

Typological Studies

Reciprocal Constructions

VOLUME 3

edited by Vladimir P. Nečajkovič

John Benjamins

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VOLUME 2

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Typological Studies in Language

71

Reciprocal Constructions

VOLUME 1

edited by Vladimir P. Nečajkovič

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Reciprocal Constructions

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Volume 71

Reciprocal Constructions

Edited by Vladimir P. Nedjalkov.

With the assistance of Emma Š. Geniušienė and Zlatka Guentchéva

Reciprocal Constructions

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A New commandment I give to you that you love one another,
even as I have loved you, that you also love one another.

(John 13, 34)

Do not speak against one another, brethren. (James, 4, 11)

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Foreword

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I first became acquainted with the work of the St. Petersburg (then: Leningrad) Typology School around 1970, when I was working on the typology of causative constructions. Among the many sources I used for data on causative constructions across the languages of the world, at a time when such typological endeavors were at the margins of mainstream linguistics in the English-speaking world, one source that I encountered continuously and with immense profit was Xolodovič (1969), a volume to which the editor of the present volumes was also a contributor. The collective monograph showed me the strengths of the typological school from which it emerged: parallel treatment of a number of languages from different language families guided by a questionnaire reflecting the interplay of careful consideration of the empirical data from the individual languages treated and the desire to uncover inductive generalizations relating to the internal form, the syntax, and the semantics of the constructions in question. I vowed to use the next opportunity to make the acquaintance of the linguists who had produced this seminal work. My wish was realized a few years later, during both a brief visit to the group in 1975 and an extended visit in 1976, when I was also able to work intensively with Vladimir P. Nedjalkov both on typology and on the Chukchi language.

At this point, one might be tempted to say: And the rest is history. But history is about the past. Of course, the history of projects from the St. Petersburg typological school is impressive indeed, including an earlier substantial edition in English, namely Nedjalkov (1988) on resultative constructions, another volume that had an important influence on my own thinking and research. But, as the present volumes show, this school also has a present. And, if the energy of Vladimir P. Nedjalkov and his younger colleagues is anything to go by, a future.

The present volumes are thus the latest in a series of works, each devoted to a particular grammatical phenomenon from a typological perspective, with substantial introductory chapters laying out the theoretical background and descriptive framework, and a

series of chapters devoted to the phenomenon in question in individual languages, each written by a specialist or specialists on that language. It should be emphasized that the descriptive framework is not an aprioristic concept designed to constrain the writers of the individual chapters, but rather a framework that has itself grown out of empirical descriptive and analytical work, and thus reflects at least one salient aspect of the Leibnizian ideal of “*theoria cum praxi*”, theory with practice. Conversely, while the individual chapters do not attempt to hide the sometimes idiosyncratic properties of particular features of the language in question and the challenges they may pose for generalizations, they are also of genuine typological and theoretical interest through the ways in which they address the general questions posed in the introductory chapters.

The particular phenomenon that is treated in the present volumes is reciprocal constructions, like *they love each other* (or indeed *they hit each other*, though for once I will try and wean myself away from the linguist’s apparent predilection with fisticuffs). This might seem a rather restricted phenomenon, but as the present volumes show – the treatment of reciprocal constructions occupies substantially more pages than the treatment of any of the former topics undertaken by the St. Petersburg group – the phenomenon in fact betrays intricate interaction with a series of other aspects of language, ranging from form to function and meaning, in a way that makes its detailed treatment a particularly challenging, and therefore rewarding, topic both for cross-linguistic investigation and, indeed, for in-depth study in a particular language.

First, languages differ considerably in the range of forms they use in order to express the semantics of ‘X loves Y and Y loves X’, with many languages having more than one form in competition. English uses the dedicated reciprocal pronoun *each other*, but many other languages make use of a pronominal form that also has other meanings and uses (see below), while yet others have verbal affixes to indicate reciprocity (sometimes again involving polysemy with other uses of the same affix). At the opposite extreme from languages that have grammaticalized the expression of reciprocity to the extent of having bound reciprocal morphology, there are languages like many of those of New Guinea that prefer either to decompose the reciprocal situation into its component parts (as in ‘X loves Y and Y loves X’), or to use an adverbial that explicitly indicates only that there is participation in a joint event. (This last type does not exclude the possibility of expressing quite complex relations, as I know from my own experience doing fieldwork in New Guinea when a local leader enjoined the masses not to indulge in mutual grooming during the visit of an important official, more specifically not to ‘seek each other’s fleas’.)

Second, languages differ in the possible range of syntactic relations between the controller and target of reciprocal constructions. While most languages will have a reciprocal construction that expresses ‘they love each other’, with subject–object coreference, things may start getting difficult when it comes to ‘the priest married them to each other’, with object–object coreference, not to mention ‘the priest married them to each other’s sisters’, with coreference between an object and a possessor. However, should readers get the impression that volumes of this size leave nothing for posterity to investigate, the discussion does not encompass the extreme cases of such possibilities that have provided fare for formal grammarians, for instance. The reader is therefore spared for now the need to

consider examples at the margins of English like *the students persuaded me to look at each other* or *we know what each other are thinking*, in whatever language.

These volumes also consider the semantics of reciprocals, in at least two respects. First, there is the question of reciprocals that do not quite get a literal interpretation, as in *the guests followed each other into the drawing room*, where it is certainly not the case that each guest followed every other guest – this is the so-called “chaining” use of reciprocals. But even more importantly, there are the relations of polysemy that characterize many reciprocal markers, with the same marker in many languages also expressing, for instance, reflexivity, though there are also examples of less expected polysemies, for instance between reciprocal and causative. The investigation of polysemies continues to be one of the hallmark strengths of the St. Petersburg school.

But I should emphasize that, with a set of contributions as rich as those constituting the present volumes, every reader will find something of direct interest. To take just one example from my own reading: I have for some years been interested in the generalization that more explicit means of indicating coreference are preferred in narrower syntactic domains (Comrie 1999). Further evidence in favor of this is provided precisely by Kabardian reciprocals. If there is coreference between subject and non-direct object, the single reciprocal affix *-z-* is used. However, in the narrower domain of coreference between subject and direct object, a further morpheme, *-r-*, is required after *-z-*.

The early years of the St. Petersburg typology school coincided with the last decades of the Cold War, with linguists in the then Soviet Union largely cut off from linguists in the West (and, let me not hesitate to add, vice versa). The scope of the present volumes show how far we have come since those days. Not only is there a significant number of contributors from outside Russia, but the range of languages covered has also broadened considerably, so that we now have a number of articles on languages of the Americas and Oceania, for instance, that were largely absent from those earlier volumes. These volumes join the growing number of works showing how different linguistic traditions can mutually – and that means: reciprocally – benefit one another.

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Preface

This collective monograph continues the tradition of the Leningrad/St.Petersburg Typology Group (Workshop for Typological Studies, Institute for Linguistic Research of the Russian Academy of Sciences). It follows the sequence of such works as *Tipologija kauzativnyx konstrukcij. Morfologičeskij kauzativ* [The Typology of causative constructions. Morphological causatives] (A.A. Kholodovich (ed.). 1969. Leningrad: Nauka), *Tipologija passivnyx konstrukcij. Diatezy i zalogy* [The Typology of passive constructions. Diatheses and voices] (A.A. Kholodovich (ed.). 1974. Leningrad: Nauka), *Zalogovyje konstrukcii v raznostrukturnyx jazykax* [Voice constructions in structurally diverse languages] (V.S. Xrakovskij (ed.). 1981. Leningrad: Nauka), *Tipologija rezul'tativnyx konstrukcij (rezul'tativ, stativ, passiv, perfekt)* [Typology of resultative constructions (resultative, stative, passive, perfect)] (V.P. Nedjalkov (ed.). 1983. Leningrad: Nauka) and its revised and enlarged version *Typology of Resultative Constructions* (V.P. Nedjalkov (ed.). 1988. Amsterdam/Philadelphia: John Benjamins; English translation edited by Bernard Comrie), *Tipologija iterativnyx konstrukcij* [Typology of iterative constructions] (V.S. Xrakovskij (ed.). 1989. Leningrad: Nauka) and its English translation *Typology of Iterative Constructions* (V.S. Xrakovskij (ed.). Munich-Newcastle: LINCOM EUROPA), and also *The Typology of Reflexives* by E. Geniušienė (1987. Berlin, etc.: Mouton de Gruyter). The St. Petersburg Typology Group has also published a large number of papers on the typology of bipredicative constructions, converbs, inchoativity, antipassives, etc.

The work on the present collective monograph started in 1991, when I was invited by the Laboratory of Formal Linguistics, VII University of Paris, CNRS (France), for joint research on some problems of common interest. I owe much to my colleagues Zlatka Guentcheva, †Katrín Paris, and †Alice Cartier for the discussion of the early drafts of the typological questionnaire on reciprocal constructions.

Unfortunately, the work on reciprocals took much longer than I had planned because for a number of reasons it was stalled and resumed only after long periods of time.

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This project was initially planned as a modest volume of about 15–20 short papers on reciprocals in individual languages, with a brief introductory chapter and a questionnaire for future investigation on a broader scale. In the course of research, however, the number of the contributors and languages to be included grew (some people wanted to join the project on hearing about it), and new problems came to light as broader data was accumulated. On many of the languages rather exhaustive data have been collected and subjected to in-depth analysis. As a result, the final version is quite different in scope and volume from what I had in mind initially.

Reciprocals turned out to be integrated in a vast set of semantic categories with a complex system of interrelations and correlations, and the data turned out to be extremely varied and complicated. I did not have the heart to disregard the accumulating data and cut down the number of languages covered. The variety of devices used across languages to denote reciprocity and variety of the types of their polysemy coupled with relatedness to other verbal categories are staggering. Some of the papers had to be rewritten to accommodate the later findings and bring them into line with other papers submitted much later.

The final versions of the general introductory papers on the typology of reciprocals and related categories that provide the conceptual framework (Chapter 1: “Overview of the research. Definitions of terms, framework, and related issues”; Chapter 3: “Encoding of the reciprocal meaning”; Chapter 5: “Polysemy of reciprocal markers”; Chapter 7: “Reciprocal derivation involving non-verbals”; Chapter 8: “Questionnaire on reciprocals”; Chapter 9: “Some typologically relevant properties of reciprocal markers and arrangement of the subsequent chapters”), based on the data of over 300 languages, were the last to be completed in 2002–2005, as they had to take into account the findings of the subsequent papers on the reciprocals of individual languages. The questionnaire (Chapter 8) covers various aspects of investigating reciprocals (85 queries, most of them with suggestions for typologically possible solutions and illustrations).

The chapters just listed constitute Part I, which contains three more chapters (Chapter 2: “Lexical reciprocals as a means of expressing reciprocal situations”; Chapter 4: “Sociativity, conjoining, reciprocity and the Latin prefix *com-*”; Chapter 6: “Reciprocal and polyadic

(Remarkable reciprocals in Bantu”) and which amplify some issues briefly treated in Chapters 1, 3 and 5.

Chapters 10–49 are language-particular studies of reciprocals. They are divided into six groups (Parts II, III, IV, V, VI and VII) according to the type of polysemy of reciprocal markers, monosemous reciprocals constituting one of the types. Within these types the languages have been classified by the type of the reciprocal marker(s) employed (verbal, pronominal, or both). About 40 individual languages have been considered all in all. The monograph is concluded by a critical review of the present research (Part VIII).

Prior to reading Chapters 10–49, the reader is advised to look through Chapter 9 which explains the arrangement of these chapters and stresses some typologically relevant features and some universals in the diversity of the reciprocal domain.

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PART I

Typological aspects of the investigation of reciprocals

CHAPTER 1

Overview of the research

Definitions of terms, framework, and related issues

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1. Goal of investigation. Database. The prototypical reciprocal meaning

This collective monograph is aimed at a detailed description of reciprocals (= symmetrical predicates) of individual languages in comparable terms with respect to their morphological, syntactic and semantic properties, and their polysemy. In this chapter I shall introduce the principal terms in which reciprocal constructions, i.e. constructions with a reciprocal predicate, either grammatical (= derived; see (2a)) or lexical (if it is an inherent reciprocal; see (1)), are described in this monograph. In the subsequent chapters of Part I, some of these concepts will be explained in more detail. This chapter (as well as Chapters 3, 5, 7 and 8) is based on the data of the subsequent chapters on the reciprocals of 40 individual languages, both genetically related and unrelated. These chapters deal with reciprocals, and also with related phenomena. The data of these chapters are supplemented by the empirical material from the literature on reciprocals and also from literature where reciprocals are dealt with in passing. All in all, about 300 different languages are cited (see Language Index).

The prototypical reciprocal meaning, i.e. the meaning of the type '(to / of / against / from / with / ...) each other', is usually defined as describing situations with at least two entities (participants) which

(a) are in the identical reverse relation to each other, i.e. the semantic arguments have the same semantic content, cf.:

- (1) *John and Bill are friends,*

in particular,

(b) they perform two identical semantic roles (e.g. of agent and patient) each, cf.:

- (2) a. *John and Bill hit each other.*

In other words, (a) implies that two predications

- b. *John hits Bill*

and

- c. *Bill hits John*

are presented as one, i.e. two subevents are shown as one event or situation (cf. also (4), (9) below).

The relations between the participants of a reciprocal situation are transparent enough, therefore it is not accidental that we find more or less similar characteristics of the reciprocal meaning in many earlier and recent works (cf. Popov 1881:294; Porzhezinskij 1903:39; Jespersen 1924:161; Tesnière 1959:242; Wierzbicka 1980:256; Xrakovskij 1981:24–38; Yomdin 1981:89, 91; Lichtenberk 1985:21; Kemmer 1993:95–7, etc.).

The meaning of the reciprocals indicates that they are at least two-place predicates semantically; cf.:

- (3) a. *John is my friend,*
 b. *John and I are friends.*

and they cannot form a construction with a single non-collective participant unless it is an elliptical construction; cf.:

- c. *?John is a friend,*

which provokes a question “Whose friend?”, and predicates denoting situations with only one participant cannot be reciprocal. On the other hand, there are forms implying a multiple participant that are not reciprocal in meaning although they are semantically close to reciprocals as they share the feature of the multiple participant. This pertains to plural verb forms (grammatical or lexical), sociative forms, as well as distributive forms. (Note that the semantic distributive component ‘each’ is usually included in the definition of reciprocal markers, and not infrequently it is a part of a reciprocal marker; cf. *each other*.) And in a number of languages a reciprocal marker also has the function of marking the plural number on verbs, or the function of a sociative marker, or it is a part of a sociative marker.

1.1 Diagnostic feature of derived reciprocals. Reciprocants. Co-participants

Example (2) can serve as a diagnostic test for establishing a reciprocal construction and a marker of reciprocity. It is the pronoun *each other* that, being monosemous, establishes the semantic identity of (2a) with a pair of sentences, viz. (2b) and (2c), containing the same predicate and inverted arguments (this relation is also called cross-reference).

The marker *each other* expresses reciprocity by itself, but in other cases it is only this traditional procedure of establishing the semantic identity of reciprocal sentences like (2a) with two non-reciprocal sentences like (2b) and (2c) that allows to identify the marker of

reciprocity. Thus, in the German sentence (4b), which is equivalent to English (5b), this marker is the highly polysemous clitic *sich*:

- (4) a'. *Anne umarmte Marie.* + a". *Marie umarmte Anne.* = b. *Marie und Anne umarmten sich.*
- (5) a'. *Ann hugged Mary.* + a". *Mary hugged Ann.* = b. *Ann and Mary hugged [each other].*

This traditional procedure of establishing the reciprocal meaning allows to identify reciprocals across languages.

As we see, a reciprocally marked verb in the German example is in opposition to a non-reciprocal verb, i.e. the base verb without a reciprocal marker. A construction containing a reciprocal marker is termed reciprocal; the construction with the corresponding base verb is termed non-reciprocal.

It is asserted above that a reciprocal construction, i.e. (4b) or (5b), covers the semantic content of two non-reciprocal inversely symmetrical constructions (4a') and (4a'') or (5a') and (5a'') respectively. I do not discuss here the obvious fact that (4a') and (4a'') can describe events taking place at different times, while (4b) describes simultaneous or temporally adjacent actions of both reciprocants (see Wierzbicka 1980:256–7; Kemmer 1993:109). The temporal distance between two subevents of a reciprocal situation may be long enough but it does not interrupt continuity of the situation; cf.:

- (6) *They write letters to each other every 5 years.*

The constituents of a reciprocal construction can be termed reciprocal arguments, and they denote reciprocants. Thus, the reciprocal arguments in (4b) and (5b) are 'Anne' and 'Marie', and 'Ann' and 'Mary', respectively. One of the reciprocants can be expressed by a non-subject; in this case it can be termed co-participant.

1.2 Extension of the prototypical reciprocal meaning. Situations with three and more participants

Reciprocals with two participants are considered prototypical (cf. Lichtenberk 1994:3506; Kemmer 1993:98). In this case each participant, as mentioned, is both the agent and the patient of the same action. A typical example is (2a). Besides situations with two participants, there are two more types of situations. The prototypical reciprocal relation of the type *A hits B and B hits A* can be further extended to situations where one or both participants refer to a plural set. This is the case if the subject names a plural participant (it may be both formally and semantically plural, as in (7a), or a coordinated subject comprised of singular noun phrases, as in (7b), or a formally singular collective noun, as in (7c)):

- (7) a. *The boys hit each other.*
 b. *John, Bill and Tom killed each other.*
 c. *People hit one another.*

The relationship between the persons within a plural participant, as illustrated in (7), is somewhat different from the prototypical reciprocal relation: it is unlikely or technically difficult, or outright impossible for each of the participants to perform both roles (of agent and patient) with regard to each other; in other words, the relations between the reciprocants cannot be reduced to the sum of prototypical reciprocal relations. All this also pertains to reciprocal constructions with an indefinite personal pronoun like German *man* or French *on* in the subject position (here the subject is grammatically singular but semantically plural). Situations with three or more singular participants are of theoretical interest but hardly relevant for the typology of reciprocals, although there are languages with a special reciprocal marker for verbs denoting situations with more than two participants (see 5.3).

In the above instances the prototypical reciprocal situation is extended due to the number of the participants exceeding two, and in the case of certain verbs with two (singular) participants, it is extended due to the lexical meaning of the base verb: in reality only one of the participants can perform the act denoted by the base, though it remains unspecified which one of them; cf.:

- (8) a. *We decided to wake each other up in the morning.*
 b. *Charles and Bill followed each other.*

Reciprocals like (8a), where only one of the participants can wake up the other, and also (8b) where one of them follows the other, may be regarded as extended use of a reciprocal marker rather than a special meaning. Cases like (7) are not special meanings either, and this is reflected in the marking of both cases like (7) and (8) across languages in the same way as prototypical reciprocals. However, reciprocals like (8b) take a special place as they derive from a limited number of bases expressing converse relations (cf. *A follows B = B precedes A*), which meaning is close to the reciprocal one (for details see §10).

To sum up, languages usually treat situations like these on a par with prototypical ones, which finds expression in identical reciprocal encoding.

2. Means of marking reciprocity and main types of reciprocals

As mentioned, reciprocals subcategorize into two main types, *grammatical* (or *derived*) and *lexical* reciprocals (they may also be labelled explicit and inherent reciprocals respectively), with possible peripheral types (see 2.3).

2.1 Grammatical (derived) reciprocals

These reciprocals can be divided into three main types which are further subcategorized into seven final subtypes.

2.1.1 Characteristics of derived reciprocals. Standard reciprocal opposition.

Reciprocalization

The term “grammatical (derived)” is used broadly to cover not only morphological derivation but also combinations of verbs with words meaning ‘each other’ and/or ‘mutually’. I assume that derived reciprocals have the following characteristics:

- They are related to an underlying (base) verb without a reciprocal meaning; (a special case is the simultaneous use of two reciprocal markers, especially pleonastically (see (9d)), and also the use of grammatical reciprocal markers on lexical reciprocals; see Section 16).
- They enter into a standard reciprocal semantic opposition with the base verb, its lexical meaning being retained in the derivative and the reciprocal meaning being augmented to it.
- The base verb describes a situation with at least two participants (deviations from this feature will be discussed separately; see reciprocals derived from one-place (sic!) intransitives in (113) and (114)).
- In the reciprocal construction the co-referent non-subject constituents are eliminated, the plural subject denoting both participants each with a double role. This process can be termed reciprocalization (cf. reflexivization, causativization, etc.). In other words, the underlying arguments are reciprocalized (note that in (1) no reciprocalization occurs, the word being inherently reciprocal; for details on lexical reciprocals see Sections 2.3 and 16).

Reciprocal constructions of this type are termed subject-oriented as the antecedent of the reciprocal marker is expressed by the subject (on object-oriented reciprocals see Sections 2.2.4, 5 and 13).

Derived reciprocals are further subdivided into three main types, syntactic, morphological and clitic. Examples of syntactic marking are (2a), (5b) and (9b). Clitic marking is illustrated in (4b) above. Example (9c) illustrates morphological marking by means of a suffix which can be used simultaneously with a syntactic marker (9d).

Yakut (Kharitonov 1963: 36; *-s* = REC; *beje beje-leri-n* is a reciprocal pronoun inflected for person and case; alternation *-ö/-ü* is due to vowel harmony)

- (9) a'. *Aya-m əal-ən öjdö-t-ö.*
 father-my neighbour-POSS.ACC understand-PAST-3SG
 ‘My father understood (his) neighbour.’
- + a". *əal-a aja-bə-n öjdö-t-ö.*
 neighbour-his father-my-ACC understand-PAST-3SG
 ‘The neighbour understood my father.’
- = b. *Aya-m ikki əal beje beje-leri-n öjdö-t-üler.*
 father-my two neighbour self self-their-ACC understand-PAST-3PL
 ‘My father and (his) neighbour understood each other.’
- = c. *Aya-m ikki əal öjdö-s-t-üler.*
 father-my two neighbour understand-REC-PAST-3PL
 (same translation).

- = d. *Aya-m ikki əal beje beje-leri-n öjdö-s-t-üler.*
 father-my two neighbour self self-their-ACC understand-REC-PAST-3PL
 (same translation).

Note that sentence (9d) seems to be preferable to (9b–c), (9c) is the least preferable with this verb, according to one of our informants, though others find it difficult to choose the most acceptable variant.

One of the participants (co-participant) can be backgrounded and it is made object, and this is marked by predicate agreement only with the subject in (9e). The meaning is the same as in (9b, c, d), but only one participant is placed in subject position for pragmatic reasons. It is but natural that the reciprocal pronoun *beje beje-leri-n* cannot be added because of the singular subject as antecedent.

- = e. *Aya-m əal-in kəttə [*beje beje-leri-n] öjdö-s-t-ö.*
 father-my neighbour-ACC with each other understand-REC-PAST-3SG
 (same translation), lit. ‘My father understands each other with (his) neighbour.’

Further on, type (9b, c, d) constructions are termed *simple* reciprocal constructions and those of type (9e) *discontinuous* (for details see Section 7).

2.1.1.1 Syntactic reciprocals. They include two subtypes:

- Subtype A involving a doubling of clauses or verb phrases with the concomitant inversion of the arguments; roughly, this can be illustrated by sentences (9a’) and (9a’’) combined into one compound sentence of the non-grammaticalized type *My father respected his neighbour and the neighbour respected my father* (for details see Ch. 3, §3).
- Subtype B composed of a verb and a component like the following:
 1. A reciprocal (pro)noun like English *each other* and Malayalam *oraal matte aal-e* ‘each other’ (lit. ‘one person other person-ACC’) (Jayaseelan 2000: 148).
 2. A reciprocal adverb like Malayalam *tammil* ‘among them’ (Jayaseelan 2000: 119) and Chinese *hùxiāng* ‘mutually’ (cf. (35) below). Reciprocal pronouns differ from reciprocal adverbs in that they can be case-marked and combine with adpositions.
 3. Adverbs like German *gegenseitig* labelled here *reciprocal specifiers* which are as a rule used in constructions with reciprocal predicates pleonastically or for disambiguation of polysemous reciprocal forms (86).

Strictly speaking, subtype B should be labelled *lexico-syntactic*, as the markers listed above are free morphemes – lexemes denoting reciprocity (cf. Yakut *beje beje-leri-n* in (9b) and also the reciprocals with the pronoun ‘each other’ in the translations of (9b–d), or reflexive pronouns like Polish *siebie* in (17b), etc.).

The distinction between Types 1 and 2 is sometimes not quite clear, especially in isolating languages.

2.1.1.2 Morphological reciprocals. There are four main subtypes:

- Subtype C: periphrastic constructions, e.g. active participle + auxiliary verb (see Nedjalkov Ch. 3, §4.1).
- Subtype D: compounds with recurrent components (see Ch. 3, §5, and also ex. (18) below).
- Subtype E: verbs marked for reciprocity with affixes, i.e. prefixes, suffixes, circumfixes (see (9c), (13), (14b), (16), etc.) and postfixes (like Russian *-sja/-s'* in (30c)).
- Subtype F: verbs marked for reciprocity with root reduplication, which is mostly combined with affixation (see Ch. 3, §7).

Subtypes C, D and F seem to be less widespread cross-linguistically than E.

2.1.1.3 Clitic reciprocals. This type comprises one variety of markers: verbs marked with clitics, including reflexive (clitic or clitic-like) pronouns (like French *se* (33), German *sich* (4)). Functionally, they do not differ from affixes, being intermediate between subtypes B and E. Sometimes, there is no clear-cut distinction between syntactic reciprocals and reciprocals marked with clitic pronouns (see Ch. 3, §8).

2.2 Other classifications of reciprocals

Reciprocals can also be classified according to a number of other features. The following classifications have been suggested.

2.2.1 Pronominal vs. verbal reciprocals

The classes often distinguished in the literature are [pro]nominal reciprocals contrasted to verbal reciprocals which are mostly built by affixes and clitics (the terms *nominal* and *verbal* are used by Faltz (1977: 15, 188) with respect to reflexives). The term *pronominal reciprocals* is used here as a cover term for all the varieties of subtype B. Verbal reciprocals include all the remaining subtypes excepting A. Subtype E is the most prominent among them. Subtypes B, E and F seem to be the most widespread devices of reciprocal marking.

In contrast to pronominal reciprocals, derivation of verbal reciprocals mostly involves detransitivization, as in (9c), although pronominal and especially adverbial reciprocals sometimes preserve some features of transitivity. Thus, *beje beje-leri-n* takes the direct object position in (9b), but not in (9d) where the reciprocal predicate is intransitive and thus *beje beje-leri-n* loses its argument properties and functions here as a reciprocal specifier.

2.2.2 Heavy vs. light reciprocal markers

This subdivision is based on the phonetic “weight” of the markers (see Kemmer 1993: 25, 102–8; cf. also Faltz 1977: 43). It mostly coincides with the above distinction: the pronominal vs. verbal marking is typically represented by heavy vs. light markers. But this is not always the case. On the other hand, verbal markers can also be either heavy or light. Not infrequently, heavy markers are productive and light markers are unproductive. Compare,

for instance, the unproductive reciprocal prefix *ber-* and productive circumfix *ber-...-an* in Indonesian, and the unproductive prefix *fe-* and productive circumfix *fe-...-'aki* (and its variants) in East Futunan (see (25)). This is made more complicated by the fact that in the latter case “middle” heavy markers are possible; cf. the East Futunan circumfix *fe-...-ki* (and its variants) (Moyse-Faurie Ch. 35, §§3.1, 3.2, 3.3). Among pronominal reciprocal markers, one can also distinguish light and heavy ones. This can be exemplified by the German light verbal marker *sich*, which was pronominal at some period of historical development and retained some pronominal features at present, and the pronoun *einander*, which is a heavy marker.

2.2.3 Anaphoric vs. middle markers

This subdivision concerns the semantic aspect though it overlaps with the above two subdivisions. Markers expressing only the reciprocal and/or reflexive meaning (cf. the Yakut reciprocal pronoun *beje-beje-leri-n* in (9b)) may be termed anaphoric, and markers with a number of other meanings that have evolved from, often by way of detransitivization, from the reflexive and/or reciprocal meanings may be termed middle (cf. the Yakut verbal reciprocal *öjdö-s-t-üiler* ‘they understand each other’ and (*bulkuj-* ‘to mix sth and sth’ >) anticausative *bulku-s-* ‘to get mixed’). Pronominal markers are usually anaphoric and middle markers are mostly verbal. But this tendency has exceptions; for instance, the Chukchi suffix *-waly-* is anaphoric since its meaning is exclusively reciprocal. For details see Nedjalkov (2004:315–397).

2.2.4 Proper reciprocals vs. spatial reciprocals

In some languages we find reciprocal markers which, alongside standard reciprocal relations between the underlying subject and object (see (9) above), express similar relations between the underlying direct and non-direct objects (or, much less frequently, between two underlying non-direct objects). These reciprocals usually denote spatial relations of joining (of two or more symmetrical entities) separating an object (into two or more symmetrical entities), and they can be termed object-oriented spatial reciprocals (spatial reciprocals for short), to distinguish them from causatives of subject-oriented reciprocals (like *He caused/let them to help each other*; see §5.1); cf. Ainu subject-oriented intransitive *u-ekap* ‘to greet each other’ (← transitive *ekap* ‘to greet sb’) and object-oriented spatial transitive *u-kotukka* ‘to glue sth (and sth) to one another’ (← transitive *kotukka* ‘to stick sth to sth’) (see (167)–(168) below). (For details see Section 13, in particular 13.2.) Similar pairs of reciprocals can be formed by syntactic markers. Thus, in Lezghian the reciprocal pronoun *sada-sada-* can form both subject-oriented reciprocals with meanings like ‘to trust each other’, ‘to be afraid of each other’, and object-oriented reciprocals with meanings like ‘to put the pieces together’ (Haspelmath 1993:409–410). Cross-linguistically, pronominal markers are used for spatial reciprocals more often than verbal markers.

Spatial reciprocals are opposed to reciprocals proper, i.e. standard reciprocals illustrated in (4b), (7a), (13), (9c), etc.

Note that among seemingly standard reciprocals with detransitivization of two-place transitives, reciprocals with spatial meanings of joining and separating are possible; cf. Ainu *kotuk* ‘to stick to sth/sb’ (vt) → *u-kotuk* ‘to stick to each other’ (vi).

2.3 Lexical reciprocals

These are items whose meaning is not a mere sum of the meaning of the base and the meaning ‘each other’. Their number in a language may run into hundreds (according to some preliminary data, in Russian there are about a thousand lexical reciprocals, and about 400 of them contain the postfix *-sja*; the latter either have no respective base verbs or they are unrelated to the base verbs semantically (cf. *borot’-sja* ‘to fight’, *sorevnovat’-sja* ‘to compete’, *bratat’-sja* ‘to fraternize’, *prepirat’-sja* ‘to squabble’, *soveščat’-sja* ‘to confer’, etc.; see Yomdin 1981: 90). As mentioned above, these are words with an inherent reciprocal meaning. Here belong reciprocals that have

(a) no two-place (or more than two-place) base form belonging to the same class of words (an exception are unproductive reciprocals; see paragraph (iv) below),

(b) with which they might enter into a standard semantic reciprocal opposition (these are reciprocals that do not conform to the requirements listed in 2.1). These are the following categories of words in the first place:

(i) words without a reciprocal marker, namely, root verbs, like *to argue*, *to fight*, *to meet*, *to combine sth and sth*, etc.; also adjectives used predicatively (e.g. *to be next to sb*), verb + noun collocations (e.g. *to shake hands with sb*, *to rub elbows with sb*, *to be on good terms with sb*), and also nouns denoting mostly class membership (cf. *brother*, *partner*, *colleague*, *friend*, etc.) and reciprocal situations and relations (cf. *a fight*, *friendship*, etc.);

(ii) words with a reciprocal marker and without an underlying base, e.g. deponential reciprocals (*reciproca tantum*), i.e. words with a reciprocal marker but without a base word which may have gone out of use (however, there may be an accidental coincidence of a segment of the root with the reciprocal marker), cf. Tuvan *bəra-š-* ‘to be equal in strength, etc.’ (cf. **bəra-*), *kəra-š-* ‘to quarrel’ (cf. **kəra-*) (Kuular, Ch. 27, ex. (151)), Indonesian *ber-kelahi* ‘to quarrel’ (Ogloblin & Nedjalkov, Ch. 33, ex. (32)), Japanese *semegi-a-u* ‘to struggle’, *tonori-a-u* ‘to be next to each other’ (Alpatov & Nedjalkov, Ch. 25, ex. (75)); Danish *kævle-s* ‘to quarrel’, *ene-s* ‘to agree’;

(iii) derived reciprocals with a lexicalized reciprocal meaning (some of them may retain the standard reciprocal or contiguous meaning along with the lexicalized one), like Tuvan *ište-* ‘to fill (a vessel)’ → *ište-š-* ‘to be equal in cubic content (of vessels)’, also ‘to help to fill sth’ (Kuular, Ch. 27, ex. (163)); Japanese *i-u* ‘to say, speak’ → *ii-a-u* ‘to dispute’, *naguru* ‘to hit’ → *naguri-a-u* ‘to fight’, also ‘to hit each other’ (Alpatov & Nedjalkov, Ch. 25, ex. (68)), Ainu *yee* ‘to say to sb’ → *u-yee* ‘to quarrel’ (Alpatov et al., Ch. 42, ex. (107)). As we see, the shift of meaning in lexicalization is very often predictable;

(iv) unproductive reciprocals; they are entered here with reservations and hesitation: verbal reciprocals derived by unproductive means can also be included among lexical reciprocals, like Russian *obnimat’* ‘to embrace (sb)’ → *obnimat’-sja* ‘to embrace each other’ (about 40 items). Such reciprocals are in fact intermediate between grammatical and lex-

ical types. Semantically, they enter mostly into the same domain as reciprocals of the groups just listed. In contrast to the above mentioned 400 Russian lexical reciprocals, they do have bases with which they enter into a standard semantic reciprocal opposition. Small groups of fossilized reciprocals are also registered in Armenian (with the suffix *-v*), Hebrew (with the prefix *het-* and root alternation), Icelandic (with the suffix *-st*), Hungarian (with the suffix *-kod/-koz*) and some other languages. Despite the presence of underlying forms for this type of reciprocals, they display what Kemmer (1993:105–9) calls “low-degree of distinguishability of subevents”.

Example (10) illustrates a lexical reciprocal: (10a') and (10a''), denoting the same situation, are syntactically parallel to (9a') and (9a''), and so is (10b). Constructions of this type can serve to identify several groups of lexical reciprocals. In both (9) and (10), predicates (a') and (a''), namely, *öjdö-t-ö* in (9) and *argues* in (10), express identical relations; the difference is that in (9b) the reciprocal meaning is added in comparison with (9a'–a''), while in (10b) the meaning of (10a'–a'') is retained. The equation symbol signifies identity of denotational content only and neglects possible pragmatic differences, in the sense that the first participant is often interpreted as the more active or the only agent (as in *He always argues*).¹

- (10) a'. *My father argues with his neighbour.*
 = a''. *The neighbour argues with my father.*
 = b. *My father and his neighbour argue [every day].*

Lexical reciprocals sometimes cannot be identified by means of type (10) constructions, because in some languages contrasts of the type (a') ~ (a'') ~ (b) are lacking. There are such reciprocals in English, too. As a rule, they are semantically two-place and syntactically one-place; in this case their identification as lexical reciprocals is explicated by the lexical definition of meaning that contains an explicit marker of reciprocity; cf. (explanation from Hornby 1974:22):

- (11) *My father and the neighbour are alike (= are like one another).*

In this monograph, attention is focused on the type of reciprocals illustrated by (9c) and (9b), while lexical reciprocals are considered mostly from the viewpoint of their possible co-occurrence with reciprocal markers.

Note that with regard to their treatment in dictionaries, (1) lexical reciprocals are commonly entered in dictionaries; (2) syntactic reciprocals are not registered, as a rule, (3) morphological reciprocals are usually registered in dictionaries but with lesser regularity than lexical reciprocals: they tend to be registered if they are lexicalized.

Verbal lexical reciprocals seem to coincide to a considerable degree (if not entirely) with those reciprocals that are distinguished as *natural reciprocals*, i.e. predicates describing naturally reciprocal events in Kemmer (1993:100–8).

1. In some languages the distinction between constructions (10a') and (10a'') is more pronounced than in these English examples, e.g. in Twi where the co-participant is minimally active (Boadi 1975:55–77).

A detailed description of lexical reciprocals is to be found in Knjazev (Ch. 2). Although Chapter 2 is based on Russian data, most of the analysis has typological relevance.

From the view-point of their combinability with reciprocal markers, lexical reciprocals are considered in Section 16 below.

2.4 Idiosyncratic reciprocal expressions

Alongside the above listed cases where reciprocity is either marked in a regular way, there happen occasional language-specific ways of expressing reciprocity. They may be determined by the context or situation. Russian example (12a) characteristic of colloquial speech is one of such cases. We cannot assert it is a structure that encodes reciprocity because the analogous structure under (12b) is not reciprocal in meaning (sentence (12a) probably came into being by analogy with constructions containing two-place lexical reciprocals, like *U nas vražda* ‘There is hostility between us.’).

- (12) a. *U nas [s Maš-ej] ljubov’.*
 at we.GEN with M.-INST love.NOM
 ‘Masha and I love each other’, lit. ‘At us [with Masha] (is) love.’
- b. *U nas [s Maš-ej] gore.*
 at we.GEN with M.-INST misfortune.NOM
 ‘Masha and I have met with misfortune’, lit. ‘At us [with Masha] (is) misfortune.’

Note that *ljubov’* ‘love’ is a two-place noun and *gore* ‘misfortune’ is one-place. The base constructions of (12a) can be sentences analogous to (9a’–a’): *U menja k Maše ljubov’* ‘I love Maša’, lit. ‘At me is love for Masha’ (= ‘I have a love for Masha’) + *U Maši ljubov’ ko mne* ‘Masha loves me’, lit. ‘At Masha is love for me’ (= ‘Masha has a love for me’). Characteristically, *ljubov’* ‘love’ is a highly emotive word, and words denoting emotions may have idiosyncrasies in the ways of expression of reciprocity (cf., for instance, Nedjalkov, Ch. 3, §§3.6; 2.3.7.1 and case 2 in §3.7.3).

Reciprocal constructions with predicates marked by means of affixes and clitic pronouns are in the focus of the present study.

3. Polysemy of reciprocal markers

This section serves to introduce Chapter 5 of this monograph, where this problem is discussed at length.

3.1 Three main types of polysemy

Monosemous reciprocal markers are typically free morphemes/words (pronouns and adverbs), less frequently affixes; they are often of relatively recent origin. An example of a monosemous reciprocal affix is:

Chukchi (-wəly- = REC only; -ə- = epenthetic vowel; -γ?at = 3PL; for details see Nedjalkov, Ch. 40, §3.1.1.1)

- (13) *penrə-nen* 'attacked-he.him' (-nen = 3SG+3SG)
 → *penrə-wəly-ə-γ?at* 'They attacked each other.'

Monosemous morphological reciprocal markers are also attested in Cashinahua, Yukaghir and Itelmen, and monosemous syntactic markers exist in English, Russian, Bamana, Vietnamese, etc.

Polysemous reciprocal markers are mostly affixes and clitic pronouns. There are three main types of the polysemy of reciprocal markers distinguished according to the meaning most frequently compatible with the reciprocal: reflexive – reciprocal, reciprocal – sociative and iterative – reciprocal. The concomitant meaning may be the historically primary meaning of a polysemous marker (as is often the case with the reflexive meaning of reflexive-reciprocal markers and the iterative meaning of iterative-reciprocal markers) or its later development (as is the case with the sociative meaning in some languages).

1. *Reflexive-reciprocal polysemy*, typical of reflexive (clitic) pronouns; inflectional forms called middle may be assigned here as well. The reciprocal meaning is semantically akin to the reflexive meaning as in both cases the same entity(-ies) (person(s)) behave both as agent and patient; cf.:

Hopi (Kalectaca 1978:92, 208; *naa* = REFL, REC and PASS, *-to-* = PL)

- (14) a. *tuuhota* 'to hurt'
 → b. *Itam naa-tuho-(to)-ta* i. 'We hurt *each other*.' reciprocal
 ii. 'We hurt *ourselves*.' reflexive

2. *Reciprocal-sociative polysemy*, i.e. polysemy of markers with a concomitant sociative meaning. Both reciprocals and sociatives presuppose a group of two or more participants which are assigned the same semantic role(s). The sociative meaning shares with the reciprocal the plurality of the participants which take part in the same event and have the same semantic role(s); cf.:

Yakut (Kharitonov 1963:46; *-s/-h-* = REC and SOC)

- (15) a. *kör-* 'to see, look'
 → b. *kör-üs-* i. 'to see *each other*' (also lexicalized 'to meet') reciprocal
 ii. 'to see sth/sb *together*.' sociative

Some of the meanings of this type of polysemy are discussed in Section 8 below.

3. *Iterative-reciprocal polysemy*, i.e. polysemy of markers with a concomitant iterative (and sometimes also sociative) meaning (based on iterativity); see (18) and (19).

Both the sociative (see 8.1 below) and the iterative meanings imply certain plurality, either of participants and/or events.

3.2 Changes in the polysemy type of a reciprocal marker

They are of course possible. For instance, many of the Bantu languages have the reciprocal suffix *-an* and its extensions *-akan-* and *-angan-*, etc. (cf. (16a)), with reciprocal-sociative

polysemy, but several Bantu languages (e.g. Luvale) have partly or entirely replaced it with a marker with reflexive-reciprocal polysemy (cf. Aksenova 1990:179–81; see (16b) below), the older marker preserved in fossilized (and often lexicalized) reciprocals, cf. (16a). Sometimes both markers co-occur in the same verb (16c). In (16a) three fossilized derivatives are cited, with the reciprocal (namely, object-oriented (spatial) reciprocal; see 2.2.4), sociative and iterative meanings respectively.

Luvale (Horton 1949:103; *-a* in (16) and other Bantu examples is the final vocalic inflectional morpheme)

- (16) a. *pàl-akan-a* ‘to press, squeeze sth together’
ly-ángan-a ‘to eat together’ (i.e. ‘at each other’s places’)
hit-akan-a ‘to pass back and forth repeatedly.’

Note that in many languages words meaning ‘together’ (such as English *together*) can be employed in two senses, reciprocal (e.g. *to tie the ends together* ‘to join or bring into contact with each other’; cf. *pàl-akan-a* in (16a) where it denotes bringing into contact two or more objects), and sociative (cf. *ly-ángan-a* in (16a) where it denotes joint action).

Another reciprocal marker in Luvale is the prefix *-li*, taking the place of the direct object marker in the verbal form. In (16b), the derivatives are reflexive, reciprocal and sociative respectively (ibid., p. 117):

- (16) b. *na-li-pihis-a* ‘he has dirtied himself’
vali na-ku-li-vet-a ‘they are beating one another.’
ku-li-nyang-ilil-a ‘to snatch sth together.’ (*-ilil* = proximitive tense).

In the following spatial intransitive reciprocal verb, both reciprocal markers are used simultaneously:

- c. *-li-pàna-akan-a* ‘to draw close together.’

Replacement of a nonreflexive-related reciprocal marker with a reflexive-reciprocal marker is also observed in some other languages. Thus, in Imbabura Quechua the older nonreflexive-related marker *na-ju-* (a cognate of the Bolivian Quechua nonreflexive-reciprocal marker *na-ku-*) retains the sociative meaning of “joint action of some kind” as its main meaning and “does not express reciprocity” (Cole 1982:92). Instead, the reflexive suffix *-ri* has become a new reciprocal marker, while retaining the reflexive and anticausative (pseudopassive in Cole’s terminology; ibid., p. 91) functions. In West Greenlandic Eskimo, according to Fortescue (Ch. 19, §3), the “loss of productivity of *-ut(i)* may have been the immediate motivation for the development of the newer construction type”. He has in mind the use of the reflexive pronoun *immiC* for encoding the reciprocal meaning, as well as the reflexive.

The development of the sociative function of a reciprocal marker (or retention of the sociative meaning conjoined with a weakening or loss of the reciprocal) is also observed for instance in Turkic and some Tungusic languages (cf. Nedjalkov & Nedjalkov, Ch. 38 on Evenki, §14.2). In Udehe, the reciprocal suffix *-masi*, unlike its cognates in the closely related Evenki and Even languages, may have a sociative meaning, although Udehe has a specialized sociative suffix *-niŋa-* (Nikolaeva, Ch. 23, §1.2).

I have no convincing examples of opposite developments, i.e. (a) a sociative marker developing into reciprocal, and (b) a sociative-reciprocal marker preserving a productive sociative function on transitives and becoming unproductive as a reciprocal marker.

A reflexive marker may develop the reciprocal function even in languages where another reflexive-reciprocal marker seems to take care of the reciprocal function. This is the case in Polish where the reflexive pronoun *siebie* (ACC) can be used instead of the reflexive clitic *się* as its synonym, and sometimes the reciprocal reading is even preferable, as, for instance, in (17b).

Polish (Wiemer, Ch. 11, ex. (35))

- (17) a. *Przyjaciele bronili się.* ‘The friends were defending themselves/each other.’
 b. *Przyjaciele bronili siebie.* ‘The friends were defending each other/ themselves.’

The dative form *sobie* of the reflexive pronoun is used as the only dative reciprocal marker, the dative reflexive form *si* having gone out of use; cf. *wierzyć sobie* ‘to trust each other’; on some verbs, however, it preserves its reflexive meaning, cf. *pozwolić sobie* ‘to let oneself (do sth)’ (ibid., §5.2.1.2).

In Czech, a similar expansion of the reflexive pronoun *sebe* (ACC) is observed: it can form reciprocals synonymous to those with the reflexive clitic *se* (ACC); cf. *Chlapci se koulují* ‘Boys snowball each other’ and *Chlapci koulují sebe (navzájem)* with the same translation (*navzájem* = ‘mutually’, ‘each other’; Skoumalová 2002: 30–1).

3.3 Iterative-reciprocal polysemy

Naturally, the reciprocal meaning suggests participant plurality and, in most cases, plurality of actions, i.e. iterativity, as two participants perform at least two actions. But the iterative meaning proper occurs when the iteration refers to a single participant. In Chinese (18) the iterative meaning of the verbal compound is primary and the reciprocal is secondary, both meanings being productive. Another similar case is attested in Samoan where the basic meaning of the prefix *fe-* seems to be “plurality of events, coherent sequence of events or events in turn” (Mosel & Hovdhaugen 1992: 180).

Chinese (Liu 1999: 124; 126; REC marker = auxiliaries *lái* ‘come’ and *qù* ‘to go’ with reduplication of a lexical verb; the main meaning of this form is iterative; judging by Liu’s examples, in compounds with transitives the object is usually omitted)

- (18) a. *dǎ* ‘to hit’
 b. *dǎ-lái-dǎ-qù* i. ‘to hit each other’ reciprocal
 ii. ‘to fight several times (or for a while)’ iterative or durative

Samoan (Mosel & Hovdhaugen 1992: 180–3)

- (19) a. *sogí* ‘to kiss’ → *fe-sogí* ‘to kiss each other’ reciprocal
 b. *a’a* ‘to kick’ → *fe-a’a* ‘to kick sth again and again’ iterative
 c. *a’a* ‘to kick’ → *fe-a’a* ‘to kick’ plural subject
 d. *’eli* ‘to paddle’ → *fe-’eli* ‘to paddle hard.’ intensive

3.4 Reflexive-sociative and reflexive-iterative polysemy

The iterative-reciprocal and the reciprocal-sociative types of polysemy rarely include the reflexive meaning. Apparently, the reflexive and the sociative share no semantic denominator, nor do the reflexive and the iterative. Nevertheless, there occur, though rarely, affixes with reciprocal-reflexive-sociative polysemy; cf. (20) and (16b):

Ritharngu (Heath 1980:61–62, 183; *-mi* = REC, SOC and REFL; *-n/-na* = an augment before derivational suffixes)

(20)	a.	<i>dak-u-</i>	‘to cut sb, cut off’	
	→	<i>dak-u-n-mi-</i>	i. ‘to cut each other’	reciprocal
			ii. ‘to cut oneself’	reflexive
	b.	<i>wa:ni-</i>	‘to go’	
	→	<i>wa:ni-na-mi-</i>	‘to go together’	sociative

The reflexive and the sociative meanings are not directly related, the reciprocal being, in a sense, an intermediate semantic link between them. In other words, if a marker combines the reflexive and the sociative meanings, it usually has a reciprocal meaning.

3.5 Three cases of relations between productive and unproductive meanings of reciprocal markers

Reflexive, sociative and iterative by no means exhaust all possible concomitant meanings of reciprocal markers. Each of all these meanings, and all of them together, may be unproductive, but typologically they may be of special interest if they have parallels in other unrelated languages thus indicating the possible paths of semantic evolution associated with reciprocity.

1. *The reciprocal meaning is productive and a non-reciprocal meaning is not* (Even, Mundari). In Even (Malchukov, Ch. 39, ex. (1); §3.3), the productive reciprocal suffix *-met/-mat* (cf. *žarga-* ‘to scold’ → *žarga-mat-* ‘to scold each other’) is generally monosemous, but there are about a dozen verbs of motion with the iterative meaning containing this suffix, cf. *tia(n)-* ‘to swim’ → *tia-mat-* ‘to swim here and there’ (most of their base verbs contain a component, like *-n-* in *tia(n)-* missing in derivatives), and also some deponent derivatives (cf. *želŋe-met-* ‘to jump repeatedly’, there is no **želŋe-*).

In Mundari (Osada, Ch. 37, ex. (1), also §9.2.3), the productive reciprocal infix *-po-/-pa-/p-* (cf. *dal-* ‘to hit’ → *da-pa-l-* ‘to hit each other’) occurs on a few distributive numerals (cf. *bar-ia* ‘two’ → *ba-pa-r-ia* ‘each two’).

2. *The reciprocal meaning is unproductive and a non-reciprocal meaning is productive* (Russian, Karachay-Balkar). Thus, in Russian, the reciprocal function of the postfix *-sja* is unproductive (as mentioned, there is a closed set of about 40 reciprocals in *-sja*, like *celovat’* ‘to kiss (sb)’ → *celovat’-sja* ‘to kiss each other’), while its other functions, e.g. anticausative and passive, are extremely productive (about 1400 anticausatives in *-sja*, like *otkryvat’* ‘to open sth’ → *otkryvat’-sja* ‘to open’ (vi)).

In Karachay-Balkar, where the productive reciprocal marker is the pronoun *biri-biri-n*,² the suffix *-š-* is unproductive in this function (there are about 60 derivatives like *tabanla-š-* ‘to kick each other’ comprising a closed set; there are no reciprocals from the bases *sij-* ‘to love’, *maxta-* ‘to praise’, etc.) and it is highly productive as a marker of the competitive meaning which is very close to the reciprocal proper (but does not meet the conditions illustrated in (1)); although my list of competitiveness contains about 40 items, competitiveness easily derive from practically all bases whose lexical meaning allows it; cf. *tig-iš-* ‘to compete in sewing’, *saw-iš-* ‘to compete in milking’ (see Nedjalkov, Ch. 5, §9.4.2).

3. *The reciprocal marker is generally unproductive* (Tagalog, Khmer). In Tagalog (Shkarban & Rachkov, Ch. 22, §3.3.1), alongside the productive reciprocal marker *mag...an*, there is an unproductive polysemous reciprocal marker *mag-* (cf. *y-um-akap* ‘to embrace sb’ → *mag-yukap* ‘to embrace each other’; about 30 derivatives) which has some unproductive non-reciprocal meanings, such as converse (cf. *b-um-ili* ‘to buy’ → *mag-bili* ‘to sell’), reflexive (cf. *um-ahit* ‘to shave sb’ → *mag-ahit* ‘to shave oneself’), causative (cf. *um-alis* ‘to go away’ → *mag-alis* ‘to remove’), intensive-iterative (*k-um-ain* ‘to eat’ → *mag-kain* ‘to eat much and often’).

In Khmer, alongside the productive reciprocal pronoun *khnie*, there is an unproductive reciprocal prefix *prv-* (about 60 derivatives; see Gorgoniev 1984:440–57) with a surprisingly rich polysemy, e.g. reciprocal *kham* ‘to bite’ → *prv-kham* ‘to bite each other’, intensive *huə* ‘to peck’ → *prv-huə* ‘peck sth as if vying’, causative *douc* ‘to be like sb/sth’ → *prv-douc* ‘to compare sth with sth’, spatial reciprocal *kɔŋ* ‘to put sth on sth’ → *prv-kɔŋ* ‘to put one upon another’, etc. (cf. (119) in Ch. 5).

4. Reciprocals and valency change. “Voice-oriented” and “non-voice-oriented” reciprocal markers

4.1 Main valency-changing means

Leaving aside a few special cases (see 12.2.1 on “possessive” reciprocals), morphological reciprocal markers reduce the valency of the underlying verb by deleting the direct or indirect object (cf. Yakut (9a’) and (9a’’) vs. (9c’)) and thus belong to valency-changing derivations. In the case of pronominal reciprocals there is hardly any valency reduction (9b).

The main types of valency change correlate with semantic functions as follows:

2. Although generally, whatever their frequency in texts, reciprocal pronouns tend to have minimal restrictions, there occur unexpected rather puzzling restrictions on their usage. For instance, in Japanese, the verb *koros-u* ‘to kill sb’ derives a morphological reciprocal *korosi-a-u* ‘to kill each other’, while the reciprocal pronoun *otagai o* as direct object cannot be used with either *koros-u* or *korosi-a-u*. Equally mysterious is the absence of the form **mi-a-ru* ‘to look at each other’ (< *mi-ru* ‘to look’), instead of which the pronominal reciprocal *otagai o mi-ru* is used (Alpatov & Nedjalkov, Ch. 25, §10.4).

- (21) a. valency reduction or demotion of an argument: reflexive, reciprocal, anticausative, object-oriented resultative,³ antipassive (unspecified object markers), passive (agentless and agented);
- b. valency increase: comitative, benefactive, malefactive, assistive, causative, applicative;
- c. valency retention: sociative (the number of the participants increases without changing the syntactic structure).

The lexical meaning of the base is preserved both in passives and antipassives, while in other cases it undergoes a change.

In general, the three types of polysemy listed in Section 3 are in the following relations with the types of valency change:

- (22) a. reflexive-reciprocal polysemy entails valency reduction, e.g. detransitivization; see (20a);
- b. reciprocal-sociative polysemy entails valency increase; see (ii) and (iii) in (60b);
- c. iterative-reciprocal polysemy entails no valency change; see (18b.ii), (19b, c, d).

Of course, in cases (22b) and (22c) the reciprocal meaning entails valency reduction.

4.2 Voice-oriented vs. non-voice-oriented reciprocal markers

I propose applying the term ‘voice’ to the main valency-changing categories listed above. This means that I do not regard retention of the lexical meaning as one of the properties of voice categories as in the passive voice. The contrast ‘voice-oriented vs. non-voice-oriented’ is proposed here tentatively, and it should be considered specially on a broader empirical basis.

The proposed broad use of the term ‘voice’ is not widely accepted, but it sometimes occurs in the literature, which seems to indicate that there are some grounds for it. Notice that in the grammars of some languages reciprocals are traditionally grouped with voices; cf. such Russian terms as *vzaimnyj zalog* (reciprocal voice), alongside *passivnyj / stradatel’nyj* (passive), *kauzativnyj / pobuditel’nyj* (causative), *refleksivnyj / vozvratnyj* (reflexive) voices in the grammars of Turkic and other Altaic languages written in Russian. This attitude is also accepted in the grammars of some other languages. For instance, Vitale (1981:177) distinguishes the following “voice categories: active, passive, reciprocal and causative, and various combinations of these” in Swahili. Zide & Anderson (2001:519) characterize Munda reciprocals and causatives as voice categories as well. Sechenbaatyar (2003:116–23) distinguishes six voices in the Chakhar dialect of Mongol: active, passive, causative, reciprocal, cooperative, and pluritative. These categories change the semantic content of the subject. Reciprocal markers entering into this system of categories are opposed to other markers which may be labelled ‘non-voice-oriented’.

I find it hard so far to propose precise definitions for voice-oriented and non-voice-oriented reciprocal markers. Although both of these types of markers can produce semantically identical or similar derivatives, they differ prototypically at least in two respects:

3. The object-oriented resultative can be illustrated by the following example: *Er öffnete das Fenster* ‘He opened the window’ → *Das Fenster ist geöffnet* ‘The window is open’ (see Nedjalkov & Yakhontov 1988:3–62).

- Voice-oriented reciprocal markers are productive in the proper reciprocal meaning (see 2.2.4), while non-voice-oriented markers are marginal as expressions of proper reciprocity. As concerns the spatial reciprocal meaning of both transitive and intransitive verbs, non-voice-oriented reciprocal markers can be even more productive in this function than voice-oriented ones.
- A voice-oriented reciprocal marker may be a part of the system of relatively few valency-changing markers of a language, or it may be the only voice-oriented marker in a language. Non-voice-oriented reciprocal markers, on the contrary, are usually a part of the system of numerous polysemous affixes with primary spatial meanings.

The borderline between voice-oriented and non-voice-oriented markers is highly mobile and indeterminate, and there are many intermediate cases across languages.

An example of a voice-oriented reciprocal marker may be the Yakut suffix *-s-* (see (9)), one of a system of five voice markers also including the reflexive suffix *-n-*, passive suffix *-ilin-*, active (zero marking) and causative (suffixes *-t-*, *-tar-*). Another example is the Khalkha Mongol reciprocal suffix *-lda-*: it is a member of the system of four voice markers, alongside with the passive suffix *-gd-*, active (zero marking) and causative suffix *-uul-*.

An example of a non-voice-oriented reciprocal marker may be the Latin prefix *com-*, one of a system of sixteen polysemous prefixes with a more or less prominent spatial meaning (see Zaliznjak & Shmelev, Ch. 4). Only some derivatives in *com-* are proper reciprocals (e.g.: *spondeo* ‘swear solemnly’ → *con-spondeo* ‘swear solemnly to each other’; *ruo* ‘throw oneself at sb/sth’ → *cor-ruo* ‘throw oneself at each other’; for details see 13.1.2, 13.1.3 and 15.5).

As mentioned, non-voice-oriented markers can derive *transitive* spatial reciprocals (which are object-oriented), cf. Latin prefixes *con-/com-/...*, *dis-/dī-* in derivational pairs like *fero* ‘carry sth’ → *cōn-fero* ‘carry sth into one place’, *vendo* ‘sell sth’ → *dī-vendo* ‘sell sth out by parts’. Such affixes can also encode meanings expressed by polysemous voice-oriented reciprocal markers, e.g. sociative, comitative, assistive, etc. (cf. (41), (48), (52), (53)).

Finally, they can also form *intransitive* spatial (subject-oriented) reciprocals, with the meanings of joining and separating of subject referents, but not of the type illustrated in (9), as a rule; cf. Latin *curro* ‘run’ → *con-curro* ‘come running together (to one place) from different directions’ (cf. also (16c)), *dis-curro* ‘disperse’ (vi).

Of course, reciprocal pronouns are not entered in this classification because they do not change the valency of the base verb.

5. Object-oriented reciprocals (embedded and derived). Referential ambiguity

In the subject-oriented reciprocal construction the reciprocants are expressed by the subject (*Uol-lattar* in (23a)), whereas in the object-oriented construction the reciprocants are denoted by the object (*uol-lar-ə-n* in (23c)). Construction (23b) may have a non-object-

oriented interpretation if (a) the subject referents are plural and (b) they belong to the same semantic class. Such referential ambiguity of reciprocals has been noted in the literature for embedded reciprocal constructions with the plural matrix subject. In terms of Section 12, these are two-diathesis reciprocals. Object-oriented reciprocals can be of two types.

5.1 Causatives of subject-oriented reciprocals

Example (23b), where the subject *kiniler* ‘they’ is plural, exhibits referential ambiguity: it can be interpreted as (i) subject-oriented “indirect” and (ii) object-oriented. Interpretation (i) is an instance of the so-called long-distance reciprocal relation, the subject referents of underlying construction (23a) being distant antecedents of the embedded object, i.e. the action ‘to meet’ does not involve the subject referents themselves but the underlying reciprocants denoted by the object, i.e. the sons of the subject referents:

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §5.3)

- (23) a. *Uol-lattar beje-beje-leri-n kör-d-üler.*
 son-their each.other-their-ACC see-PAST-3PL
 ‘Their sons met/saw each other.’
- b. *Kiniler uol-lattar-ən beje-beje-leri-ger kör-dör-d-üler.*
 they son-their-ACC each.other-their-DAT see-CAUS-PAST-3PL
 ‘They made/let their sons meet/see each other.’
- i. ‘each of the subject referents showed his son to the other subject referent’
 (subject-oriented)
- ii. ‘each of the subject referents showed his son to the son of the other subject referent’
 (object-oriented)
- c. *Kini uol-lar-ə-n beje-beje-leri-ger kör-dör-d-ü.*
 he son-PL-his-ACC each.other-their-DAT see-CAUS-PAST-3SG
 ‘He made/let his sons meet/see each other.’
 (object-oriented)

The matrix predicate can be not only a causative verb but also other verbs, e.g. ‘to tell’, ‘to think’, etc. Note also that in some languages there are no morphological causatives of reciprocal verbs, e.g. in Japanese (see Alpatov & Nedjalkov, Ch. 25, §6.2).

5.2 Reciprocals derived from three-place transitives

As in type (23c), there is no referential ambiguity and the sentence is object-oriented if the subject is singular (24c). If the subject is plural, subject-oriented “indirect” interpretation becomes possible; cf. Bamana (24b) and its English translation of which both allow two interpretations:

Bamana (Vydrine, Ch. 46, §3.2.2.3)

- (24) a. *Dú-tigi` yé à mùsò` jira à lá.*
 family-head-ART PFV his wife-ART show him to
 ‘The head of the family introduced his wife to him.’

- b. *Dú-tigi-w yé ù m̀s̀ó-w j̀ira j̀ógn ná.*
 family-head-PL PFV their wife-PL show REC to
 ‘The heads of the families introduced *their wives to each other.*’
- i. ‘The head of one family introduced his wife (wives) to the head of another family and *vice versa.*’ (subject-oriented “indirect”)
- ii. ‘One head of a family introduced his wife (wives) to the wife (wives) of the head of another family, and *vice versa.*’ (object-oriented)
- c. *Dú-tigi` yé à m̀s̀ó-w j̀ira j̀ógn ná.*
 family-head PFV his wife-PL show REC to
 ‘The head of the family introduced his wives *to each other.*’

6. Reciprocal markers for derivatives with two reciprocants only

I have not encountered any reciprocal markers used for two reciprocants only and entirely different from the markers for more than two participants (with one rather ambiguous exception). In most cases the marker used for more than two participants is morphologically more complex (“heavier”) than the marker for two participants. For instance, it can be iconically expressed by additional (root) reduplication (see (26b), (27b)). Reciprocal markers for two participants (‘2’) different from markers for more than two (‘>2’ or ‘≥2’) occur in some Austronesian (Malayo-Polynesian) and Tibeto-Burman languages. In general, three types of oppositions between reciprocal markers are logically possible:

- (1) ‘2’ ~ ‘≥ 2’
- (2) ‘≥ 2’ ~ ‘>2’
- (3) ‘2’ ~ ‘>2’.

Let us consider these types.

(1) ‘2’ ~ ‘≥ 2’. This type of opposition is attested in East Futunan. The ‘2’-marker, as in (25a), occurs on relic reciprocals and ‘≥2’-marker, as in (25b), is productive.

East Futunan (Moyse-Faurie, Ch. 35, §§3.1.1; 3.3.1)

- (25) a. *fe-tā* ‘to hit each other’ (of two only)
 b. *fe-tā-’aki* ‘to hit each other.’ (of two or more)

(2) ‘≥ 2’ ~ ‘>2’. This type is attested in Tagalog, in oppositions of two types: (26a) where *mag-away* is an unproductive (relic) form and (26b) where both forms are productive. It is important to note that the prefix *mag-* can express the dual number on nouns; cf. *klase* ‘class’ → *ka-klase* ‘classmate’ → *mag-ka-klase* ‘two classmates’ (Shkarban & Rachkov, Ch. 22, §4.2.1).

Tagalog (ibid., §§7; 3.2.1)

- (26) a. *mag-away* ‘to fight with each other’ (of two or more)
mag-away-an ‘to fight with each other’ (of more than two)
 b. *mag-ka-sunod* ‘to follow one another’ (of two or more)
mag-ka-sunod-sunod ‘to follow one another.’ (of more than two)

(3) ‘2’ ~ ‘>2’. This type is attested in a number of languages, cf. Latin *alter alterum* ‘2’ and *alius alium* ‘>2’. In Muna, the difference between the two markers is similar to what we find in Tagalog (26b): root reduplication together with the reciprocal marker ‘2’ is used as a ‘>2’-marker (while in non-reciprocal constructions the distinction between ‘2’ vs. ‘>2’ seems to be morphologically irrelevant); cf.:

Muna (van den Berg 1989:206; *po-* = REC for DU, *do-* = 3PL (sic!), *-mo* = PFV)

- (27) a. *do-po-foguru* ‘they teach each other.’ (of two only)
 b. *do-po-logo-logo-mo* ‘they competed with each other.’ (of more than two)

A similar distinction is also attested in Eastern Kadazan (genetically related to Muna), where the prefix *pi-*, termed dual reciprocal by Hurlbut (1988:54), “indicates a mutual action done by two persons to each other or a similar action done in two locations by one person” (ibid., p. 107). The translations of the sentences illustrating these two meanings are (comments on the constructions are mine – V. N.): ‘They followed *one after another*’ (reciprocal), ‘That (creature) keeps running and hiding *hither and thither*’ (dispersive-iterative), ‘I divided it *in two* for them’ (object-oriented reciprocal) (ibid., pp. 107, 54). Another reciprocal prefix *poi-*, termed ‘multiple reciprocal’, “means that more than two people are doing the action together or to each other. <...> It usually co-occurs with the iterative” (ibid., p. 55). The translations are: ‘We have all met *each other*’ (reciprocal), ‘*Several of us* will set off (lit. walk) *at the same time*’ (sociative), ‘So they fastened those boats *side by side*’ (spatial transitive reciprocal) (ibid., pp. 55, 109). Analogous to this pair of reciprocal prefixes and, it seems, genetically related are the markers *po-* and *pada-* in Tukang Besi (Donohue 1999:273).

The same type of opposition is attested for syntactic reflexive-reciprocal markers in Maori, being encoded by the dual vs. plural forms of the respective 3rd person pronouns; cf.: *raaua anoo* ‘they two again’, ‘themselves’, ‘each other’, *raatou anoo* ‘they more than two again’, ‘themselves’, ‘each other’ (Bauer 1993:186).

In Limbu, reflexive-reciprocal markers are different for the plural and dual subjects. The suffix *-siŋ* is used in the reflexive sense if the subject is singular, while with a plural subject its meaning can be either reflexive or reciprocal. The suffix *-ne* is used with a dual subject when it can be either reflexive or reciprocal, depending on the lexical meaning of the predicate; cf. (all the three forms in (28) are interpreted in accordance with the information on pp. 86–7 in van Driem 1987):

Limbu (ibid., p. 383)

- (28) a. *warum-siŋ-aŋ*. ‘I bathed myself.’
 b. *warum-siŋ-ŋʔna*. ‘We (PL.EXC) bathed ourselves/each other.’
 c. *warum-ne-tchi-ge*. ‘We (DU.EXC) bathed ourselves/each other.’⁴

4. It is probably not accidental that the suffix *-ne* functions as a portmanteau affix meaning “1st person (Subj.) → 2nd person (Direct Obj.)” regardless of the number of the subject and object, i.e. with the meanings ‘I – you (SG/PL)’, ‘we (PL/DU) – you (SG/PL)’, cf. *hip-ne* ‘I’ll hit you’ (van Driem 1987:88).

Finally, it may be noted in passing that in Awtuw, the reciprocal marker is obligatorily followed by a dual prefix even if the antecedent is plural (Feldman 1986:67; see (73) in Ch. 3, §6.3.2.4).

7. Simple and discontinuous constructions; “one NP” and “two NP” types. Part of the subject or a comitative object?

7.1 The simple reciprocal construction

In this type of constructions both reciprocants are expressed by the subject alone:

(1) by a single plural (pro)noun (‘one NP’ type; cf. the subject *Kiniler* ‘They’ in (23b) and pronouns *nous*, *vous*, *ils* in (33a)); this seems to be the most common expression of the reciprocants. There are languages where the subject of a reciprocal construction can be a single plural (pro)noun and not two separate (pro)nouns; this is the case in Ngiyambaa (Donaldson 1980:168);

(2) by two separate (pro)nouns (‘two NP’ type), when the conjoining of the (pro)nouns can be of two types:

(2a) the reciprocants are conjoined by a specialized conjunctive marker, cf. *ikki* ‘and’, lit. ‘two’ in (9b–d) and *i* ‘and’ in (30b);

(2b) the reciprocants are connected by a marker with the comitative meaning only or by a marker that can be both comitative and conjunctive (in this case the comitative noun phrase may be interpreted in the same ways as in non-reciprocal sentences). The comitative phrase can be a part of the subject NP, as is shown in (32a, b).

Besides, a comitative phrase can be a comitative object, as in (30a’, a’). This case is different from a simple construction; it is termed here a discontinuous construction (for details see §7.2). Note that there are cases when a comitative phrase may be interpreted either way.

With syntactic reciprocals, only the simple construction is possible; cf., for instance, Yakut (9e), and also sentences with English *each other*, German *einander*, Udehe *mene-mene* (Nikolaeva, Ch. 23, §4.7), as well as German and French reciprocals with reflexive (clitic) pronouns (the few exceptions are lexicalized units; see (33b, c)). Similarly, morphological reciprocals in Kabardian (Kazenin, Ch. 17, §3.1), Tagalog (Shkarban & Rachkov, Ch. 22, §9), and Eskimo (Fortescue, Ch. 19, §9) also allow simple constructions only. In Tagalog, the discontinuous construction is possible only with the comitative form of reciprocals (37c).

In reciprocal constructions of a number of languages the subject can be singular in number. In this case it is usually expressed by a collective noun phrase like ‘crowd’ (there can be subtle restrictions dependent on the meaning of the noun phrase, the meaning of the reciprocal verb and context), and also by an indefinite-personal pronoun like German *man* which occurs not only with verbal but also with pronominal reciprocals; e.g. *Man hat sich/einander umgebracht* ‘They have killed each other.’

7.2 The discontinuous construction in languages with non-verb-final syntax

This group includes type 2b of the previous subsection. In this case there is a clear indication that one of the reciprocants is encoded by a separate comitative argument, in postposition to the predicate (e.g. *na Halima* in (29b)). In languages with subject agreement an additional criterion may be predicate agreement with the first reciprocant only (cf. *a-* = 3SG.SB in (29b)), which is in fact the only subject. The comitative object, as a constituent of lower pragmatic and syntactic status, does not differ semantically from the reciprocant in the subject position; cf.:

Swahili (Vitale 1981: 145, 150–151; see also Maslova, Ch. 6, §3.4)

- (29) a. *Juma na Halima wa-na-pend-an-a.*
 J. and/with H. 3PL.SB-PRES-love-REC-a
 ‘Juma and Halima love each other.’
- b. *Juma a-na-penda-an-a na Halima.*
 J. 3SG.SB-PRES-love-REC-a with H.
 ‘Juma and Halima love each other’, lit. ‘Juma loves each other with Halima.’

At least in some of the Bantu languages where the reciprocal suffix *-an-/ak-an/...* was replaced by a new marker that developed from a reflexive prefix (cf. (16a) and (16b)) the discontinuous construction of type (29b) is also used. This is the case in Kimbundu (see Chatelain 1889/90: 191).

Let us consider discontinuous constructions on the basis of Russian reciprocals with the reflexive postfix (and compare them with the simple construction). As mentioned above, there are no more than 40 verbal *-sja* reciprocals of type (30c); all of them are lexicalized and, with a few exceptions, allow the discontinuous construction (see Knjazev, Ch. 15, §3).

Thus, diagnostic constructions of type (30a’, a”, c’) may also be formed by verbal (but not pronominal!) reciprocals, if these reciprocals can be used in the discontinuous construction at all, – usually with a syntactic object marked by a case form or comitative preposition or postposition. (30a’) and (30a”) are discontinuous constructions where one of the participants is named by a non-subject, while (30c) and (30c’) are simple constructions with both participants named by the subject. The use of a reciprocal verb in the discontinuous construction entails an increase of syntactic valency by one: (30c’) is a one-place construction and (30a’) and (30a”) are two-place, while semantically all of them are two-place (in (30) *-la-* = PAST.SG.F; *-li-* = PAST.PL; *s* = ‘with’):

Russian

- (30) a. *Anja obnja-la Mashu.* + b. *M. obnja-la A.* = c. *A. i M. obnja-li-s’.*
 ‘A. hugged M.’ ‘M. hugged A.’ ‘A. and M. hugged each other.’
- a’. *A. obnja-la-s’ s Mashej* = a”. *M. obnja-la-s’ s A.* = c’. *A. i M. obnja-li-s’.*
 ‘A hugged M.’ ‘M hugged A.’ ‘A. and M. hugged each other.’

The comitative argument with a reciprocal verb (31a), unlike a free comitative adjunct (30a’), cannot be omitted as it is required by the meaning of the reciprocal predicate and the comitative preposition *s* ‘with’ cannot be replaced by its antonym *bez* ‘without’; cf.:

- (31) a. *A. obnja-la-s' s M.* → b. **A. obnja-la-s' bez M.*
 'A. hugged M.' 'A. hugged without M.'

but

- a'. *A. priš-la s M.* → b'. *A. priš-la bez M.*
 'A. came with M.' 'A. came without M.'

At first glance, Russian examples (30a') and (30a'') are (almost) synonymous with (30a) and (30b) respectively and they are translated into English in the same way, but in fact they are not. Therefore, in (30a) the constituent *Mashu* can be replaced by the word *pokojnika* 'the deceased', while in (30a') the phrase *s Mashej* cannot be replaced by *s pokojnikom* 'with the deceased', because the reciprocal verb implies counteraction of the second participant.

Constructions where the second reciprocant is a comitative phrase are a special case. In cases like (31a) the comitative phrase is obviously an object, while (32a–b) when the reciprocants are placed in contact syntactically, poses the problem whether the comitative phrase is an object or a part of the subject NP. Subject-predicate agreement, the singular or plural number of the predicate, the nature of the anaphora control, possible insertion of other words between the reciprocants may help to establish the syntactic status of the comitative phrase. The same problem (a part of the subject or an object) seems to be relevant for non-reciprocal verbs, cf. (32a'–b'). The difference lies in the fact that in (32a) the choice is between a part of the subject and a comitative object (i.e. an argument) and in (32a') we have to choose between a part of the subject and a comitative adjunct (i.e. a non-argument).

- (32) a. *A. s M. obnja-li-s'.* = b. *M. s A. obnja-li-s'.* = c. *A. i M. obnja-li-s'.*
 lit. 'A. with M. hugged e.o.' 'M. with A. hugged e.o.' 'A. and M. hugged e.o.'
 a'. *A. s M. priš-li* = b'. *M. s A. priš-li* = c'. *A. i M. priš-li*
 lit. 'A. with M. came.' 'M. with A. came.' 'A. and M. came.'

The situation is similar to a few French (and German) reciprocals that allow the use in discontinuous constructions (see Guentchéva & Rivière, Ch. 12, §6.2; Wiemer & Nedjalkov, Ch. 10, §4.7). In simple constructions, a reciprocal predicate has *three* person/number forms only (1PL, 2PL, 3PL; see (33a)) and in discontinuous constructions it has all the *six* person/number forms (i.e. 1SG, 2SG, 3SG and 1PL, 2PL and 3PL; see (33b–c)). The following is a paradigm of six forms of the French verb *se battre*, which is a slightly lexicalized derivative from *battre* 'to hit':

- A. The simple construction (one-place)
- (33) a. *Nous nous battons.* 'We fight.'
Vous vous battez. 'You fight.'
Ils se battent. 'They fight.'
- B. The discontinuous construction (two-place)
- b. *Nous nous battons avec Pierre.* 'We fight with Peter.'
Vous vous battez avec Pierre. 'You fight with Peter.'
Ils se battent avec Pierre. 'They fight with Peter.'

- c. *Je me bats avec Pierre.* 'I fight with Peter.'
Tu te bats avec Pierre. 'You fight with Peter.'
Il se bat avec Pierre. 'He fights with Peter.'

Note that in the (b) sentences the plural subject does not include the opposite party, i.e. 'Peter'.

7.3 The discontinuous construction in languages with verb-final syntax

In this case the post-predicate position of the second reciprocant is as a rule impossible (i.e. the term 'discontinuous' does not retain its literal sense here). However, the subject agreement may serve as a criterion for distinguishing between simple and discontinuous constructions, i.e. the state of affairs is then the same as in (29b) or (34a–b). Thus, for instance, in Evenki the main connector between the reciprocants in the conjunctive subject is the comitative marker *-nun*: if the predicate agrees with both reciprocants, we have a simple construction (34a), if the predicate agrees with the first reciprocant only, the construction is discontinuous (though on condition that this reciprocant is in the singular; (34b)). If the first reciprocant is in the plural the difference between simple and discontinuous constructions is morphologically neutralized (34c), and other criteria of distinguishing between them should be found (cf. the text above (32)). In fact, however, the readings do not display any significant semantic difference (the use of some criteria, for instance, insertion of an adverb between the reciprocants transforms a simple construction into discontinuous rather than serves as a diagnostic criterion for the discontinuous construction).

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.5)

- (34) a. *Eni hunat-nun-mi n'ukani-maat-čere-Ø.* RECS
 mother daughter-with-her kiss-REC-PRES-3PL
 'Mother and her daughter are kissing each other.'
- b. *Eni hunat-nun-mi n'ukani-maat-čere-n.* RECD
 mother daughter-with-her kiss-REC-PRES-3SG
 (same translation as (a))
 lit. 'Mother with her daughter is kissing each other.'
- c. *Nuŋartən hunat-nun-mer n'ukani-maat-čere-Ø.*
 they daughter-with/and-their kiss-REC-PRES-3PL
 i. 'They and their daughter are kissing each other.' RECS
 ii. (same as (i)), lit. 'They with their daughter are kissing each other.' RECD

Turkish differs from Evenki in the following way: in simple constructions the reciprocants are expressed either by a plural noun phrase or two noun phrases conjoined by the conjunction *ile* 'and', the predicate being always marked for plural. In discontinuous constructions, the element *ile* follows the second noun phrase and functions as a postposition 'with', and if the first noun phrase is singular the predicate is also in the singular (Underhill 1979: 366).

A specific situation is observed in Udehe: even if the second participant is expressed by the instrumental case the predicate always agrees “with the complex NP rather than with the first participant alone” (Nikolaeva, Ch. 23, §3.5.1). She asserts: “There are reasons to think that in these cases the instrumental NP does not have an adverbial or object status, but rather has a modifying or coordinative function and forms a complex NP with the subject” (ibid.).

7.4 No criterion for distinguishing between simple and discontinuous constructions?

The problem gets further complicated for the languages where

(a) the comitative and conjunctive meanings share the same means of expression, i.e. there are no specified conjunctive markers (this combination of functions is very widespread across languages),

(b) a concomitant “comitative” phrase cannot be postposed to the verb, and

(c) there is no subject-predicate agreement.

This is the case in Modern Chinese where the word *hé* and a number of other analogous elements may function both as a conjunction ‘and’ and a preposition ‘with’. Not infrequently, the choice of one or another reading (of such units) does not visibly affect the meaning of the sentence and its translation. Thus, the translation of (35a) into Chinese is indicative in this respect: (35b) was translated back into English by another native speaker of Chinese as (35c), i.e. the English sentence with an obvious non-subject *from him* is translated into Chinese by means of a simple reciprocal construction, without an obvious object.

- (35) a. *I am going in the opposite direction from him.*
 b. *Wǒ hé tā hùxiāng nì-xíng.* (F. Li., p.c.)
 I and/with he mutually opposite-go
 c. ‘I and he are going in opposite directions from each other.’

(see also Hoa et al., Ch. 49, §3.1.3)

7.5 An applicative form of reciprocal serves to build a discontinuous reciprocal construction

The applicative marker serves to derive applicatives not only from reciprocals but also from any other verbs whose meaning is compatible with it. In the latter case the applicative form introduces a new argument (see (36)), while in the case of reciprocals this form places one of the reciprocants in a non-subject position (37). Such derivatives are attested at least in two languages, Tagalog and Maasai.

In Tagalog, the applicative-comitative prefix *maki-* (not employed to mark the reciprocal and sociative meanings when used alone) derives comitatives not only from unmarked verbs, but also from reciprocals (37) and sociatives (38). In the latter case the syntactic valency increases by one while the semantic valency is retained (the difference between (36b) and (38c) remains unclear to me). This transformation produces semantic changes in the sentence. To cite Schachter & Otanes (1972:334), the prefix *maki-* often

implies that the performer (subject) is taking part in an activity in which another person (non-subject) “has, in some sense, a prior or more direct involvement.”

Tagalog (Shkarban & Rachkov Ch. 22, §12, ex. (218), (221), (229))

- | | | | | |
|------|----|---------------------------|-----------------------------|--------------------------------|
| (36) | a. | <i>um-inom</i> | ‘to drink’ | |
| | b. | <i>maki-inom</i> | ‘to drink with sb’ | comitative of an unmarked verb |
| (37) | a. | <i>t-um-ulong</i> | ‘to help’ | |
| | b. | <i>mag-tulong-an</i> | ‘to help each other’ | |
| | c. | <i>maki-pag-tulong-an</i> | ‘to cooperate with sb’ | comitative of reciprocal |
| (38) | a. | <i>um-inom</i> | ‘to drink’ | |
| | b. | <i>mag-inum-an</i> | ‘to drink together’ | |
| | c. | <i>maki-pag-inum-an</i> | ‘to drink together with sb’ | comitative of sociative |

In Maasai, there is a polysemous verbal form in *-a* termed “middle” (“neuter” in earlier terminology) which, judging by the examples, can express such meanings as reciprocal (see (39a)), reflexive, anticausative, resultative. There is also a polysemous form with the marker *-ie/-je* or *-re* (after vowels) called “applied or instrumental” in Tucker & Mpaayei (1955: 134–40) and commonly termed applicative in linguistics. The applicative derivative of the middle form can denote actions performed “by means of a specific instrument or directed to a specific person or place” (ibid., p. 157). As (39b) shows, in one of its usages the applicative form can require the discontinuous construction with the shift of one of the reciprocants into a non-subject position, as in Tagalog (37) (although it can hardly be regarded as comitative).

Maasai (Tucker & Mpaayei 1955: 157; *k-* = 1PL, *a-* = 1SG)

- | | | | |
|------|----|--------------------|--|
| (39) | a. | <i>k-iŋor-a</i> | ‘we look at each other.’ |
| | b. | <i>a-iŋor-a-re</i> | ‘I look at him (while he looks at me)’ applicative of reciprocal |

8. Reciprocal-sociative polysemy. Sociative, comitative, assistive

These meanings can be expressed by reciprocal markers. In this section, I will discuss constructions of types (b) and (b’) shown in (40) below and also assistive constructions contiguous to the comitative. First let it be noted that, although constructions (a), (a’) and (b), (b’) are structurally similar, they differ in the following way: in comitative (b’) the non-specified constituent can generally be omitted (cf. (61c), (62) and (65b)), while in discontinuous reciprocal construction (a’) it usually cannot; cf. example (112) in Kuular (Ch. 27, §5.3) (see, however, (73c) below).

- | | | | | | |
|------|----|---------------------------------------|---|-----|--|
| (40) | a. | <i>Simple</i> reciprocal construction | – | a’. | <i>Discontinuous</i> reciprocal construction |
| | | (= RECS) | | | (= RECD) |
| | b. | <i>Sociative</i> construction | – | b’. | <i>Comitative</i> construction |
| | | (= SOC) | | | (= COM) |

The sociative and the comitative meanings are very close to each other, often being expressed by the same marker. But even in this case the grammarians, including native

speakers of the relevant languages, distinguish these meanings under different labels. Thus, in Abaza (Tabulova 1976: 188–91) the comitative marked by the prefix *c-* (see (69b') below) is termed “the category of conjunctivity” (Russian *sojuznost'*) and the sociative marked by the same prefix (see (69b)) is termed the “category of jointness” (Russian *sovmestnost'*). These categories are also differentiated by the authors of the grammars of Yakut; the comitative marked by the suffix *-s* (see (54b.ii)) is termed “contiguous jointness” (*primykajuščaja sovmestnost'*) and the sociative also marked by *-s* (see (54b.i)) is named “combined jointness” (*sovokupnaja sovmestnost'*) (Kharitonov 1963:22).

Note that the sociative does not change the valency of the base, and the comitative and assistive increase it by one.

A striking parallel to the Yakut reciprocal-sociative-comitative-assistive polysemy is attested in Ancient Greek. Incidentally, the Yakut reciprocal marker is listed among reciprocal voice-oriented markers in Yakut grammars, while in the Ancient Greek grammars the prefix *συν-* is not, the expression of reciprocity being a marginal function of this prefix (see 15.5).

8.1 Sociative

The sociative meaning (also called associative, collective, cooperative, etc.) suggests that an action is performed jointly and simultaneously by a group of people (at least two) named by the subject (on objects see below) and engaged in the same activity (Lichtenberk 1985:28; see Kemmer 1993:98–102; 123–27; Wierzbicka 1980:260–4; Zaliznjak & Shmelev Ch. 4, §2.1). The prototypical sociative meaning seems to include related semantic components, such as spatial (the meaning ‘together’), aspectual (‘simultaneously’), number (‘all’, ‘many’, etc.), and modal (‘jointly’).

Of particular interest are some characteristics of the sociative in Yakut, especially in view of the fact that they are pointed out by an author who is a native speaker: “a joint action is understood as one common action in which two or more acting persons participate in equal measure”; “verbs of joint action manifest in their meaning the presence of some inner bond between the participants”; “the linking bond is probably the unity of the cause and the unity of the situation (and of psychological conditions) of the action performed”; “the nature of the inner connection between the components of the idea of joint action may vary depending on the lexical meaning of the verbal stem and the overall meaning of the context” (Kharitonov 1963:24–5). The author illustrates his statements with examples cited below in (44) and (45), where the base constructions with a plural predicate are opposed to constructions with a predicate marked as sociative (the same marker is also used for the reciprocal, comitative and assistive meanings). A picturesque description of sociatives in Tatar is suggested by Zinnatullina (1969:195): sociatives denote actions “not as a single process but as a sum of single actions of a multitude of persons <...> The actions are seen as live, dimensional, dynamic: the action of each person is characterized by peculiarities <...>.”

The general characteristics of the sociative meaning just cited do not cover the cases of “extended” use of the sociative markers, especially those with the inanimate subject referents (see (46) and (47) below).

Like reciprocals, sociatives can be (a) subject-oriented and (b) object-oriented (cf. (a) and (b) respectively in (41); see also (65)). In case (a) the sociative relation holds between the subject referents and in (b) between object referents. This relation is in a sense isomorphic to that between the subject- and object-oriented reciprocals, and also between subject- and object-oriented distributives in a number of languages (cf. Nivkh (Gilyak) *vi-γət-t* ‘each of them left’, *řu-γət-t* ‘picked up each of them’; here *-γət* is an aspect marker and *-t* is a finite marker). Needless to say, if the predicate is intransitive it is always subject-oriented, and a transitive predicate is usually, though not exclusively, also subject-oriented (on object-oriented reciprocals see Section 5 above).

As the examples show, there is a significant semantic difference between these two types with respect to the degree of active participation of the referents in the action. Obviously, the feature ‘jointly’ from the above definition does not apply to object-oriented sociative sentences with the meanings like ‘She washed his shirt and trousers together’. Here the main features are ‘spatial proximity’ and ‘simultaneity (of actions on the object participants)’. ‘Spatial proximity’ and ‘simultaneity’ are also typical of subject-oriented sociatives (thus the situation ‘to be near/next to each other’ can also be interpreted as spatial reciprocal; it is not accidental that it can be marked by reciprocal markers which lack the sociative meaning; see (102), (103)).

Ancient Greek and Latin

- (41) a. *κάθημαι* ‘sit’ → *συγ-κάθημαι* ‘sit next to each other or together’
γεωργέω ‘till land’ → *συγ-γεωργέω* ‘till land together, jointly’
 b. *δεκάζω* ‘bribe’ → *συν-δεκάζω* ‘bribe all (persons) together or entirely’
crucifigo ‘crucify’ → *con-crucifigo* ‘crucify sb and sb simultaneously or together.’

In contrast to intransitive sociatives that usually can be translated in different ways (see the text beneath (45)), the word ‘together’ adequately renders the meaning of transitive sociatives. The sociative meaning is the most common additional function of reciprocal markers (see (54b)). The two meanings usually differ syntactically; thus, the direct object rules out the reciprocal meaning (see reading (i) in (42a)) and, *vice versa*, its absence makes the construction reciprocal (see reading (ii)). But this is possible only if a predicate can take an animate direct object. For instance, the omission of the direct object in (42b) makes the sentence absurd (cf. *‘They paved each other’).

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §9.2.1.2)

- (42) a. *Kiniler* [*is taŋah-ə*] *məɫala-s-t-əlar*.
 they interior clothes-ACC SOAP-REC-PAST-3PL
 i. ‘They soaped the underwear *together*.’ (with the bracketed constituents)
 ii. ‘They soaped *each other*.’ (without the bracketed constituents)
 b. *Kiniler* [*uulussa-nə*] *muostala-s-t-əlar*.
 they street-ACC pave-REC-PAST-3PL

- i. ‘They paved the street *together*.’ (with the bracketed constituent)
 ii. *‘They paved *each other*.’ (without the bracketed constituent)

When both the reciprocal and the sociative meanings are productive enough, the class of base verbs to which sociatives can apply is typically larger than that of the verbs which can be reciprocalized. Firstly, reciprocals do not derive from one-place intransitives, as a rule (see, however, (see (113) and (114)), and secondly, they do not derive from transitives with an inanimate direct object, i.e. like those in (42b) (the exception being the “indirect” and “possessive” reciprocals; see 12.1.2 and 12.2.1 below). Note that judging by the data from the *Yakut-Russian dictionary* (Slepcev 1972), checked with the informants, about 300 reciprocal and 600 sociative derivatives are registered, many derivatives exhibiting both meanings (see Ch. 26, §§9.2.1 and 7). The data for the Tatar language (Zinnatullina 1969:197, 190, 193) also show the prevalence of sociative derivatives (mostly of intransitive bases) over reciprocal derivatives, about 130 and 110 items respectively (out of 660 forms with the suffix -ṣ̌). But the most productive class in Tatar are assistives – 335 items (nearly all derived from transitives).

In a number of languages, sociatives derive mostly or exclusively from intransitives. Thus, in the *Karachay-Balkar-Russian dictionary* (Gochijaeva & Sujunchev 1989) as few as 10 registered sociatives are transitive and as many as 140 are intransitive (in connection with the weakening of the productivity of transitive sociatives it should be noted that in another Turkic language, Kirghiz, sociatives have practically fallen out of use). The main semantic classes of the intransitive base verbs from which sociatives derive (including derivatives with the additional components of meaning like ‘many’, ‘intensively’ and the like) are:

- (a) verbs of producing sounds, e.g. ‘to snore’, ‘to cluck’;
- (b) verbs of shining, e.g. ‘to sparkle’;
- (c) verbs of motion, e.g. ‘to sit down’, ‘to hobble’;
- (d) verbs of physiological processes, e.g. ‘to grow thin’, ‘to grow old’;
- (e) some verbs of psychological states and processes, e.g. ‘to get scared’, ‘to get confused’, ‘to rejoice’;

(f) natural states and processes, e.g. ‘to hang down’, ‘to burst into leaf’, ‘to grow green’ (Nedjalkov & Nedjalkov, Ch. 24 on Karachay-Balkar, §5.2.3). In Yakut, sociatives often derive from numerous intransitives denoting sound production and/or those with aspectual frequentative meanings (see Kharitonov 1963:22–8). The same is the case in Tuvan; cf.:

Tuvan (Kuular, Ch. 27, ex. (105))

- (43) *kattar-aš-* ‘to laugh (of many together)’
mööle-š- ‘to moo (of many cows simultaneously)’
ulu-š- ‘to howl (of many).’

The sociative meaning of intransitives seems to vary within certain semantic limits and therefore, as mentioned, it may be translated in a variety of ways. Thus, Yakut sociatives are translated into Russian by the Yakut linguist N. Kharitonov (1963:25–8) with the help of words meaning ‘together’, ‘jointly’, ‘of many (persons, things) together’, ‘of many’, ‘simultaneously’, ‘all (of them) together’, ‘all at once’, etc. Karachay-Balkar sociatives are also

translated with the help of the expressions ‘all together’, ‘all at once’, ‘all those present’, ‘here and there’, ‘first one then another, overlapping’, ‘interrupting each other without waiting for one’s turn’, ‘in a hurry’, ‘feverishly (as if in competition)’, ‘competing in speed’ (which may imply an intensive action). Sometimes, in broad context or due to the lexical meaning of the base verb, the sociative meaning surfaces in translations in an unpredictable way. Compare examples with intransitive sociatives:

Yakut (Nedjalkov & Nedjalkov, Ch. 26, ex. (146)–(147))

- (44) a. *Turaax-tar daayənə-l-lar.* → b. *Turaax-tar daayəna-h-al-lar.*
 CROW-PL CAW-PRES-3PL CROW-PL CAW-REC-PRES-3PL
 ‘Crows are cawing.’ ‘Crows are cawing (all of them together, jointly).’
- (45) a. *Oyo-lor atə-l-lar.* → b. *Oyo-lor ata-h-al-lar.*
 child-PL cry-PRES-3PL child-PL cry-REC-PRES-PL
 ‘The children are crying.’ ‘The children are crying (all of them together, as if vying with each other).’

Out of context, the meaning of intransitive sociatives can very often be rendered in English more or less adequately by the word ‘together’, but in textual examples they often acquire very subtle semantic nuances (cf. (47)). These nuances are sometimes difficult to express adequately in English: they may be omitted in translation, as in (46), or translated by a separate word and thus acquire inappropriate emphasis absent in the original, as in (44) and (45).⁵

Yakut (Ch. 26, §9.2.1.1)

- (46) *Kölohən-ner-e čallərya-ččə tammala-s-t-əlar.*
 sweat-PL-his drop-CONV drop-REC-PAST-3PL
 ‘Drops of his sweat fell down.’
- (47) *Təhənča-nan hojuu bugul-lar bačəgara-h-al-lar.*
 thousand-INST thick haystack-PL stand-REC-PRES-3PL
 ‘Thousands of haystacks stand here and there’ (the distributive sense ‘here and there’ is used for stylistic purposes to convey the meaning ‘many’, in semantic agreement with the numeral ‘thousands’).

As a rule, sociative markers, including words meaning ‘together’ (or ‘both’), do not combine with grammatical and lexical reciprocals (cf. Dougherty 1974:37–8; Yomdin 1981:100; Reis & Vater 1980:375–7; Zaliznjak & Shmelev 1999:454). This may be due to a collision of the meanings of the two markers: in the sociative the subject referents share *one* semantic role and are presented as a single “indivisible” entity, while in the reciprocal the subject referents are divided [into two parties], each being ascribed *two* roles. The reciprocal denotes an action involving the subject referents, whereas ‘together’ stresses the meaning of *joint* action. Therefore, if a sociative marker is added to a reciprocal sentence with a meaning like ‘They fight’ (> ‘They fight together’), the informants may ask: ‘whom

5. Similar problems arise when a grammatical element of a language is translated into another language where the corresponding meaning is not grammaticalized; cf. the difficulties of rendering Russian aspects in aspectless languages, such as English.

do they fight with?’ The sporadically attested combinations of these two markers may be accounted for by a change of the meaning of the sociative marker when it is combined with a reciprocal marker, for instance, it may acquire the meaning ‘simultaneously’, as in Even (cf. Malchukov, Ch. 39, §§2.5.1 and 7). A different case is attested in Tariana where the combination of both markers means ‘do sth all together to one another’ (Aikhenvald, Ch. 30, §§4.1–4.4) and thus the above mentioned semantic conflict does not hold.⁶

8.2 Comitative

The sociative meaning implies a joint action of participants acting *en masse*, as a single group, whereas the comitative meaning implies *two participants*, each participant being single or collective (as in the reciprocal meaning), acting jointly, together, without indication which of them is the initiator of the action. The second participant is expressed by a non-subject argument, either an indirect object with a comitative marker (postposition, preposition or case marker) or a direct object. Syntactic separation and demotion of this participant may lead to the filling in of this position by the name of a referent unequal to the subject referent in status (cf. 1.9.8). In this construction the subject may be in the *singular* (this also applies to discontinuous reciprocal constructions of type (40a') as well; see (33c), (29b), (30a')). The comitative meaning differs from the sociative where all the participants are equally involved in the action in that it implies that the subject referent, which may be singular, takes part in an action often initiated by another party which can be expressed by a non-subject argument or remain unexpressed. In isolated quotations (and in forms non-inflected for number), a form with a sociative-comitative marker is ambiguous (sociative or comitative) and, often, the dictionary translation as either sociative or comitative is accidental (thus, (48a) may also have a sociative meaning ‘to laugh together’). Comitatives can also be subject-oriented (48a) and object-oriented (48b), although the latter type is rather rare.

Ancient Greek and Latin (henceforth 1SG.PRES forms used as standard citation forms in dictionaries are translated as English infinitives)

- (48) a. γελάω ‘laugh’ → σὺγ-γελάω ‘laugh together with sb’
 b. *creo* ‘create’ → *concreo* ‘create sth together with sth.’

Unlike intransitive (but not transitive) sociatives, which may be translated in different ways, depending on the the lexical meaning, comitatives are more homogeneous: they are mostly translated by means of the phrase ‘(together) with sb’, or ‘(together) with sth’.

As a rule, *comitative constructions can be easily converted into sociative*, but the opposite conversion of sociative into a comitative construction is often impossible. For instance,

6. To a certain degree, the following derivational relationship is characteristic of the semantic relationship between the comitative, reciprocal and sociative: the meaning ‘together’ is expressed in Nivkh and Ainu by reciprocal derivatives from lexical comitatives; cf. Nivkh *-yrə-* ‘to accompany sb’ → *u-yrut* ‘together’ (where *u-* = REC, *-t* = CONV.PL; the alternation *-ə/u-* is unique): thus, ‘together’ literally means ‘accompanying each other’; Ainu *tara* ‘to go with sb’ → *u-tara* ‘together’ (*u-* = REC).

sociative constructions with a non-human subject are not as a rule convertible into comitative for pragmatic reasons; cf. examples (44), (46) and (47) of sociatives cited above. For the following Karachay-Balkar sociatives, comitative transforms are impossible or weird (cf. the literal English translation of the comitative conversion of (49b): ‘A log together with other logs burns breaking into sparkles’).

Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24, ex. (93b, k))

- (49) a. *Tawuq-la qanqalda-š-də-la.* (G. 56)
 hen-PL cackle-REC-PAST-3PL
 ‘The hens started cackling all at once.’
 b. *Kösew-le dziltinde-š-ib džan-a-dəla.* (KB. 249)
 log-PL sparkle-REC-CONV burn-PRES-3PL
 ‘The logs (many of them) burn breaking into sparkles.’

There are rather rare exceptions, however, determined by various pragmatic factors. Here are examples of Karachay-Balkar sociative constructions which can be converted into comitative with an unspecified co-participant (50c) and with the co-participant expressed by a comitative phrase (50d), and examples of sociative constructions that can be converted into comitative only if the co-participant is expressed by a comitative phrase (51d) but not with an unspecified co-participant (51c).

Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24, ex. (86), (90); -*də* = PAST, -*la* = 3PL, -*š* = REC, *an-ə* = ‘s/he-ACC’, *bla* = ‘with’)

- (50) a. *Ala dabərda-də-la.* ‘They were making noise.’
 b. *Ala dabərda-š-də-la.* ‘They all were making noise [vying with/interrupting each other].’
 c. *Ol dabərda-š-də-Ø.* ‘He was making noise [taking part in the general hubbub].’
 d. *Ol an-ə bla dabərda-š-də-Ø.* ‘He was making noise with him [taking part in the general hubbub].’
 (51) a. *Ala džutlan-də-la.* ‘They fell upon their food.’
 b. *Ala džutlan-əš-də-la.* ‘They fell upon their food (many of them, in a hurry).’
 c. **Ol džutlan-əš-də-Ø.* (intended meaning: ‘He fell upon his food with sb else.’)
 d. *Ol an-ə bla džutlan-əš-də-Ø.* ‘He fell upon his food with him.’

8.3 Assistive

The assistive meaning, like comitative, implies two participants, initiator of the action and the assistant, each single or a group of people jointly performing the same action. The initiator of the action surfaces as a non-subject (often in the dative case), and the assistant as the subject.

Unless there are restrictions determined by the weak productivity of the comitative, *any assistive construction can be converted into comitative*, but the opposite is not true.

Although the distribution of the meanings assigned in a dictionary to derivatives may be accidental, I will illustrate various combinations of the assistive meaning in Ancient Greek with other meanings in polysemous Ancient Greek derivatives: the assistive mean-

3. Valency: the reciprocal implies valency reduction, in the sociative there is no change, and the comitative and assistive display valency increase.

4. Subject/object-oriented constructions: the reciprocal, sociative and comitative can be both subject- and object-oriented (I have in mind the following oppositions respectively: *They hit each other* – *He hit the stones against one another*; *They killed him together* – *He killed them together*; *He built the house with them* – *He cooked the meat with potatoes*; cf. (24), (41), (48b)). The assistive has no object-oriented correlates (it is hard to imagine an object-oriented construction in opposition to the sentence *He helped them to build the house*).

5. In the reciprocal and the assistive the underlying meaning seems to undergo a more essential shift than in the sociative and comitative.

6. In the reciprocal and the sociative the subject referents perform identical actions; in the assistive, the non-subject denotes the main performer; in the comitative the main performer is determined by the context.

7. The following pragmatically conditioned relations typically hold between the four meanings (if all of them are productive in a language) (the illustrations are from Yakut):

7a. A derivative with the assistive meaning can also have a comitative meaning (cf. *ülele-s-* ‘to help sb to work’, ‘to work with sb’), but not *vice versa* (cf. *kel-is-* ‘to come with sb’, but not *‘to help sb to come’);

7b. As a rule, any comitative construction can be converted into sociative (‘to help sb to work’ > ‘to work with sb’ > ‘to work together’), but not *vice versa* (the sociative *tammala-s-* (*tammala-* ‘to drop’) in (46) does not allow a natural comitative phrase ‘with sth’);

7c. While the lexical scope (the range of lexical meanings of the bases) of the assistive is narrower than that of the comitative, which, in turn, is narrower than that of the sociative, the lexical scopes of reciprocal and comitative overlap; as a result, the following classes exist:

(i) derivatives with both the reciprocal and sociative meanings (sometimes with assistive and comitative meanings; e.g. *ölör-üš-* i. ‘to kill *each other*’, ii. ‘to kill sb *together*’, iii. ‘to kill sb *with someone*’, iv. ‘to *help* sb to kill sb’);

(ii) derivatives with the sociative meaning only; besides numerous sociatives of one-place intransitives (cf. *ülele-s-* ‘to work together’, etc.), here belong derivatives of transitives with an inanimate object (cf. *mehij-is-* ‘to knead (dough) together’, *muostala-s-* ‘to pave (the street) together’, etc.);

(iii) derivatives with the reciprocal meaning only (cf. *taapta-s-* ‘to love each other’, *ubura-s-* ‘to kiss each other’, *umn-us-* ‘to forget each other’, *üöx-süs-* ‘to curse each other’, *bil-is-* ‘to know each other’, *axt-æs-* ‘to miss each other’).

The hierarchy of the classes of derivatives can be represented as follows:

$$(55) \textit{reciprocal} \cap \textit{sociative} \supset \textit{comitative} \supset \textit{assistive}.$$

The relations listed in the generalizations under 7 are mostly due to pragmatic reasons. Another relevant parameter is the decrease of productivity of functions, such as sociative and comitative. In some languages the configuration of relations may be different.

Thus, implication 7a is absent in Modern Kirghiz, but this absence does not disprove this implication. The reason of the lack of sociatives and comitatives (whereas assistives and reciprocals are highly productive) is probably due to the fact that the sociative function of the reciprocal marker has developed into an optional 3PL marker on verbs (see Nedjalkov, Ch. 28, §9.2).

9. **Formal correlations: (a) simple reciprocal construction (RECS) – (a') discontinuous reciprocal construction (RECD), and (b) sociative construction – (b') comitative construction**

Sociative constructions are simple by definition, while comitative constructions are always discontinuous (in the sense that the second participant is expressed by a non-subject constituent), also by definition. The following main means of marking these four types of constructions are considered below (note that (56) and (57) repeat the schema in (40)). Syntactically, (56a) relates to (56a') in the same way as (57b) relates to (57b'): in both (57a') and (57b'), as compared with (56a) and (56b) respectively, syntactic valency increases by one, although the number of the participants is retained; on the other hand, the non-subject constituent cannot be omitted in (56a'), while in (57b') it can easily be omitted as it is or it can be implied by the comitative form and context.

- (56) a. *Simple* reciprocal construction – a'. *Discontinuous* reciprocal construction
 (= RECS) (= RECD)
- (57) b. *Sociative* construction – b'. *Comitative* construction
 (= SOC) (= COM)

These categories can use same or different markers which may differ in productivity. The following main types may be distinguished.

9.1 **Type A. Languages where constructions RECS – RECD and SOC – COM are marked in the same way**

All the four types employ the same marker; this is the case in Yakut, Tuvan and a number of Bantu languages; the markers for these languages are:

(58) Yakut; Tuvan

RECS	-s; -š-	RECD	-s; -š-
SOC	-s; -š-	COM	-s; -š-

(59) In some Bantu languages

RECS	-an	RECD	-an
SOC	-an	COM	-an

The allomorphs of the Yakut and Tuvan reciprocal suffix are *-s/-h*, and *-š/-ž/-č* respectively).

Tuvan (Kuular, Ch. 27, ex. (123); in (60), the assistive meaning also characteristic of some other Turkic languages is added here to those used in the constructions listed in (56) and (57))

- (60) a. *Bis sigen kes-ip tur bis.*
 we hay mow-CONV AUX.PRES 1PL
 ‘We make hay.’
- b. *Bis sigen kes-č-ip tur bis.*
 we hay mow-REC-CONV AUX.PRES 1PL
- i. ‘We are making hay *together*.’ sociative
 ii. ‘We are making hay *with sb else*.’ comitative
 iii. ‘We *help sb* to make hay.’ assistive
 iv. ‘We are making hay *together helping each other*.’ reciprocal-assistive

For the RECS and RECD see Swahili (29a–b) above; for SOC and COM see (61b, c) and (62). It is but natural that RECD implies the existence of RECS, and COM seems to imply the existence of SOC.

Rwanda (Coupez 1985: 15)

- (61) a. *kureb-a umugabo* ‘to look at a man’ → *kureb-an-a* ‘to look at each other’
 b. *guhinga umurimá* ‘to till a field’ → *guhing-an-a umurimá* ‘to till a field together’
 c. *guhing-an-a n-úmwána* ‘to till a field with a child (who is also tilling).’

In contrast to discontinuous reciprocal constructions where the non-direct object cannot, as a rule, be omitted (a special case is Cashinahua where this constituent cannot be expressed at all; see 9.7), it is possible in comitative constructions, i.e. the co-participant remains unspecified; cf.:

Karanga (Marconnès 1931: 194)

- (62)=(60) *Ndaka tamb-an-a (sek-an-a) mu church.*
 ‘I played (laughed) with others in church.’

9.2 Type B. Languages with the same marker for RECS – RECD and another marker for SOC – COM

This type of marking is attested in Evenki and in Fula (the Fula reciprocal marker *-indir* has variants *-ootir* and *-tir*, the latter being used after a reduplicated root; Arnott 1970: 345, 357, 358).

(63) Evenki

RECS	<i>-maat</i>	RECD	<i>-maat</i>
SOC	<i>-ldə</i>	COM	<i>-ldə</i>

(64) Fula

RECS	<i>-indir</i>	RECD	<i>-indir</i>
SOC	<i>-d</i>	COM	<i>-d</i>

For the RECS and RECD of (63) see examples (34a, b); for SOC and COM of (63) see (65a, b). Case COM of (64) is illustrated by subject-oriented and object-oriented sociatives in (66a) and (66b) respectively. Note that the sociative meaning is translated into English not only by means of ‘together’ but also ‘all (of them) together’, ‘simultaneously’, etc.

Evenki (Nedjalkov & Nedjalkov, Ch. 38, ex. (47))

- (65) a. *Nuŋartən tatkit-tula ŋene-ldə-re-Ø.*
 they school-ALL go-SOC-NFUT-3PL
 ‘They went to school together.’
 b. *Nuŋan tatkit-tula ŋene-ldə-re-n.*
 he school-ALL go-COM-NFUT-3SG
 ‘He went to school with somebody.’

Fula (Arnott 1970:345)

- (66) a. *be-nast-id-ii* (*fiu*).
 they-come-SOC-PERF all
 ‘They all came in.’
 b. *gujjo nast-id-ii huudi ’amin fiu.*
 thief come-SOC-PERF hut our all
 ‘The thief entered all our huts.’

9.3 Type C. Languages with RECD and COM derived by the same marker from RECS and SOC respectively

This type of marking is attested in Tagalog:

(67) Tagalog

RECS	<i>mag-...-an</i> →	RECD	<i>maki-pag-...-an</i>
SOC	<i>mag-...-an</i> →	COM	<i>maki-pag-...-an</i>

For the RECS and RECD see examples (37b, c); for SOC and COM see (38b, c).

9.4 Type D. Languages lacking RECD, with SOC and COM marked in the same way

This is attested in Abaza. The reciprocal marker in Abaza is *a(i)-* for intransitives (subject – non-direct object coreferentiality) and *a(i)-ba-* for transitives (subject – direct object, subject – indirect object and direct object – non-direct object coreferentiality; cf. Tabulova 1976:191–4).

(68) Abaza

RECS	<i>a(i)-; a(i)-ba-</i>	RECD	–
SOC	<i>c-</i>	COM	<i>c-</i>

Compare:

Abaza (Tabulova 1976:191–2; 188; *j-* = subject agreement marker on intransitives and object agreement marker on transitives; in (69) the Cyrillic spelling is transliterated)

- (69) a. *j-aba-dər-itl.* a'. –
 they-REC-know-PRES
 ‘They know each other.’

- b. *ja-cə-gI-ga-tI.*
that-SOC-we-carry-PAST
'We carried that together.'
- b'. *j-rə-cə-z-ga-tI.*
that-they-COM-I-carry-PAST
'I carried that with them.'

An example for RECS with the prefix *ai-*:

- c. *xI-ai-čvažva-tI.*
we-REC-talk-PAST
'We talked with each other.'

9.5 Type E. Languages lacking RECD, with SOC derived from COM by means of a reciprocal marker

This is the case of Kabardian: the reciprocal markers are *zə-* for the reciprocalization of subject and non-direct object or direct object and non-direct object and *zə-rə-* for subject and direct object reciprocalization.

(70) Kabardian

RECS	<i>zə-; zə-rə-</i>	RECD	–
SOC	<i>zə-də- ←</i>	COM	<i>də-</i>

Kabardian (Shagirov 1957: 135, 130, 129)

- (71) a. ... *də-zə-pselə-a-šb.* a'. –
we-REC-speak-PAST-ASS
'... we had a talk *with each other*.'
- b. ... *unə zə-də-tI-šbI-a-šb.* b'. *v-də-s-tx-a-šb.*
house REC-COM-we-build-PAST you.PL-COM-I-write-PAST
'... we built a house *together*.' 'I wrote it *with you*.'

9.6 Type F. Languages which have RECS only

In this case the discontinuous construction is either non-existent or occurs mostly with lexicalized reciprocals only. This is typical of Indo-European languages, e.g. French reciprocals with *se*, German *sich*. Russian unproductive reciprocals in *-sja* usually allow the discontinuous construction, as they are practically lexicalized reciprocals (see, for instance, (30a'), (30a'') and (30c'); (iv) in 1.2.3). In French only one or two lexicalized reciprocals allow the discontinuous construction, as illustrated by (33b, c). In German, there are about 20 reciprocals that allow the discontinuous construction (Wiemer & Nedjalkov, Ch. 10, §4.7).⁷

Here is the schema for this type (the parentheses indicate that the type is possible as an exception; note that anticausatives derived from three-place lexical reciprocals (= lexical causatives) and homonymous with reciprocals proper can be used in constructions

7. A similar relation is attested in Indonesian where "(...) judging by written texts the use of a reciprocal with discontinuous arguments seems to be determined by the degree of its lexicalization, and also by its semantic affinity to lexical reciprocals" (Ogloblin & Nedjalkov, Ch. 14, §7.3).

formally identical with RECD; cf. German *Er versöhnte Peter mit Paul* ‘He reconciled Peter and Paul’ → *Peter versöhnte sich mit Paul* ‘Peter got reconciled with Paul’; see Section 14):

(72) French, German

RECS	<i>se; sich</i>	RECD	(-)
SOC	-	COM	-

In this connection Bogorodickij’s (1935⁵: 168) assertion on Russian reciprocals may be of interest: “it is natural to assume that at first the forms of the reciprocal voice appeared in the plural number (*my boroli-s’* ... ‘we fought...’), and later the singular number was formed by analogy with other verbs”.

9.7 Type G. Languages which lack SOC and COM and have only RECS and “zero” RECD

The only instance of this type, which is of special interest typologically, is Cashinahua (Camargo, Ch. 45, §3.2.1). The RECD exhibits two important features:

- if the subject (= first reciprocant) is singular (cf. ‘This man’ in (73c)), another reciprocant is nonspecified and cannot be expressed (but it is implied by the reciprocal verb form); moreover, the action of this participant may be separated in time and/or in space from the action of the first one (note that in the discontinuous reciprocal constructions of other languages the comitative phrase denoting the co-participant cannot generally be omitted);
- if the subject is plural the sentence is generally ambiguous: it can have the reciprocal “indirect” reading (as a simple construction, see (i) in (73d)) or be interpreted as a reciprocal construction with an unspecified second reciprocant (see (ii) in (73d)), whereas the plural subject is interpreted as a collective first reciprocant, i.e. this interpretation is analogous to (73c) where the subject is singular.

Cashinahua (Camargo, Ch. 45, ex. (3)); in (73b) *-şun* = BEN is used because in constructions with three-place transitives the addressee is deleted)

- (73) a. *na huni-bu-n paku piti inan-mis.*
 this man-PL-ERG P. food give-HAB
 ‘These men always give food to Paco.’
- b. *na huni-bu-n piti inan-şun-mis.*
 this man-PL-ERG food give-BEN-HAB
 ‘These men always give food to someone.’
- c. *na huni-Ø piti inan-nami-mis.*
 this man-ABS food give-REC-HAB
 ‘This man always gives food to someone else reciprocally (who gives/will give food to this man in return when he needs it...).’
- d. *na huni-bu-Ø piti inan-nami-mis.*
 this man-PL-ABS food give-REC-HAB
 i. ‘These men always give food to each other.’
 ii. ‘These men always give food to someone else (who gives food to these men in return when they need it...).’

9.8 Irreversible reciprocal discontinuous constructions and comitative constructions

In these constructions, the second participant is of a different semantic class than the first one or this second participant is coreferential with the first one, and therefore the discontinuous reciprocal construction cannot be converted into simple, and the comitative construction into sociative. Thus the reason is rather trivial: the (pro-)nouns of different lexical or grammatical classes cannot be linked by co-ordinating conjunctions (cf. ‘they’ and ‘spirit...’ in (74), ‘the man’ and ‘himself’ in (75), ‘he’ and ‘a dog/a book’ in (76)). Therefore, the syntactic detachment of the second participant can lead to semantic separation, and to the loss of the properties of standard reciprocal or comitative constructions in cases like (74)–(76); cf.:

Indonesian (Ogloblin & Nedjalkov, Ch. 33, §7.4)

- (74) *Mereka ingin ber-kenau-an dengan jiwa Dai Nippon.*
 they strive REC-know-REC with spirit state Japan
 ‘They strove to get acquainted with the spirit of the State of Japan.’

Tuvan (Kuular, Ch. 27, ex. (42))

- (75) *Bod-u-bile bod-u čugaala-ž-ïp or-ar kiži boor*
 himself-3.POSS-with himself-3.POSS speak-REC-CONV AUX-NPAST.3 man possibly
be?
 really
 ‘Does the man really talk with himself?’

Nkore-Kiga (Taylor 1982:67–68)

- (76) *y-a-ij-an-a embwa/ekitaba.*
 he-TP-come-REC-a dog/book
 ‘He came with a dog/a book // brought a dog/a book.’

10. Reciprocals of converse bases

This meaning involves both spatial and temporal relations. In this case two underlying constructions contain verbs or prepositions, adverbs, etc. which are in a converse semantic relation and imply one another (cf. ‘to follow’ – ‘to precede’, ‘before’ – ‘after’, ‘at the top’ – ‘at the bottom’, etc.). Reciprocals derived from converse bases are as a rule marked in the same way as proper reciprocals, although there are no prototypical reciprocal relations between the participants.

With respect to the feature of “subsequent distribution of an action or motion among a multiplicity of homogeneous subjects or objects” (cf. Birjulin 2001:198–9), these formations contain a distributive meaning. And with respect to the feature of spatial and/or temporal relation between the participants named by the subject and inherited from the converse bases, with a potential change of the semantic relation between them (‘to follow – to precede’, ‘before – after’, ‘in front of – behind’, etc.) they can be entered among recip-

rocals. Depending on the morphological class of the converse bases, reciprocals function as markers of the distributive meaning ‘one after another’, ‘one by one’ (cf. (84b)), or they function as distributives with meanings like ‘to walk in front of each other’ (82c)). The semantic domains of distributives and reciprocals overlap here to a certain degree.

10.1 Verbs

Languages commonly treat meanings like ‘to follow each other’, often labelled “chaining” (the term was proposed by Lichtenberk 1985:24–6), as common reciprocals and thus have no special markers for them (see, however, (85) where a special marker, though similar to the verbal reciprocal marker, is used on the adverb). Therefore these meanings can hardly be regarded as a special case alongside the prototypical reciprocals and sociatives: it is a reciprocal meaning on a particular lexical group of verbs (cf. Kemmer 1993:100–1).⁸ Their number usually does not exceed five or ten items at the most. Here is a French example and its English equivalent (note that (77) with *two* participants is not covered by chaining, because there is no intermediate participant):

- (77) a. *Les deux compagnies se suivaient à une centaine de pas.*
 b. *The two companies followed one after the other at a distance of a hundred paces.*

Heath (1984:391) distinguishes this meaning in Nunggubuyu as a “unilinear collective sense ($A \rightarrow B \rightarrow C \dots$) in which the individual component actions are one way but in which they add up (like links in a chain) in such a way that all parties can be thought of as collectively associated actions.” Examples:

- (78) a. =*lhama-n’ji-* ‘to beget each other’
 b. =*yaba-n’ji-* ‘to give birth to each other.’

Neither of these sentences can be paraphrased in the same way as in (4), i.e. with the same non-reciprocal verb in (4a’) and (4a’), or (9a’) and (9a’), as

- (79) a’. *Company A followed company B.* + a”. *Company B followed company A.*

Instead, converse verbs must be used:

- (80) a’. *Company A followed company B.* +/= a”. *Company B preceded company A.*

These sentences are analogous to (4a’) and (4a’). In other words, (77b) implies both (80a’) and (80a’).

This problem of converse relations has attracted considerable attention (see, for instance, Fiengo & Lasnik 1973:454–6; Dougherty 1974:16–7; Langendoen 1978:184, 191–3; Xrakovskij 1981:24–5).

It has been pointed out that in some languages there are reciprocals meaning ‘to follow each other’ but no reciprocals with the meaning ‘to precede each other’. One of the

8. Nevertheless, the pronoun *each other* cannot be used in (77b) and this may show that the two situations do not coincide entirely (S. Say, p.c.).

rare exceptions is Nivkh where converse verbs become synonyms when used with the reciprocal prefix (81b). Note that in (81) the reciprocal verbs are reduplicated (reduplication is one of the markers of the distributive meaning and it may signify repetition or plurality of agents).

Nivkh (Otaina & Nedjalkov, Ch. 41, §3.5; *v-/u-* = REC)

- (81) a. *-əri-* 'to follow sb'
 → *v-əri-v-əri-* 'to follow each other', '(in) single file'
 a. *-ənki-* 'to precede', 'to leave behind/overtake'
 → *v-ənki+v-ənki-* lit. 'precede each other', '(in) single file'; 'overtake each other.'

An analogous example is attested in Chamorro by Costenoble (1940:386): the prefix *ǎ-* expresses not only the reciprocal proper (82a) and sociative (82b) meanings but also the "chaining" ("kättenmäsig") meaning (82c):

Chamorro (ibid.)

- (82) a. *ǎ-tuŋuʳ* 'to know each other'
 b. *ǎ-toʳkani* 'to try together'
 c. *ǎ-foʳna* 'to walk in front of each other' ('vor einander hergehen').

10.2 Prepositions, adverbs, locative nouns, etc.

A similar synonymy of reciprocals derived from converse (inflected) postpositions meaning 'after sb' – 'before sb' (not from converse verbs, as in (81a–b)) is attested in Udehe: these reciprocals are formed by reduplication rather than by means of a reciprocal affix; cf.:

Udehe (Nikolaeva, Ch. 23, §5.1)

- (83) a. *amä:ta* 'after sb' → *amä:ta amä:ta* 'after each other'
 b. *zulefe* 'before sb' → *zulefe zulefe* 'one after another.'

This type of reciprocals is characteristic not only of verbs but also of locative prepositions and postpositions, adverbs (see (84)) and locative nouns (85); but, as mentioned above, a language may have a special marker for them different from the reciprocal marker on verbs. Compare Ainu (84) with the shared marker and Evenki (85) with different markers (see also Nedjalkov & Nedjalkov, Ch. 38 on Evenki, §12; Malchukov, Ch. 39 on Even, §8.2; Alpatov et al., Ch. 42 on Ainu, §12; Otaina & Nedjalkov, Ch. 41 on Nivkh, §3.4). Prepositions with a reciprocal marker may be polysemous (cf. Wiemer & Nedjalkov, Ch. 10 on German, §5.5.5). Compare (verbal reciprocal forms are cited for comparison):

Ainu (Tamura 1996:495, 743–4, 817, 799; *u-* = REC)

- (84) a. *siru* 'to rub sth/sb' → *u-siru* 'to rub each other'
 b. *otutanu* 'after, next to' → *u-otutanu* 'in order, one by one.'

Evenki (Vasilevich 1958:27; cf. older REC marker *-lda/-ldə*, now used as a SOC marker; *-lta* = REC used on adverbs; now *-maat/-meet* = REC; *-du-* = DAT)

- (85) a. *bele-* 'to help sb' → *bele-meet-* 'to help each other'
 b. *amar* 'hind part, back' (→ *amar-du* 'behind') → *amaru-lta* 'one after another.'

11. Relations between verbal and syntactic (mostly pronominal) reciprocals across languages

Across languages, five types of the systems of reciprocal markers are attested (the sixth logical type is not registered).

11.1 Case 1. Languages with (one or more) syntactic reciprocal markers only

Here belongs English (where the only explicit reciprocal markers are the pronouns *each other* and *one another*) and Basque (*elkar* ‘each other’, inflected for case; see Saltarelli 1988: 120–128). Close to this type are Eastern Slavic languages, cf. the reciprocal pronouns *drug druga* ‘each other’ and *odin drugogo* ‘one another’ in Russian and its counterparts in the other languages. On the other hand, verbal reciprocals in Eastern Slavic languages are not productive and limited in number (e.g., in Russian, the number of reciprocals in *-sja/-s’*, of type (30b), does not exceed 40). Another instance is Malayalam with five reciprocal pronouns and four reciprocal adverbs (see Ch. 3: ex. (17) and §3.4), the pronouns being the principal markers of reciprocity. Here also belongs the Australian language Djarru (Tsunoda, Ch. 21, §§3.2 and 5.2) with a reflexive-reciprocal pronoun *nga-...-nyunu* inflected for number, person and case (in the slot between the other two components) which takes the position of noun phrases.

11.2 Case 2. Languages with (one or more) morphological and clitic markers only

Here belong Motuna (see Onishi 2000:137), Mundari (Osada, Ch. 37, §1.2), Nêlêmwa (Bril, Ch. 34, §1.1). No reflexive or reciprocal pronouns of any sort are registered in North-Arawakan languages of the Upper Rio Negro (Aikhenvald, Ch. 20, §1.3) and Bolivian Quechua (see van de Kerke, Ch. 31, §1.2). Kabardian (see Kazenin, Ch. 17, §5.1.2) and Tagalog (Shkarban & Rachkov, Ch. 22, §8) may be included here with reservations, as in these languages a syntactic marker of reciprocity is nevertheless used, though very rarely, and in Tagalog it is rare without the support of verbal markers.

11.3 Case 3. Languages with both types of reciprocal markers

Here is a slightly simplified schema, with the logically possible *Case 3d* of complementary distribution of both markers not registered. The subtypes are listed in order of decreasing nominal properties and increasing adverbial properties.

(86)	Co-occurrence of both reciprocal markers	Substitution of syntactic for verbal marker	Language
3a.	–	+	German, Polish (87a)
3b.	+	+	Yakut, Evenki (9)
3c.	+	–	French, Bulgarian (94c)
3d.	–	–	unattested (see, however, Case 3d in §11.3.4)

Let us consider these cases of correlation of both types of markers, and also the case when both markers have become one complex marker in the process of evolution (see Telugu in 11.4).

11.3.1 Case 3a. *The language has partially interchangeable but not co-occurring reciprocal markers*

An example may be the situation in German, where reciprocal markers occasionally co-occurring in colloquial speech are considered non-standard (87d). As the clitic pronoun *sich* is polysemous, in order to resolve its ambiguity in the case of polysemy of a given verb (cf. (87a) and (87b)), the adverb *gegenseitig* ‘mutually’ can be used; this adverb co-occurs with the reflexive pronoun and cannot express the reciprocal meaning by itself (cf. (87e)). Substitution of the reciprocal pronoun for the reflexive clitic (cf. (87a) and (87c)) is generally possible, though with stylistic restrictions (the former being sometimes bookish), as the reciprocal pronoun is not characteristic of colloquial speech: according to Berger et al. (1972:544) the reciprocal pronouns “fast immer gehoben, bei einigen Verben sogar gespreizt”.

- (87) a. *Sie lieben sich.* i. ‘They love *each other*’, ii. ‘They love *themselves*.’
 b. *Sie lieben sich gegenseitig.* ‘They love each other’, lit. ‘... each other mutually.’
 c. *Sie lieben einander.* ‘They love each other.’ (bookish)
 d. **Sie lieben sich einander.* (same intended meaning)
 e. **Sie lieben gegenseitig.* (same intended meaning).

If the base verb takes a prepositional object the reflexive clitic cannot be used as a reciprocalizer, and the reciprocal pronoun is the only choice (cf. the analogous state of affairs in French illustrated by (95) and in Bulgarian illustrated by (105) below); the reciprocal markers are in overlapping distribution.

- (88) a. *Sie warten auf ihn.* ‘They wait for him.’
 b. *Sie warten aufeinander.* ‘They wait for each other.’
 c. **Sie warten auf sich.* (same intended meaning as (b)).

11.3.2 Case 3b. *The language has both types of reciprocal markers which can co-occur and are partially interchangeable*

This co-occurrence of two different markers is rather common across languages. It may be pleonastic, determined, in particular, by the emphasis of reciprocity (cf. Yakut (9b–c–d) above where reciprocity is expressed in three different ways, in particular with a suffix and a pronoun simultaneously), or it may serve to resolve ambiguity if the verbal reciprocal form is polysemous. Synonymous reciprocal constructions with different marking may differ in the degree of acceptability (see the comment preceding Yakut example (9) above).

In the Indo-European languages this relation is either not represented at all or it is represented by a limited number of instances, as in Lithuanian, where a number of verbs form reciprocals with either the reciprocal marker *-si-/-s* or the reciprocal pronoun *vienas kitą* ‘each other’ but not with both, and on a few verbs they may co-occur, as in (89d) (Geniušienė, Ch. 14, §§8.5, 8.6.1). Compare:

Lithuanian

- (89) a. *Jis erzina ją.* 'He teases her.'
 b. *Jiedu erzina-si.* 'They-two tease each other.'
 c. *Jiedu erzina vienas kitą.* (same meaning).
 d. *Jiedu erzina-si vienas kitą.* (same meaning).

Japanese (Alpatov & Nedjalkov, Ch. 25, §1.2)

- (90) a. *Taroo wa Akiko o hagemasi-te-ita.*
 T. TOP A. ACC encourage-CONT-PAST
 'Taro was encouraging Akiko.'
 b. *Taroo to Akiko wa hagemasi-at-te-ita.*
 T. and A. TOP encourage-REC-CONT-PAST
 'Taro and Akiko were encouraging each other.'
 c. *Taroo to Akiko wa otagai o hagemasi-te-ita.*
 T. and A. TOP each.other ACC encourage-CONT-PAST
 (same translation).
 d. *Taroo to Akiko wa otagai o hagemasi-at-te-ita.*
 T. and A. TOP each.other ACC encourage-REC-CONT-PAST
 (same translation).

A reciprocal pronoun may be in complex relations with the reciprocal suffix, in case of overlapping distribution. For instance, the reciprocal pronoun in Kirghiz is odd with the verb *öp-* 'to kiss' in (91c): due to the frequency of the situation named, the respective verbal reciprocal was the first to occupy the niche.

Kirghiz (Nedjalkov, Ch. 28, §1.2)

- (91) a. *Kəz apa-sə-n öp-tü.*
 girl.NOM mother-her-ACC kiss-3.PAST
 'The girl kissed her mother.'
 b. *Kəz menen apa-sə öb-üş-tü.*
 girl.NOM and mother-her.NOM kiss-REC-3.PAST
 'The girl and her mother kissed.'
 c. [?]*Alar birin-biri öp-tü.*
 they each.ACC-other kiss-3.PAST
 'They kissed each other.'

But, on the other hand, the reciprocal suffix is ungrammatical in (92b), probably because the derivative has lexicalized usage shown in (92c). But other explanations are also possible, if we take into account the spatial meaning of the base verb (moreover, the derivative *bajla-š-* has other meanings as well, for instance, 'to help sb to tie sth', 'to tie sth together with sb'; see (181c)). The meaning in (92d) can be expressed by the reciprocal pronoun only:

- (92) a. *Men anə terek-ke bajla-də-m.*
 I.NOM he.ACC tree-DAT tie-PAST-1SG
 'I tied him to a tree.'

- b. **Biz terek-ke bajla-š-tə-k.*
 we tree-DAT tie-REC-PAST-1PL
 (intended meaning:) ‘We tied each other to a tree.’
- c. *Men anə menen bajla-š-tə-m.*
 I.NOM he.ACC with tie-REC-PAST-1SG
 ‘I made a bet with him.’ (lexicalized meaning)
- d. *Biz birin-biri terek-ke bajla-dī-k.*
 we each.ACC-other tree-DAT tie-PAST-1PL
 ‘We tied each other to a tree.’

A reciprocal pronoun may reciprocalize derivatives with the reciprocal suffix if the latter encodes a non-reciprocal meaning, as assistive in (93a), which is thus a reciprocalized assistive relatable to (93b.iii):

Kirghiz (Nedjalkov, Ch. 28, §5.2.2)

- (93) a. *Ata-m eköö-büz biri-biri-biz-ge ot tašə-š-tə-k.*
 father-my two-we each-other-DAT hay cart-REC-PAST-1PL
 ‘My father and I helped each other to cart hay.’

Deletion of the reciprocal pronoun seems to change the meaning of (93a) as follows:

- b. *Ata-m eköö-büz ot tašə-š-tə-k.*
 father-my two-we hay cart-REC-PAST-1PL
- i. ‘My father and I carted hay *together*.’ sociative
 - ii. ‘My father and I carted hay with *somebody else*.’ comitative
 - iii. ‘My father and I *helped* someone to cart hay.’ assistive

11.3.3 Case 3c. The syntactic marker is used with verbal reciprocals only

In other words, a reciprocal pronoun is not interchangeable but co-occurrent with a derivational marker. The reflexive clitic may be more common than a reciprocal pronoun. This is attested in French, Italian, Spanish and Bulgarian, where a reciprocal pronoun cannot be used instead of the clitic, as a rule, but it can be added for disambiguation or pleonastically. These languages lack constructions of the (87c) type; instead, they have type (87d) constructions (cf. (94c)). But in the case of reciprocalization of a prepositional object, a reciprocal pronoun is commonly used, as in (95b). There are exceptions, however. For instance, in French, this rule does not apply to constructions with an animate indirect object with the preposition *à*: in this case, substitution is not possible either and the reciprocal pronoun can be used with this preposition pleonastically.⁹ Since the position of the direct object in this type of constructions is already eliminated by the intransitivizing reflexive clitic pronoun, the pronoun *l’un l’autre* cannot have a claim on this position. Thus *l’un l’autre* tends to lose its argument character and acquire the properties of an adverb of the type *gegenseitig* (see (87b) and (87e)).

9. Compare: *Il plait à Marie* ‘Marie likes him’ → *Ils se plaisent . . . [l’un à l’autre]* ‘They like each other’ (Guentchéva & Rivière, Ch. 12, ex. (32)).

French (Guentchéva & Rivière, Ch. 12, §§1.2; 7)

- (94) a. *Jean embrasse Marie.* 'John embraces Mary.'
 b. *Jean et Marie s'embrassent.* 'John and Mary embrace each other.'
 c. *Jean et Marie s'embrassent l'un l'autre.* 'John and Mary embrace each other.'
 d. **Jean et Marie embrassent l'un l'autre.* (same intended meaning).

In French, as well as in German and Bulgarian (cf. (87), (104), (105)), a reciprocal pronoun is used as the only marker of reciprocity on verbs constructed with prepositional objects (as just mentioned, except for verbs with an indirect object with the preposition *à*), and also on some other verbs, e.g.:

- (95) a. *Jean compte sur Marie.* 'Jean relies on Marie.'
 b. *Ils comptent l'un sur l'autre.* 'They rely on each other.'
 c. **Ils se comptent.* (same intended meaning).
 d. **Ils se comptent l'un sur l'autre.* (same intended meaning).

11.3.4 Case 3d. Syntactic and verbal reciprocals are in complementary distribution

In this case a reciprocal pronoun is neither interchangeable nor co-occurring with an affixal or clitic reciprocal marker and they never overlap. I have no convincing illustrations for this type. Close to it are the following cases:

Case 3a where reciprocals are derived from two-place prepositional intransitives by means of syntactic markers only and from two-place transitives by means of a reflexive (clitic) pronoun interchangeable with a reciprocal pronoun, as is the case in German (see 11.3.1), or

Case 3b where a clitic marker may be co-occurrent with a reciprocal pronoun, as in French (see 11.3.3).

Another instance of similar behaviour of a reciprocal pronoun is observed in Telugu where reciprocals are formed from verbs with the "Dative-subject" (= antecedent) by means of the reciprocal pronoun, and on verbs with the Nominative-subject (= antecedent) the morpheme *-kon-* (descended from a lexical verb meaning 'to take, to buy') must be used, its basic function being analogous to that of reflexive clitics in a number of Indo-European (e.g. Romance) languages, although the reciprocal pronoun unambiguously denotes reciprocity (Subbarao & Saxena 1987: 128; Subbarao & Lalitha 2000: 260).

11.4 Case 4. A verbal and a syntactic markers are obligatorily used together

The nearest to this usage is observed in Telugu where deviations from it, i.e. separate usage of the syntactic and verbal markers, are relatively few. This case, which is not reflected in schema (86), is attested on reciprocals with the Nominative-subject, in contrast to the just considered reciprocals with the Dative-subject which are always pronominal. The verbal marker *-kon-* is used without a reciprocal pronoun on a very limited number of stems with meanings usually expressed by lexical reciprocals:

Telugu (Krishnamurti & Gwynn 1985: 206–8)

- (96) a. *kottu-kon* 'to fight, beat each other.'

Typical reciprocal marking looks as follows (Subbarao & Lalitha 2000: 226):

- b. *wallu okalla-ni okallu tittu-kon-naa-ru.*
 they one.PL-ACC one.PL.NOM abuse-REFL-PAST-3PL.M/F
 ‘they abused each other.’

12. The main diathesis (= syntactic) types of reciprocals. Subject-oriented reciprocals; type A.1

The term “diathesis” is used here to refer to the schema of relations (correspondences) between the semantic roles (agent, patient, etc.) and the syntactic functions (subject, direct object, attribute, adverbial) of a clause. As mentioned, in the grammars of Altaic, Bantu and some other languages the reciprocal is traditionally regarded as voice, together with the passive, causative, reflexive, and some other categories. Here, the term “voice” refers to all the valency changing means, which involve a change in the semantic content of the derived subject (cf. also 4.1 and 4.2).

The main diathesis types are termed “canonical”, “indirect”, “possessive”, “adverbial”. They are termed “reversible”, in contrast to an “irreversible” type in which the reciprocal marker does not mark deletion of any underlying constituent (see A.1.3 in 12.3). These terms can have other meanings, therefore they are spelt between quotes when they refer to the diathesis types.

Reciprocal constructions subcategorize into non-embedded and embedded constructions (see 1.5.5).

Non-embedded reciprocals fall into two sharply distinct groups, A.1 and A.2, with a kind of intermediate A.3 group.

A.1. Subject-oriented reciprocals: reciprocalization involves the subject and a non-subject of the underlying construction.

Group A.1 is further subdivided into two types A.1.1 and A.1.2 (see 12.1 and 12.2 respectively), each falling into two main subtypes.

A.1.1. Coreferentiality holds between the subject and a syntactic argument of the underlying clause; here “canonical” and “indirect” diathesis subtypes are distinguished; see *A.1.1.1* and *A.1.1.2* in 1.12.1.1 and 1.12.1.2 respectively.

A.1.2. Coreferentiality holds between the subject and a non-argument; “possessive” and “adverbial” diathesis subtypes are distinguished here; see *A.1.2.1* and *A.1.2.2* in 12.2.1 and 12.2.2 respectively.

A.2. Object-oriented reciprocals: reciprocalization involves two objects, direct and non-direct (much less commonly, between two non-direct objects). Here also belong derivatives semantically close to them, as a result of semantic extension (see Section 13).

A.3. This type subsumes specific reciprocals which cannot belong to type *A.1* (because they cannot be related to two underlying constructions of type (9a') and (9a'')) or *A.2*: they are in fact anticausative derivatives from three-place lexical reciprocals (which are object-oriented), anticausativization being signified by a reciprocal marker (see Section 14). This is an intermediate class between *A.1* and *A.2*.

As a matter of fact, type A.3 represents polysemy of reciprocal markers but it is entered here because of the change in the diathesis and semantic affinity to type A.2.

12.1 Reciprocals with argument coreferentiality (type A.1.1)

12.1.1 “Canonical” reciprocals (type A.1.1.1)

As a rule, they are intransitive (I have in mind verbal reciprocals only), the base verb being either transitive (97) or, less commonly, two-place intransitive (98)–(100). However, in my list of languages, there are two languages in which the number of registered intransitive-based reciprocals exceeds that of transitive-based reciprocals, namely, Itelmen (where the reciprocal prefix *lo-/lu-* is registered on about 25 transitive-based and about 45 intransitive-based reciprocals; Volodin, Ch. 43, §3.2-3.6) and Kusaiean where, according to Lee (1975:201–3), the reciprocal circumfix *a-...-i* is “usually used with intransitive verbs but some transitive verbs [...] can be used with this” circumfix. Curiously enough, among transitive verbs meaning ‘to see’, ‘to hear’, ‘to love’, ‘to remember’ are cited, and among intransitive verbs meaning ‘to hit’, ‘to kick’, ‘to wash’. The state of affairs in these two languages is possibly connected with the ratio of transitives and intransitives rather than with the peculiarities of the reciprocal markers.

Intransitivity shared by both transitive-based and intransitive-based reciprocal derivatives distinguishes them from transitive “indirect” (see 12.1.2) and “possessive” (12.2.1) reciprocals. Therefore the first two types of derivatives are listed as “canonical”, though in some languages they may differ in marking (see 9.4) and intransitive-based reciprocals may show the same marking as “indirect” reciprocals. And in some languages, there may also be constraints on the reciprocalization of constituents other than direct objects.

12.1.1.1 Reciprocals derived from two-place transitives. Here is an example (see also (24), (29), (30c), (33), (34), etc.):

East-Futunan (Moyses-Faurie, Ch. 35, ex. (48))

- (97) a. *na tamate a Petelo e Paulo.*
 PAST kill ABS P. ERG P.
 ‘Paulo killed Petelo.’
- b. *o fe-tamate-’aki fa’i le kau Alo.*
 and REC-kill-REC only ART CLF A.
 ‘And the Alos killed each other.’

Since these intransitive reciprocals are the prevalent type across languages, they, as will be shown below, may affect certain grammatical peculiarities of transitive reciprocals by way of attracting them and spreading their features upon them (see 12.1.2).

12.1.1.2 Reciprocals derived from two-place intransitives. In many languages we find intransitive reciprocals derived from two-place intransitive bases, and their semantic range is frequently similar enough, covering verbs of emotions and their expression (like ‘to be afraid’, ‘to be angry’, etc.), verbs of speech (like ‘to speak to sb’, etc.), and also verbs

of motion. There are languages where this type of reciprocals is lacking, which is to say that reciprocals derive only from two-place transitives. Ainu is an example: in reciprocal derivation from transitive bases the reciprocal prefix *u-* is placed in the agreement slot of the direct object; the non-direct object does not agree with the predicate and therefore it cannot be reciprocalized. But there is a device to circumvent this constraint: in order to derive a reciprocal from a two-place intransitive verb the latter must be transitivized by means of an applicative marker first (see Alpatov et al., Ch. 42, §3.1.1.2). West Greenlandic Eskimo also lacks reciprocal derivation from intransitives (Fortescue, Ch. 19, §1.2).

Reciprocals derived from intransitives with the meaning of motion or (change of) position or posture enter into semantic oppositions as the following: ‘A stuck to B’ → ‘A and B stuck together’. Syntactically, these intransitive spatial reciprocals may not differ from proper reciprocals. They are peculiar in that they may have more restrictions on derivation by means of verbal markers, pronominal markers being more commonly used. Besides, in some languages such spatial reciprocals may use markers which cannot be used in the derivation of proper reciprocals for semantic reasons, because these markers may involve spatial relations (see (107)). Section 2.2.4 above concerns spatial reciprocals, namely, transitive spatial reciprocals (like *X stuck A to B* → *X stuck A and B together*). They have in fact no syntactic correlates among proper reciprocals (unless we count causativization of subject-oriented reciprocals; cf. 5.1). As to intransitive spatial reciprocals, they can be similar to proper reciprocals syntactically (cf. (101b) and (107b)).

Spatial reciprocals of this type may derive from bases with a weakly governed spatial constituent which can take different locative values, but a spatial value is obligatorily implied by the lexical meaning of the base verb; therefore these reciprocals can be placed here (where argument reciprocalization takes place). From a different viewpoint, they could be classed together with “adverbial” reciprocals in 12.2.2, along with benefactive and also causal reciprocals, with meanings like ‘for each other’ or ‘because of each other’. I will not dwell on the status of the spatial constituent as an argument or adjunct (i.e. a kind of adverbial) and will use the term ‘locative constituent’ to refer to it; as a more general term, the label “non-direct object” is used rather loosely.

Languages that possess both proper and spatial reciprocals derived from intransitive bases display two types of marking (types 1 and 2), each being naturally used on a different set of base verbs.

Type 1. *The reciprocal marking for two-place intransitives is the same as for two-place transitives.* The reciprocal construction derived from a two-place intransitive does not inherit the marking (case inflection, preposition, postposition, etc.) of the non-direct object of the base construction.

1a. Proper reciprocals. Thus, in East Futunan the non-direct object marker *ki* is omitted in the reciprocal construction, and in Japanese it is the postposition *ni* marking the non-direct object that is lost in the reciprocal construction. The derived construction is syntactically identical with that of transitive-based reciprocals; cf.:

East-Futunan (Moyses-Faurie, Ch. 35, ex. (51))

- (98) a. *e 'ita a Paulo ki lona āvaga.*
 IPFV be.angry ABS P. OBL his wife
 'Paulo is angry at his wife.'
- b. *e fe-'ita-'aki a Lotoato mo Sanele.*
 IPFV REC-be.angry-REC ABS L. and S.
 'Lotoato and Sanele are angry at each other.'

Japanese (Alpatov & Nedjalkov, Ch. 25, ex. (15))

- (99) a. *Taroo wa Ziroo ni ozigis-ta.*
 T. TOP Z. DAT greet-PAST
 'Taro greeted Jiro.'
- b. *Taroo to Ziroo wa ozigisi-at-ta.*
 T. and Z. TOP greet-REC-PAST
 'Taro and Jiro greet each other.'

Similar constructions are attested in some isolating languages, e.g. in Mandarin Chinese, where the reciprocal adverb *hùxiāng* does not occur with prepositions. If the underlying sentence contains a prepositional object (see *xiàng tā* in (100a)) the latter is deleted in the reciprocal construction, like the postposition *ni* of (99a) is deleted in (99b); cf.:

Chinese (Hoa et al., Ch. 49, §3.2.1.2)

- (100) a. *Wǒ xiàng tā dào-qian-le.*
 I to he apologize-PERF
 'I apologized to him.'
- b. *Tāmen hùxiāng dào-qian-le.*
 they mutually apologize-PERF
 'They apologized to each other.'

1b. Spatial reciprocals. The same marking is also used for intransitive spatial reciprocals. Such verbs are registered in quite a number of languages, e.g. in Indonesian where the preposition *pada* of the base (101a) is deleted in (101b). Another instance is Itelmen where there are five reciprocal derivatives denoting position or a change of position of two or more entities relative to one another, the reading 'next to each other' being pragmatically the most likely, (see (102); cf. also (41a)).

Indonesian (Ogoblin & Nedjalkov, Ch. 33, §4.2.1.2)

- (101) a. *A me-lekat pada B.* 'A stuck to B.'
 b. *A dan B ber-lekat-an.* 'A and B stuck together.'

Itelmen (Volodin, Ch. 43, ex. (24); *lo-* = REC)

- (102) a. *la-* 'to sit' → *lo-la-* 'to sit next to each other'
 b. *tekej-* 'to stand up' → *lo-tekej-* 'to stand up next to each other.'

Adyghe (Rogava & Kerasheva 1966: 271–272; *zə-* = REC, *gə-* = LOC; $-(\emptyset)x = 3\text{PL}$)

- (103) a. *gə-t* 'he stands next to him' → *zə-gə-t-əx* 'they stand next to each other'

- b. *go-kIə* ‘that (thing) grows up to it’ → *zə-go-kIə-x* ‘they grow together (into one)’
 c. *go-kIə* ‘that one goes away from him’ → *zə-go-kIə-x* ‘they go away from each other.’

Note in this connection that in certain languages, e.g. German and French, verbal reciprocal markers are used to derive spatial intransitive reciprocals only from certain intransitives or not at all; e.g., in Udehe, spatial intransitive reciprocals are not derived from two-place intransitives like *decte-* ‘to separate’, *susa-* ‘to escape’, etc. (Nikolaeva, Ch. 23, §3.2), taking locative constituents which can also be regarded as adverbials. In Udehe, there are no verbal reciprocals of the Itelmen type illustrated in (102). Instead, syntactic reciprocals are formed with a reciprocal adverb *dä: dä: te:-* ‘to sit next to each other’ (< *dä:* ‘next to sb’, *te:-* ‘to sit’). Similarly in Even, a verbal reciprocal marker does not derive a spatial intransitive reciprocal from the base verb meaning ‘to run’. Instead, a pronominal marker is used which inherits the marking, i.e. the ablative case, of the locative constituent (see (107)). The cause of this usage and other analogous cases is the fact that deletion of the marker of the locative constituent entails the loss of the information about the direction of motion which is hard to predict from the meaning of the base: one can run from someone or some place, or towards someone, etc. Therefore verbal intransitive spatial reciprocals are usually formed from intransitives whose meaning implies the final or starting point of motion which is not lost in the process of derivation, like

- ‘to approach’ (cf. Itelmen *tmalsa-* ‘to approach’ → *lo-tmalsa-* ‘to approach each other’, Kabardian *xuəžən* ‘to run to meet’ → *zə-xuəžən* ‘to run together (into one place)’, Japanese *tikazuk-u* ‘to approach’ → *tikazuki-a-u* ‘to approach each other’);
- ‘to go away’ (cf. Yakut *tej-* ‘to move away’ → *tej-is-* ‘to move away from each other’, Japanese *hanare-ru* ‘to move away from sb’ → *hanare-a-u* ‘to move away from each other’); ‘to go to sb’ (cf. Udehe *xuli-* ‘to go to sb’ → *xuli-masi-* ‘to go to each other’; Nikolaeva, Ch. 23, ex. (14)), Itelmen *lale-* ‘to walk’ → *lo-lale-* ‘to go to each other’ (Volodin, Ch. 43, ex. (23));
- ‘to stick’, ‘to bump’ (cf. Chukchi *ittil-* ‘to bump against sth/sb’ → *ittil-wəly-* ‘to bump against each other’), etc.

Verbal reciprocals also derive from spatial intransitives if they undergo lexicalization (cf. ‘to go, walk’ → ‘to visit each other’). In works on reciprocals, the reciprocals of the latter two varieties are usually listed together with proper reciprocals.

Needless to say, languages may have special markers for spatial reciprocals, e.g. of type (191)–(196), which are used to derive proper reciprocals rarely or not at all (see (207)).

Type 2. The reciprocal marking for two-place intransitives is not the same as for two-place transitives. As mentioned, the markers of intransitive-based reciprocals may differ from those of transitive-based reciprocals: in partially different affixes, different case forms of clitics and pronouns, extensive use of prepositional collocations with pronouns; reciprocal forms of postpositions and auxiliary locative nouns. With respect to the latter two cases, it should be stressed that in one case the locative marker (case inflection, preposition, etc.) is attached to the reciprocal marker, and in the other the reciprocal marker is attached to the postposition or locative noun.

2a. Proper reciprocals. The use of different affixes for reciprocal derivation from transitives and intransitives can be illustrated by the following forms in Abaza where the prefixes *aba-/aiiba-* and *a-/ai-* are used respectively: *j-aba-dər-itI* <they-REC-know-PRES> ‘they know each other’ and *xI-ai-čvažva-tI* <we-REC-speak-PAST> ‘we spoke to each other’ (see Ch. 3, §6.2.1.2). An example of the use of different clitics can be the Bulgarian *se* (ACC) and *si* (DAT): *te se gledat* ‘they watch each other’ and *te si pomagat* ‘they help each other’. In the illustrations below, a reciprocal marker retains the preposition of the non-direct object of the base construction (note that clitics in German, Bulgarian and certain other languages do not combine with prepositions at all or when used in the reciprocal function); e.g.:

German

- (104) a. *Er denkt an Peter.* ‘He thinks of Peter.’
 b. *Sie denken aneinander.* ‘They think of each other.’

Bulgarian (Penchev, Ch. 13, §1.2)

- (105) a. *Te gledat kām Petār.* ‘They look at Peter.’
 b. *Te gledat edin kām drug.* ‘They look at each other.’

Vietnamese and Ancient Chinese also display this type of marking. In Ancient Chinese, the main reciprocal marker, i.e. the auxiliary word *xiāng* ‘each other’, combined with the prepositions *yǔ* ‘with’ and *wèi* ‘for’ (cf. *xiāng yǔ xiào zhī* ‘All [of them] laugh at it’; *xiāng yǔ* lit. ‘with each other’, i.e. ‘together’; Yakhontov, Ch. 48, ex. (59)). Later this construction was lost. In Vietnamese, the reciprocal marker *nhau* has retained the ability to combine with prepositions (cf. *tha thứ cho nhau* ‘to forgive each other’, lit. ‘for each other’; see Bystrov & Stankevich, Ch. 47, ex. (16); see also (107b) below).

2b. Spatial reciprocals. Some devices marking proper reciprocals can also be used for the derivation of spatial reciprocals, as in (101)–(103) and (105) where the reciprocal pronoun is used with the preposition of the non-direct object it replaces. In Even, the non-direct object *nöö-duk-i* of (107a) cannot be reciprocalized by means of a verbal reciprocal marker, the reciprocal pronoun with the non-direct marker *-duk-* (ABL) being used instead.

German

- (106) a. *Er stieß/prallte auf ihn.* ‘He bumped into him.’
 b. *Sie stießen/prallten aufeinander.* ‘They bumped into each other.’

Even (Malchukov, Ch. 39, §1.2)

- (107) a. *Hurken-Ø nöö-duk-i tut-te-n.*
 youth-NOM brother-ABL-REFL run-NFUT-3SG
 ‘The youth runs from his (younger) brother.’
 b. *Aknil-Ø meen meen-duk-ur tut-te.*
 brothers-NOM each other-ABL-REFL.PL run-NFUT.3PL
 ‘The brothers run from each other.’

As indicated above, in cases like (106b) and (107b), the locative marker (preposition *auf* or case suffix *-duk-*) is attached to the reciprocal marker, while in the following cases, on

the contrary, the reciprocal marker (prefixes *u-* in Ainu, *u-* in Nivkh, *n'e-* in Yukaghir) is attached to a locative marker, viz. a postposition in Ainu (cf. *ekohopi* 'separately from sth/sb' → *u-ekohopi* 'separately from each other'; Alpatov et al., Ch. 42, §1.12) or an auxiliary locative noun functioning as a postposition and taking case marking. These locative words are two-place predicates. Therefore they can take a reciprocal marker; cf., for instance, Ainu *ka* 'top of sth' → *u-ka* 'one on top of another', *teksam* 'place at the side' → *u-teksam* 'next to each other'. Such reciprocal marking is characteristic of postpositions descended from locative nouns and therefore sometimes taking case marking (cf. the Nivkh postposition *řara* 'opposite' in (108) which can take locative and dative case markers). The postposition of the base sentence can be a part of the locative constituent of an intransitive verb (108a). As to the reciprocal marker, it can be attached to the postposition of a locative constituent only (i.e. the predicate does not contain a reciprocal marker (108b)), or to the predicate as well (109b), in which case reciprocity is marked twice.

Nivkh (Otaina & Nedjalkov, Ch. 41, §3.4, ex. (52))

- (108) a. *if p^ʼ-ətək řara-in hur t'iv-d'.*
 he REFL-father opposite-LOC there sit.down-FIN
 'He sat down opposite his father.'
- b. *if ətək-xe u-t'ara-in hur t'iv-d'-yu.*
 he father-COM.DU REC-opposite-LOC there sit.down-FIN-PL
 'He and [his] father sat down opposite each other.'

Yukaghir (Maslova, Ch. 44, ex. (21))

- (109) a. *tiŋ as'e met numö al'a: uldo:-j.*
 this deer my house to be.tied-3SG.INTR
 'This deer is tied to my house.'
- b. *n^ʼ-al^ʼ-in n'e-uldo:-ŋ.*
 REC-TO-DAT REC-be.tied-3PL.INTR
 'They are tied to each other.'

This double marking of reciprocity is not accidental. It is characteristic of intransitive-based reciprocals in Yukaghir. With regard to prefixed reciprocals of two-place intransitives, Maslova (Ch. 44, §4.2.1) notes that "<...> the reciprocal constructions with underlying intransitive verbs normally involve one of the syntactic reciprocal markers." Although constructions of this kind are mostly characteristic of verbs of motion in Yukaghir, verbs commonly yielding proper reciprocals also sometimes occur here, which is probably due to the implication of direction in the meaning of these verbs; e.g.:

- (110) *tittel n'e-laŋi n'e-mon-ŋi.*
 they REC-TO REC-say-3PL.INTR
 'They said to each other.'

12.1.1.3 Reciprocals derived from three-place transitives. In this rare type the indirect object is retained and the direct object deleted; scarcity of this diathesis type in comparison with reciprocals from two-place bases is due to the much smaller number of three-place

base verbs (this is also true of the subsequent type) and predominance of transitive bases with an inanimate direct object which naturally hinders its reciprocalization; cf.:

Even (Malchukov, Ch. 39, ex. (25))

- (111) a. *Bi etiken-teki nimek-u göön-e-m.*
 I old.man-ALL neighbour-ACC say-NFUT.1SG
 ‘I told the old man about the neighbour.’
 b. *Bi n’imek-n’un etiken-teki göö-met-te-p.*
 I neighbour-COM old.man-ALL say-REC-NFUT-1PL
 ‘I and the neighbour told the old man about each other.’

See also Kirghiz examples (92) which show that, instead of an ungrammatical morphological reciprocal, a syntactic reciprocal is formed from a three-place transitive verb.

12.1.1.4 Reciprocals derived from three-place intransitives. In this rare case, as well as in the previous case, the indirect object of addressee or receiver is retained and the other object (denoting information or a thing that is passed over) is deleted (semantically this type corresponds to “indirect” reciprocals; see 12.1.2).

Yakut (Ch. 26, ex. (64))

- (112) a. *aal-əm kinie-xe ah-ənan-üölü-nen xardala-ər.*
 neighbour-my he-DAT food-INST-food-INST give.in.exchange-PRES.3SG
 ‘My neighbour gives *him* food in exchange.’
 b. *Kiniler ah-ənan-üölü-nen xardala-h-al-lar.*
 they food-INST-food-INST exchange-REC-PRES-3PL
 ‘They exchange their supplies of food with each other.’

12.1.1.5 Reciprocals derived from one-place intransitives (sic!). Two semantic subtypes can be distinguished.

1. The base verbs of this subtype commonly have meanings like ‘to produce sounds’ (of animals), ‘to cheep’, ‘to roar’, ‘to cackle, cluck’, ‘to squeak’, ‘to neigh’, ‘to moo’, ‘to whistle’ (of birds), ‘to croak’, i.e. they denote production of sounds or other signals by animate beings, usually implying an addressee which is practically never expressed. The derivatives denote an exchange of signals provoked by the partner(s). This type is intermediate between reciprocals and sociatives.

Yakut (Ch. 26, ex. (70); cf. §4.1.1.6; -s/-h = REC)

- (113) a. *Bu ənax mayəraa-n bar-d-a.*
 this cow moo-CONV AUX-PAST-3SG
 ‘The cow began to moo.’
 b. *Bu ənax mayəra-h-an bil-s-er.*
 this cow moo-REC-CONV know-REC-PRES.3SG
 ‘The cows recognize each other by mooing to each other.’

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.1.3)

- (114) a. *Murin keenari-žara-n.*
horse neigh-PRES-3SG
'The horse is neighing.'
b. *Muri-r keenari-maat-čara-Ø.*
horse-PL neigh-REC-PRES-3PL
'The horses are neighing to each other.'

There are about 10 such reciprocals in Yakut. Analogous reciprocals in Evenki number at least 12 items (Nedjalkov & Nedjalkov, Ch. 38, ex. (25). See also Nedjalkov, Ch. 28 on Kirghiz, §4.1.1.4).

2. This subtype includes pairs of antonymous reciprocals with the base verbs implying an object which is never expressed. Not infrequently, the meaning of these reciprocals is expressed in various languages by non-derived verbs, i.e by lexical reciprocals.

Indonesian (Ogloblin & Nedjalkov, Ch. 33, ex. (61'))

- (115) *tepat* 'to hit (the mark)' → *ber-tepat-an* 'to coincide'
salah 'to miss (the aim)' → *ber-salah-an* 'to not coincide.'

12.1.2 "Indirect" reciprocals (type A.1.1.2)

12.1.2.1 *The standard case.* "Indirect" reciprocals are always transitive, due to the reciprocalization of the indirect object of a three-place transitive and retention of the direct object (116). Since languages commonly have fewer three-place than two-place transitives, this diathesis type is much less common cross-linguistically than "canonical" reciprocals, and some languages lack it entirely. The meaning of this type can be rendered by two-diathesis (referentially ambiguous) reciprocals in some languages (see 5.2). The typical meanings of the base verbs are 'to give sth to sb', 'to take sth away from sb', 'to tell sth to sb', 'to show sth to sb', 'to send sth to sb', 'to hide sth from sb', 'to dress sb in sth', 'to entrust sth to sb', 'to explain sth to sb', 'to introduce sb to sb', etc. Here are examples of the standard "indirect" reciprocal construction:

Bolivian Quechua (van de Kerke, Ch. 31, ex. (50))

- (116) a. *Maria wawa-s-man misk'i-ta qu-rqa.*
M. child-PL-ALL sweet-ACC give-3SG.PAST
'Maria gave the children a sweet.'
b. *wawa-s misk'i-ta qu-na-ku-nku.*
child-PL sweet-ACC give-REC-REFL-3PL
'The children give each other a sweet.'

Yakut (Pekarskij 1959:616)

- (117) a. *Ini bii-tten kur-u bəld'a-t-a.*
younger.brother elder.brother-ABL belt-ACC take.away-PAST-3SG
'The younger brother took the belt away from his elder brother.'
b. *Ikki inibii kur-dar-n bəld'a-s-pit-tar ühü.*
two brothers belt-PL-ACC take.away-REC-PERF-3PL they.say
'They say the two brothers are taking belts from each other.'

12.1.2.2 Deviations from the standard case. Some languages impose restrictions on the derivation of this type of reciprocals. For instance, in contrast to Kolyma Yukaghir, “indirect” reciprocals are non-existent in Tundra Yukaghir (Maslova, Ch. 44, §8.2). Greenlandic Eskimo has only “canonical” reciprocals and lacks “indirect” and “possessive” reciprocals (Fortescue, Ch. 19, §§7.1.2 and 7.1.3). Some languages display deviations from the standard type of “indirect” reciprocal constructions. These deviations are mostly due to the pressure of the more common “canonical” (= intransitive) reciprocals. Here are a few instances.

1. Lithuanian. In this language, standard “indirect” reciprocals with the reflexive marker *-si-/s* mostly derive from verbs of speech meaning ‘to whisper’ and the like, taking either a direct object *kažk-q* ‘something’ or prepositional *apie kažk-q* ‘about something’ (as in Russian) deleted or retained in the derived construction (118c). Retention of the direct object in (118b) outrules the reciprocal reading (i), and the construction is interpreted as reflexive-benefactive (ii). Another restriction is on three-place transitives meaning ‘to tell’, ‘to say’, ‘to give’, ‘to send’, with an indirect dative object: they do not form reciprocals with the reflexive marker, reciprocity being expressed syntactically by the phrase *vien-as kit-am* (DAT) ‘to each other’.

Lithuanian (Geniušienė, Ch. 14, §4.1.3)

- (118) a. *Petr-as šnibžd-a kažk-q On-ai.*
 P.-NOM whisper-3.PRES something-ACC O.-DAT
 ‘Peter whispers something to Ann.’
- b. *Petras ir Ona šnibžda-si kažk-q.*
 i. *‘Peter and Ann are whispering something to each other.’
 ii. ‘Peter and Ann are whispering something each to him/herself.’
- c. *Petras ir Ona šnibžda-si apie kažk-q.*
 ‘Peter and Ann are whispering about something between themselves.’

2. Mundari. Another instance of deviation from the expected marking of the “indirect” reciprocal construction is encountered in Mundari. Although the direct object is retained, as in the standard case, the transitive marker *-ʔ-* on the predicate in (119a) is replaced by the intransitive marker *-n-* in (119b), as on “canonical” reciprocals.

Mundari (Osada, Ch. 37, ex. (16); infix *-p/-po-/... = REC*)

- (119) a. *Soma seta hon-ko=eʔ om-ki-ʔ-i-a.*
 S. dog child-PL=3SG.SBJ give-COMPL-TR-3SG.OBJ-PRED
 ‘Soma gave the dog to the children.’
- b. *seta-ko=le o-po-m-ta-n-a.*
 dog-PL=1PL.EXC.SBJ give-REC-give-PROGR-INTR-PRED
 ‘We are giving the dogs to each other.’

A somewhat similar case is observed in Kolyma Yukaghir where “indirect” reciprocals can be inflected both like transitives and intransitives (Maslova, Ch. 44, §3.2).

3. Cashinahua. “Indirect” (and also “possessive”) constructions of this language may retain the direct object and thus remain transitive in contrast to “canonical” reciprocals. But their transitivity is weakened, because the subject cannot be marked for ergative, and

this may be due to the influence of “canonical” constructions which are not ergative because of their intransitivity (see Camargo, Ch. 45, §1.2); cf. (73a, b) with the ergative suffix *-n* on the subject and “indirect” (73c, d) where it is absent).

4. *Warrungu*. In this language, the subject of “indirect” and “possessive” reciprocals is not ergative but nominative, despite the fact that a direct object can be retained (see Tsunoda, Ch. 32, §§1.2, 4.2, and 4.3).

12.2 Reciprocals with non-argument coreferentiality (type A.1.2)

12.2.1 “Possessive” reciprocals (type A.1.2.1)

12.2.1.1 *The standard case*. These are derivatives with reciprocalization of a possessive attribute of the object; the direct object is retained (if there is one in the base construction). Unlike “canonical” and “indirect” reciprocals, “possessive” constructions retain the valency of the underlying verb because the object is retained and the syntactic change involves deletion of an attribute if it is present in the base construction or expressed by a possessive marker on the object. They can be derived from (a) two-place transitives, which is the most common case (120); (b) two-place intransitives (123); (c) three-place transitives; (d) three-place intransitives.

1. *Reciprocals derived from two-place transitives*. This case is illustrated by an example with a unique suffix *-takan/-tak* ‘each other’s’ attested in the Oxotsk dialect of Even (see Malchukov, Ch. 39, §5). This suffix (also used to derive reciprocal pronouns in this dialect) may mark cross-coreferentiality of the subject and the possessor on the head of the possessive phrase in addition to the marking on the predicate.

Even

- (120) a. *Bej hooni-wa-n irič haa-ži-m?*
 man strength-ACC-his how know-FUT-1PL
 ‘How can we try the man’s strength?’
 b. *Honi-l beji-l, hooni-tak-mar irič haa-mat-či-p?*
 strong-PL man-PL strength-takan-REFL.PL how know-REC-FUT-1PL
 ‘Strong men, how can we try each other’s strength?’

Compare also the following.

Yakut (Ch. 26, ex. (78); in (b) reduplication iconically signals two objects; possessivity is marked by suffix *-leri/-teri* only)

- (121) a. [*Bukatær at-a atøn bukatær at-ǰ-n*] *tüü-tü-n, et-ǰ-n,*
 athlete horse-his other athlete horse-his-ACC hair-his-ACC flesh-his-ACC
tirii-ti-n baraa-t-a.
 skin-his-ACC destroy-PAST-3SG
 ‘[The athlete’s horse] destroyed the hair, flesh and skin [of the other athlete’s horse].’
 b. ... *tüü tüü-leri-n, et et-teri-n, tirii tirii-leri-n*
 hair hair-their-ACC flesh flesh-their-ACC skin skin-their-ACC
bara-s-pət-tara.
 destroy-REC-NR.PAST-3PL
 ‘[The horses of the athletes] destroyed each other’s hair, flesh and skin.’

Modern Chinese (Hoa 1983:31)

- (122) *L.Z. hé X.L. hùxiāng fāngwèn chōudū.*
 L.Z. and X.L. REC visit capital
 ‘L.Z. and X.L. visit each other’s capitals (each visits the other’s capital).’

2. *Reciprocals derived from two-place intransitives.* An illustration is from Even (Malchukov, Ch. 39, §3.1.1.4.2; in (123a) the possessive attribute is expressed by izafet: the possessive ending *-n* ‘his’ agrees with the uninflected noun *etiken* ‘old man’; this construction is retained in (123b), cf. the izafet construction *meer ... -wur*; thus the base and the derived construction are syntactically identical):

- (123) a. *Bi etiken žuu-la-n bii-wet-te-m.*
 I old.man house-LOC-his be-ITER-NFUT-1SG
 ‘I (used to) stay in the old man’s house.’
 b. *Mut etike-n’un meer žuu-l-dula-wur bii-wet-met-te-p.*
 we old.man-COM selves’ house-PL-LOC-REFL.PL be-ITER-REC-NFUT-1PL
 ‘I and the old man (used to) stay in each other’s houses.’

Replacement of the verb meaning ‘to be, live’ in (123b) with a verb meaning ‘to die’ would make the sentence ungrammatical or require the use of the reciprocal pronoun. Thus, the morphological reciprocal is sensitive to the nature of the spatial complement of the base verb: expression of place with the verb meaning ‘to be, live’ is implied by the lexical meaning of the verb, while this does not apply to the verb meaning ‘to die’.

The device *meer ... -wur* + reciprocal suffix illustrated in (123b) is the main means of marking “possessive” reciprocals from any bases in written Even, i.e. this marking can be used in (120b) by the speaker of Standard Even. Similarly, a native speaker of the Oxotsk dialect can use in (123b) the means employed for a two-place transitive in (120b).

12.2.1.2 Deviations from the standard case. Languages lacking the standard “possessive” reciprocal construction sometimes find idiosyncratic ways of expressing the same meaning.

In some languages, there are deviations from the standard way of marking “possessive” reciprocals, and various “quasi-possessive” (mostly intransitive) constructions are used. Note that “possessive” reciprocals are generally not attested among morphological reciprocals in many languages, e.g. in Mundari, Lithuanian, etc. In Kabardian, there are no standard “possessive” reciprocals (see 12.2.1), but the respective meaning can be expressed, sometimes by the reciprocal form of benefactive verbs (Kazenin, Ch. 17, §3.2.1.3; see also (127) below).

In what follows I will discuss a number of deviations semantically but not formally corresponding to standard “possessive” reciprocal constructions.

1. *Ainu.* The situation described by (124e) covers the subevents described by (124a) and (124b). Constructions like (124c), to be found in a number of languages (cf. (121b)), are not possible in Ainu, because the verb *nukar* takes only one object which is replaced by the reciprocal marker (*u-nukar* means ‘to look at each other, to meet’ (Tamura 1996:774) but in this context it is interpreted as ‘to test each other’), therefore the object in (124c) is not linked to the intransitive predicate syntactically. (124d) is ungrammatical because the

prefix *u-* can be attached, with few exceptions, as mentioned above, only to names of body parts and locative nouns. Example (124e) is a semantic counterpart of Even (120b).

Ainu (Alpatov, et al., Ch. 42, §3.1.3; cf. “canonical” *kotuk* ‘to stick to sth/sb’ → *u-kotuk* ‘to stick to each other’; cf. also *ibid.*, (50))

- (124) a. *E-kiror-o ku-nukar.* vt
 your-strength-POSS 1SG-see/test
 ‘I test your strength.’
- b. *Ku-kiror-o e-nukar.* vt
 my-strength-POSS 2SG-see/test
 ‘You test my strength.’
- c. **Ci-kiror u-nukar-an.* vi
 our-strength REC-see/test-1PL
 ‘We test each other’s strength’, i.e. ‘We compete in strength.’
- d. **U-kiror ci-nukar.* vt
 REC-strength 1PL-see/test
 (same intended meaning as (c)).
- e. *u-kiror-nukar-an* ‘we (= *-an*) compete in strength’ vi
esi-u-kiror-nukar ‘you (= *-esi*) compete in strength’ vi
Ø-u-kiror-nukar ‘they (= *Ø*) compete in strength.’ vi

2. *Nivkh*. “Possessive” reciprocal verbs are not attested in *Nivkh*, but there are constructions semantically corresponding to “possessive” reciprocal constructions. In these constructions the reciprocal suffix is attached to the direct object. The latter assumes a reduplicated form which is an iconic expression of (distributive) plurality. Compare:

Nivkh (Otaina & Nedjalkov, Ch. 41, §3.2.4; cf. *-y-* ‘to kill sb’ → *u-y-* ‘to kill each other’)

- (125) a. ... *mat’kalk i-dəmk zap-r ler-d’.*
 kiddy his-hand take.hand-CONV.3SG play-FIN
 ‘... the child_i plays holding his_{i,j} hand.’
- b. *mat’kalk-xu u-dəmk rəmk zap-t ler-d’-yu.*
 kiddy-PL REC-hand hand take.hand-CONV.3PL play-FIN-PL
 ‘Children play holding each other by the hand.’

3. *Kolyma Yukaghir* (Maslova, Ch. 44, §3.3.2). In this language, alongside standard “possessive” reciprocals two isolated derivatives are registered which are adjacent to the above two cases: the reciprocal prefix is attached to the noun incorporated in the transitive base which thus functions as an intransitive verb (note that incorporation is not characteristic of *Yukaghir*).

- (126) a. ... *n’e-pöme-aŋs’i-jej’i.*
 REC-louse-look.for-1PL-INTR
 ‘... we are looking for each other’s lice.’
- b. ... *n’e-ažu-medi:-nunnu-l’el-ŋi.*
 REC-word-perceive-HAB-EVID-3PL.INTR
 ‘... they understood each other’s language.’

12.2.2 “Adverbial” reciprocals (type A.1.2.2)

In this case reciprocalization involves a sentence constituent which is not an argument or a possessive attribute. It is an (optional, or weakly governed) constituent which can take different spatial values with verbs of motion and posture, or a constituent not implied by the lexical meaning of the verb (e.g., a benefactive or causal constituent). Thus, in meaning, “adverbial” reciprocals may be spatial, benefactive, causal, etc. The benefactive meaning is close to the “indirect” type both semantically and formally. Generally, “adverbial” reciprocals are rather rare cross-linguistically. In languages that possess both verbal and syntactic reciprocal markers the syntactic marker is used to derive “adverbial” reciprocals exclusively or at least more commonly than the verbal marker. A distant parallel to this distribution is the reciprocal use of a reflexive (clitic) pronoun on bases with a direct object and a reciprocal pronoun on bases with a prepositional object in German (87)–(88), French (94)–(95) and Bulgarian (105).

1. *Spatial reciprocal meaning.* Reciprocals that could be entered in this type are for a number of reasons included among reciprocals derived from two-place intransitives (see 12.1.1.2 above).

2. *Reciprocal-benefactive meaning.* The benefactive meaning can be expressed by a verbal benefactive affix, case inflection on the object or an auxiliary word. In some languages that possess verbal benefactive forms, morphologically marked reciprocals do not derive from them. An example is Mundari where the benefactive and the reciprocal markers do not co-occur (Osada, Ch. 37, §3.1.2), and a reciprocal construction with the meaning like ‘We cut trees for each other’ cannot be derived (probably due to the benefactive verbal base taking the intransitive marker *-n* only; *ibid.*, §2.6.3).

Reciprocal benefactive constructions may be formed both from marked (127) and unmarked benefactive verbs.

2a. *Kabardian* (Kazenin, Ch. 17, §§3.2.1.2.2 and 3.2.1.3; ex. (38)). The reciprocal prefix *-zə-* is attached to the benefactive form with the prefix *-xu[ə]-*:

- (127) a. *unə-r* *Ø-p-xuə-z-o-šbI-Ø*
 house-ABS 3SG.ABS-2SG.OBL-BEN-1SG.ERG-DYN-build-PRES
 ‘I am building this house for you.’
 b. *unə-xə-r* *Ø-zə-xu-f-o-šbI-Ø*
 house-PL-ABS 3SG.ABS-REC-BEN-1PL.ERG-DYN-build-PRES
 ‘We are building houses for each other.’

An analogous form is registered in Quechua, but in derivation of reciprocals from benefactives the benefactive suffix is placed after the reciprocal marker (van de Kerke, Ch. 31, §4.2.1.3).

2b. *Yakut.* In this language benefactive reciprocity is expressed by the dative case of the reciprocal pronoun or, rarely, by the reciprocal suffix or both simultaneously.

- (128) *Kiniler* [*beje-beje-leri-ger*] *die-leri-n* *tut-us-t-ular.*
 they each.other-their-DAT house-their-ACC make-REC-PAST-3PL
 ‘They built houses for each other.’

2c. *Even*. The benefactive meaning is not marked on the verb but on the object by means of the benefactive case marker (*-ga* ‘for sb’ in (129b)) which is always followed by a possessive ending (*-n* in *turki-ga-n* (129b)). The unmarked possessor-beneficiary *bey* in (129a, b) is part of the *izafet* construction, the link in this construction being marked by the possessive ending *-n* (Malchukov, Ch. 39, ex. (31)):

- (129) a. *Etiken bey turki-wa-n ga-d-ni.*
old.man man sleigh-ACC-his take-NFUT-3SG
‘The old man took the man’s sleigh.’
- b. *Etiken bey turki-ga-n ga-d-ni.*
old.man man sleigh-BEN-his take-NFUT-3SG
‘The old man took the sleigh for the man.’
- c. *Etiken hurken-de meer turki-ga-wur ga-mat-ta.*
old.man youth-and selves’ sleigh-BEN-REFL.PL take-REC-NFUT.3SG
‘The old man and the youth took the(ir) sleigh(s) for each other.’

3. *Reciprocal-causal meaning*. Example (130b) contains a syntactic marker of reciprocity. The pronoun is used with the preposition of cause inherited from the base construction. This sentence seems to have no parallels with a verbal marker in any language, since the meaning of cause is not a part of the lexical meaning of the base verb and therefore cannot be expressed by a verbal reciprocal:

Vietnamese (Bystrov & Stankevich, Ch. 47, §1.2, ex. (2))

- (130) a. *Lan khổ vì Hồng.*
‘Lan suffers because of Hong’
- b. *Lan và Hồng khổ vì nhau.*
‘Lan and Hong suffer because of each other.’

12.3 “Irreversible” reciprocals (type A.1.3)

This type is opposed to the diathesis types A.1.1 and A.1.2, as the reciprocal marker does not replace any constituent. This very rare type is attested in Modern Chinese. (With reservations, reciprocals from one-place intransitives, like (113) and (114), can also be regarded as irreversible).

Modern Chinese (Hoa et al., Ch. 49, §3.5.1; the REC marker is optional here)

- (131) *Nǐ bǎ zhè jǐ shuāng xié [hùxiāng] shì-shì.*
you.SG ba this several pair shoe mutually try.on-try.on
lit. ‘Try on some of these pairs of shoes [mutually] (= compare them with each other to see which pair is better).’

12.4 Implicational hierarchy of the diathesis types of reciprocals

In conclusion of the discussion of subject-oriented reciprocals, I propose the following implicational hierarchy for verbal reciprocal markers where each subsequent type implies the existence of the previous types. Pronominal reciprocals are taken into consideration if they are the only or main type of reciprocals in a language.

(132) “canonical” ⊃ “indirect” ⊃ “possessive” ⊃ “adverbial” ⊃ ‘irreversible’.

This is supported by the fact that there are languages

1. With “canonical” reciprocals only, e.g. Tariana (see Aikhenvald, Ch. 30, §1.2), West Greenlandic Eskimo (Fortescue, Ch. 19, §§1.2 and 7), Lithuanian where “indirect” reciprocals are practically absent (see (118) above), To’aba’ita (see Lichtenberk, Ch. 36, §4); in Chukchi the other diathesis types are not attested reliably (see Nedjalkov, Ch. 40, §3.1.1);

2. With “canonical” and “indirect” reciprocals only, e.g. German (see Wiemer & Nedjalkov, Ch. 10, §§4.1–4.2), Kabardian (Kazenin, Ch. 17, §3.2.1.3), Nivkh (Otaina & Nedjalkov, Ch. 41, §§3.2.1–3.2.4), Ainu (Alpatov et al., Ch. 42, §§3.1.1, 3.1.2, 3.1.3.2), Udehe (curiously enough, if a pronominal marker is used, a verbal reciprocal is possible; see Nikolaeva, Ch. 23, §§3.1, 4.1);

3. With “canonical”, “indirect” and “possessive” reciprocals only, e.g. Yakut (see Nedjalkov & Nedjalkov, Ch. 26, §§4.1.1–4.1.3), Even (see Malchukov, Ch. 39, §3.2), Khalkha-Mongol and Buryat (see Nedjalkov et al., Ch. 29, §3.1.1–3.1.3), Mundari (see Osada, Ch. 37, §§3.1.1–3.1.3).

(Almost) all the diathesis types are represented by syntactic reciprocals in some languages, e.g. by reciprocals with the adverb *hùxiāng* in Modern Chinese, pronoun *each other* in English, *drug druga* in Russian, etc.

Thus, if a language has only one diathesis type of reciprocals it is likely to be “canonical”, if it has two types, they are certain to be “canonical” and “indirect”, etc.

13. Object-oriented reciprocals; type A.2 – spatial transitive reciprocals of joining and separating

This section is a sequence to 2.2.4 and to two subsections (b) in 12.1.1.2.

13.1 The Kabardian case¹⁰

Spatial transitive reciprocals are considered here mostly on the basis of Kabardian where this class of verbs has morphological marking and seems to have reached maximum development (this also pertains to the closely related Adyghe language).

10. On transliteration of the Cyrillic characters of the Adyghe and Kabardian alphabet: phonetic transcription is used for many consonants and vowels (e.g. the Latin letters *b, g, d,* etc., and *a, o, u,* etc.). The letters *ə* and *e* (which usually signifies the diphthong /jə/) are preserved. The following letters are preserved: *l* (glottal stop), *ʙ* and *ɸ* (the latter two change the value of the previous letter; cf. *g = /g/* and *gɸ = /ɣ/*). The Cyrillic letter *ʙ* is replaced by schwa (ə). The letter *ʉ* is replaced by the combination *ʂʙ*. This mixed transliteration is also used in Chapters 3, 5, 7 and in Ch. 18 on Adyghe reciprocals. However, in Chapter 17 on Kabardian reciprocals, phonetic transcription is used.

13.1.1 *Introductory*

Spatial reciprocals are in fact two antonymous lexical groups, of joining and separating, with numerous derivatives more or less related in meaning to them. In the *Kabardian-Russian dictionary* (Apazhev et al. 1957) and in the *Russian-Kabardian dictionary* (Kardanov & Bichoev 1955), at least 230 spatial transitive reciprocals with the prefix *zə-* are registered, about 150 of them with the meaning of joining and about 80 denoting separating (the number of base roots without preverbs is much more limited).

Note that in Kabardian, spatial transitive reciprocals are derived by means of the prefix *zə-* alone (133a, b), which also reciprocates non-direct objects of two-place intransitives (133c) and three-place transitives (133d), whereas for the direct object the prefix *zə-rə-* is used (133e):¹¹

- | | | | | |
|-------|----|--|---|---|
| (133) | a. | <i>klərə-dən</i> ‘to sew sth onto sth’ | → | <i>zə-klərə-dən</i> ‘to sew two pieces together’ |
| | b. | <i>pə-upšvIən</i> ‘to cut sth off sth’ | → | <i>zə-pə-upšvIən</i> ‘to cut sth through/in half’ |
| | c. | <i>guoun</i> ‘to shout to sb’ | → | <i>zə-guoun</i> ‘to shout to each other’ |
| | d. | <i>tən</i> ‘to give sth to sb’ | → | <i>zə-tən</i> ‘to give sth to each other’ |
| | e. | <i>zexuən</i> ‘to chase sb’ | → | <i>zə-rə-zexuən</i> ‘to chase each other.’ |

Spatial transitive reciprocals, like the one in (134), crucially differ from proper reciprocals semantically, as their reciprocal arguments are object referents, i.e. patients manipulated

11. The data for this section are obtained from the *Kabardian-Russian dictionary* (Apazhev et al. 1957) and the *Russian-Kabardian-Cherkess dictionary* (Kardanov & Bichoev 1955). In the examples below, the verbs are, as a rule, segmented into morphemes (the masdar suffix *-n* is not singled out).

Kabardian has ergative-absolutive structure: *-(ə)m* is a case marker for the ergative subject and non-direct and oblique objects, and *-(ə)r* marks the absolutive subject and direct object. Admitting that *-(ə)m* in both functions is the same case I nevertheless indicate in the glosses the function (ERG or OBL) and not the name of the case for the reader's convenience, though I realize the illogicality of this decision (influenced by the choice of Kazenin for Kabardian (Ch. 17, §2.1). Nouns with the double conjunctive suffix *-rə* are always marked for the oblique case whatever their syntactic function. The 1st and 2nd person pronouns have no ERG and ABS forms. The plural suffix is *-xə*.

The morphological structure of a reciprocal verb is very complex, a simplified pattern being REC-PREV-CAUS-ROOT. Agreement markers are inserted either before the root (or before the causative prefix *gəə-*, as in (134)), and/or the preverb, depending on the syntactic function of the argument they refer to. In many forms 3rd person object agreement markers are zero. The reciprocal prefix takes the agreement slot of the reciprocalized object.

Kabardian preverbs are mostly locative; a verb form may contain more than one locative preverb, sometimes three, to reflect very subtle locative meanings. All in all, the number of simple and complex preverbs reaches about 100 (Kazenin, Ch. 17, §9.2.4). Many of the preverbs denote position somewhere: they point to the part of the object where the action takes place, e.g. inside (*švIə-/švIə-*) or in its upper or lower part, or in its opposite part, or on its vertical surface (*klərə-*), or in the front of the object (*pə/pə-*), etc., rather than the direction of motion towards some place or away from it. Direction ‘towards’ or ‘from (sth)’ is determined by the lexical meaning of the root, which may be a bound morpheme. Therefore the same prefix may denote opposite directions of motion on different derivatives (cf. *pə-gəə-švən* ‘to weld sth to sth’ and *pə-gəə-švən* ‘to cut sth off sth’; Apazhev et al. 1957: 162, 451–2). This antonymy is retained on spatial reciprocals with the same preverb (cf. *zə-pkəərə-lə-xən* ‘to assemble sth from parts (e.g. a rifle)’ and *zə-pkəərə-xən* ‘to dismantle sth into parts’; Shardanov 1983: 74).

In Kabardian example (167), there occurs the preverb *kəə-* with the main meaning of direction towards the speaker.

by the subject referent. Despite obvious differences between them, the fact that in many languages both types of reciprocals share the same markers, verbal or pronominal, shows their semantic affinity (see 13.2.1, where such reciprocal markers from eight languages are cited). As a rule, spatial transitive reciprocals derive from three-place transitives: in the process of derivation the non-direct object position is deleted and its referent comes to be denoted by the direct object together with the referent of the base direct object; hence valency decrease. As a rule, spatial reciprocals are two-place transitives. Syntactically, they form simple constructions (to use the term introduced in Section 7), as the reciprocalized referents are expressed by the same (conjoined) constituent. An example (recall that the English word *together*, as well as its equivalents in numerous other languages, has two meanings: (i) sociative of joint action and (ii) spatial of coming or bringing two entities into contact):

- (134) a. *Inal-əm surət-ər txələmpIə-m kIərə-i-gəə-pšb-a-šb.*
 I-ERG photo-ABS paper-OBL PREV-3SG-CAUS-stick-PAST-ASS
 ‘Inal stuck the photo to the paper.’
- b. *Inal-əm txələmpIə-r surət-əm kIərə-i-gəə-pšb-a-šb.*
 I-ERG paper-ABS paper-OBL PREV-3SG-CAUS-stick-PAST-ASS
 ‘Inal stuck the paper to the photo.’
- c. *Inal-əm surət-əm-rə txələmpIə-m-rə zə-kIərə-i-gəə-pšb-a-šb.*
 I-ERG photo-OBL-and paper-OBL-and REC-PREV-3SG-CAUS-stick-PAST-ASS
 ‘Inal stuck the photo and the paper together.’

Syntactically, derivation of spatial transitive reciprocals is somewhat similar to that of “in-direct” reciprocals proper, like ‘A introduced B to C and C introduced D to A’ → ‘A and C introduced B and D to each other’. By the way, the latter example seems to be one of the few among “indirect” reciprocal constructions that allows object-oriented interpretation, which is obvious if the subject is singular: ‘A introduced B and D to each other’ (see 12.1.2 above; see also object-oriented reciprocals in (23c) and (24c) above). But reciprocity concerns the subject referents in the case of proper “indirect” reciprocals (the referent of the base indirect object is also denoted by the subject of the derivative), and both perform reciprocated actions while in the case of spatial reciprocals cross-coreference concerns the object referents subjected to one action only.

The spatial meanings of joining and separating occupy a special place among locative meanings. It is significant that they can also be expressed by polysemous reciprocal markers with the anticausative meaning, as is the case in Muna:

Muna (van den Berg 1989: 314; *po-* = REC)

- (135) a. *paliki* ‘to visit sb’ → *-po-paliki* ‘to visit each other’
 b. *tai* ‘to stick sth (in)to sth)’ → *-po-tai* ‘to be bound together’
 c. *kuta* ‘to break sth’ → *-po-kuta* ‘broken in two pieces.’

Expression of separating by a reciprocal marker is attested in a number of languages where it is also used to express joining together, and there are also languages where the reciprocal marker has only the latter meaning. I propose a tentative implication: if a reciprocal

marker is used to denote separating it is also used to denote joining together, but the opposite is not necessarily true.

13.1.2 Proper intransitive reciprocals and spatial intransitive and transitive reciprocals
 Constructions with the first two types of reciprocals, i.e. proper (“canonical”) and spatial intransitive, do not differ from each other syntactically in Kabardian (see 12.1.1.2 above). However, there is a marked semantic difference between them (cf. proper reciprocals like ‘to speak to each other’ and spatial intransitive reciprocals like ‘to stick to each other’) and, in some languages (not in Kabardian whose spatial reciprocal marker is voice-oriented, to use the term introduced in 4.2), their marking may differ, e.g. spatial reciprocals may have a special marker (cf. the Russian non-voice-oriented spatial reciprocal marker *s-* in *s-kleit’-sja* ‘to stick together’ (vi); cf. (142b); see also case 6 in 13.2.6).

The relations of the three types of reciprocal constructions named with the respective pairs of base constructions look as follows (note that a plural noun phrase is more common than coordinated phrases like *A and B*):

- (a) Proper “canonical” reciprocal
 (136) a’. *A spoke to B.* + a”. *B spoke to A.* = b. *A and B spoke to each other.*
- (b) Spatial intransitive reciprocal
 (137) a’. *A stuck to B.* + a”. *B stuck to A.* = b. *A and B stuck to each other.*
- (c) Spatial transitive reciprocal
 (137’) a’. *S stuck A to B* + a”. *S stuck B to A.* = b. *S stuck A and B together/to each other.*

In construction (b), the valency of all three oppositions decreases, if the derivative has a verbal reciprocal marker. This valency decrease is due to the expression of the reciprocants by one constituent, i.e. a construction termed simple is used (cf. (138c), (139c) and (134c)). The following examples illustrate the syntactic identity of proper “canonical” and spatial intransitive reciprocals:

- (138) a. *sələt-xə-r* *bij-xə-m* *j-o-zəuə-Ø.*
 soldier-PL-ABS enemy-PL-OBL OBJ-DYN-fight-PRES
 ‘Soldiers are fighting with (=against) enemies.’
- b. *bij-xə-r* *sələt-xə-m* *j-o-zəuə-Ø.*
 enemy-PL-ABS soldier-PL-OBL OBJ-DYN-fight-PRES
 ‘Soldiers are fighting with (=against) enemies.’
- c. *sələt-xə-m-rə* *bij-xə-m-rə* *z-o-zəuə-Ø.*
 soldier-PL-OBL-and enemy-PL-OBL-and REC-DYN-fight-PRES
 ‘Soldiers and enemies are fighting (with each other).’
- (139) a. *surət-ər* *txələmpIə-m* *klərə-pšb-a-šb.*
 photo-ABS paper-OBL PREV-stick-PAST-ASS
 ‘The photo stuck to the paper.’
- b. *txələmpIə-r* *surət-əm* *klərə-pšb-a-šb.*
 paper-ABS photo-OBL PREV-stick-PAST-ASS
 ‘The paper stuck to the photo.’

- c. *surət-əm-rə* *txəlθəmpIə-m-rə* *zə-kIərə-pšb-a-šb.*
 photo-PL-OBL-and paper-OBL-and REC-stick-PAST-ASS
 ‘The photo and the paper stuck together.’

13.1.3 Formation of spatial transitive reciprocals: Labile derivation, reciprocal, locative markers

Spatial transitive reciprocals may enter into morphological oppositions both with same-root spatial (one-place) intransitive reciprocals and underlying three-place transitives (= bitransitives). Four forms are theoretically possible which may enter into four semantic oppositions between themselves, two reciprocal (English (140a)–(140b) and (140’a)–(140’b)) and two causative ((140a)–(140’a) and (140b)–(140b’)).

Similarly, among four Kabardian same-root predicates in (141) and (141’), and four Russian same-root predicates in (142) and (142’), there are analogous causative oppositions, and forms (a) and (b) also enter into reciprocal relations. In Kabardian, the causative member is marked with a causative prefix (141’), and in Russian, the anticausative member is marked with a medial postfix (142). The semantic oppositions illustrated by (137) and (137’) can be expressed by different formal oppositions. There are three main marking strategies:

1. *Labile derivation* (with optional or obligatory addition of an adverb like *together*); this strategy is employed in English, where the same verb form is used in all four meanings:

- English
- | | | | |
|--------|-------------------------------|---|--|
| (140) | a. ‘to stick to sth’ (vi) | ↔ | b. ‘to stick together’ (vi) |
| | ↓ | | ↓ |
| (140’) | a. ‘to stick sth to sth’ (vb) | ↔ | b. ‘to stick sth and sth together.’ (vt) |

2. *Reciprocal derivation*: a spatial transitive is derived from a bitransitive base by means of a voice-oriented reciprocal affix (cf. (141’a) → (141’b)) or from an intransitive reciprocal by means of a causative marker (cf. (141b) → (141’b)); these strategies are employed in Kabardian:

- Kabardian
- | | | | |
|--------|---|---|--|
| (141) | a. <i>kIərə-pšbIən</i> ‘to stick to sth’ (vi) | → | b. <i>zə-kIərə-pšbIən</i> ‘to stick together’ (vi) |
| | ↓ | | ↓ |
| (141’) | a. <i>kIərə-gθə-pšbIən</i> ‘to stick sth to sth’ (vb) | → | b. <i>zə-kIərə-gθə-pšbIən</i> ‘to stick sth and sth together’ (vt) |

3. *Locative derivation*: derivational locative affixes with the meaning of joining or separating are used; they are non-voice-oriented; a spatial reciprocal derives from the base verb; cf. Russian *kleit* ‘to stick, paste’ → *s-kleit* ‘to stick, paste sth together’, *pri-kleit* ‘to stick, glue sth to sth’), the prefixed derivatives comprise an (additional) equipollent opposition where the affix of one denotes joining of one object to another and the affix of the other member has a reciprocal meaning: *pri-kleit* ‘to stick, glue sth to sth’ (142’a) ↔ *s-kleit* ‘to stick, glue sth and sth together’ (142’b). In other words, in this case the reciprocal meaning in Russian is expressed by substitution of the prefix *s-* for *pri-*:

Russian

(142) a. *pri-kleit'-sja* 'to get stuck to sth' (vi) ⇔ b. *s-kleit'-sja* 'to get stuck together' (vi)
 ↑ ↑

(142') a. *pri-kleit'* 'to stick sth to sth' (vb) ⇔ b. *s-kleit'* 'to stick sth and sth together.' (vt)

Russian spatial reciprocals like *skleit'* 'to stick sth and sth together' (142'b) are regularly translated into Kabardian by means of reciprocals like *zə-kIəɾə-gʷə-pšbIən* with the same meaning. Analogous correspondences are attested among Russian spatial reciprocals of separating with the prefix *raz-* which are also regularly translated by means of the reciprocal prefix *zə-*.

13.1.4 Reversible and non-reversible spatial reciprocals

Spatial reciprocals relating to two non-reciprocal base constructions with inverted arguments like (139a, b) and (134a, b) which can be used in intransitive type (139c) constructions and transitive type (134c) constructions can be termed reversible. Thus, semantically, a reversible reciprocal construction equals two non-reciprocal constructions, being the "sum" of their meanings. Reciprocals of separating are, as a rule, non-reversible, only a few conforming to the conditions for reversible reciprocals; e.g.:

- (143) a. *markə-xə-r_i j zə-kIəɾə-gʷə-pšbIə-kIən.*
 'to unstick/unglue the stamps [from one another].'
 b. *markə-m-əɾ_i markə-m-əɾ_j zə-kIəɾə-gʷə-pšbIə-kIən.*
 'to unglue a stamp_i from a stamp_j.'
 c. *markə-r_i markə-m_j kIəɾə-gʷə-pšbIə-kIən.*
 'to unglue a stamp_i from a stamp_j.'
 d. *markə-r_j markə-m_i kIəɾə-gʷə-pšbIə-kIən.*
 'to unglue a stamp_j from a stamp_i.'

In fact, this schema, in contrast to its counterpart with verbs of joining, is represented by a very limited number of derivatives, because the situation of separating such homogeneous objects (e.g. two stamps) is a comparatively rare phenomenon. Much more frequent are situations when a whole object is divided into parts. In this case the reciprocal construction relates only to one base construction (cf. (144b), viz. to a spatial transitive reciprocal of type (137'a')), inversion of the objects in (144b) being precluded by the difference in the semantic status of the object referents and/or the lexical evolution of spatial reciprocals. Not infrequently, a reciprocal construction is not related semantically to any base construction of type (137'a') at all (cf. (153b)).

It is obvious that the two main lexical groups of spatial reciprocals are antonymous in respect of the relationship between a whole (object) and its parts, and it is a greater or lesser symmetricity of the parts (either fully separated or in spatial contact) of the same whole entity that make the employment of the reciprocal marker possible. In the case of joining, separate parts exist prior to the whole object. In the case of separating, the relation is the opposite. These opposite images manifest themselves in the background of various spatial reciprocals to a different degree, depending on the lexical meaning of the base verb and/or lexical meaning of the objects. Reciprocalization may involve

various kinds of metonymical re-interpretation. I will cite a number of most common non-prototypical cases, cases with minor deviations and some where no connection to the reciprocal meaning can be traced.

Case 1: the object referent of the reciprocal construction is a single whole subjected to dividing into parts. Thus, for instance, spatial reciprocal (144a) is related only to one base construction (144b) meaning ‘to break off a piece of bread’; needless to say, the meaning ‘to break off bread from a piece’ is hardly natural.

- (144) a. *šbIakxčbuš-r zə-pə-šbIə-kIən* ‘to break (a loaf) of bread’
 b. *šbIakxčbuš Iəxbə pə-šbIə-kIən* ‘to break off a piece of bread.’

Case 2: the object referents (two or more than two) of the reciprocal construction are in converse relation to each other. Sentences (145) and (146) illustrate typical deviations from the cases illustrated in (139) and (143). The main factor is the lexical meaning of the base verb and non-symmetry (or similarity?) of the object referents. In (145) the reciprocants (i.e. chair and table) can appear as conjoined reciprocated objects only as in (145b), and hardly in the inverted order ‘to put the chair and the table one upon another’; thus (145b) relates only to one base construction, namely (145a), where inversion of the direct and non-direct objects (i.e. ‘to put a table *on* the chair’) is rather unlikely, a converse statement like ‘to put the table *under* the chair being more natural (see §10).

- (145) a. *šənt-ər stIol-əm te-gčə-uvən.*
 chair-ABS table-OBL PREV-CAUS-stand
 ‘to put a chair on the table.’
 b. *stIol-əm-rə šənt-əm-rə ze-te-gčə-uvən.*
 table-OBL-and chair-OBL-and REC-PREV-CAUS-stand
 ‘to put the table and the chair one upon another.’

The following instance differs from (145) in that the object referents are identical entities (bricks) and the reciprocal predicate naturally denotes their joining together into a whole by placing one upon the other (although spatially they are not symmetrical, one brick being on top of another, etc., i.e. this is a converse situation like (145)). The reciprocal generates a construction of type (146a):

- (146) a. *mə čərbəš-ər mo čərbəš-əm te-ləxbən.*
 this brick-ABS that brick-OBL PREV-put
 ‘to put this brick on that brick.’
 b. *čərbəš-xə-r zə-te-ləxbən.*
 brick-PL-ABS REC-PREV-put
 ‘to put bricks one upon another.’

Case 3: the object referent of the reciprocal construction is a whole resulting from joining separate entities/parts together:

- (147) a. *čərbəš-xə-r blən-əm te-ləxbən.*
 brick-PL-ABS wall-OBL PREV-put
 ‘to put bricks into a wall.’

- b. *blən-ər čərbəš-u zə-te-ləxəən.*
 wall-ABS brick-ADV REC-PREV-put
 ‘to build a wall with bricks.’
- (148) a. *Iu-e-šbə.* ‘Someone (= -e-) plaits (works) sth into sth.’
 b. *bədz-əm bədzəxə zə-Iu-e-šbə.* ‘A spider spins a web.’

Case 4: the object referent is an entity (= a whole) to which another entity (= its part) is attached (see (149)) or somewhat separated from it (e.g., (150b)). Recall that the suffix *-(ə)r* is ABS.

- (149) *zə-te-pIən* ‘to close (a book)’
- (150) a. *šəxəteplə-r te-xən* ‘to take a lid (off sth)’
 b. *pxəuantə-r zə-te-xən* ‘to open a suitcase.’

Case 5: the object referent of a spatial reciprocal, being unrelated to other referents as their whole or part, enters into spatial relations with them by being placed inside or taken out. There are also a few spatial reciprocal forms synonymous with their bases, both denoting joining or separating of an entity and its parts while the whole is kept intact; cf.:

- (151) a. *sabij-r xə-pxən* ‘to swaddle a baby’
 b. *sabij-r zə-xə-pxən* ‘to swaddle a baby.’
- (152) a. *saugəət-ər kəəp-əm kəə-kluəclə-xən* ‘to unpack a gift (lit. out of a bag)’
 b. *saugəət-ər kəə-zə-kluəclə-xən* ‘to unpack a gift.’

Case 6: lexicalized reciprocals. Object-oriented reciprocals are not always necessarily spatial proper, they can also denote “mental joining” of two entities, e.g. of the ‘original’ and ‘copy’. The relation of the reciprocal to the base is necessarily non-standard: in (153b) a verb meaning ‘to compare, collate’ derives from the base meaning ‘to count, take into consideration’ (at least this is the only meaning registered in the dictionary for this verb).

- (153) a. *ləətən* ‘to count, take into consideration’
 b. *tratxəkIa-m-rə zətratxəkIa-m-rə zə-ləətən*
 original-OBL-and copy-OBL-and compare
 ‘to compare the copy with the original.’

Case 7: finally, it may be useful to mention that there are derivatives with the prefix *zə-* which have nothing in common with spatial reciprocals of joining or separating, and no individual semantic development from these meanings can be traced. Thus, the form *gəə-pə-šbəən* which might be the base for *zə-gəə-pə-šbəən* (154) is not registered in the dictionaries; instead, we find the root verb *šbəən* as a synonym of this derivative.

- (154) *zə-gəə-pə-šbəən* ‘to create’, ‘to form (e.g. a government), ‘to equip (an expedition).’

13.1.5 *The prefix zə- as a fixed component of complex preverbs*

Not all verbs containing *zə-* can be counted as derivatives of the types just considered. As a matter of fact, there are quite a number of complex preverbs in Kabardian whose meaning does not follow immediately from that of the components (the existence of complex preverbs containing *zə-* shows its ancient origin). The second part of a complex preverb

can also be used in its own meaning alone (exceptions are very few; e.g. *zə-bgə-rə-* where *-bgə-rə-* is not used alone); cf.: *te-gəə-uvən* ‘to put sth upon sth’ → *zə-te-gəə-uvən* ‘to put [two] things one upon another’ and *šxən* ‘to eat’ → *zə-te-šxə-xb-ən* ‘to eat up all that was served’. Many of these preverbs may also have meanings adjacent to the reciprocal, among them meanings which in some other languages may be denoted by polysemous reciprocal markers without any additional components; e.g. the intensive meaning (155a, b, c), dispersive (155d), distributive (155e.ii), iterative (155e.i), sociative (155f), prolative (155g), the meaning ‘many’ (155h):

- | | | | |
|----------|---------------------------------------|---|---|
| (155) a. | <i>gəə-sxbən</i> ‘to burn sth’ | → | <i>zə-te-gəə-sxbən</i> ‘to burn everything’ |
| b. | <i>txbəšbIən</i> ‘to wash’ | → | <i>zə-ščIə-txbəšbIən</i> ‘to wash everything’ |
| c. | <i>čətxən</i> ‘to tear into parts’ | → | <i>zə-xə-čətxən</i> ‘to tear violently into small parts’ |
| d. | <i>xun</i> ‘to drive (sb) away’ | → | <i>zə-bgə-rə-xun</i> ‘to drive sb (many) away in different directions’ |
| e. | <i>ləelən</i> ‘to jump over sth’ | → | <i>zə-kIə-ləelən</i> i. ‘to jump over sth several times in succession’, ii. ‘to jump one after another’ |
| f. | <i>tədžən</i> ‘to stand up’ | → | <i>zə-švə-tədžən</i> ‘(of all) to stand up together’ |
| g. | <i>šən</i> ‘to lead sb’ | → | <i>zə-pə-rə-šən</i> ‘to lead/take sb across a street, etc.’ |
| h. | <i>šbIə-xbən</i> ‘to enter somewhere’ | → | <i>šbIə-zə-rə-xbən</i> ‘(about many) to squeeze somewhere’ (cf. the reciprocal meaning of <i>zə-rə-</i> in (133e)). |

See also Shardanov (1983:73–4), Urusov (1983:48), Kumaxov (1989:237–9).

13.1.6 *Lexical range of spatial transitive reciprocals*

I will list the main lexical groups of verbs (about 110 derivatives out of 230) to show their lexical range. I find it interesting to delimit the range of meanings of joining and separating and related meanings and establish the maximum semantic field, where a language perceives similarity or affinity with joining and separating. In the lists below, the base forms are not supplied for some derivatives, because it is not always possible to find their semantic and/or formal correlates in the dictionaries. Sometimes, e.g. in the case of reciprocals with meanings like ‘to compare’ (see (153)) and some others, the meaning of the base verb does not relate to that of the derivative, probably due to the individual evolution of meaning. Alongside verbs with a more or less clear meaning of joining or separating, there is a number of related less typical verbs. Occasionally, the dictionary definitions of the base and derived forms coincide, which possibly shows the expansion of the use of the reciprocal prefix on verbs whose meaning contains a component of joining or separating. For instance, it happens when the meaning of the base verb is close to the reciprocal meaning. Below, lists of verbs of joining precede those of separating, each is followed by a residual group (cases 1.7 and 2.5 below respectively) of related verbs.

1. *Derivatives of joining*

1.1. *Joining of two or more objects by contact or fixation.* This is the most numerous lexical group. The following cases of joining can be distinguished: (a) bringing into contact and fixing together, (b) mixing together of two substances, (c) bringing into contact with-

out fixation. Group (d) of verbs denoting various actions upon body parts is distinguished on a different basis.

For instance, out of seven verbs meaning ‘to sew (the hem, from beneath, from above, along, etc.)’ only one is chosen.

- (156) a. Bringing into contact and fixing together
- | | |
|---|---|
| <i>pxən</i> ‘to tie sb/sth’ | → <i>zə-pxən</i> ‘to tie two things together’ |
| <i>flə-dən</i> ‘to sew sth to sth’ | → <i>zə-flə-dən</i> ‘to sew sth (make sth by sewing)’ |
| <i>flə-gvə-nən</i> ‘to hook sth to sth’ | → <i>zə-flə-gvə-nən</i> ‘to hook, attach sth one to another’ |
| <i>flə-lun</i> ‘to pin, fasten sth to sth’ | → <i>zə-flə-lun</i> ‘to pin, fasten sth together’ |
| <i>guə-gvə-pšvən</i> ‘to stick sth to sth’ | → <i>zə-guə-gvə-pšvən</i> ‘to stick sth together’ |
| <i>švIə-švIən</i> ‘to harness, yoke’ | → <i>zə-švIə-švIən</i> ‘to harness (horses), yoke (oxen), etc.’ |
| <i>pə-gvə-žbən</i> ‘to weld sth to sth’ | → <i>zə-pə-gvə-žbən</i> ‘to weld (parts of sth) together’ |
| <i>pə-švən</i> ‘to plait, weave sth into sth’ | → <i>zə-pə-švən</i> ‘to interlace, plait, weave together’ |
| <i>pə-gvə-klən</i> ‘to make sth grow to sth’ | → <i>zə-pə-gvə-klən</i> ‘to knit (the bones) together.’ (vt) |
- b. Mixing substances together
- | | |
|---|---|
| <i>guə-gvə-xbən</i> ‘to mix’ | → <i>zə-guə-gvə-xbən</i> ‘to mix sth together’ |
| <i>xə-plətIən</i> ‘to press sth into sth’ | → <i>zə-xə-plətIən</i> ‘to mix by stirring together.’ |
- c. Bringing into contact without fixation
- | | |
|--|---|
| <i>te-upllən-švən</i> ‘to put sth in layers’ | → <i>zə-te-upllən-švən</i> ‘to fold (e.g. a sheet of paper in two)’ |
| <i>švIə-gvə-kvūən</i> ‘to prop sth up’ | → <i>zə-švIə-gvə-kvūən</i> ‘to stack together (e.g. rifles).’ |
- d. Verbs denoting various actions/motions of body parts
- | | |
|------------------------------------|---|
| <i>gvə-lvən</i> ‘to make jump’ | → <i>pə-r zə-gvə-lvən</i> ‘to wrinkle one’s nose’ |
| <i>te-gvə-uən</i> ‘to click, snap’ | → <i>dzə-r zə-te-gvə-uən</i> lit. ‘to chatter with one’s teeth’ |
| <i>te-kvuzən</i> ‘to press’ | → <i>dzə-xə-r zə-te-kvuzən</i> ‘to clench one’s teeth.’ |

The base forms, general or semantically related, of many of the derivatives with the reciprocal prefix are lacking in the dictionaries, most likely, by accident. It should also be taken into account that sometimes the absence of the base form without *zə-* may be due to the fact that *zə-* constitutes a complex preverb with the preverb that follows it (this may also be the case in (162), (163b, c), (164b, d), etc.). Here are some of these derivatives:

- | | |
|---------------------------------------|---|
| e. <i>zə-xə-də-xbən</i> | ‘to make patchwork’ |
| <i>zə-xə-gvə-švə-xbən</i> | ‘to interlace, plait with one another’ |
| <i>zə-xə-vən</i> | ‘to intermix (soil and turf) when ploughing’ |
| <i>zə-xə-xbə-žən</i> | ‘to grind sth (e.g. wheat and barley) together’ |
| <i>zə-švə-xvūən</i> | ‘to rub sth against sth’ |
| <i>zə-švIə-kvūən</i> | ‘to put together (e.g. papers)’ |
| <i>zə-te-plIən</i> (<i>nə-xə-r</i>) | ‘to close (one’s eyes).’ |

1.2. *Placing one thing upon another.* In this group of verbs the relations between the joined objects are converse, i.e. an object which is on top of another can be under a third object (see Section 10 above). This type is illustrated by (145) and (146). Here are a few reciprocals with base verbs:

- (157) *te-lubən* ‘to cover sth with sth’ → *zə-te-lubən* ‘to cover (plates, etc.) one with another’
te-gəə-sən ‘to seat, put sth on sth’ → *zə-te-gəə-sən* ‘to pile, heap one upon another’
te-dzən ‘to put sth on top’ → *zə-te-dzən* ‘to throw sth one upon another’
te-kəuən ‘to pull sth over sth’ → *zə-te-kəuən* ‘to pull sth one upon another’
flə-un ‘to pass sth through’ → *zə-flə-un* ‘to thread together’
šəxəə-šəə-gəə-žən ‘to spill, pour’ → *zə-šəxəə-šəə-gəə-žən* ‘to pour a part from one vessel into another.’

1.3. *Putting objects into one place without fixing them together.* The derivatives of this class subdivide into two main lexical groups: (a) of moving (animate or inanimate) objects (in)to one place (including figurative usages like *zə-gəə-zəxuən* ‘to save (e.g. money)’; *zə-xuə-gəə-sən* ‘to concentrate’); (b) of mixing sth, e.g. cooking several ingredients together in the same pot (this case is close to object-oriented sociatives, due to the patiency of the reciprocants and their spatial proximity).

- (158) a. Moving objects into one place
te-ləxəən ‘to put sth upon sth’ → *zə-te-ləxəən* ‘to put sth together’
te-təuən ‘to rake sth on sth’ → *zə-te-təuən* ‘to rake sth together, into a heap’
te-klutən ‘to rake sth’ → *zə-te-klutən* ‘to put, pour (e.g. potatoes) into a heap’
xuə-šə-sən ‘to carry sth to sb’ → *zə-xuə-šə-sən* ‘to carry (in)to one place.’
- b. Mixing, cooking several ingredients in the same pot or dish
xə-gəə-vən ‘to boil sth in sth’ → *zə-xə-gəə-vən* ‘to boil sth together in the same pot’
xə-gəə-žəən ‘to fry sth in sth’ → *zə-xə-gəə-žəən* ‘to fry sth together in the same frying pan’
xə-šuuən ‘to salt sth in sth’ → *zə-xə-šuuən* ‘to salt sth (e.g. cucumbers and tomatoes) together’
xə-šən ‘to milk cows into sth’ → *zə-xə-šən* ‘to milk cows into the same vessel.’

1.4. *Making an object smaller by pressing it or otherwise, or changing its internal structure/mixing it up inside*

- (159) *šəə-guən* ‘to press (e.g. a stack)’ → *zə-šəə-guən* ‘to press sth together’
te-kəuzən ‘to squeeze’ → *zə-te-kəuzən* ‘to squeeze sth together’
lə-gəə-xəən ‘to entangle sth’ → *zə-lə-gəə-xəən* ‘to entangle (a thread, etc.)’
flə-gəə-zəə-xəən ‘to muddle up’ → *zə-flə-gəə-zəə-xəən* ‘to muddle up (e.g. a problem).’

1.5. *The meaning of closing, wrapping sth up*

- (160) *lu-dzən* (also *xun*) ‘to weave’ → *zə-lu-dzən* (also *xun*) ‘to spin’
lu-šəən ‘to interweave’ → *zə-lu-šəən* ‘to weave (fabric)’
lu-pIən ‘to close (e.g. a door)’ → *zə-lu-pIən* ‘to close (e.g. shutters)’
klučlə-pxən ‘to swaddle’ → *zə-klučlə-pxən* ‘to swaddle (a baby)’
klučlə-šə-xəən ‘to reel, wind’ → *zə-klučlə-šə-xəən* ‘to reel, roll sth up’

<i>šbIə-ufən</i> ‘to cover sth/sb’	→	<i>zə-šbšbIə-ufən</i> ‘to wrap up, muffle sb’
<i>te-pIən</i> ‘to cover sth with sth’	→	<i>zə-te-pIən</i> ‘to close (a book)’
<i>xuə-šbIən</i> ‘to close’	→	<i>zə-xuə-šbIən</i> ‘to close (a window, a shop), finish (a meeting).’

1.6. *The meaning of comparing.* This abstract figurative meaning is close to that of joining. Nearly all the derivatives of this group contain the reciprocal prefix. They are either related to their base verbs in an individual way or they lack bases.

- (161) *zə-gvə-pšbən* ‘to compare, confront’ (cf. *pšbən* (vt) ‘to measure’)
zə-ləə-tən ‘to collate (sth with the original)’ (cf. *ləə-tən* ‘to count’)
zə-pə-gvə-šbə-čən ‘to weigh equal measures’, fig. ‘to compare sth’ (cf. *šbə-čən* ‘to weigh sth’)
zə-pə-ləə-tən ‘to compare’ (cf. (153) above)
zə-te-gvə-xuən ‘to coordinate’ (cf. *te-gvə-xuən* ‘to make sth hit sth’)
zə-xuə-gvə-dən ‘to consider equal to each other’ (cf. *xuə-gvə-dən* ‘to compare, make alike to sb’)
zə-xuə-pləən ‘to collate (sth with the original)’ (cf. *pləən* ‘to look somewhere...’)
zə-xuə-gvə-dizən ‘to equalize sb/sth in measure, size; make level’ (cf. *xuə-gvə-dizən* i. ‘to equalize, ii. ‘to compare in sight, size’).

1.7. *Non-spatial figurative use with a weakening of the reciprocal meaning.* In contrast to the preceding case where the relatedness to the meaning of joining is transparent enough, in the derivatives cited below and many others like them the meaning of joining is either not traceable or less obvious.

- (162) *zə-xvəuə-kIən* ‘to replace sth with sth, substitute sth for sth’
zə-blə-xvəun ‘to replace sth with sth, substitute sth for sth’
zə-xə-šən ‘to form’
zə-gvə-pə-šbən ‘to create’
zə-xə-šbIə-kIən ‘to be aware, to perceive (e.g. reality).’

2. Derivatives of separating

2.1. *The meaning of dividing an object into parts.* This is the main lexical group. It is the counterpart of the first lexical group of verbs of joining.

- (163) a. *guə-udən* ‘to chop, break off’ → *zə-guə-udən* ‘to break (e.g. a plate), chop into parts’
guə-gvə-zən ‘to split sth off the side’ → *zə-guə-gvə-zən* ‘to split, chop, cleave, splinter’
guə-txəən ‘to tear st off the side’ → *zə-guə-txəən* ‘to tear sth lengthwise’
pə-upšbIən ‘to cut off’ → *zə-pə-upšbIən* ‘to cut up (e.g. a wire) (into parts)’
pə-xən ‘to saw off’ → *zə-pə-xən* ‘to saw (e.g. a log) into parts’
pə-čən ‘to tear sth off sth’ → *zə-pə-čən* ‘to tear (e.g. a thread) in(to) two’
pə-fə-šbIə-kIən ‘to tear sth off’ → *zə-pə-fə-šbIə-kIən* ‘to tear into small bits’
pə-gvə-sə-kIən ‘to burn the end of sth’ → *zə-pə-gvə-sə-kIən* ‘to burn through, cut in half by fire’
pə-gvəu-kIən ‘to gnaw the end of sth’ → *zə-pə-gvəu-kIən* ‘to gnaw through in(to) two’

- pə-udən* ‘to break sth off sth’ → *zə-pə-udən* ‘to break (e.g. a leg)’
pə-šxə-klən ‘to bite off the end of sth’ → *zə-pə-šxə-klən* ‘to bite (e.g. a thread) in two’, ‘to cut (e.g. a thread) in two with teeth.’

The following derivatives denote dividing into parts without indication of the manner; the base underlying forms are not registered in the dictionaries:

- b. *zə-guə-gvə-klən* ‘to divide into parts’
zə-šbxbə-ščə-xən ‘to divide into parts.’

An object can denote a thing which is damaged rather than broken into parts.

- c. *ləpə-r zə-guə-pxəun* ‘to cut a finger’
šbxbə-r zə-guə-udən ‘to break (one’s) head’.

In the following derivatives the meaning of separating manifests itself as intervals between lines:

- d. *klə-šbIə-txən* ‘to write under sth’ → *zə-klə-šbIə-txən* ‘to write sth with small intervals between the lines’
xə-bzə-klən ‘to cut sth out of sth’ → *zə-xə-bzə-klən* ‘to count (objects) separately and assort (them)’.

The following derivative may be entered here (its base form is lacking in the dictionary):

- zə-xə-pIə-klən* ‘to bring (children) up differently (one with greater care, another with less)’

2.2. *The meaning of expanding, spreading (antonyms of compressing); the meaning of opening an object (the lid, eyes, mouth, door, window) (antonyms of closing).* This group also covers derivatives usually denoting an action that implies a prior action (the so-called reversible meaning, like ‘unwind’ – ‘wind up’), and many of them contain the verb *klən* ‘to go out’ used as an auxiliary.

- (164) a. *pə-gvə-klən* ‘to separate sth’ → *zə-pə-gvə-klən* ‘to demarcate, delimit’
guə-xən ‘to take sb from sb’ → *zə-guə-xən* ‘to draw, move sth apart’
te-šən ‘to unwind, unroll’ → *zə-te-šən* ‘to unwind, unroll’
kluəclə-xən ‘to take sth from a wrapping’ → *zə-kluəclə-xən* ‘to unwind, unwrap sth’
klərə-gvə-pšvə-klən ‘to unglue sth from sth’ → *zə-klərə-gvə-pšvə-klən* ‘to unglue’ (what was glued together previously).

The base verbs of the following derivatives are not registered in the dictionaries:

- b. *zə-guə-klən* ‘to throw (e.g. a collar) open’
zə-guə-tIəpIə-klən ‘to unrip, rip, undo’
zə-guə-uxuənxə-klən ‘to untwist, untwine (e.g. a rope)’
zə-guə-uluəntIə-klən ‘to untwist, untwine (e.g. a rope)’
zə-lə-pə-šbIə-gvə-klən ‘to separate (e.g. fighting men)’
zə-klə-šbIə-gvə-klən ‘to disconnect’

<i>zə-te-gvə-xun</i>	‘to pull down (e.g. a stack of hay)’
<i>zə-klucIə-xən</i>	‘to unwind sth.’

The following verbs denote opening an object by taking sth off or moving a part, etc. The meanings of the base verb and the derivative may coincide:

- | | | | |
|----|--|---|--|
| c. | <i>te-xən</i> ‘to take a lid off sth’ | → | <i>zə-te-xən</i> ‘to open (e.g. a suitcase)’ |
| | <i>Iu-xən</i> ‘to open (a door, the shop)’ | → | <i>zə-Iu-xən</i> ‘to open’ |
| | <i>te-txvən</i> ‘to rip sth from sth’ | → | <i>zə-te-txvən</i> ‘to open (a suitcase), unseal (an envelope).’ |

The following small group is somewhat close to it; no bases with preverbs are registered.

- | | | |
|----|--------------------------|--|
| d. | <i>zə-gvə-dzə-klən</i> | ‘to turn (e.g. a sack) inside out’ |
| | <i>zə-gvə-dzə-kləžən</i> | ‘to turn (e.g. a suit, a coat)’ |
| | <i>zə-dzə-klən</i> | i. ‘to turn sth over’, |
| | | ii. ‘to translate from one language into another’. |

2.3. *Expanding an object without breaking it.* Most of the derivatives contain the root *šən* ‘to pull’ and thus are more or less synonymous, varying in the spatial characteristics due to the different preverbs; but the base verbs with preverbs are lacking in the dictionaries. A kind of analogy to these derivatives are the verbs with the meaning of pressing objects together (see (159) above): in both cases the object is preserved, though with a change of form or volume.

- | | | |
|-------|-------------------------|---------------------------------------|
| (165) | <i>zə-flə-šən</i> | ‘to stretch sth’ |
| | <i>zə-Iə-šən</i> | ‘to stretch all around’ |
| | <i>zə-pə-šən</i> | ‘to stretch (e.g. an elastic)’ |
| | <i>zə-Iə-flə-šən</i> | ‘to stretch sth’ |
| | <i>zə-klə-šəbIə-šən</i> | ‘to stretch in all directions’ |
| | <i>zə-Iə-gvə-klən</i> | ‘to stretch, widen, broaden, expand’. |

2.4. *A kind of distributive meaning.* The object usually names either a substance (water, mud, etc.) or separate things, or animates moving in different directions. More commonly, this meaning is expressed by the complex preverb *zə-bgəra-* (cf. (155d)).

- | | | | | |
|-------|----|---|---|---|
| (166) | a. | <i>te-dzən</i> ‘to throw down, away’ | → | <i>zə-te-dzən</i> ‘to scatter sth’ |
| | | <i>xə-švən</i> ‘to plunge sb into water’ | → | <i>zə-xə-švən</i> ‘to dissolve (e.g. lime)’ |
| | | <i>klə-šəbIə-xən</i> ‘to take sth from under’ | → | <i>zə-klə-šəbIə-xən</i> ‘to plant out, plant (e.g. sprouts) apart’. |

A semantic affinity can be perceived in the following derivative where spreading concerns light:

- | | | | |
|----|--|---|---|
| b. | <i>šəbIə-gvə-nən</i> ‘to strike a match, light a lamp’ | → | <i>zə-šəbIə-gvə-nən</i> ‘to kindle (a fire, the firewood)’. |
|----|--|---|---|

The dictionaries do not register base verbs with preverbs for the following derivatives with the reciprocal prefix:

- c. *zə-lə-xun* 'to splash (e.g. mud with feet)' (cf. *xun* 'to drive away, roll out')
zə-klə-rə-xun 'to splash (e.g. mud with feet), drive sb away from each other'
zə-klə-šb-lə-xun 'to disperse, scatter'
zə-klə-šb-lə-pxəən 'to scatter, spray, disperse' (cf. *pxəən* 'to scatter sth dry, disperse')
zə-klə-šb-lə-čən 'to thin (e.g. plants) out.'

2.5. *The non-spatial meaning of differentiating, distinguishing between sth.* There are no corresponding base verbs with respective preverbs in the dictionaries. This semantic group has counterparts among derivatives of joining with the meaning of comparing.

- (167) *zə-xə-gəə-klən* 'to discriminate, distinguish between sth and sth'
 (cf. *guə-gəə-klən* i. 'to distinguish sth from sth')
zə-xə-gəə-klə-fən 'to establish differences'
kəə-zə-xə-clə-xu-klən 'to distinguish between sth and sth'
 (cf. *pəž-ər pclə-m kəə-xə-clə-xu-klən* 'to distinguish truth from a lie')
zə-šb-xəə-šbə-gəə-klən 'to distinguish sb/sth, differentiate'
zə-xə-gəə-žən 'to differentiate between sth and sth, make distinctions'
 (cf. *xə-gəə-žən* – 'to single sth out, distinguish among others').

13.2 Types of derivation of spatial transitives

There are languages that seem to lack derived object-oriented spatial reciprocals. There are no such reciprocals in Indonesian (Ogloblin & Nedjalkov, Ch. 33, §5), Even (one exception is registered; see Malchukov, Ch. 39), Cashinahua (Camargo, Ch. 45), Nivkh (Otaina & Nedjalkov, Ch. 41, §3.2), Yukaghir (Maslova, Ch. 44, §4.3.2), Udehe (Nikolaeva, Ch. 23, §4.1). Note that in 13.2.5 below the reciprocal marker is attached to the postposition and not to the verb.

There are at least five types of derivation of spatial reciprocal transitives, each of the types using the marker of proper reciprocals in various ways, either alone or in combination with other affixes; the latter marker is either the only one that derives spatial reciprocal transitives or it is part of such a marker or it marks derivatives from which spatial reciprocal transitives are formed. One more type of derivation of spatial transitives involves the use of affixes which are entered among non-voice-oriented markers above (see 4.2). These six types are considered below.

There are derivations of spatial transitive reciprocals by means of markers that are unrelated to reciprocal markers and have no locative meaning of their own. For instance, there is a case of spatial transitive reciprocals in Tagalog labelled relational verbs. They are derived from three-place transitives with the prefix *i-* (see (168a)) replaced by the circumfix *pag-...-in* which is a marker of relational verbs (see (168b) (Schachter & Otanes 1972:341), and they "express actions that establish a relation shared by two or more objects". Verbs of this type are two-place transitives (semantically they remain three-place).

Tagalog (ibid.)

- (168) a. *i-sama mo ang karne sa gulay.*
 PASS-put YOU.GEN NOM meat OBL vegetable
 ‘Put the meat in with the vegetables.’
 b. *pag-samah-in mo ang karne at gulay.*
 pag-put-PASS YOU.GEN NOM meat and vegetable
 ‘Put the meat and the vegetables together.’

As is known, all the verb forms in Tagalog are marked and the direction of derivation is not obvious. The cited forms are also related to the same root forms *s-um-ama* ‘to come close to sth/sb’ (two-place vi) and *mag-sama* with two meanings i. ‘to get together, join each other’ (one-place vi), ii. ‘to put sth to sth’ (three-place vt). This verb in meaning (ii) coincides with the meaning of *i-sama* in (168a), but it differs in voice. A few more examples:

- (169) a. *i-dikit* ‘to stick/paste sth onto sth’ → *pag-dikit-in* ‘to stick/paste sth together’
 b. *i-hivalay* ‘to separate sth from sth’ → *pag-hivalay-in* ‘to separate sth from one another’
 c. *i-tabi* ‘to put sth beside sth’ → *pag-tabih-in* ‘to put sth beside one another.’

13.2.1 Type 1. Same marker is used for object- and subject-oriented reciprocals

The following languages display this type of marking. In the examples for each language below, first the derivation of a proper reciprocal is illustrated prior to that of a spatial transitive reciprocal.

1. Kabardian (Apazhev et al. 1957: 107, 110, 117)

- (170) a. *pəmən* ‘to smell, sniff sth’ → *zə-pəmən* ‘to sniff at each other’
 b. *fləlun* ‘to pin, fasten sth to sth’ → *zə-fləlun* ‘to pin, fasten sth together’
 c. *pəxən* ‘to saw sth off’ → *zə-pəxən* ‘to saw sth into parts’.

Compare also Kazenin (Ch. 17, §3.2.2.2).

2. Siuslaw (Frachtenberg 1922: 505, 506)

- (171) a. *tqūl-* ‘to shout at sb’ → *tqūl-nawa* ‘to shout at one another’
 b. *sū’qu-* ‘to join sth’ → *sū’qu-nawa* ‘to join sth together’
 c. *āq-* ‘to take sth off’ → *āq-nawa* ‘to take sth apart’.

3. Ainu (Alpatov et al., Ch. 42, ex. (40d, g))

- (172) a. *ekap* ‘to greet sb’ → *u-ekap* ‘to greet each other’
 b. *kamure* ‘to cover sth/sb with sth’ → *u-kamure* ‘to lay one on top of another’
 c. *kotukka* ‘to stick sth to sth’ → *u-kotukka* ‘to stick sth and sth to each other’.

In this language, at least 20 object-oriented reciprocals are attested (discounting object-oriented reciprocals derived from subject-oriented by causativization) with the same marker as subject-oriented reciprocals. They all denote joining or separating (one derivative) of objects (Alpatov et al., Ch. 42, §§3.2.2.1 and 3.2.2.2).

4. Nêlêmwa (Bril, Ch. 34, §§3.1.1.1.1, 3.2)

- (173) a. *nô* ‘to watch sb’ → *pe-nô* ‘to watch each other’
 b. *na* ‘to put sth on sth’ → *pe-na* ‘to pile up objects.’

5. Tidore (van Staden 1969: 116)

- (174) a. *yo-mako-karo* ‘they call out to each other’
 b. *fo-maku-kapu* ‘we mix sth with sth.’

6. Khmer (Gorgoniev 1984: 440–57; cf. also (119g, h) in Ch. 5)

- (175) a. *kiək* ‘to embrace sb’ → *prv-kiək* ‘to embrace each other tightly’
 b. *kəŋ* ‘to put sth long on sth’ → *prv-kəŋ* ‘to put sth one upon another.’

Note in passing that the unproductive prefix *prv-* is unique in the sense that it also has a causative function. In this case it derives (a few) causative spatial transitive reciprocals, and the bases are lexical reciprocals:

- c. *təh* ‘to lie across sth’ → *prv-təh* ‘to put sth together crosswise’
douc ‘to be like sb/sth’ → *prv-douc* ‘to compare sth with sth.’

7. Muna (van den Berg 1989: 206)

- (176) a. *-po-semba* ‘to kick each other (about two persons)’
 b. *-po-ka-tapu* ‘to bind sth together.’

An anticausative derivative denoting separation with the prefix *-po* is given in (135c) above.

8. Fula (Arnott 1970: 358–9)

- (177) a. *min-’yam-indir-i* ‘we asked each other’
 b. *’o-jokk-indir-i boggi ...* ‘He joined the ropes together ...’
 c. *’o-horf-indir-i kosde maako* ‘He tucked his legs together’ (i.e. he sat cross-legged).’

13.2.2 Type 2. Object-oriented reciprocals are derived from anticausatives by a causative marker

This is the case in Kirghiz and Buryat. As a rule, three-place lexical reciprocals serve as underlying verbs from which anticausatives are derived by means of a reciprocal marker. In the anticausative derivative the valency decreases by one and the causative meaning is deleted (but the reciprocal meaning is retained); the causative affix brings back the meaning of the base verb or slightly changes it or the case frame. Thus, in Kirghiz, three-place transitives of joining are mostly causatives derived from anticausatives which are in their turn derived from three-place lexical reciprocals by means of the reciprocal suffix, the first and the third members of the derivational chain being semantically similar and sometimes even synonymous (Nedjalkov, Ch. 28 on Kirghiz, §13.2). Examples follow.

1. Kirghiz (ibid., §13)

- (178) a. *ula-* ‘to join sth with sth’ lexical reciprocal
 → b. *ula-š-* ‘to join’ (vi) anticausative
 → c. *ula-š-tər-* (same as (a)) causative of anticausative

2. Buryat (Nedjalkov et al., Ch. 29, ex. (60))

- (179) a. *xolbo-* 'to tie, join sth together' lexical reciprocal
 → b. *xolbo-ldo-* 'to be tied, joined' anticausative
 → c. *xolbo-ld-uul-* (same as (a)) causative of anticausative

3. Tuvan. No significant changes either in the meaning or case frame take place, and the reciprocal marker puts emphasis on the object-oriented reciprocal meaning, while retaining both objects without any change (cf. (197) below):

Tuvan (Kuular, Ch. 27, ex. (131))

- (180) a. *Ol spirt-ti sug-bile xolu-p tur.*
 he alcohol-ACC water-with mix-CONV AUX.PRES.3SG/PL
 'He is mixing alcohol with water.'
 → b. *Spirt sug-bile xolu-ž-a ber-gen.*
 alcohol water-with mix-REC-CONV AUX-PERF.3
 'Alcohol has mixed with water.'
 → c. *Ol spirt-ti sug-bile xolu-š-tur-up tur.*
 he alcohol-ACC water-with mix-REC-CAUS-CONV AUX.PRES.3SG/PL
 (same translation as in (a)).

In such cases the difference is that the base sentence can have two meanings, of attaching one object to another and of joining two objects, while the derived (180c) denotes only the joining of two substances together; cf. also Kirghiz *bajla-* 'to tie *sth to sth*, tie sth up' → *bajla-štər-* 'to tie *sth and sth together*' (Ch. 28, §13). In (180c), equality of the semantic status of the participants is determined by the meaning of the derived lexical reciprocal *xolu-š-tur-*, whereas in the corresponding base constructions their equal semantic status is denoted by the lexical meaning of the participants as well as by the type of the syntactic connection between them.

13.2.3 Type 3. Object-oriented reciprocals are derived by a complex reciprocal-causative marker

In this case the intermediate member, of type (b) in (178), (179), is either absent (see (c) in (183) and (184)) or has a meaning unrelated to (b) in the derivatives with a complex suffix (see (c) in (181) and (182)). In Japanese, only two-member chains are attested, as the reciprocal marker has no anticausative function.

1. Kirghiz (Nedjalkov, Ch. 28, §13)

- (181) a. *bajla-* 'to tie sth to sth, tie sth up' lexical reciprocal
 → b. *bajla-š-tər-* 'to tie (e.g. horses) together' object-oriented reciprocal
 [c. *bajla-š-* i. 'to help sb to tie sth' assistive
 ii. 'to tie together with sb' sociative]
- (182) a. *sal-* 'to put sth into sth'
 → b. *sal-aš-tər-* 'to put several things one into another'
 [c. *sal-aš-* 'to help sb put sth into sth'].

2. Lillooet (van Eijk 1985: 185; *-twál'* = REC, *-min'* = CAUS)

- (183) a. *nuk^wʔan-twálʔ* ‘to help *each other*’
 b. *maχ-un* ‘to mix sth’ (vt) → *maχ-min^w-twál^w-ən* ‘to mix things together’
 c. *cúq^w-un* ‘to add sth’ (vt) → *cúq^w-min^w-twál^w-ən* ‘to add several pieces of rope together.’

In contrast to the prior cases, in Lillooet spatial transitive reciprocals the reciprocal suffix is preceded by the causative suffix *-min^w-*, although the forms *maχ-min^w-* and *cúq^w-min^w-* are not attested. As we see, in Lillooet, as well as in the above two languages, the reciprocal and the causative suffixes function together as complex markers, though with the opposite sequence of the components.

3. Japanese. Forms superficially and semantically analogous to Kirghiz *bajla-š-tər-* are attested in Japanese; e.g.:

(Alpatov & Nedjalkov, Ch. 25, ex. (50d), (57c))

- (184) a. *har-u* ‘to paste sth and/with sth’
 → b. *hari-aw-ase-ru* ‘to paste sth *together*’
 [c. **hari-a-u*]
- (185) a. *nu-u* ‘to sew sth’ (sewing involves joining together pieces of fabric)
 → b. *nui-aw-ase-ru* ‘to sew two things *together*’
 [c. **nui-a-u*]

Here, *-aw* (allomorph *-a*) is identical with the reciprocal suffix and *-ase* is a causative suffix. In (184b) and (185b) the complex *-aw-ase-* functions as a single morpheme, because causatives cannot derive from reciprocals in Japanese. Besides, there are no reciprocal forms of the verbs *har-u* (184a) and *nu-u* (185a); see (184c) and (185c).

This calls for a question: where do forms (184b) and (185b) come from? As a matter of fact, they are compounds of two verbs, the base verb and the verb *aw-ase-ru* i. ‘to join’, ii. ‘to coordinate’, iii. ‘to compare’ (there are about 80 such compounds in Japanese; see Himeno 1982: 17–52; Hasselberg 1996: 46–51). The verb *aw-ase-ru* is the causative form of the verb *a-u* ‘to meet’, ‘to come up’, i.e. the verb that was the source of the reciprocal suffix *-a/-aw*. Incidentally, some native linguists consider reciprocal derivations as compounds with the verb *a-u* as well (Nishigauchi (1992: 157) calls it “the reciprocal verb *-aw*”). But in other publications the component *-a/-aw* is regarded as a suffix (derived from the verb *au* ‘to meet’; Iwasaki 2002: 144). (My thanks to M. Shibatani for his advice on the Japanese data.)

Japanese examples (184) and (185) are precise formal (though not morphological) and semantic counterparts of the Turkic material in (181)–(182) and they reveal the same tendency to derive two-place spatial reciprocals from three-place bases.

13.2.4 Type 4. Object-oriented reciprocals are derived from subject-oriented reciprocals by a causative marker

Note that not all languages form causatives from reciprocals. For instance, in Japanese, suffixed reciprocals have no causative derivatives with the suffix *-sase/-ase-*, i.e. they have no related object-oriented constructions (see Alpatov & Nedjalkov, Ch. 25, §3.6.1). Here are examples where the morphological causatives are derived from subject-oriented re-

reciprocals, i.e. in (b) of both examples the underlying subject is retained (cf. 13.2.2 where the causatives are derived from anticausatives whose derived subject corresponds to the underlying object of the base verb):

1. Yakut (Nedjalkov & Nedjalkov, Ch. 26, §4.2; *-is/-ih* = REC; *-ter/-ner/...* = CAUS; REFL *-in* is obligatorily added when CAUS is attached to the REC suffix)

- | | | | | |
|-------|----|---------------------------------------|---|------|
| (186) | a. | <i>bil-</i> | ‘to know sb/sth’ | (vt) |
| | b. | <i>bil-is-</i> | ‘to become acquainted with each other’ | (vi) |
| | c. | <i>bil-ih-in-ner-</i> (REC-REFL-CAUS) | ‘to acquaint sb with sb, introduce sb to sb.’ | (vb) |

2. Ainu (Alpatov et al., Ch. 42, §3.2.1)

- | | | | | |
|-------|----|-------------------|---|-------|
| (187) | a. | <i>kotuk</i> | ‘to stick to sth’ | vt |
| | b. | <i>u-kotuk</i> | ‘to stick to each other’ | vi |
| | c. | <i>u-kotuk-ka</i> | ‘to stick sth and sth to each other (with glue).’ | vb(?) |
| | | | cf. (172) with a different sequence of the derivatives. | |

13.2.5 Type 5. The reciprocal marker is attached to the postposition or preposition and not to the predicate

Illustrations are from Yukaghir and German.

1. *Yukaghir*. In this language, the reciprocal prefix may be attached to a spatial postposition instead of the verb (cf. (109b) and (110) where both usages, i.e. on the verb and on the postposition, are illustrated).

Yukaghir (Maslova, Ch. 44, ex. (26); *laŋin* ‘to, towards, in the direction of’)

- | | | | |
|-------|----|--|--|
| (188) | a. | <i>n'e-laŋin ulte-č-ie-m.</i> | |
| | | REC-DIR tie-DISTR-INGR-3SG.TR | |
| | | ‘He began to tie (them) to each other.’ | |
| | b. | <i>tude touke-pul n'-iŋer ulte-č-um.</i> | |
| | | his dog-PL REC-separately tie-DISTR-3SG.TR | |
| | | ‘He tied his dogs separately from each other.’ | |

2. *German*. The syntactic reciprocal marker *einander* can always replace *sich* in the reciprocal function but the opposite substitution is usually forbidden when *einander* is used with a preposition and in particular if it forms an adverb (cf. (87) and (88) above). In German, there is a considerable number of adverbs formed from prepositions with the reciprocal pronoun *einander* ‘each other’. Some of them that are formed from spatial prepositions have a tendency to be used as a kind of preverb spelt together with the predicate. Here is a list of spatial prepositions: *an* ‘at’, *auf* ‘on(to)’, *aus* ‘from, off, out’, *bei* ‘at’, *gegen* ‘against’, *hinter* ‘behind’, *in* ‘in’, *neben* ‘beside’, *über* ‘above’, *unter* ‘under’, *zu* ‘(directed) at/towards’; all in all, about 15 prepositions combine with *einander*. It is often unclear whether these combinations are to be regarded as parts of a verb lexeme (“Verbzusatz”) or as separate adverbs, as in the following instance which is followed by a list of the adverbs-preverbs (cf. Wiemer & Nedjalkov, Ch. 10, §5.5.1, ex. (71)).

- | | | | |
|-------|----|---------------------------------------|--|
| (189) | a. | <i>Er will Karl auf Peter hetzen.</i> | |
| | | ‘He wants to set Karl against Peter.’ | |

- b. *Er will Karl und Peter aufeinanderhetzen.*
 ‘He wants to set Karl and Peter against each other.’
- (190) *aneinanderreihen* ‘to line sth/sb up next to each other’
aufeinanderhäufen ‘to heap things together’
beieinanderhalten ‘to keep sth/sb together’
gegeneinanderlegen ‘to put sth/sb next to one another’
ineinanderschieben ‘to push sth into one another’
übereinanderstapeln ‘to pile sth on top of one another’
zueinanderordnen ‘to group sth/sb together.’

As regards the two main lexical meanings of joining and separating, it is characteristic that the former is often expressed either without the reciprocal pronoun (cf. the adverb-preverb *zusammen* in *zusammenkleben* ‘to glue sth together’) and the latter by means of the adverb-preverb *auseinander* (cf. *auseinanderjagen* ‘to disperse sb’) whose derivatives do not have any base verbs with the preposition *aus*, contrary to other derivatives of type (189). Since the markers *zusammen* and *auseinander* do not derive proper reciprocals, they are not entered in list (190), and included in (195) as specialized markers of joining and separating.

13.2.6 Type 6. Object-oriented (spatial) reciprocals with non-voice-oriented markers (Latin, Ancient Greek)

These markers were considered briefly in 4.2 and 13.2.1–13.2.5 where they were opposed to “voice-oriented” markers such as Yakut *-s*, Bantu *-an*, Evenki *-maat*, Fula *-indir*, etc. The “non-voice-oriented” markers dealt with below derive transitive spatial reciprocals with the same meanings as in 13.2–13.5 above, i.e. they denote joining and separating, bringing into contact and related meanings. As regards intransitive spatial reciprocals with the same markers, they correspond mostly semantically to the transitive spatial reciprocals (see 15.5). Not infrequently, they enter into a semantic (and even morphological) causative opposition (see (141), (141’), (142), (142’) above).

The markers in question are not materially related to the proper reciprocal markers. In many languages that have no specialized verbal markers for proper reciprocals there are verbal markers for encoding the meanings of joining and separating. The base verbs are often lexical reciprocals. Below, only the use of affixes with the object-oriented reciprocal meaning is illustrated. Their other meanings (only those relating to the polysemy of reciprocal markers) are considered in Section 15 below. These same prefixes may derive a limited number of subject-oriented reciprocals, usually spatial reciprocals.

One of the main markers of reciprocity in Latin is the phrase *inter se* ‘each other’ for 3PL, lit. ‘among themselves’, marked for person only; cf.: *inter nos* ‘each other’ for 1PL, lit. ‘among us’; *inter vos* ‘each other’ for 2PL, lit. ‘among you’. And in Ancient Greek it is a reciprocal pronoun marked for number, gender, and case, e.g. *ἄλλήλους* <PL.M.ACC> ‘each other’, *ἄλλήλω* <DU.M/N.ACC>. In the formation of transitive spatial reciprocals, other markers, especially prefixes, play a more prominent role, although the syntactic means just named and the corresponding means of other languages may also take part in their derivation. For instance, the Greek reciprocal pronoun marks transitive spatial reciprocals

meaning ‘to compare sb/sth and sb/sth with each other’ alongside proper reciprocals like ‘to kill each other’.

The invariable reciprocal pronoun *čere* with the initial meaning ‘friend, peer, mate’ in Koyra Chiini occurs in both proper and transitive spatial reciprocal constructions with the meanings like ‘you help each other’ and ‘they sew (= braid) it (= straw) together’ (Heath 1999:341–5).

In many cases, the base verb and the derivative are close in meaning (191a), and the prefix may be regarded as pleonastic, although sometimes it may change the case frame. On the whole, derivatives of this type are highly lexicalized, the base verb being often out of use. Here are a few examples from Latin and Ancient Greek.

1. Latin. In this language, one of the meanings of the highly polysemous prefix *com-/con-/co-/...* (one out of 15 prefixes) is ‘joining’ (see Zaliznjak & Shmelev, Ch. 4, §3). Separating is encoded by the prefix *dis-/di-*. (The examples are borrowed from Dvoreckij 1976.) The meanings of object joining of the prefix *com-* and disjoining of the prefix *dis-* seem to be their main meanings (Dvoreckij 1976). They are attested for the largest number of verbs among the derivatives with these prefixes.

- (191) a. *glūtino* ‘glue sth (together)’ → *con-glūtino* ‘glue sth together’
ligo ‘tie sth together, tie’ → *col-ligo* ‘tie, join sth together’
fundo ‘pour sth out, pour’ → *cōn-fundo* ‘pour sth into one place, mix, join’
coquo ‘boil sth’ → *con-coquo* ‘boil together one thing with another’
 b. *socio* ‘join sth’ → *dis-socio* ‘separate sth’
vendo ‘sell sth’ → *di-vendo* ‘sell sth out by parts.’

2. Ancient Greek. Verbs of joining and separating are formed mostly with two prefixes (out of 18): *συν-/συνγ-/...* and *δια-* (see (192b) and (192c)) respectively. A few object-oriented derivatives are attested with the prefix *ἀντι-*. Their base verbs have practically the same meaning. Examples are from Dvoreckij (1958).

- (192) a. *κατακτείνω* ‘put sth’ → *συν-κατακτείνω* ‘put sth together, next to one another’
χέω ‘pour sth’ → *συν-χέω* ‘fuse, pour sth into one together’
ἄθέω ‘push sth/sb’ → *συν-ἠθέω* ‘make collide, knock sth together’
ράππω ‘sew, sew together’ → *συν-ράππω* ‘sew sth together’
 b. *πρίω* ‘saw sth’ → *δια-πρίω* ‘saw sth into halves’
ζεύγνυμι ‘harness’ → *δια-ζεύγνυμι* lit. ‘unharness’
κρίνω ‘divide sth’ → *δια-κρίνω* ‘divide sth into halves’
 c. *κολλάω* ‘glue sth’ → *δια-κολλάω* ‘glue sth together’
πλέκω ‘weave sth’ → *δια-πλέκω* ‘weave, plait sth together’
 d. *παραβάλλω* ‘compare sth’ → *ἀντι-παραβάλλω* ‘compare with one another’
ρέπω ‘weigh sth’ → *ἀντι-ρέπω* ‘balance, counterbalance sth.’

It may be noted in passing that similar object-oriented reciprocals are formed by means of non-voice-oriented markers in a number of other Indo-European languages:

3. Vedic, Sanskrit (*sám-/ví-*) (Kochergina 1978:706, 581)

- (193) *bandh* ‘to tie sth’ → *sam-bandh* ‘to tie, join sth together’
kart ‘to cut, cut into sections’ → *vi-kart* ‘to cut, cut into sections’).

4. Russian (for details see Knjazev, Ch. 15, §6)

- (194) *kleit'* 'to glue, paste sth' → *s-kleit'* 'to glue, paste together' (vt)
ras-kleit' 'to unglue' (vt).

5. German (Wiemer & Nedjalkov, Ch. 10, §§7.2; 5.5.3; 5.5.1)

- (195) *leimen* 'to glue sth' → *zusammenleimen* 'to glue sth together'
schneiden 'to cut sth' → *auseinanderschneiden* 'to cut sth apart'.

6. Wappo (Radin 1929:38). Analogous spatial affixes are attested in non-Indo-European languages, e.g. in Wappo. In this language, judging from Radin's data, a prefix *pa-/po-* 'together' forms object-oriented reciprocals, usually from three-place transitives; the proper reciprocal meaning is marked by the suffix *-lil* which also has a reflexive meaning (ibid., p. 113).

- (196) *pa-pʰtʰiti* 'to tie strings together'
pa-mepi'le 'to fold'
pa-li'he 'to push together'
pa-he'ye 'to rub together'
pa-nak.a'ε 'to bite (action of bringing lips together)'
pa-li'm'i 'to make deer-drive (drive together).'

14. Reciprocal anticausatives (type A.3)

These are specific reciprocals that cannot be grouped with type A.1 or A.2: they are in fact *anticausative derivatives from three-place potential lexical reciprocals* (which are transitive spatial reciprocals and lexical causatives), the loss of the causative meaning being indicated by a reciprocal marker, while the reciprocal sense is preserved. Thus this type is intermediate between A.1 and A.2. In languages that have devices like middle and polysemous reflexive markers, anticausatives with these markers are derived from various verbs, not only from three-place lexical reciprocals, cf. German *öffnen* 'to open' (lexical causative vt) → *sich öffnen* 'to open' (anticausative vi).

As a rule, reciprocal markers are used to mark anticausativity on three-place lexical reciprocals. Naturally, in the process of evolution the anticausative function of a reciprocal marker may expand and the marker can acquire other meanings semantically related to the reciprocal. In reciprocal anticausatives, the reciprocal relation between the object referents of the underlying transitive spatial construction is retained in the derived spatial reciprocal construction as a relation between the subject referents.

Tuvan (Kuular, Ch. 27, ex. (131); *-š/-ž* = REC; *-bile* = 'with', 'and')

- (197) a. *Ol spirt-ti sug-bile xolu-p tur.* (T. 481) (= (180a, b))
 he alcohol-ACC water-with mix-CONV AUX.PRES.3
 'He is mixing alcohol with water.'
 b. *Spirt sug-bile xolu-ž-a ber-gen.*
 alcohol water-with mix-REC-CONV AUX-PERF.3
 'Alcohol has mixed with water.'

A few more Tuvan reciprocal anticausatives (Kuular, Ch. 27, examples (192), (153), (154), (162), (164)):

- | | | |
|-------|---|---|
| (198) | <i>onaa-</i> ‘to distribute sth’ | → <i>onaa-š-</i> ‘(of sth) to become sb’s share’ |
| | <i>borbakta-</i> ‘to roll sth up into a ball’ | → <i>borbakta-š-</i> ‘to roll oneself into a ball’ |
| | <i>bökpecte-</i> ‘to gather sth into a heap’ | → <i>bökpecte-š-</i> ‘to gather into a heap/crowd’ |
| | <i>dolga-</i> ‘to coil/wind sth’ | → <i>dolga-š-</i> ‘to get entangled’ |
| | <i>düj-</i> ‘to tie sth in a knot/ wrinkle’ | → <i>dü-üs-</i> ‘to become tied, tie itself in a knot.’ |

In Tuvan, anticausatives are derived in a regular way from transitives (that are not lexical reciprocals) by means of the passive and reflexive suffixes, and sometimes these markers are used to derive reciprocal anticausatives from three-place lexical reciprocals. The selection rules are rather intricate: there are instances of two parallel reciprocal anticausatives with the passive and the reflexive marker, as in (199a), one anticausative with the reflexive marker only, as in (199b) and, finally, there are parallel anticausatives of which one is built with the reciprocal marker and the other contains both the reciprocal and reflexive markers, but the form with the reflexive marker only is ungrammatical, as in (199c), where the first two forms also have the sociative meaning:

Tuvan (Kuular, Ch. 27, ex. (176), (192), (25); *-l* = PASS, *-n* = REFL)

- | | | | | | |
|-------|----|----------------------------------|--|-------------------------------------|---------------|
| (199) | a. | <i>ilga-</i> ‘to distinguish’ | → <i>ilga-š-/ilga-l-</i> ‘to differ from each other’ | | |
| | b. | <i>ögle-</i> ‘to marry sb to sb’ | → <i>ögle-n-</i> ‘to get married’ | | |
| | c. | <i>badala-</i> ‘to register’ | → <i>badala-š-</i> / <i>badala-n-iš-</i> / <i>*badala-n-</i> | | |
| | | | i. | ‘to get married at the registrar’s’ | anticausative |
| | | | ii. | ‘to register together’ | sociative |

A similar interplay of the reciprocal, reflexive and passive markers is observed in another Turkic language, viz. Yakut. Thus, in (200a) synonymous reciprocal anticausatives are derived with the reciprocal and reflexive suffixes, and in (200b) they are formed with the reciprocal and passive suffixes:

Yakut (Nedjalkov & Nedjalkov, Ch. 26, ex. (206); *-s* = REC, *-n* = REFL, *ülün-* = PASS)

- | | | | |
|-------|----|--------------------------------|---|
| (200) | a. | <i>silimnee-</i> ‘to glue sth’ | → <i>silimne-s-</i> / <i>silimne-n-</i> ‘to get glued together’ |
| | b. | <i>tüm-</i> ‘to gather sth’ | → <i>tüm-üs-</i> / <i>tüm-ülün-</i> ‘to gather’ (vi) |

15. “Non-voice-oriented” markers; other meanings

15.1 Introductory notes

Section 13.2.6 concerns transitive spatial reciprocals formed with the markers other than those used for the derivation of proper reciprocals (cf. 13.1 and 13.2.1), namely, with “non-voice-oriented” reciprocal markers. In 13.2.6, only one function of these markers is discussed, i.e. the function of marking transitive spatial reciprocals. But their meanings are not limited to this function. They may also express a number of other meanings, such as intransitive (spatial and non-spatial) reciprocal, sociative, comitative, assistive, and response action. All of these meanings can also be expressed by reciprocal “voice-oriented”

markers in a number of languages. The meanings discussed below do not exhaust the polysemy of these markers (for details see especially Zaloznjak & Shmelev, Ch. 4).

15.2 The sociative and comitative meanings (Latin, Ancient Greek)

These two meanings differ syntactically (cf. 8.1 on sociatives and 8.2 on comitatives): as mentioned above, the construction is sociative if both participants are expressed by the subject, and the construction is comitative if one of the participants is expressed by a non-subject. There are few restrictions on the transformation of sociatives into comitatives and even fewer on opposite transformations. Translations in the dictionaries often do not differentiate between these meanings.

1. *Latin*. The sociative-comitative meaning is one of the main meanings of the prefix *com-/con-/...* Both meanings can derive from intransitive and transitive verbs. In the latter case we observe a semantic affinity to transitive spatial reciprocals. Some of the derivatives are ambiguous: they can be interpreted as either transitive spatial reciprocals or transitive sociatives. Interestingly, in the *Latin-Russian dictionary* (Dvoreckij 1976) there are practically no derivatives explicitly translated into Russian as transitive sociatives rather than transitive spatial reciprocals. Most of the registered derivatives with the sociative meaning are formed from intransitive verbs (201a). Only a few transitive sociatives (201b) are registered in Dvoreckij (1976). Subject-oriented derivatives from transitive verbs are very few in number. A number of derivatives can be interpreted either as transitive spatial reciprocals or as transitive sociatives (cf. (201c)); note that the Greek equivalent is cited in (192d) as a spatial reciprocal. This affinity is due to the similarity of the situations described; see Zaloznjak & Shmelev (Ch. 4, §5).

- | | | |
|----------|----------------------------------|---|
| (201) a. | <i>bibo</i> ‘drink’ | → <i>com-bibo</i> ‘drink together’ |
| | <i>rīdeo</i> ‘laugh’ | → <i>cor-rīdeo</i> ‘laugh together’ |
| | <i>vēscor</i> ‘eat, feed on sth’ | → <i>con-vēscor</i> ‘feed together’ |
| | <i>sono</i> ‘sound’ | → <i>cōn-sono</i> ‘make noise together’ |
| | <i>ferveo</i> ‘boil, cook’ | → <i>cōn-ferveo</i> ‘boil, cook together’ |
| | <i>altercor</i> ‘argue’ | → <i>co-altercor</i> ‘take part in an argument’ |
| b. | <i>aestimo</i> ‘estimate’ | → <i>co-aestimo</i> ‘estimate sth and sth together’ |
| | <i>creo</i> ‘create’ | → <i>concreo</i> ‘create sth together with sth’ |
| | <i>crucifigo</i> ‘crucify’ | → <i>con-crucifigo</i> ‘crucify sb and sb simultaneously or together’ |
| c. | <i>pendo</i> ‘weigh’ | → <i>com-pendo</i> ‘weigh sth and sth together.’ |

2. *Ancient Greek*. Sociatives and comitatives are formed with the prefix *συν-*. The following examples illustrate subject-oriented sociatives derived from intransitives (202a) and transitives (202b); and object-oriented sociatives derived from transitives (202c).

- | | | |
|----------|----------------------------|---|
| (202) a. | <i>γελᾶω</i> ‘laugh’ | → <i>συν-γελᾶω</i> ‘laugh together with sb’ |
| | <i>κάθημαι</i> ‘sit’ | → <i>συν-κάθημαι</i> ‘sit next to each other or together’ |
| b. | <i>γεωργέω</i> ‘till land’ | → <i>συν-γεωργέω</i> ‘till land together, jointly’ |
| | <i>φίλῶ</i> ‘love sb’ | → <i>συν-φίλῶ</i> ‘love sb together’ |

- | | | | |
|----|-----------------------------|---|---|
| c. | <i>καταθάπτω</i> ‘bury’ | → | <i>συγ-καταθάπτω</i> ‘bury sb (and sb) together’ |
| | <i>καθείρω</i> ‘lock sb in’ | → | <i>συγ-καθείρω</i> ‘lock, leave sb with sb in private’ |
| | <i>δεκάζω</i> ‘bribe’ | → | <i>συν-δεκάζω</i> ‘bribe all (persons) together or entirely.’ |

Some transitive derivatives can express both sociative (see (203i)) and spatial reciprocal (see (203ii)) meanings: they are often almost indistinguishable (in Dvoreckij (1958), the sociative meaning is explicated by words like ‘together’ and also by the word ‘simultaneously’).

- | | | | |
|-------|--------------------|---|--------------------|
| (203) | <i>συγ-γομώ</i> i. | ‘knock, drive sth in simultaneously’ | sociative |
| | ii. | ‘nail sth together.’ ‘knock sth together’ | spatial reciprocal |

15.3 The assistive meaning (Ancient Greek)

It is expressed by the same prefix as the comitative-sociative. The valency increases by one, as in the comitative.

- (204) *αλεαίνω* ‘heat sth’ → *συν-αλεαίνω* ‘help sb to heat sth.’

According to Dvoreckij (1958), the assistive is (a) the only meaning of some derivatives with *συν-* or (b) the second meaning alongside the sociative, or (c) the third meaning alongside spatial reciprocal and sociative; see (204), (52b), (53b) respectively. It seems that sometimes the author’s choice of translations is accidental.

15.4 The response reciprocal meaning

This meaning, which can also be termed “delayed reciprocal”, is one of the most frequent meanings of the prefix *ἀντι-/ἀντ-* on verbal bases in Ancient Greek:

- | | | | |
|-------|--------------------------|---|---|
| (205) | <i>ωφελέω</i> ‘help’ | → | <i>ἀντ-ωφελέω</i> ‘help sb in return’ |
| | <i>φιλέω</i> ‘love’ | → | <i>ἀντι-φιλέω</i> ‘pay sb for love with love’ |
| | <i>ζητέω</i> ‘search’ | → | <i>ἀντι-ζητέω</i> ‘search, look for sb in return’ |
| | <i>τιμάω</i> ‘respect’ | → | <i>ἀντι-τιμάω</i> ‘respect sb in return’ |
| | <i>σκώπτω</i> ‘ridicule’ | → | <i>ἀντι-σκώπτω</i> ‘ridicule sb in return’ |
| | <i>μισέω</i> ‘hate’ | → | <i>ἀντι-μισέω</i> ‘pay sb with hate for hate.’ |

Derivatives with the meaning of response reciprocity are also attested in Cashinahua (see 9.7 above). Note, however, that in Cashinahua, the subject denotes the participant who can perform not only an action of the type illustrated in (205), i.e. the action in response, but also (which should be obvious from the extralingual situation) an action in advance, in expectation of the response action at a later date (a) of the person who is the target of his action, or (b) from the latter’s relatives. The response action of the suffering party need not be the same as that of the subject referent (though usually but not necessarily it is the same kind of action) (Camargo, Ch. 45, examples (38c), (56); §§3.2.1–3.2.3; see also ex. (168) in Ch. 5, §10).

15.5 Subject-oriented reciprocals (spatial and non-spatial intransitives) (Latin, Ancient Greek)

This section amplifies 12.1.1.2. Reciprocals considered here are derived, with a few exceptions, from one-place intransitives. Some bases are lexical reciprocals (cf. *pūgno* ‘fight’ in (206c)).

1. *Latin*. The prefix *com-/con-/...* denotes joining, among other meanings (see Zaloznjak & Shmelev, Ch. 4, §3). It also serves as a subject-oriented reciprocal marker. It forms intransitive reciprocals denoting the following:

(a) spatial relations, namely, coming together (206a) and dispersing of subject referents (206b); the base verbs are one-place intransitives, the valency is retained but the meaning is changed and the subject becomes plural; these formations are sometimes regarded as sociatives, which seems imprecise to me because plurality is here implied by the reciprocal meaning of moving from different directions to one place (thus, the meaning ‘together’ in the translations is reciprocal and not sociative).

- | | | |
|----------|----------------------------|---|
| (206) a. | <i>crēsko</i> ‘grow’ | → <i>con-crēsko</i> ‘accrete, grow together, into one’ |
| | <i>curro</i> ‘run’ | → <i>con-curro</i> ‘come running together’ |
| | <i>eo</i> ‘go, walk’ | → <i>co-ēo</i> ‘come together, gather’, ‘to copulate’ |
| | <i>fluo</i> ‘flow’ | → <i>confluo</i> ‘flow together’ |
| | <i>venio</i> ‘come’ | → <i>convenio</i> ‘convene’ |
| b. | <i>curro</i> ‘run’ | → <i>dis-curro</i> ‘run away in different directions, disperse’ |
| | <i>verto</i> ‘make a turn’ | → <i>dī-verto</i> ‘disperse, go away in different directions.’ |

(b) Non-spatial relations; the bases are transitive or intransitive; the derivatives mostly denote aggressive actions implying contact. Sometimes the prefix *con-* is pleonastic. The valency decreases, i.e. the derivatives behave like regular “canonical” reciprocals in this respect.

- | | | |
|-------|---|--|
| (207) | <i>futuo</i> ‘have sexual intercourse’ (vt) | → <i>con-futuo</i> ‘copulate’ |
| | <i>pūgno</i> ‘fight’ | → <i>com-pūgno</i> ‘fight, struggle’ |
| | <i>ruo</i> ‘throw oneself’ | → <i>cor-ruo</i> ‘throw oneself upon each other’ |
| | <i>fligo</i> ‘hit’ | → <i>con-fligo</i> ‘fight’ |
| | <i>spondeo</i> ‘swear solemnly’ | → <i>con-spondeo</i> ‘swear solemnly to each other.’ |

2. *Ancient Greek*. Subject-oriented reciprocals with all the three prefixes dealt with above are rather rare. They may denote the following:

(a) spatial relations, viz., coming together (208a) and dispersing of plural subject referents (208b); the bases are one-place intransitives, the valency is retained but the meaning is changed and the subject becomes plural (but the derivatives are not sociatives):

- | | | |
|----------|------------------------------|--|
| (208) a. | <i>θέω</i> ‘run’ | → <i>συν-θέω</i> ‘gather running’ |
| | <i>κυρέω</i> ‘come across’ | → <i>συν-κυρέω</i> ‘come across, meet’ |
| | <i>τρέχω</i> ‘run’ | → <i>συν-τρέχω</i> ‘run, come together for a battle’ |
| b. | <i>θέω</i> ‘run’ | → <i>ἀντι-θέω</i> ‘run away in all directions’ |
| | <i>θέω</i> ‘run’ | → <i>δια-θέω</i> ‘run away in different directions’ |
| | <i>πίπτω</i> ‘fling oneself’ | → <i>δια-πίπτω</i> ‘run away in all directions’ |
| | <i>τρέχω</i> ‘run’ | → <i>δια-τρέχω</i> ‘run away in different directions.’ |

(b) Non-spatial relations, e.g. competition (209a), hostile actions (209b); in the latter instance valency decrease takes place and in the verbs of competition the valency relations are not clear.

(209) a.	<i>σεμνύμαι</i> ‘pride oneself’	→ <i>ἀντι-σεμνύμαι</i> ‘compete in pride’
	<i>θέω</i> ‘run’	→ <i>ἀντι-θέω</i> ‘compete in running’
	<i>μέτειμι</i> ‘try to achieve’	→ <i>ἀντι-μέτειμι</i> ‘compete’
	<i>δημαγωγέω</i> ‘fawn upon people’	→ <i>ἀντι-δημαγωγέω</i> ‘compete in fawning’
	<i>διφρεύω</i> ‘go in a chariot’	→ <i>δια-διφρεύω</i> ‘compete in chariots’
	<i>τοξεύω</i> ‘shoot arrows’	→ <i>δια-τοξεύομαι</i> ‘compete in shooting arrows’
	<i>θέω</i> ‘run’	→ <i>δια-θέω</i> ‘compete in running’
b.	<i>πίτνω</i> ‘fling oneself’	→ <i>συμ-πίτνω</i> ‘fling oneself at each other’
c.	<i>μολογέω</i> ‘agree’	→ <i>δι-ομολογέω</i> ‘come to an agreement.’

16. The reciprocal marker on lexical reciprocals

This section is an amplification of Section 2.3 above.

16.1 Introductory

There is no clear-cut borderline between the main semantic groups. Some reciprocal verbs can be included in two groups. (For details see Knjazev, Ch. 2, §3.3.3; see also Yomdin 1981:89–105; Kemmer 1993:104–5).

(a) Verbs of spatial relations, i.e. joining and separating (both physical and mental), with meanings like ‘to mix sth and sth together’, ‘to divide sth’, ‘to tie sth and sth together’, ‘to connect sth and sth’, ‘to combine sth and sth’, ‘to gather, collect sth’, ‘to separate sth from sth’, etc.

(b) Verbs of identity, similarity, difference, etc., with typical meanings ‘to compare sth and sth’, ‘to identify sth with sth’, ‘to differentiate between sth and sth’, ‘to distinguish sth from sth’, ‘to equalize sth and sth’, etc.

(c) Verbs of human relations, e.g. ‘to marry sb to sb’, ‘to introduce sb to sb’, ‘to reconcile sb and sb’, ‘to grant a divorce to sb’, ‘to make sb and sb related/relatives’, ‘to cause sb and sb to quarrel’, etc.

Diagnostic constructions of type (4a’, a’’, b) may be generated by verbs which contain no morphological marker of reciprocity. For instance, sentences (210a’) and (210a’’) with inversed arguments are synonymous both with each other and with (210b). In this case we can hardly find any difference between the roles of the subject and object referents as they are defined in 1.1. And there is no doubling of roles: as a matter of fact, each participant can be assigned only one role, and both have the same semantic role. Of course, pragmatically, the sentences in each of triplets (210) and (211) are not identical: the hierarchical relations between the participants in a particular sentence may violate the identity of *reversed* sentences like (210a’) and (211a’’). Moreover, syntactic context, e.g. the use of negation, may result in the highlighting of the first participant as more active and in the

subsequent defocusing of the co-participant, cf. *He always argues; Don't argue!*. When used with a phasal marker of inceptivity, the first participant is, in a way, presented as the causer of a reciprocal situation, cf. *John began to argue with Peter*.

Compare Russian and the English equivalents (note that the Russian preposition *s* 'with' and English *with* in the comitative sense are lexical reciprocals: *John with Mary = Mary with John*).

A. Discontinuous constructions

B. Simple construction

- (210) a'. *Ivan sporit s Mashej.* = a". *Masha sporit s Ivanom.* = b. *Masha i Ivan sporjat.*
 (211) a'. *John argues with Mary.* = a". *Mary argues with John.* = b. *Mary and John argue.*
 (212) a'. *John met Peter.* = a". *Peter met John.* = b. *John and Peter met.*
 (213) a'. *John fought Peter.* = a". *Peter fought John.* = b. *John and Peter fought.*

In (210)–(213) reciprocity is inherent in the lexical meaning of the predicates rather than expressed by a special morpheme (word). As the three clauses in each of the four cases, i.e. (210a', a", b) – (213a', a", b), are synonymous with each other and the first two in each group are syntactically alike (we disregard here possible pragmatic differences), they have no non-reciprocal correlates like (4a'–a"). As mentioned in §2.3, verbs of this type are termed here lexical reciprocals. This phenomenon is sometimes also called covert reciprocity (Langendoen 1978:190) or inherent reciprocity (denoting naturally reciprocal events) (Kemmer 1993:102–8). In these cases the reciprocal meaning is integrated in their lexical meaning, which means they are not related to any non-reciprocal bases which function as non-reciprocal predicates (i.e. they have no counterpart as German *umarmte* 'hugged (sb)' for reciprocal *umarmten sich* 'hugged each other' from (4)).

At first glance, the term lexical reciprocal is parallel to the term lexical causative. However, lexical causatives usually have non-causative derived, i.e. anticausative, or non-derived, e.g. labile or suppletive counterparts (cf. *otkryvat* 'to open' (vt) → *otkryvat*'-*sja* 'to open' (vi), *to break* (vt) – *to break* (vi), *to kill* – *to die* respectively). By contrast, lexical reciprocals normally do not have non-reciprocal counterparts (cf., however, *to argue* – *to object*; this opposition may be encoded with a reciprocal marker in some languages; cf. Fula *yedd-ondira* 'to argue' ← *yedda* 'to object'), nevertheless, their reciprocal meaning can be explicated not only by diagnostic constructions like (210)–(213), but also by a lexicographic definition; cf., for instance, the English translation of the definition of the Russian verb *družít* 'to be friends' in the *Explanatory Combinatorial Dictionary of Modern Russian* (Mel'čuk & Zholkovsky (eds.) 1984:311) in which the reciprocal pronoun is repeated five times and two lexical reciprocals (*partner* and *contact*) are used:

- (214) *X družít s Y-om* 'X is friends with Y' = 'X and Y, knowing *each other* well, are emotionally well-disposed *towards each other*, and X and Y are not sexual *partners*, they understand the motives of *each other's* actions and are ready, in case of necessity, to help *each other*, which causes X and Y to want to be in *contact with each other* ...'

16.2 Subject-oriented lexical reciprocals in discontinuous and simple constructions

(On transitive spatial lexical reciprocals see Section 13.) Five main types of the use of reciprocal markers on lexical reciprocals can be distinguished, depending on the properties of the base verbs. These types may differ in productivity in the same language, and the number of verbs in one lexical group may vary across languages. On the whole, the picture is extremely variegated and often idiosyncratic; therefore I shall only illustrate the cases that seem to be most common cross-linguistically. The reciprocals in question are semantically two-place predicates. They are intransitive in the simple construction and transitive or mostly intransitive in the discontinuous construction. In accordance with the nature of the discontinuous and simple use and co-occurrence with a reciprocal marker, the five types may be grouped into two classes, prototypical lexical reciprocals (see 16.2.1) and lexical semi-reciprocals (see 16.2.2). Verbs of the former class are used in both types of constructions without a reciprocal marker (as in (215a) and (215c), while in (215b) the marker is optional) and the verbs of the latter class are used either in the simple construction only (there may be a corresponding two-place construction but it is not reciprocal, cf. *He kissed her* in (215d)), or without a reciprocal marker in the discontinuous construction only and with this marker in the simple construction, as in (215e). All these usages fall into the following schema:

Simple construction	Discontinuous construction
(215) a. (Japanese) <i>T. to A. wa kekkonsi-ta.</i>	= <i>T. wa A. to kekkonsi-ta.</i>
b. <i>They argued [with each other].</i>	= <i>He argued with her.</i>
c. <i>They are alike.</i>	–
d. <i>They kissed [each other].</i>	≠ (<i>He kissed her</i>).
e. <i>They resembled each other.</i>	= <i>He resembled her.</i>

These cases deserve to be discussed in more detail.

16.2.1 Prototypical lexical reciprocals

These are lexical reciprocals that may be used in the same form in both discontinuous and simple constructions, while retaining the reciprocal meaning in either of them, or they have no discontinuous construction. This is probably the most common case cross-linguistically; it may be illustrated by (210)–(213), (215a, b, c). Here belong:

- (a) reciprocals without a reciprocal marker (like *to argue*);
- (b) *reciproca tantum*, i.e. verbs containing a reciprocal marker that have lost the base verb (cf. Buryat *xoybo-ldo-* ‘to hobnob’ ← [?]*xoybo-*);
- (c) reciprocals taking an optional reciprocal marker in both types of constructions (cf. Buryat *arsa-/arsa-lda-* ‘to argue’);
- (d) lexicalized derived reciprocals (cf. Buryat *ala-lda-* ‘to fight, squabble’, also ‘to kill each other’ ← *ala-* ‘to kill, beat’).

Two subtypes are distinguished among prototypical lexical reciprocals differing in the use of a reciprocal marker in the simple construction. As a rule, a reciprocal marker is used pleonastically or for blocking the reading of a construction as elliptical discontinuous.

Type 1. Lexical reciprocals do not take a reciprocal marker either in the discontinuous or in the simple construction, although the latter remains ambiguous, like (216b). Note that the verb with the meaning ‘to marry’ in Tamil (Annamalai 2000:176) behaves in the same way as its counterpart in Japanese. In Udehe, lexical reciprocals do not take a reciprocal suffix; unlike Evenki lexical reciprocals on which the reciprocal suffix can emphasize the reciprocal meaning (Nikolaeva, Ch. 23, §7).

Japanese (Alpatov & Nedjalkov, Ch. 25, §11.2.1.1)

- (216) a'. *Taroo wa Akiko to kekkonsi-ta.*
 T. TOP A. with marry-PAST
 ‘Taro married Akiko.’
- a". *Akiko wa Taroo to kekkonsi-ta.*
 A. TOP T. with marry-PAST
 ‘Akiko married Taro.’
- b. *Taroo to Akiko wa kekkonsi-ta.*
 ‘T. and A. TOP marry-PAST
 i. ‘Taro and Akiko got married [*to each other*].’
 ii. ‘Taro and Akiko got married [*each to someone else*].’
- c. **Taroo to Akiko wa kekkonsi-at-ta.*
 T. and A. TOP marry-REC-PAST
 (same intended meaning as (b.i)).

Lexical reciprocals with the same meaning differ across languages in their combinability with syntactic markers. Thus, the English verb *to marry* allows an optional reciprocal pronoun; cf. *They got married [to each other]*. But Chinese follows the Japanese pattern in this respect and the verb *jìnhūn* ‘to marry’ does not combine with the reciprocal adverb *hùxiāng*. Judging by the data from Hoa (1983:50–1), many of Chinese lexical reciprocals (e.g., *dǎjià* ‘to fight, quarrel’, *tánhuà* ‘to converse’, *dìngghūn* ‘to be betrothed’) behave in the same way.

Type 2. Lexical reciprocals optionally take a reciprocal marker in the simple construction but not in the discontinuous construction. The marker may be used pleonastically or for disambiguation in the case of polysemy. It may be due to the speaker’s intention to show that the clause is a simple reciprocal construction rather than a discontinuous one with an ellipted second participant.

- (217) a. *John argued with Mary [*with each other].*
 b. *John and Mary argued with each other.*
 c. *John and Mary argued* (probably *with someone else*); cf. also translations in (213b).

Type 3. In this case lexical reciprocals are used in the simple construction only and do not take a reciprocal marker. It takes a special place in this schema, being contiguous to Type 1, on the one hand, and to Type 4, on the other.

- (218)=(11) *My father and the neighbour are alike.*

16.2.2 Lexical semi-reciprocals

Here belong verbs which are: (a) lexical reciprocals in the simple construction only, and (b) lexical reciprocals that require a reciprocal marker when used in the simple construction. (Compare the term semi-symmetric predicates in Turek 1988: 115–24; see also Knjazev, Ch. 2, §2.3.)

Type 4. Lexical reciprocals that function as reciprocals in the simple construction only. The respective discontinuous construction can denote an action which may provoke a response action (see (219a'–a'') and (220a'–a'')). In the simple construction a reciprocal marker can be used optionally for the same reasons as in (217b); cf. English and Russian respectively (in (219a', a'')) *s* = 'with'):

(219) a'. *John kissed Mary.* + a''. *Mary kissed John.* = b. *John and Mary kissed*
[*each other*].

(220) a'. *A pozdorovalsja s B.* + a''. *B pozdorovalsja s A.* = b. *A i B pozdorovalis'*
[*drug s drugom*].
'A greeted B.' 'B greeted A.' 'A and B greeted *each other*.'

Type 5. Lexical reciprocals take a reciprocal marker obligatorily in the simple construction but not in the discontinuous construction. Thus, according to this feature they do not differ in form from common grammatical reciprocals. The distinction from the latter lies in the fact that discontinuous constructions with a lexical reciprocal and reversed arguments are synonymous. Compare French (221) and their English equivalents in (222), as well as Nivkh example (223) with the transitive verb 'to be of the same age as'.

(221) a'. *A ressemble à B.* = a''. *B ressemble à A.* = b. *A et B se ressemblent.*

(222) a'. *A resembles B.* = a''. *B resembles A.* = b. *A and B resemble each other.*¹²

Nivkh (Otaina 1978: 3–31, 34, 53; DO in (a'–a'')) is zero-marked and forms a phonetic unity with the transitive verb)

(223) a'. *ətək əmək nətə-d'.* (vt) = a''. *əmək ətək nətə-d'.* (vt)
father mother have.same.age-FIN mother father have.same.age-FIN
'Father is of the same age as mother.' 'Mother is of the same age as father.'
= b. *ətək-xe əmək-xe u-nətə-d'.* (vi)
father-and mother-and REC-have.same.age-FIN
'Father and mother are of the same age.'

17. Concluding remarks

These notes are meant to reiterate the main points of this chapter.

12. The Tamil verb with the meaning 'resemble' behaves in the same way (Annamalai 2000: 176; cf. also Bystrov & Stankevich, Ch. 47 on Vietnamese, §§6.2.1 and 6.2.2.1).

17.1 Grammatical and lexical (inherent) reciprocals

Grammatical reciprocals comprise all constructions formed by the seven types of markers listed in 1.17.2. The use of markers makes it possible to express the meaning of two underlying base sentences by means of one sentence (traditional diagnostic feature); cf. German:

- (224) a'. *A umarmte B.* + a". *B umarmte A* = b. *A und B umarmten sich* = (4)
 (225) a'. 'A hugged B' + a". 'B hugged A' = b. 'A and B hugged each other.'
 (see §2.1.1).

As for lexical (inherent) reciprocals, they lack semantically underlying non-reciprocal verbs and therefore may not need a reciprocal marker. In (226), syntactically analogous to (224), the following three sentences are semantically equal, all of them being lexical reciprocals, and the difference between them is pragmatic:

- (226) a'. *A argued with B* = a". *B argued with A* = b. *A and B argued* (see §2.3).

Lexical reciprocals fall into three main groups differing in the possibility or necessity of the reciprocal marker when they are used in simple constructions of type (226b), i.e. with both reciprocants in the subject position:

- (a) lexical reciprocals never used with a reciprocal marker (cf. Japanese *kekconsi-ru* 'to marry'; cf. (216) above);
- (b) those with an optional reciprocal marker (cf. Japanese *kooronsu-ru* / *kooronsi-a-u* 'to argue'; see Ch. 25 (on Japanese), ex. (129)), and
- (c) those with an obligatory reciprocal marker (cf. Nivkh *u-ηətə-d'* 'to be of the same age'; cf. (223)).

An optional reciprocal marker may be used in type (b) constructions in order to highlight the reciprocal meaning or to show that the subject denotes both reciprocants and the sentence is complete (cf. *A and B argued with each other*), thus blocking out the possible interpretation of the construction as elliptical discontinuous with an omitted second reciprocant (cf. *A and B argued* = i. 'with each other', ii. 'with someone else'), rather than as simple with the subject as a collective first reciprocant.

The use of a reciprocal marker may vary both on lexical reciprocals within one language and across languages (see Section 16).

As mentioned in bypassing, the following difference may be observed between grammatical and lexical reciprocals (I somewhat simplify the picture):

- for grammatical (non-lexicalized) reciprocals the main or only possible type is the simple construction; discontinuous constructions, if they are possible, require no additional marker (with rare exceptions; see 7.5);
- for lexical reciprocals (most of them two-place intransitives) the main type of construction is discontinuous; the use in the simple construction may require an obligatory or optional grammatical marker of reciprocity or it may not allow it.

17.2 Reciprocal marking devices

As is claimed above (2.1.1.1–2.1.1.3), the seven marking devices registered here are grouped as follows:

- (a) *syntactic markers* comprising clause doubling (type 1); pronouns, adverbs (type 2);
- (b) *morphological markers* comprising periphrastic devices (type 3), compounds (type 4), affixes (type 5), and root reduplication (type 6);
- (c) *clitics* (type 7); they are kind of intermediate between pronouns (type 2) and affixes (type 5).

Reciprocals with morphological markers and clitics under the cover term of *verbal* reciprocals are often contrasted to *pronominal* reciprocals, the most common among syntactic reciprocals. These types of reciprocals are the most widespread across languages and therefore they are in the centre of attention in the literature (see Section 2 above and Nedjalkov, Ch. 3).

With regard to the distribution of pronominal and verbal reciprocals, languages may be classified in the following way (see also Section 11):

- (a) languages employing pronominal marking only (cf. English *each other*);
- (b) languages employing verbal (affixal or clitic) marking only (cf. the infix *-pa-* in Mundari);
- (c) languages employing both types of marking, in which case the relations between the markers may be as follows:
 - (c.1) both markers are interchangeable in certain cases and they do not co-occur, as a rule (e.g. German *einander* and *sich*),
 - (c.2) the two markers are interchangeable and may co-occur (e.g. Yakut *beje beje-lerin* ‘each other’ and *-s*), and
 - (c.3) the two markers may co-occur but in particular cases the pronominal marker is used alone (e.g. in combination with prepositions; cf. French *l’un l’autre* and *se*).

Pronouns, affixes and clitics seem to be the most widespread means of reciprocal marking, at least in my corpus.

If a sentence constituent of the base construction is expressed in a way that is not the most typical and common one, the likelihood of the pronominal rather than verbal marking of its reciprocalization increases. This is often the case if the constituent is a prepositional or postpositional noun phrase. Needless to say, interchangeability may be sometimes determined by conditions that are hard to explicate, and also by traditional usage.

17.3 Syntactic (diathesis) types of proper reciprocals

This concerns non-spatial (= proper) subject-oriented reciprocals. The following main diathesis types are distinguished depending on the reciprocalized sentence constituents:

- (a) reciprocals with argument co-referentiality [reciprocalization involving the base subject and an object], with two subtypes:

(a.1) “canonical” which are always intransitive and derive from two- or three-place transitives (12.1.1) or two- or three-place intransitives (12.1.2), and in some languages, even from one-place intransitives (with covert second valency; cf. 12.1.1.1.5);

(a.2) “indirect” which are always transitive and derive from three-place transitives, with reciprocalized indirect object (12.1.2.1);

(b) reciprocals with non-argument co-referentiality [reciprocalization involving the base subject and a non-argument], with two subtypes:

(b.1) “possessive” which are also transitive, with reciprocalization of a possessive attribute of the object (12.2.1);

(b.2) “adverbial” reciprocals where reciprocalization involves an adverbial (12.2.2). The latter type is rare. Generally it may be assumed that these four types represent the following implicational hierarchy (12.4):

(227) “canonical” (vi) \supset “indirect” (vt) \supset “possessive” (vt) \supset “adverbial” (vi/vt) = (132)

“Canonical” reciprocals are naturally the prevalent type cross-linguistically – due to the prevalence of the derivation base, i.e. of two-place transitives. In some languages, e.g. in Lithuanian, it is the only type of verbal reciprocals. In other languages, “indirect” and “possessive” reciprocals being rather marginal, manifest some features of adaptation to “canonical”, i.e. intransitive reciprocals, e.g.:

(a) the use of the absolutive construction instead of the ergative despite direct object retention (Cashinahua; see 9.7 above);

(b) the use of a transitive suffix instead of the intransitive on the predicate (Mundari, see (119) above);

(c) incorporation of the direct object (denoting the possessee) with the reciprocal prefix attached to it (Ainu (124), Yukaghir (126));

(d) attachment of a reciprocal affix to the direct object (the latter, as a rule, forms one phonetic word with the predicate); (Nivkh (125)).

17.4 Spatial transitive reciprocals

The above concerns proper reciprocals which meet the requirements of the diagnostic test shown in (224). Spatial reciprocals fall into two main lexical classes, those of joining and separating, and there is a number of reciprocals semantically close to them (e.g. the meaning ‘to compare’ in (229.6a) which can be interpreted as mental joining). The diagnostic test for many of the spatial transitive reciprocals denoting joining is syntactically analogous to (224), with the difference that in (224) the reciprocal relations hold between the subject and object and in (228) between two objects:

(228) a'. *S joined A to B.* + a". *S joined B to A.* = b. *S joined A and B together.*

This analogy holds if objects A and B belong to the same semantic class (two details, two pieces of wood, etc.) Moreover, here the verb *join* is a lexical reciprocal and thus (228) is also analogous to (226). Despite obvious differences between proper and spatial reciprocals, the reciprocants of the latter being object referents, the fact that many languages

use the same marker, pronominal or verbal, for both types of reciprocals (e.g. Kabardian (230)), shows their semantic affinity.

The test under (228), relevant for a (large) number of verbs of joining, does not describe as a rule verbs of separating. Reciprocals of joining are usually more numerous than those of separating (it is significant in this respect that reciprocals of joining with the prefix *zə-* in Kabardian number 130 and those of separating, 80). It is probably possible to claim tentatively that if a language has reciprocals of separating it is likely to have (more numerous) verbs of joining; the opposite is not always the case.

Here are the lists of the most typical lexical groups of reciprocals of joining and separating attested in Kabardian, where probably the maximum lexical range is achieved (see 13.1). One can see that all the lexical groups of joining have counterparts among verbs of separating, except the second one.

- (229) 1. a. 'to tie two things together' – b. 'to cut up a wire into bits'
 2. a. 'to pile, heap sth one upon another' –
 3. a. 'to carry sth (in)to one place' – b. 'to disperse, scatter sb/sth'
 4. a. 'to wrap sth up, muffle sb' – b. 'to unwrap, undo sth'
 5. a. 'to press sth together' – b. 'to stretch sth'
 6. a. 'to compare sth and sth' – b. 'to differentiate, discriminate sth/sb.'

To sum up, spatial reciprocals can be derived by three types of markers:

A. A marker of proper reciprocals or a marker containing the latter as a component; three varieties are registered:

(i) the same marker as that of proper reciprocals (see 13.2.1):

Kabardian

- (230) a. *guəun* 'to shout at sb' → *zə-guəun* 'to shout at each other'
 b. *kIəɾə-dən* 'to sew sth onto sth' → *zə-kIəɾə-dən* 'to sew sth together.'

(ii) A causative marker on the anticausative underlying verb derived from a lexical reciprocal (see 13.2.2):

Kirghiz

- (231) a. *kuu-* 'to chase sb' → *kuu-š-* 'to chase each other'
 cf.: b. *ula-* 'to add sth on sth', 'join the ends of sth'
 → c. *ula-š-* 'to join' (vi)
 → d. *ula-š-tər-* 'to tie sth and sth together.'

(iii) A reciprocal-causative complex marker (see 13.2.3):

Kirghiz

- (232) a. *kuj-* 'to pour sth (into)'
 [→ b. *kuj-uš-* 'to help to pull sth (into)']
 → c. *kuj-uš-tur-* 'to pour sth from several vessels into one.'

B. A sociative marker (not used to derive reciprocals proper, or at least not regularly):

Latin

- (233) a. *bibo* 'drink' → *com-bibo* 'drink together'
 b. *suo* 'sew' → *con-suo* 'sew sth and sth together.'

C. Various markers with locative meanings (affixes, adverbs, etc.), (see 13.2.5); cf.:

- Russian
- (234) a. *kleit'* 'to glue sth'
 → b. *s-kleit'* 'to glue sth and sth together.' (cf. also prefix *pa-* in Wappo (196))

17.5 Simple and discontinuous reciprocal constructions

As mentioned (7.1), in the simple construction both reciprocants are expressed by one syntactic argument, viz. subject, and in the latter by two syntactic arguments, viz. subject and non-subject; cf. German:

- (235) a. *A und B schlugen sich.* 'A and B fought with each other.'
 b. *A schlug sich mit B.* 'A fought with B.'

Only about 10 to 20 German verbal reciprocals allow the discontinuous construction, i.e. of the type (235b). Discontinuous constructions with other verbal reciprocals are ungrammatical; cf.:

- (236) a. *A und B begrüßten sich.* 'A and B greeted each other.'
 b. **A begrüßte sich mit B.* lit. 'A greeted each other with B.'

Pronominal reciprocals generally allow the simple construction only, therefore the following concerns languages with verbal reciprocals. These languages can be subdivided at least into the following types.

(a) Languages where verbal reciprocals are used in the simple construction and do not allow the discontinuous construction, although the discontinuous use may be allowed for lexicalized reciprocals. The reciprocants can be expressed:

(a.1) Only by one plural NP subject; so far, this is attested in one language, which is Ngiyambaa (Donaldson 1980:168).

(a.2) Either by one plural NP subject or two NP (conjoined) subjects; these are German and Kabardian. It should be added that languages of which the simple construction is characteristic may exhibit a limited number of reciprocals (three to five, or twenty at the most) which can occur in the discontinuous construction. Thus, the discontinuous construction is secondary to the simple one. There are languages where all reciprocal constructions are simple and discontinuous constructions are either non-existent or they are formed by lexicalized reciprocals of type (235). This is probably related to the "age" of reciprocals: needless to say, the "older" the reciprocals the more numerous lexicalized items are.

(b) Languages where verbal reciprocals allow both simple and discontinuous constructions, without any difference in the marking on the verb. The discontinuous construction involves the following issues:

(b.1) In some languages, the second reciprocant can take the position after the predicate; in this case the construction is unambiguously discontinuous, irrespective of the second constituent bearing a comitative marker or a marker used both as a conjunction and a comitative marker (this is the case in some Bantu languages, see (29b)).

(b.2) There are languages where the second reciprocant follows the subject and precedes the predicate; in this case, if the marker of conjoining is homonymous with the comitative marker (preposition or postposition or a comitative case marker), the problem of distinguishing between a complex subject and a combination of the subject and a comitative object arises. If the first NP is singular and the predicate agrees with it in number, the construction is clearly discontinuous (see (237b) below where the noun phrase *Aya-m* is the subject), and if the predicate is plural (i.e. agrees with both nouns) this means that the construction is simple (see (237a) where the subject is the noun group *Aya-m aal-ən katta*). However, if the first NP is plural the construction is ambiguous and determining the status of the construction is problematic (this is the case in Yakut and Evenki, see examples (34)). It is but natural that both conjoined subjects and subjects including a comitative noun phrase are semantically alike.

(c) Languages where verbal reciprocals occur in both simple and discontinuous constructions but the discontinuous construction is marked by a special applicative marker (of course, it is used not only on reciprocals); this is shown in the Tagalog and Maasai examples (37) and (39).

(d) A special case are languages where the second reciprocant is either expressed by the subject together with the first reciprocant (simple construction) or it is represented by zero: if the subject is singular the construction is unambiguously discontinuous, and if the subject is plural both interpretations are possible; this seems to be the case in Cashinahua (Section 9.7).

17.6 Lexical range of the main meanings of polysemous reciprocal markers

Certain meanings of polysemous reciprocal markers may imply one another. For instance, it has been noted that the passive meaning of a reflexive-reciprocal marker implies that it has (or had) the anticausative meaning. On the other hand, the meanings may differ in the lexical range of their base verbs. For instance, this is the case with some reciprocal-sociative markers. The lexical range of a certain derivational meaning may depend both on the transitivity/intransitivity of the bases, and in the case of intransitive verbs on their one-place or two-place valency. Some of the derivational meanings may be lacking because of their incompatibility with the semantic properties of the base verbs. Besides, extralinguistic pragmatic factors may be at work, too. All this is shown below on the basis of the meanings of Turkic reciprocal-sociative markers as one of the main polysemy types. The data cited are Yakut, but the generalizations suggested seem to be applicable to other languages with similar kinds of polysemy of the relevant markers as well.

In Yakut, the suffix *-s* has the following main meanings: (a) reciprocal, (b) sociative, (c) comitative, (d) assistive; it also has a number of other much less productive meanings more or less close to those listed. These main meanings cover hundreds of derivatives. Each of these meanings is related to a certain lexical range of bases which may either include one another or overlap.

Derivatives of many transitive verbs with a human object, e.g. *ölör-* ‘to kill sb’, may have all the four main meanings, as is illustrated below (both the simple and the discontinuous constructions for the reciprocal meaning are given).

Yakut

- | | | | | | |
|-------|----|--|---------------|--------------------------------------|------|
| (237) | a. | <i>Aya-m</i> | <i>əal-ən</i> | <i>kəttə ölör-üs-t-üler.</i> | RECS |
| | | father-my | neighbour-his | with kill-REC-PAST-3PL | |
| | | ‘My father and his neighbour killed <i>each other</i> .’ | | | |
| | b. | <i>Aya-m</i> | <i>əal-ən</i> | <i>kəttə ölör-üs-t-ö.</i> | RECD |
| | | father-my | neighbour-his | with kill-REC-PAST-3SG | |
| | | (same), lit. ‘My father with his neighbour killed <i>each other</i> .’ | | | |
| | c. | <i>Aya-m</i> | <i>əal-ən</i> | <i>kəttə kini-ni ölör-üs-t-üler.</i> | SOC |
| | | father-my | neighbour-his | with he-ACC kill-REC-PAST-3PL | |
| | | ‘My father and his neighbour killed him <i>together</i> .’ | | | |
| | d. | <i>Aya-m</i> | <i>əal-ən</i> | <i>kəttə kini-ni ölör-üs-t-ö.</i> | COM |
| | | father-my | neighbour-his | with he-ACC kill-REC-PAST-3SG | |
| | | ‘My father <i>with</i> his neighbour killed him.’ | | | |
| | e. | <i>Aya-m</i> | <i>əal-ga</i> | <i>kini-ni ölör-üs-t-ö.</i> | ASS |
| | | father-my | neighbour-DAT | he-ACC kill-REC-PAST-3SG | |
| | | ‘My father <i>helped</i> his neighbour kill him.’ | | | |

As regards bases with inanimate objects, e.g. *muostalaa-* ‘to pave (e.g. a road)’, their derivatives, like *muostala-s-*, may have the assistive (‘to help sb to pave (the road)’), comitative (‘to pave (the road) with sb’) and sociative (‘to pave the road together’) meanings, the reciprocal meaning being naturally outruled.

One-place intransitive bases which cannot acquire the reciprocal meaning, as a rule, differ in the productivity of the other three meanings; cf.:

- the derivative *üleele-s-* (< *üleele-* ‘to work’) has the same three meanings as *muostala-s-* above: assistive (‘to help sb to work’), comitative (‘to work with sb’), and sociative (‘to work together’);
- the derivative *xon-us-* (< *xon-* ‘to spend a night’) has two meanings: comitative ‘to spend a night with sb’ and sociative ‘to spend a night together’;
- the derivative *tammala-s-* (< *tammalaa-* ‘to drop’) has the sociative meaning only which is hard to render adequately in English (46).

These three verbs are listed in the order of diminishing activity of the subject, which correlates with the diminution of the saliency/activity of the [possible] second participant characteristic of the three meanings of the derivatives. In sociatives, all the participants are equally salient, in comitatives the participant expressed by a non-subject constituent may be the initiator, and, lastly, in assistives this second participant is generally the main performer of the action.

As for the relations between the lexical scope characteristic of the three meanings, they may be linked by the symbol of inclusion. In Yakut, the lexical range of bases for assistives seems to be narrower than that for comitatives (an assistive situation is a joint action but not any joint action is assistive), which in turn is narrower than that for socia-

tives (comitative and sociative situations often coincide, both being joint actions, but the expression of one of the participants by a non-subject constituent in some situation can be pragmatically unusual), while the lexical scopes of reciprocals and sociatives overlap:

(238) $\text{reciprocal} \cap \text{sociative} \supset \text{comitative} \supset \text{assistive} (= (55))$ See 8.4 above.

There may be some counterexamples to this implication. Thus, for instance, the Yakut form *bar-əs-* (< *bar-* ‘to go away’) has the comitative meaning ‘to go away with sb’ only and cannot have the meaning ‘to go away together’.

By way of amplifying the above, I will return to the classification of derivatives on the basis of the reciprocal meaning. Three groups can be distinguished here: (a) derivatives which cannot have this meaning but they may have any of the other three meanings (their bases: one-place intransitives and transitives with an inanimate object); (b) derivatives which may have both the reciprocal and some or all of the other meanings (see (237) which has all the four meanings and thus illustrates the possibility of coincidence of the type of the lexical range of reciprocals and sociatives); (c) derivatives which may have the reciprocal meaning exclusively. These are verbs like *tapta-s-* ‘to love each other’, *umn-us-* ‘to forget each other’. It is of course possible to think of situations like ‘to help sb forget sb’, ‘to forget sb together’, but in these cases the literal expression of these meanings is more likely: by means of *kömölös-* ‘to help’ and the adverb *birge* ‘together’ respectively.

17.7 Formal relations between simple and discontinuous reciprocal constructions and sociative and comitative constructions

The relationship between simple and discontinuous reciprocal constructions is symmetrical to that between sociative and comitative constructions: in the simple reciprocal and sociative constructions the participants are expressed by the subject, and in the discontinuous and comitative constructions the second participant is named by a non-subject constituent. This parallelism may manifest itself in the identity of expression for all the four cases (see line 1 in (239)) or in the same expression of RECD and COM (see line 6 in (239)). The meaning of reciprocity and that of sociativity are essentially preserved in both pairs of constructions. Languages often reflect this semantic affinity in a formal way. The following variants of marking are registered:

(239)	<u>RECS</u>	<u>RECD</u>	<u>SOC</u>	<u>COM</u>	<u>languages</u>
1.	-š	-š	-š	-š	Tuvan
2.	-maat	-maat	-ldə	-ldə	Evenki
3.	<i>a(i)-, a(i)ba-</i>	–	<i>c-</i>	<i>c-</i>	Abaza
4.	<i>zə-, zə-r(ə)</i>	–	<i>zə-də-</i>	<i>də-</i>	Kabardian
5.	<i>-nʲji-</i>	–	<i>-nʲji</i>	<i>anʲji-</i>	Nunggubuyu
6.	<i>mag-... -an</i>	<i>maki-pag-... -an</i>	<i>mag-... -an</i>	<i>maki-pag-... -an</i>	Tagalog
7.	<i>se</i>	–	<i>com-</i>	<i>com-</i>	Latin
8.	<i>-nami-</i>	∅	–	–	Cashinahua

For examples and explanations of these forms see: Tuvan (60), Evenki (34) and (65), Abaza (69) and Kabardian (71) above; Nunggubuyu (35) in Ch. 5; Tagalog (36)–(38) and Latin (201) above; for Cashinahua §10 in Ch. 5.

Generally, the means of expression are rather diverse. Alongside the absence of discontinuous reciprocal constructions in a number of languages, I will note that in some languages there are no morphologically entirely different markers for the sociative and the comitative meanings: they coincide either completely or one is part of another.

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Authorized translation from Russian by E. Geniušienė

Lexical reciprocals as a means of expressing reciprocal situations

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1. Introductory notes

An insight into the existence of lexical reciprocals can already be gained from the reading of O. Jespersen's "The Philosophy of Grammar" (1924). As he pointed out in the course of discussing the means of expressing reciprocity in various languages, there are verbs that by virtue of their meaning make it possible to reverse the relation between subject and object. Thus, if A meets B, B meets A as well, and if Mary resembles Ann, Ann resembles Mary, too. Meanwhile, A may hate B without B hating A (Jespersen 1924: 161). Hence, reciprocity is necessarily implied in the meaning of verbs like *meet* or *resemble* (but not in that of the verb *hate*), that is, they in themselves indicate reciprocal situations in which, according to Lichtenberk (1985: 21), "there are two participants, A and B, and the relation in which A stands to B is the same as that in which B stands to A".

By analogy with logic where such relations are termed "symmetric", predicates which share the property of actant reversibility and, as a consequence, their cross-coreference (like verbs mentioned by O. Jespersen) are also often called "symmetric predicates".¹ This term does not seem to be the best one possible. On the one hand, the idea of symmetry which includes inverse relations between two (or more) participants is involved in the meaning of all reciprocals irrespective of whether this sense is an inherent part of their meaning or is superimposed by adding a morpheme or some other marker of the reciprocal meaning. On the other hand, although reversibility of actants (being an indispensable corollary of logical symmetry) is the basic distinctive feature of reciprocity, it is widely believed that, in natural languages, "some sort of the presumption of asymmetry is valid for all relations" (Padučeva 1974: 44) and reciprocal actions "are not necessarily symmetrical

1. See, among others, Lakoff & Peters (1961); Borillo (1971); Yomdin (1981); Haiman (1983); Turek (1988).

in human languages” (Kemmer 1988: 138). What conditions favour or, on the contrary, impede the actual symmetry of a predicate is a problem in itself (it is discussed in Section 5 below). At this stage, it will suffice to say that the more uniform, in every respect, relevant actants of a reciprocal predicate are, the more evident are symmetric properties of the predicate.² Preference is therefore given to the label “lexical reciprocals” which reflects nothing but a type of formal difference between this kind of reciprocal predicates and other means of expressing reciprocity.

A greater or lesser number of lexical reciprocals can be found, most likely, in any language.³ Besides being by themselves a widely used means of referring to reciprocal situations, they are also employed as base forms for derived reciprocals. This process is often accompanied by various concomitant effects (see 4.2 below). Further, lexical reciprocals make up the kernel part of so called “natural reciprocals”. This term was introduced by S. Kemmer as a cover term to subsume predicates indicating “events that either necessarily (e.g. ‘to meet’) or very frequently (e.g. ‘to fight’, ‘to kiss’) are semantically reciprocal (Kemmer 1988: 137). In comparison with the class of “natural reciprocals” as a whole, lexical reciprocals may be expected to have a more clear-cut semantic scope. Nevertheless, as will be seen from what follows, lexical reciprocals are not entirely homogeneous even in a single language.

The present study is concerned mainly with Russian lexical reciprocals which are occasionally contrasted with comparable constructions of some other languages. The choice is motivated, firstly, by the fact that Russian is, in this respect, a relatively less-known language (for instance, in comparison with English), although the syntax and semantics of Russian lexical reciprocals have been repeatedly dealt with.⁴

Besides, in Russian the link between lexical and grammatical reciprocals is particularly close. Therefore, a general outline of lexical reciprocals, if only in broad terms, is a necessary prerequisite for a description of Russian reciprocal constructions. Finally, it should be noted that the lists of lexical reciprocals presented below include frequently used words only and are not meant to be exhaustive.

In what follows the distinction between proper reciprocals and sociatives is not drawn.

2. Main subtypes of lexical reciprocals

2.1 Morphological subtypes

Words which are treated below as lexical reciprocals can be subdivided into three morphological subtypes.

2. It is not by mere chance that in works on reciprocals the arguments tend to be represented in the most generalized form, right up to the purely algebraic notation, such as *Mary and Ann*, *A and B*.

3. A. Wierzbicka (1994) regards the reciprocal predicates “similar” and “same” as lexical universals which are supposed to occur in any human language.

4. Cf. Yomdin (1981); Gajsina (1981); Nedjalkov (1991).

2.1.1 Underived reciprocals

Firstly, lexical reciprocals, in the narrow sense of the word, are words which do not contain any reciprocal marker and lack base forms with a non-reciprocal meaning; e.g. *vražđovat* ‘to be enemies with each other’, *poxožij* ‘similar’, *obsuždat* ‘to discuss/talk over’, etc.

2.1.2 Deponent and semi-deponent reciprocals

Another subtype includes words that, despite the presence of a reciprocal marker, either lack a corresponding non-reciprocal counterpart or diverge in particular ways from its meaning. These words may be called *deponents* and *semi-deponents* respectively.⁵ As has been repeatedly pointed out (see, among others, Kemmer 1988: 144; Nedjalkov 1991: 311), lexical reciprocals often appear as deponents and, conversely, deponents with reciprocal markers are, as a rule, semantically reciprocal. A detailed analysis of Russian reciprocals is presented in Knjazev (Ch. 15). The following will suffice for our purposes here.

In Russian there are four affixal markers expressing the reciprocal sense proper and related senses of sociative and comitative. They are:

1. The polysemous reflexive postfix *-sja* (*-s'*) which is able, specifically, to render the reciprocal meaning; e.g.:

- (1) *tolkat* ‘to push’ → *tolkat'-sja* ‘to push each other’
rugat ‘to abuse’ → *rugat'-sja* ‘to abuse each other.’

2. Two antonymous prefixes *s-* (*so-*) and *raz-* (*razo-*, *ras-*), rendering, among others, the meanings of joining and separating of two or more participants; e.g.:

- (2) *gnat* ‘to drive, turn out’ → a. *so-gnat* ‘to drive *together* from different points’
 → b. *razo-gnat* ‘to drive away, disperse.’

When intransitive, these verbs are additionally marked by the reflexive postfix; e.g.:

- (3) *bežat* ‘to run’ → a. *s-bežat'-sja* ‘to come running *together* from different points’
 → b. *raz-bežat'-sja* ‘to run away in different directions.’

3. The comitative-sociative prefix *so-* which is similar both in form and in meaning to the prefix *s-* from (2a) and (3a); e.g.:

- (4) *vladelec* ‘owner’ → *so-vladelec* ‘joint owner, co-proprietor.’

All these markers occur both with deponent reciprocals, as in (5), and with semi-deponent reciprocals, as in (6):

- (5) *borot'sja* ‘to struggle, fight’
smežnyj ‘adjoining, adjacent’
različat ‘to distinguish’
sopernik ‘rival, adversary.’

5. I follow here S. Kemmer’s (1988:30–1) use of the term “deponent”. The label “semideponent” is coined by analogy with it.

- (6) *torgovat'sja* 'to haggle over the price' ← *torgovat'* 'to trade'
sravnivat' 'to compare' ← *ravnyj* 'equal'
raz"edinjat' 'to divide' ← *edinyj* 'united, common'
sopostavljat' 'to compare/confront' ← *postavit'* 'to put.'

2.1.3 Odd reciprocal derivatives

Finally, it seems reasonable to extend the label "lexical reciprocal" to those reciprocals which are related to their non-reciprocal counterparts in marginal or isolated patterns. In Russian, this applies to a good many adverbial and postpositional reciprocals (for more information see 3.2.1.1 below). Derivatives of this sort generally follow two main patterns:

- reduplication of a noun in various case forms; e.g.: *plečo* 'shoulder' – *plečom* (SG.INST) *k pleču* (SG.DAT) 'shoulder to shoulder';
- imitation of case forms of non-existent or semantically divergent nouns; e.g. *napereboj* 'vying each other in telling'. This adverb, whose closest semantic kin is the verb *perebivat'* 'to interrupt sb's speech', is constructed as if it were a combination of the preposition *na* 'on' and the ACC.SG form of the noun *pereboj* that lacks an appropriate meaning.⁶

2.2 Syntactically free and syntactically bound reciprocals

From the viewpoint of the type of cross-coreference, lexical reciprocals, like grammatical reciprocals, depending on whether the subject of the clause is involved in inverse relations or not, may be of two main diathesis types, i.e. subject-oriented, as in (7) and (8):

- (7) *Miš-a i Griš-a poxož-i.*
M.-SG.NOM and G.-SG.NOM similar-PL
'Misha and Grisha are alike.'
- (8) a. *Miš-a poxož na Griš-u.*
M.-SG.NOM similar.M.SG at G.-SG.ACC
'Misha is like (lit. similar to) Grisha.'
- b. *Griš-a poxož na Miš-u.*
G.-SG.NOM similar.M.SG at M.-SG.ACC
'Grisha is like (lit. similar to) Misha.'

or object-oriented, as in (9) and (10):

- (9) *On poznakomi-l Miš-u i Griš-u.*
he acquaint.PFV-PAST.M.SG M.-SG.ACC and G.-SG.ACC
'He made Misha and Grisha acquainted.'
- (10) a. *On poznakomi-l Miš-u s Griš-ej.*
he acquaint.PFV-PAST.M.SG M.-SG.ACC with G.-SG.INST
lit. 'He acquainted Misha with Grisha.'

6. Linguists are not in agreement on the grammatical status of the adverbials belonging to the latter type; see, among others, Vinokur (1959:413); Polivanova (1990:55).

- b. *On poznakomi-l Griš-u s Miš-ej.*
 he acquaint.PFV-PAST.M.SG G.-SG.ACC with M.-SG.INST
 lit. 'He acquainted Grisha with Misha.'

As regards adverbial and prepositional lexical reciprocals (as well as other non-verbal predicates with reciprocal meaning), they seem to be in themselves neutral in this respect, their diathesis type being determined by the syntactic properties of the main verb; cf. examples (32)–(34) below. Nevertheless, they occur most commonly in subject-oriented reciprocal constructions.

The overwhelming majority of Russian lexical reciprocals may easily appear both in the *simple* reciprocal construction in which cross-coreferent actants are equal in syntactic value (cf. (7) and (9)), and the *discontinuous* construction where one of the actants syntactically dominates over the other (cf. (8) and (10)). The selection of one or the other type of construction depends on discourse.

There are, however, a few, “literally unique” (Gajsina 1981: 125), exceptions. Thus, for instance, the widely used verbs *otličat'* and *različat'* both meaning ‘to distinguish, make a distinction’ but with different prefixes (*ot-* and *raz-* respectively) differ in their syntactic properties. Due to the semantic input of the prefix, the verb *otličat'* is used in the discontinuous reciprocal construction only (cf. (11a)), while *različat'* occurs in the simple construction (cf. (11b)):

- (11) a. *On ne otliča-et zolot-o ot med-i.*
 he not distinguish.IPFV-PRES.3SG gold-SG.ACC from copper-SG.GEN
 ‘He does not distinguish gold from copper.’
 b. *On ne različa-et zolot-o i med'.*
 he not distinguish.IPFV-PRES.3SG gold-SG.ACC and copper.SG.ACC
 ‘He does not distinguish between gold and copper.’

A change of the type of construction makes these sentences ungrammatical, cf.:

- (12) a. **On ne otliča-et zolot-o i med'.*
 he not distinguishes gold-ACC and copper.ACC
 ‘He does not distinguish gold and copper.’
 b. **On ne različa-et zolot-o ot med-i.*⁷
 he not distinguishes gold-ACC from copper-GEN
 ‘He does not distinguish gold from copper.’

2.3 Symmetric and semi-symmetric reciprocals

It is worthwhile noting that the syntactic distinction between simple and discontinuous reciprocal constructions appears to be sensitive to some semantic features of lexical reciprocals. From this point of view, they may be subdivided into two large groups.

One group comprises reciprocals whose symmetric properties are not dependent on the type of reciprocal construction and which can occur in both simple and discontinuous

7. This collocation is discussed again in 4.1.3.

constructions in an equal degree. This holds mostly for reciprocals denoting permanent or stable qualities and relationships as well as other stative situations. Thus, the true value of (7) implies the true value of (8), and vice versa.

The other group comprises predicates which are true reciprocals in the simple construction only, while in the discontinuous construction they do not demonstrate symmetric properties. This can be illustrated by the following set of examples with the deponent reflexive verb *pozdorovat'sja* 'to greet' in which the true value of (13a) implies the true value of both (13b) and (13c) but the reverse is not necessarily true:

- (13) a. *Oni pozdorova-l-i-s'*.
they greet.PFV-PAST-PL-REFL
'They greeted each other.'
- b. *On pozdorova-l-sja s nej.*
he.NOM greet.PFV-PAST.SG.M-REFL with she.INST
'He greeted her.'
- c. *Ona pozdorova-l-a-s' s nim.*
she.NOM greet.PFV-PAST-SG.F-REFL with he.INST
'She greeted him.'

This assumption may be illustrated by (14):

- (14) *Ona izbega-l-a menja. Ja s nej zdorova-l-sja, ona*
she avoid.IPFV-PAST-F.SG me I with she.INST greet.IPFV-PAST.M.SG-REFL she
ele otveča-l-a. (M. Roščin)
barely reply.IPFV-PAST-F.SG
'She tried to avoid me. I greeted her, but she barely replied.'

It should be mentioned that some English "natural reciprocals" such as the verbs *to kiss, to fight, to argue, to embrace* reveal similar properties. Thus, for example, if (15a) is true, both (15b) and (15c) are also true, whereas the truth of neither (15b) nor (15c) in themselves implies the true value of the other two sentences (see also Kholodovich 1978: 15):

- (15) a. *A and B kissed.*
b. *A kissed B.*
c. *B kissed A.*

Ch. Turek (1988: 119) called these English verbs "semi-symmetric" on the grounds that they "refer to actions that a person can start or end before another does". This term is accepted below in a somewhat different sense, namely, with respect to the predicates that meet the conditions exemplified in (13). As will be shown in 3.3.1.2 and 3.3.2.3 below, a lot of Russian deponent and semi-deponent reflexive verbs are semi-symmetric in this sense of the word.

3. Notional classes of lexical reciprocals

On the whole, the meanings of lexical reciprocals fall into three main classes:

- general relations (e.g. identity or difference);
- spatial relations (e.g. proximity or remoteness);
- relations between people (e.g. rivalry or collaboration).

Although these notional spheres seem to have little in common, it is hardly possible to draw a precise boundary between these classes.

First of all, these classes may be considered, at least to a certain extent, as semantically enclosed into one another in the order of their enumeration above. As A. Wierzbicka argued, a semantic feature that reciprocals have in common is “their concern with identity. They all say, in one way or another, that the same thing can (or cannot) be said about each member of a group” (Wierzbicka 1980:258). In its turn, the idea of spatial proximity or physical contact between two (or more) participants is involved in the meaning of a large number of lexical reciprocals denoting interpersonal relations.

Besides, due to the process of metaphoric extension or exfoliation, it often turns out that different meanings of a polysemous lexical reciprocal may be attached to different classes. Thus, for example, the adjective *blizkij*, apart from its original concrete spatial meaning of proximity, e.g. *blizkij poselok* ‘near-by (neighbouring) settlement’, has developed other reciprocal meanings associated with the other two classes of lexical reciprocals. This is illustrated by the following examples:

- (16) a. *Ix vzgljad-y blizk-i.*
 their view-PL.NOM near-PL
 ‘Their views are similar.’
- b. *On mne očēn’ blizok.*
 he I.DAT very near.SG.M
 ‘I feel very close to him.’

In (16a) the adjective denotes the general relation of similarity, while in (16b) the interpersonal relation of close friendship is expressed. Lexical polysemy of this sort requires special investigation. In what follows I will restrict myself to mentioning manifestations of this polysemy (provided that it is confined to denoting reciprocal situations) without going into further discussion.

3.1 General relations

This class of lexical reciprocals comprises two semantic subclasses of predicates: one denoting identity, similarity and difference; the other denoting congruence and non-congruence.

3.1.1 Identity, similarity and difference

The relations of identity, similarity and difference seem to be the most evident and widely mentioned instance of symmetric relations. They all can be considered as being linked, in one way or another, with the idea of interchangeability. In Shreider (1971:78) the notion of identity is explicated as a complete interchangeability of two objects in a given situation

while similarity (in a certain respect) displays itself through their partial interchangeability, different objects being, in their turn, non-interchangeable.

3.1.1.1 Non-verbal reciprocals. These reciprocals are of three main types:

- (17) a. Adjectives denoting identity or equality; e.g.: *ravnyj* 'equal', *odinakovyj* 'the same', *identičnyj* 'identical', *toždestvennyj* 'identical', *ekvivalentnyj* 'equivalent'.
- b. A number of quasi-synonymous adjectives meaning 'similar', 'analogous'; e.g.: *analogičnyj*, *poxožij*, *podobnyj*, *sxodnyj*, *blizkij*; cf. (7), (8), (16).
- c. Nouns denoting some specific kinds of identity; e.g.: *rovesnik*, *sverstnik* 'person of the same age as another', *zemljak* 'person born (or living) in the same place (town, country, etc.) as another', *sosed* 'neighbour, person living near another'.

As for the sense of dissimilarity, it is commonly signalled by collocations of the negative prefix *ne-* with the above-mentioned adjectives of similarity and identity; e.g. *neravnyj* 'unequal', *neodinakovyj* 'dissimilar', *nepoxožij* 'unlike', etc. Underived adjectives rendering these meanings, e.g. *raznyj* and *različnyj* 'different, distinct', are few in number and are not typically employed as predicates.

Another possible usage of the greater part of the adjectives listed in this section is that they occur as the first constituent of a number of compounds in which their semantic range is limited to the specific area defined by the second component; e.g.: *ravnocennyj* 'of equal value' (*ravnyj* 'equal' + *cena* 'price'); *raznovremennyj* 'taking place at different times' (*raznyj* 'different' + *vremja* 'time').

3.1.1.2 Subject-oriented verbal reciprocals. In Russian there is only a small number of underived subject-oriented verbal reciprocals. They seem to be confined to the following three cases:

- (18) a. Loan-translations; e.g.: *sovpadat'* 'to coincide with' which can be traced back to the Medieval Latin *coincidere* with the same set of constituents: *co/so* 'together' + *in/v* 'upon' + *cadere/padat'* 'to fall'.
 - b. Borrowings; e.g.: *kontrastirovat'* 'to contrast with'.
 - c. Verbs used figuratively; e.g.: *napominat'* 'to resemble' (lit. 'to remind, recall'), cf. (19)); *sxodit'sja* 'to agree with' (lit. 'to come together from different points'); *rasxodit'sja* 'to disagree with, differ from' (lit. 'go away in various directions')⁸ cf. (20).
- (19) *Amsterdam napomina-et Peterburg.*
A.SG.NOM resemble.IPFV-PRES.3SG P.ACC
'Amsterdam resembles Petersburg.'
- (20) *Naš-i mneni-ja rasxod-jat-sja.*
OUR-PL.NOM opinion-PL.NOM diverge.IPFV-PRES.3PL-REFL
'Our opinions differ.'

Relations signalled by both verbal and non-verbal reciprocals in subject-oriented constructions are mainly restricted to those designating static situations; cf. (7) and (8). If,

8. The verb *podxodit'* 'to fit, suit' with the same root refers to a symmetric relation of congruence; cf. (28).

alternately, it is a change of state that is expressed, the situation is rarely (if ever) logically symmetrical. This holds both for a deliberate (intentional) acquisition of a property, as in (21), and a spontaneous (unintentional) one, as in (22). Thus, the sentences in (21) and (22) are not semantically equivalent and the corresponding noun phrases cannot replace each other without a change of meaning.

- (21) a. *Griš-a podraža-et Miš-e.*
G.-SG.NOM imitate.IPFV-PRES.3SG M.-SG.DAT
'Grisha imitates Misha.'
- b. *Miš-a podraža-et Griš-e.*
M.-SG.NOM imitate.IPFV-PRES.3SG G.-SG.DAT
'Misha imitates Grisha.'
- (22) a. *Griš-a sta-l poxož na Miš-u.*
G.-NOM become-PAST.SG.M similar.M.SG at M.-ACC
'Grisha became similar to Misha.'
- b. *Miš-a sta-l poxož na Griš-u.*
M.-NOM become-PAST.SG.M similar.M.SG at G.-ACC
'Misha became similar to Grisha.'

3.1.1.3 Object-oriented verbal reciprocals. This group of reciprocals comprises a number of causative transitive verbs denoting mental acts of making a comparison between two (or more) things and/or treating them as identical, similar or different; e.g.:

- (23) *differencirovat'* 'to differentiate'
protivopostavljat' 'to contrast with/oppose to'
otoždestvljat' 'to identify'
uravnivat' 'to make equal/equalize'
otličat', različat' 'to distinguish, cf. (7), (8)'
sračnivat' 'to compare'
sopostavljat' 'to compare, confront'
upodobljat' 'to liken to.'

All these reciprocals easily combine with the reflexive postfix *-sja*. This process results in intransitivization of a verb coupled with its transformation into a passive or an anticausative one (see Section 4.2.1). In the latter case, an object-oriented reciprocal construction becomes subject-oriented; cf.:

- (24) *Zolot-o otliča-et-sja ot med-i.*
gold-NOM distinguish.IPFV-PRES.3SG-REFL from copper-GEN
'Gold differs (lit. distinguishes itself) from copper.'

3.1.2 Congruence and non-congruence

Predicates signalling congruence and non-congruence are logically based on an implicit comparison of the present set of qualities or constituent parts of an object with a set which would be expected or desired to be right for the purpose or occasion. For the most part, this group consists of intransitive verbs which are used as subject-oriented reciprocals and refer to static situations; e.g.:

- (25) *sootvetstvovat'* 'to correspond/conform to/be in accordance'
garmonirovat' 'to agree with/be in harmony'
disgarmonirovat' 'to be out of harmony'
podxodit' 'to fit, suit' (lit. 'to come up, approach')
protivorečit' 'to contradict.'

The form of the second complement in discontinuous reciprocal constructions is specific for each of these verbs; cf.:

- (26) *Ego povedeni-e ne sootvetstvu-et ego princip-am.*
 his conduct-SG.NOM not accord.IPFV-PRES.3SG his principle-PL.INST
 'His conduct does not accord with his principles.'
- (27) *Ego slov-a garmoniru-jut s postupk-ami.*
 his word-PL.NOM accord.IPFV-PRES.3PL with deed-PL.INST
 'His words are in accord with his deeds.'
- (28) *Melodi-ja prekrasno podxod-it k slov-am.*
 tune-SG.NOM exactly fit.IPFV-PRES.3SG to word-PL.DAT
 'The tune fits the words perfectly.'

A change of state as well as object-oriented reciprocity is expressed mainly by periphrastic collocations such as *prijti v protivorečie* 'to come into conflict' or *privešti v sootvetstvie* 'to bring into conformity with' consisting of semantically unspecific verbs and nouns derived from the verbs mentioned under (25).

3.2 Spatial relations

Lexical reciprocals referring to spatial relations are arranged below in three groups:

- those denoting proximity and remoteness;
- those in whose meaning the idea of geometrical symmetry is, in one way or another, discernible;
- those denoting relations between the whole and its constituent parts.

3.2.1 Proximity and distance

3.2.1.1 *Non-verbal reciprocals.* These reciprocals are of three structural types:

1. A number of adverbials derived from the adjectives *blizkij* 'near' and *dalekij* 'distant' which are considered, in particular, to refer to the distance between two points or places (Apresjan 1986:18–20; Jakovleva 1994:16–66) along with a few adverbials containing other roots; e.g.:

- (29) *blizko, vblizi, poblizosti* 'nearby'
daleko, vdaleke, vdali 'far away, in a distance'
nedaleko, nevdaleke, nepodaleku 'not far off'
rjadom 'beside' ← *rjad* 'row'
plotnuju 'fast by, close to' ← *plotnyj* 'close, close-packed, dense.'

2. Adverbials consisting of reduplicated case forms of some nouns denoting, mostly, body parts; e.g.:

- (30) *bok o bok* 'side by side' (of people)
bort o bort 'broadside by broadside' (of ships)
plečom k pleču 'shoulder to shoulder'
licom k licu 'face to face, with faces towards each other'
nosom k nosu 'face to face' lit. 'nose to nose.'

3. Adverbials, typical of informal style, taking the case forms of nouns, in particular, forms of the accusative case, as in (31):

- (31) *vpriřtyk* 'edge to edge, in immediate contact' ← *tykat* 'to thrust'
vpriřtirku 'very tightly' ← *priřtirat* 'to grind in'
vpovalku 'side by side/in a disorderly way' (of people) ← *povalit* 'to throw down'
vrassyřnuju 'in all directions, helter-skelter' ← *rassyřpat* 'to spill.'

As can be seen from the following illustrations, these adverbials denote either a state, as in (32), or an action, i.e. a change of state, as in (33), (34), and they occur both in subject-oriented reciprocal constructions (see (32), (34)) and in object-oriented ones (see (33)):

- (32) *Pořt-a nedaleko ot magazin-a.*
 post-office-SG.NOM not.far from shop-SG.GEN
 'The post-office is not far from the shop.'
- (33) *On postavi-l bol's-uju i malen'k-uju krovat-i vplotnuju.*
 he.NOM put.PFV-PAST.SG.M big-SG.F.ACC and small-SG.F.ACC bed-PL.ACC side.by.side'
 'He put the big and the small beds side by side.'
- (34) *Soldat-y brosi-l-i-s' vrassyřnuju.*
 soldier-PL.NOM throw.PFV-PAST-PL-REFL in.all.directions
 'The soldiers scattered (lit. 'threw themselves') in all directions.'

Nevertheless, it often turns out that denotation of an action (change of state) prevents reciprocal reading of these adverbials. Thus, sentences (35a) and (35b), in contrast to the semantically equivalent (36a) and (36b) cannot normally refer to the same situation:

- (35) a. *On se-l rjadom s Griř-ej.*
 he.NOM sit down.PFV-PAST.SG.M next with G.-INST
 'He sat down next to Grisha.'
- b. *Griř-a se-l rjadom s nim.*
 G.-NOM sit down.PFV-PAST.SG.M next with he.INST
 'Grisha sat down next to him.'
- (36) a. *On side-l rjadom s Griř-ej.*
 he.NOM sit.IPFV-PAST.SG.M next with G.-INST
 'He was sitting next to Grisha.'
- b. *Griř-a side-l rjadom s nim.*
 G.-NOM sit.IPFV-PAST.SG.M next with he.INST
 'Grisha was sitting next to him.'

3.2.1.2 *Subject-oriented verbal reciprocals.* Among the few intransitive verbs that can be used in subject-oriented reciprocal constructions are the following:

- (37) *graničit'* 'to border on'
soprikasat'sja 'to be contiguous/border on'
primykat', prilegat' 'to adjoin'
podxodit' 'to adjoin' (lit. 'to come up/approach').

Sentential examples:

- (38) *Armeni-ja granič-it s Turci-ej.*
 A.-NOM border.IPFV-PRES.3SG ON T.-INST
 'Armenia borders on Turkey.'
- (39) *Sad prilega-et (primyka-et, podxod-it) k dorog-e.*
 garden.NOM adjoin.IPFV-PRES.3SG to road-DAT
 'The garden adjoins the road.'

It is more typical of these relations to be expressed by the reflexive derivatives of transitive verbs of joining and separating described in the subsequent section.

3.2.1.3 Object-oriented verbal reciprocals. This group consists of transitive verbs of joining and separation whose common feature is that they are necessarily or, at least, mainly marked by one of the three prefixes mentioned in Section 2.1, i.e. *so-*, *s-* or *raz-*. These prefixes appear either as constituents of deponent and semi-deponent verbs (see (40a)) or, with the exception of *so-*, as markers of the perfective aspect with purely aspectual value, the latter being neutralized in the case of derivation of so-called "secondary" imperfectives from prefixed perfective verbs; cf. (40b):

- (40) a. *so sredotočivat', koncentririvat'* 'to concentrate'
sočetat', sovměščat' 'to combine'
soedinjat' 'to link, join, connect'
sobirat' 'to gather, collect'
sbližat' 'to bring closer to each other'
skrepljat' 'to fasten together'
raz"edinjat' 'to separate'
- b. *mešat'* IPFV → *smešat'* PFV → *smešivat'* IPFV 'to mix'
delit' IPFV → *razdelit'* PFV → *razdeljat'* IPFV 'to divide'
vjazat' IPFV → *svjazat'* PFV → *svjazyvav'* IPFV 'to bind, tie together.'

Examples:

- (41) *Dorog-a soedini-l-a gorod so stolic-ej.*
 road-NOM.F link.PFV-PAST-SG.F town.SG.ACC with capital-SG.INST
 'The railroad linked the town with the capital.'
- (42) *On meša-et (smešiva-et) molok-o s vod-oj.*
 he.NOM mix.IPFV-PRES.3SG milk-SG.ACC with water-SG.INST
 'He mixes milk and water.'

Apart from expressing spatial relations, verbs of joining can indicate mental connection of two entities as well, e.g.:

- (43) *Im-ja Kolumb-a svjazyva-jut s otkryti-em Amerik-i.*
 name-SG.ACC C.-SG.GEN link.IPFV-PRES.3PL with discovery-SG.INST A.-SG.GEN
 ‘The name of Columbus is linked with the discovery of America.’

Transitive verbs of joining and separation freely combine with the intransitivizing reflexive postfix *-sja*, e.g. *soedinjat* ‘to connect’ → *soedinjat’-sja* ‘to be connected’, the distinction being comparable to that between transitive and reflexive verbs of similarity and difference (see 3.1.1.3 and 4.2.1).

3.2.2 Geometrical symmetry

This kind of symmetry, which can be defined as a regular, balanced arrangement on the opposite sides of a dividing line, or plane, or around a center or axis, conforms to the every-day use of the term “symmetry”. The prototypical pattern of geometrical symmetry may be seen in relations between an object and its image reflected in a mirror. There are three main semantic types of lexical reciprocals whose logical symmetry is based on geometrical symmetry: (a) intersecting and being parallel; (b) being or occurring between; (c) alternation.

3.2.2.1 Intersecting and being parallel. This subgroup includes both adverbial, as in (44a), adjectival (as in (44b)) and verbal reciprocals (as in (44c)) denoting, prototypically, spatial relations either of two lines (e.g. ‘parallel’) or of two entities situated face to face or back to back on either side of a dividing line (e.g. ‘opposite’):

- (44) a. *naprotiv* ‘opposite’
krest-nakrest ‘in the form of a cross, cross-wise’
napererez ‘across, by way of intercepting sb/sth’ ← *pererezat* ‘to cut’
- b. *protivopoložnyj* ‘opposite’
parallel’nyj ‘parallel’
perpendikuljarnyj ‘perpendicular’
- c. *vstretit’* ‘to meet/come face to face from different directions’
peresekat’ ‘to go across, intersect with each other (of lines)’
skrestit’ (ruki) ‘to cross (one’s arms), put/place across or over’ ← *krest* ‘a cross.’

Sentential examples:

- (45) *Ego dom naprotiv mo-ego.*
 his house.SG.NOM opposite my-SG.GEN
 ‘His house is opposite mine.’
- (46) *Prjama-ja A parallel’n-a prjam-oj B.*
 line-SG.F.NOM A parallel-SG.F line-SG.F.DAT B
 ‘Line A is parallel to line B.’

Some of these words may express ideas of similarity or difference as well; cf.

- (47) *Ix vzgljad-y protivopoložn-y.*
 their view-PL.NOM opposite-PL.NOM
 ‘Their views are opposite (entirely different).’

- (48) *Meždu et-imi sobyti-jami možno proves-ti paralel'.*
 between this-PL.INST event-PL.INST one.may draw.PFV-INF parallel.SG.ACC
 'One may draw a parallel between these events.'

3.2.2.2 Being or occurring between. It seems reasonable to single out the widely used preposition *meždu* 'between' as a distinct type of lexical reciprocals. In its primary use, this preposition indicates a special kind of mutual spatial arrangement of three entities, one of which may be seen as the center of symmetry with regard to the other two. Consequently, sentence (49a) may be re-worded as (49b):

- (49) a. *Dom sto-it meždu rek-oj i les-om.*
 house.SG.NOM stand.IPFV-PRES.3SG between river-SG.INST and forest-SG.INST
 'The house stands between a river and a forest.'
 b. *Dom sto-it meždu les-om i rek-oj.*
 house.SG.NOM stand.IPFV-PRES.3SG between forest-SG.INST and river-SG.INST
 'The house stands between a forest and a river.'

Secondly, the preposition *meždu* (like the corresponding English preposition *between*) is employed to link reciprocal arguments of deverbal nouns derived from certain lexical reciprocals; cf. (50a) and its synonymous transform (50b):

- (50) a. *Meždu nimi nača-l-a-s' vražd-a.*
 between they.INST begin.PFV-PAST-F-REFL enmity-F.SG.NOM
 lit. 'Enmity began between them.'
 b. *Oni nača-l-i vraždova-t'.*
 they.NOM begin.PFV-PAST-PL be.enemies.IPFV-INF
 lit. 'They began to be enemies.'

Moreover, this preposition in combination with the reflexive pronoun, such as *meždu soboj* lit. 'between (among) themselves' serves as a reciprocal marker (see Knjazev, Ch. 15, §5). Reciprocal markers with a similar structure occur in a number of other languages, too; cf. Latin and Lithuanian respectively:

- (51) *Amant inter se pueri.*
 'The boys love each other.'
 (52) *Jie tyliai šnekė-jo-si tarp sav-ęs.*
 they.NOM softly talk-PAST-REFL between self-GEN
 'They were speaking to each other in low voices.'

3.2.2.3 Alternation. A particular subtype of geometrical symmetry resembling an ornament or tracery may be seen in words meaning alternation or successive reproduction of the same situation; cf.:

- (53) *čeredovat'* 'to alternate, cause to take place one after another in sequence'
poperemanno 'alternately, by turns' ← *peremennyj* 'changeable, variable'
 (54) *Na zavrak on čeredu-et jajc-a i kaš-u.*
 on breakfast.SG.ACC he alternate.IPFV-PRES.3.SG egg-PL.ACC and porridge-SG.ACC
 'He alternates eggs with porridge for breakfast.'

The same idea seems to underlie the meaning of the English verb *exchange* in sentences such as the following:

(55) *He exchanged seats with me*

referring to situations in which there are three participants, an agent, a patient and a recipient, the agent and recipient being coreferential. Note that the verb *exchange* can indicate asymmetrical situations, too; cf.:

(56) *He exchanged a pen for a knife.*

In Russian, these two meanings are expressed in distinct ways. The asymmetric meaning of the type 'to give and receive in return' is rendered by the verb *obmenjat'* whereas its reflexive counterpart *obmenjat'sja* conveys the symmetrical meaning 'to interchange' (see Knjazev: Ch. 15, §3.3).

3.2.3 *Parts and whole*

In this case, it is the relation between the constituent parts of a whole that is symmetrical. It is expressed by a number of verbs:

- (57) *sostojat'* 'to consist of'
vključat' 'to include, comprise'
soderžat' 'to contain'
sostavljat' 'to form together'
vxodit' fig. 'to be a constituent part of' (lit. 'enter').

Syntactically, these verbs follow different patterns. Some of them occur in object-oriented constructions, cf. (58), (59), the others are subject-oriented, cf. (60):

(58) *Beton sosto-it iz cement-a, pesk-a i gravi-ja.*
 concrete.SG.NOM consist.IPFV-PRES.3SG of cement-SG.GEN sand-SG.GEN and gravel-SG.GEN
 'Concrete consists of cement, sand and gravel.'

(59) *Beton vključa-et cement, pesok i gravij.*
 concrete.SG.NOM include.IPFV-PRES.3SG cement.SG.ACC sand.SG.ACC and gravel.SG.ACC
 lit. 'Concrete includes cement, sand and gravel.'

(60) *V sostav beton-a vxod-jat cement, pesok i gravij.*
 in composition.SG.ACC concrete-SG.GEN enter.IPFV-PRES.3PL cement.SG.NOM sand.SG.NOM and gravel.SG.NOM
 'Cement, sand and gravel are components of concrete.'

3.3 Relations between people

This group of lexical reciprocals is the most diverse. It covers words denoting (a) kinship and companionship; (b) rivalry and collaboration; (c) verbal intercourse. These classes are not mutually exclusive nor are the borders between them clear and distinct.

3.3.1 Kinship and companionship

3.3.1.1 *Non-verbal reciprocals.* This group comprises symmetric terms of kinship and companionship such as brothers, friends, relatives, etc. (see Wierzbicka 1980:265) such as the following:

- (61) *rodstvennik* ‘relative’ *drug* ‘friend’
 brat ‘brother’ *tovarišč* ‘comrade’
 sestra ‘sister’ *prijatelj* ‘pal.’

Their symmetry may depend on certain features of the participants such as age, gender, etc. Thus, the relation *byt’ bratom* ‘to be brother to’ is not symmetric unless both of its actants are male persons. Consequently, the names of participants in (62) meeting this condition are interchangeable:

- (62) a. *Miš-a* *brat* *Griš-i*.
 M.-SG.NOM brother.SG.NOM G.-SG.GEN
 ‘Misha is Grisha’s brother.’
 b. *Griš-a* *brat* *Miš-i*.
 G.-SG.NOM brother.SG.NOM M.-SG.GEN
 ‘Grisha is Misha’s brother.’
 c. *Griš-a* *i* *Miš-a* *brat’-ja*.
 G.-SG.NOM and M.-SG.NOM brother-PL.NOM
 ‘Grisha and Misha are brothers.’

As for the relation described in (63a), one of the participants of which (i.e. Masha) is a female person, it is not symmetric and its paraphrase (63b), parallel to (62b) or (62c), makes no sense:

- (63) a. *Miš-a* *brat* *Maš-i*.
 M.-SG.NOM brother.SG.NOM M.-SG.GEN
 ‘Misha is Masha’s brother.’
 b. **Maš-a* *brat* *Miš-i*.
 M.-SG.NOM brother.SG.NOM M.-SG.GEN
 *‘Masha is Misha’s brother.’

It is obvious and seems to require no further explanation that the scope of lexical reciprocals of this sort is determined by language and culture. According to Boadi (1975), in Twi, the mother and her sisters (and, respectively, the father and his brothers) are indicated by the same word. Hence, these relations in Twi turn out to be symmetrical.

3.3.1.2 Subject-oriented verbal reciprocals. This variety of lexical reciprocals covers intransitive verbs which denote establishing, breaking off or continuation of kinship and companionship relations.

In most cases, these verbs are (a) deponent or (b) semi-deponent reflexives; unmarked intransitive verbs of this kind are few in number (c):

- (64) a. *rasstat'sja* 'to part with'
obščat'sja 'to have contacts'
 b. *videt'sja* 'to meet' (lit. 'to see each other')
znat'sja 'to associate/have to do with' (lit. 'to know each other')
priřeret'sja 'to get used to' (lit. 'to get ground')
sojtis' 'to become friends/intimate with' (cf. (20))
razojtis' 'to part, divorce, break with'
 c. *vstupit' v brak* 'to marry' (lit. 'to enter into marriage')
družit' 'to be friends with.'

Sentential examples:

- (65) *Oni vid-jat-sja raz v mesjac.*
 they.NOM see.IPFV-PRES.3PL-REFL once in month.SG.ACC
 'They meet once a month.'
 (66) *On blisko soše-l-sja s doktor-om.*
 he.NOM close come.together.PFV-PAST.M-REFL with doctor-SG.INST
 'He became close friends with the doctor.'

This group also comprises deponent reflexive verbs indicating actions performed by people when they meet each other, part from each other or spend time together:

- (67) *zdrovat'sja* 'to greet each other'
proščat'sja 'to say good-bye to each other'
čokat'sja 'to clink glasses.'

The verbs under (67) are semi-symmetric; see comments on examples (13) and (14) in Section 2.3 above.

As regards deponent and semi-deponent verbs of this group on the whole, it should be noted that a somewhat parallel semantic shift tends to occur across languages. Thus, S. Kemmer gives a number of examples showing that a reciprocal literally meaning 'they saw each other' often "means not only that they saw each other, but that they had some kind of mutual social interaction involving such socio-personal factors as recognition, acknowledgement, and so forth" (Kemmer 1988: 148–9).

On the other hand, some of these reciprocals are characteristic of some languages only. The Russian symmetric predicate *vstupit' v brak* mentioned in (64c) is typical of the formal style. There is a far more common way of expressing this meaning, namely, by means of asymmetric verbs whose meaning reflects the gender of the subject: *vyjti замуž* 'to marry' (← *muž* 'husband') if the subject is female, and *ženit'sja* 'to marry' (← *žena* 'wife') if the subject is male (the latter is a reflexive anticausative of *ženit'* 'to marry a male person to a female person', see 3.3.1.3 below). As a result, the Russian translations of the English

sentences in (68), which serve in (Jespersen 1924:161) as examples of lexical reciprocals, do not share symmetric properties:

- (68) a. *Jack marries Jill.*
Džek ženi-t-sja na Džill.
 Jack.NOM marry.IPFV-PRES.3SG-REFL on Jill
- b. *Jill marries Jack.*
Džill vyxod-it zamuž za Džek-a.
 Jill marry.IPFV-PRES.3SG to Jack-ACC.

The verb *ženiťsja* (but not the collocation *vyjti zamuž*), however, should be still regarded as semi-symmetrical because it can be used in simple reciprocal constructions and, in that case, its arguments are interchangeable:

- (69) *Džek i Džill (=Džill i Džek) xot-jat poženi-t'-sja.*
 Jack and Jill (=Jill and Jack) want.IPFV-PRES.3SG marry.PFV-INF-REFL
 'Jack and Jill (=Jill and Jack) want to get married.'

3.3.1.3 *Object-oriented verbal reciprocals.* These are the following causative transitive verbs:

- (70) *venčat'* 'to marry sb to sb (in church)'
porodnit' 'to make related (relatives)'
razvodit' 'to grant a divorce'
raspisyvat' coll. 'to register (sb's) marriage'
znakomit' 'to acquaint/ introduce sb to sb'
mirit' 'to reconcile sb'
ssorit' 'to embroil, cause to quarrel'
razlučat' 'to separate sb (friends or near ones).'

Examples:

- (71) *Svjaščennik obvenča-l Meri i Džon-a. (=Džon-a i Meri)*
 clergyman.SG.NOM marry.PFV-PAST.M M.ACC and J.-ACC J.-ACC and M.ACC
 'The clergyman married Mary to John (=John to Mary).'
- (72) *Ee razluči-l-i s mater-ju.*
 she.ACC separate.PFV-PAST-PL with mother-SG.INST
 'She was separated from her mother.'

3.3.2 *Rivalry and collaboration*

The words falling into this semantic class are rather numerous and diverse. Among them, however, there seem to be no the object-oriented reciprocals (with the exception of those listed in (70)).

3.3.2.1 *Non-verbal reciprocals.* Non-verbal reciprocals of this class comprise, firstly, agentive nouns differing in stylistic connotations and various evaluative components of meaning, as under (73), and, secondly, adverbial reciprocals that are used mainly to qualify actions as competitive or uncoordinated, as in (74):

- (73) *vrag* 'enemy'
nedrug 'foe'
protivnik, opponent 'opponent'
sopernik 'rival, adversary'
soobščnik 'accomplice'
soratnik 'comrade-in-arms'
kollega 'colleague, person working with another or others'
popučik 'fellow-traveller'
naparnik 'mate, a man working as a pair with somebody else.'
- (74) *vmeste* 'together'
porozn', vroz' 'separately'
vraznobož 'discordantly' ← *raznobož* 'discord'
vrazbrod 'haphazardly, without coordination, raggedly' ← *razbrestis'* 'to disperse (in different directions)'
naparegonki 'trying to overtake each other' ← *peregonjat'* 'to overtake'
naperebož 'interrupting each other, vying with each other in telling' ← *perebivat'* 'to interrupt.'

3.3.2.2 Subject-oriented verbal reciprocals. These reciprocals denote various kinds of rivalry. Almost all of them, with a single exception, (see (75c)), are either (a) deponent or (b) semi-deponent reflexives:

- (75) a. *drat'sja* 'to fight'
sražat'sja 'to fight, have a battle'
borot'sja 'to struggle'
sorevnovat'sja 'to compete'
- b. *bit'sja* 'to fight' ← *bit'* 'to strike, beat'
rubit'sja 'to fight (with cold steel)' ← *rubit'* 'to chop'
streljat'sja 'to fight a duel' ← *streljat'* 'to shoot'
sudit'sja 'to go to law, litigate' ← *sudit'* 'to try (in court)'
torgovat'sja coll. 'to haggle over the price' ← *torgovat'* 'to trade'
tjagat'sja coll. 'to compete, take on' ← *tjagat'* 'to pull'
rezat'sja coll. 'to play cards' ← *rezat'* 'to cut'
- c. *voevat'* 'to wage war, be at war.'

3.3.3 Verbal intercourse

This group of reciprocal consists of speech words whose meaning implies two equally important participants. These are verbs denoting verbal interchange of views, achievement of an agreement as a result of discussion, collective verbal acts such as a dispute or quarrel. They are subdivided below into (a) deponent reflexives and (b) non-reflexives:

- (76) a. *dogovorit'sja* 'to come to an agreement after discussion'
soveščat'sja 'to confer'
ob"jasnjat'sja 'to converse' ← *ob"jasnjat'* 'to explain'
uslovit'sja 'to agree upon'
prepirat'sja coll. 'to argue'
prerekat'sja coll. 'to argue'

- b. *besedovat'* 'to have a talk'
razgovarivat' 'to converse'
obsuždat' 'to discuss, talk over'
sporit' 'to argue'
debatirovat' 'to debate'
diskutirovat' 'to discuss.'

Examples:

- (77) *My dogovori-l-i-s' vstreči-t'-sja v desjat'.*
 we.NOM arrange.PFV-PAST-PL-REFL meet.PFV-INF-REFL at ten
 'We arranged to meet at ten.'
- (78) *My ob"asnja-l-i-s' žest-ami.*
 we converse.IPFV-PAST-PL-REFL gesture-PL.INST
 lit. 'We explained ourselves to each other by gestures.'

3.4 A summary account

As can be seen from the survey above, the overall semantic range of lexical reciprocals is rather limited. It is worth noting that Russian deponent and semi-deponent verbs marked with the reflexive-reciprocal postfixal clitic *-sja* do not go beyond its bounds. Moreover, reflexives form the greater part of some semantic subclasses of lexical reciprocals used to indicate human actions (see 3.3.1.2 and 3.3.2.3 above).

4. Lexical reciprocals in reciprocal constructions

4.1 Lexical reciprocals and overt reciprocal markers

Although the idea of reciprocity is inherent in the meaning of lexical reciprocals, this fact by itself does not determine their ability to collocate with overt reciprocal markers.

There are three logical possibilities here:

- the use of an overt reciprocal marker is blocked;
- the use of an overt reciprocal marker is neither blocked nor obligatory;
- an overt reciprocal marker is obligatory.

4.1.1 Incompatibility with reciprocal markers

It appears to me that Russian lexical reciprocals are all compatible either with the reciprocal pronoun *drug druga* 'each other' (which is the main reciprocal marker in Russian) or with the collocation *meždu soboj* lit. 'between (among) selves' mentioned in 3.2.2.2 above.

Nevertheless, the distributive restriction of this type holds for the greater part of Russian derived reflexive reciprocals such as *tolkat'sja* 'to push each other', *kusat'sja* 'to bite each other' and a number of others (see Knjazev, Ch. 15, §3.1) which seem to fall into the

class of “natural reciprocals” proposed by S. Kemmer. It is hardly possible (or impossible at all) to say something like the following:

- (79) *Oni tolka-jut-sja* **drug s drugom* / **meždu soboj*.
 they push.IPFV-PRES.3PL-REFL one with another among selves
 lit. ‘They are pushing *one another* / *among themselves*.’

4.1.2 Optionality of reciprocal markers

This case can be easily illustrated by English pairs such as (80) from Gleitman (1965:282) or (81) from Kemmer (1988:138):

- (80) a. *The car and the bus collided.*
 b. *The car and the bus collided with each other.*
- (81) a. *The boys fought.*
 b. *The boys fought each other.*

As S. Kemmer points out, the reciprocal marker is used in (81b) to emphasize reciprocity of the action, i.e. to indicate overtly that the boys fought each other as opposed to their fighting someone else together.

As regards lexical reciprocals in Russian, they likewise, for the most part, allow both insertion and deletion of the overt reciprocal marker. In this respect, Russian sentences in (82) may be seen as quite parallel to those in (81):

- (82) a. *Mal'čik-i der-ut-sja.*
 boy-PL.NOM fight.IPFV-PRES.3PL-REFL
 ‘The boys fight / are fighting.’
- b. *Mal'čik-i der-ut-sja drug s drugom.*
 boy-PL.NOM fight.IPFV-PRES.3PL-REFL one with another
 ‘The boys fight / are fighting each other.’

The Russian sentence (82a) also allows, besides, “absolute” (“object-deletion” or “antipassive”) reading as one referring to a situation with two participants, agent and patient, the latter being, however, only implied. It serves to represent an action as a characteristic feature of its subject, mainly, in the “timeless” present.⁹

4.1.3 Obligatoriness of reciprocal markers

Overt reciprocal marking may be seen as obligatory if a lexical reciprocal cannot occur in the simple reciprocal construction unless the syntactic position for the second participant is filled, i.e. if its use in clauses similar to the (a) items under (80)–(82) is semantically incomplete or ungrammatical. In Russian, this property is shared (a) by the few transitive verbs that are allowed in subject-oriented constructions and (b) by some oblique transitive verbs:

9. A combination of the reciprocal and the so-called “absolute” (“object-deletion”) readings is characteristic of derived grammatical reflexive reciprocals in Russian, too. As for the possible explanations of similarity between the two uses see Knjazev (Ch. 15).

- (83) a. *peresekat'* 'to cross, intersect'
vstrečat' 'to meet'
napominat' 'to resemble'
otličat' 'to distinguish'
- b. *graničit'* 'to border on'
primykat', prilegat' 'to adjoin'
sootvetstvovat' 'to correspond/conform to, be in accordance'
protivorečit' 'to contradict.'

These lexical reciprocals are used either in discontinuous reciprocal constructions (see examples (19), (26), (38) and (39) above) or coupled with the overt reciprocal marker. Thus, the ungrammatical sentence (12a) will turn out to be well formed if the reciprocal pronoun *drug druga* 'each other' is inserted:

- (84) *On ne otliča-et zolot-o i med' drug ot druga.*
 he not distinguish.IPFV-PRES.3SG gold-ACC and copper.ACC one from other
 lit. 'He can't distinguish gold and copper from one another.'

In English, as distinct from Russian, a number of transitive verbs can receive reciprocal interpretation when used without an object; cf.:

- (85) a. *John and Mary met each other.*
 b. *John and Mary met.*

The Russian verb *vstretit'* 'to meet' does not occur in clauses such as (85b). To be used in a simple reciprocal construction, it requires either insertion of the reciprocal pronoun or a transformation into the reflexive reciprocal:

- (86) a. **Oni vstreti-l-i.*
 they meet.PFV-PAST-PL
 '*They met ...'
- b. *Oni vstreti-l-i drug druga-a (= vstreti-l-i-s').*
 they meet.PFV-PAST-PL each other-ACC meet.PFV-PAST-PL-REFL
 'They met each other.'

It is worth mentioning that in English, too, there are lexical reciprocals, e.g. the verb *to resemble*, that in this respect are closer to the Russian verb *vstretit'* rather than to its English counterpart *to meet*; cf.:

- (87) a. *John resembles Mary.*
 b. *John and Mary resemble each other.*
 c. **John and Mary resemble.*

The same is true for its Russian near equivalent *napominat'* 'to resemble', cf (19). The interesting point is, however, that both languages do not extend this restriction to the adjectives with a similar meaning: cf. (7), (8) and their translations into English.

Another type of language is Kabardian where the reciprocal marking of lexical reciprocals is obligatory if their arguments are expressed by a single noun phrase as in (85b) or (87c) (Kazenin, Ch. 17).

4.2 Lexical reciprocals and their reciprocal derivatives

The most important derivational processes in which a lexical reciprocal can be involved seem to be its intransitivization and transitivization that usually (but not necessarily) entail changes in its diathesis type and, occasionally, an alteration of aspectual properties.

4.2.1 *Intransitivization of lexical reciprocals*

In Russian, nearly all lexical reciprocals that appear as transitive verbs can take the polylexical reflexive postfix *-sja*. This results in intransitivization of the base verb and in various concomitant semantic effects. Since the semantic range of the postfix *-sja* includes the reciprocal meaning (see Knjazev, Ch. 15, §3), it is important to distinguish between two groups of reflexives with reciprocal meaning: those in which the symmetry of arguments “is inherited” from the base non-reflexive lexical reciprocal, and those in which the reciprocal meaning is introduced by the reciprocal marker.

4.2.1.1 *Change in diathesis type.* Reflexives derived from lexical reciprocals change their diathesis type if, by virtue of this process, the causative component in the meaning of the base verb is eliminated or somehow altered. As a result, the former object figures as a derived subject and, thus, an object-oriented reciprocal becomes subject-oriented.

Depending on the “degree of independence” of the derived subject, these reflexive reciprocals fall into a number of semantic subtypes,¹⁰ none of which are only characteristic of lexical reciprocals only.

1. *Anticausative (in the narrow sense) verbs* that differ from their base transitive verbs in the loss of causative semantic component; cf. the transitive causative lexical reciprocal *smešivat’* ‘to mix’ in (42) above and its reflexive anticausative in (88):

- (88) *Molok-o i vod-a smešiva-jut-sja.*
 milk-SG.NOM and water-SG.NOM mix.IPFV-PRES.3PL-REFL
 ‘Milk and water mix.’

2. *Autocausative verbs*, in which the underlying object is converted into subject and its referent becomes the actor that causes changes in his/her own state (Geniušienė 1983:43). Cf. the transitive lexical reciprocal *poznakomit’* ‘to acquaint sb and/with sb’ in (9), (10) above and the corresponding reflexive in (90):

- (89) *Oni poznakomi-l-i-s’ v teatr-e.*
 they acquaint.PFV-PAST-PL-REFL in theatre-SG.LOC
 ‘They got acquainted at the theatre.’

Some verbs allow both the anticausative and autocausative readings, depending on whether the action is performed under the influence of an outside causer or the referent of the surface subject performs it of his (or her) own will; cf.:

10. I follow here the terminology used in Geniušienė (1983, 1987) and Geniušienė & Nedjalkov (1991).

- (90) a. *On sobra-l det-ej v sad-u.*
 he gather.PFV-PAST.SG.M child.PL-ACC in garden-SG.LOC
 ‘He gathered the children in the garden.’
 b. *Det-i sobra-l-i-s’ v sad-u.*
 child.PL-NOM gather.PFV-PAST-PL-REFL in garden-SG.LOC
 ‘The children gathered in the garden.’

3. *Reflexive-causative verbs*, where the subject referent is both the initiator and the patient, the actor being, most commonly, only implied; cf.:

- (91) a. *Svjaščennik obvenča-l ix.*
 priest.SG.NOM marry.PFV-PAST.SG.M they.ACC
 ‘The priest married them.’
 b. *Oni obvenča-l-i-s’ v cerkv-i.*
 they marry.PFV-PAST-PL-REFL in church-SG.LOC
 ‘They got married in church.’

4.2.1.2 *Retention of diathesis type.* As was mentioned above, the diathesis changes should not be considered a necessary entailment of derived intransitivity of lexical reciprocals by means of the reflexive marker. This assumption may be illustrated by the following instances.

1. *The passive reflexive form* of lexical reciprocals denoting the same situation as the base transitive verb, the difference being that the deep object is encoded by the surface subject; in this case, the reciprocal obviously retains its diathesis type; cf.:

- (92) a. *My ešče ne obsužda-l-i et-u problem-u.*
 we yet not discuss.IPFV-PAST-PL this-ACC problem-SG.ACC
 ‘We have not discussed this problem yet.’
 b. *Et-a problem-a ešče ne obsužda-l-a-s’.*
 this-SG.NOM problem-F.SG.NOM yet not discuss-PAST-F-REFL
 ‘The problem has not been discussed yet.’

2. *Pairs such as vstrečat’ ‘to meet’ – vstrečat’sja lit. ‘to meet oneself’, peresekat’ ‘to cross/intersect’ – peresekat’sja lit. ‘to cross itself’,* where the difference between the two verbs is mainly in their syntactic valency, i.e. in direct object demotion to comitative object in the derived (reflexive) construction, the surface subject (as distinct from the passive) retaining its semantic and syntactic roles; cf.:

- (93) a. *Na ulic-e on vstreti-l drug-a.*
 on street-SG.LOC he.NOM meet.PFV-PAST.SG.M friend-SG.ACC
 ‘He met a friend in the street.’
 b. *Na ulic-e on vstreti-l-sja s drug-om.*
 on street-SG.LOC he meet.PFV-PAST-REFL with friend-SG.INST
 lit. ‘He met himself with his friend in the street.’
 (94) a. *Odn-a lini-ja pereseka-et drug-uju.*
 one-SG.NOM.F line.F-SG.NOM cut.IPFV-PRES.3.SG another-F.SG.ACC
 ‘One line cuts another.’

- b. *Odn-a lini-ja pereseka-et-sja s drug-oj.*
 one line cut.IPFV-PRES-REFL with another-F.SG.INST
 lit. 'One line cuts itself across with another.'

The main functions of the reflexive marker in Russian are anticausative and passive, whereas true reflexives and reciprocals constitute very restricted semantic classes (see Knjazev & Nedjalkov 1985). Therefore, reflexives inheriting the reciprocal meaning from the base lexical reciprocals occur far more often than the true reflexive reciprocals in which the reciprocal meaning is signalled by the reflexive marker only. Nevertheless, in French, where derivation of reciprocals by means of the reflexive marker seems to have almost no lexical restrictions, reflexive anticausatives derived from lexical reciprocals are quite numerous, too (see Kordi 1981:249–51); cf.:

- (95) a. *La guerre a séparé les époux.* 'The war separated the couple.'
 b. *Les époux se sont séparé.* 'The couple separated.'

4.2.1.3 Aspectual shift. The effect of derived intransitivity on the aspectual properties of lexical reciprocals in Russian can be seen in that their reflexive counterparts, unlike their base verbs, indicate permanent or stable static situations far more often than actions; cf. the transitive verb *soedinjat* 'to connect' in (41) and reflexive in (96) or the transitive *čeredovat* 'to alternate' in (53) and reflexive in (98):

- (96) *V nem soedinja-jut-sja energija i um.*
 in he.LOC combine.IPFV-PRES.3PL-REFL energy-SG.NOM and brains.SG.NOM
 'He combines energy with brains.'
- (97) *V et-oj morfem-e čeredu-jut-sja zvuk-i*
 in this-SG.F.LOC morpheme.F-SG.LOC alternate.IPFV-PRES.3PL-REFL sound-PL.NOM
 /a/ i /o/.
 /a/ and /o/
 'In this morpheme the sounds /a/ and /o/ alternate with each other.'

This instance seems to be, to some extent, analogous to Russian constructions with *-n/-t* participles that combine functions of the passive and resultative (indicating states resulting from a previous action) but occasionally denote "non-derived" static situations with no reference to their origins (Knjazev 1989:46–9, 131–41). It is noteworthy that the greater part of statives (in this sense of the term) are derived from lexical reciprocals, cf.:

- (98) *Et-i slov-a protivopostavl-en-y po značeni-ju.*
 this-PL.NOM word-PL.NOM oppose.PFV-PASS-PL in meaning-SG.DAT
 'These words are opposed in meaning.'
- (99) *Angli-ja otdel-en-a ot Franci-i La-Manš-em.*
 E.-NOM separate.PFV-PASS-SG.F from F.-GEN Channel-INST
 'England is separated from France by the Channel.'

4.2.2 Causativization of lexical reciprocals

As Russian lacks morphological causative, the example of a causative derived from a lexical reciprocal is taken from Turkish (Erguvanli 1979); cf.:

- (100) a. *Ali Napoleon-a benz-iyor.*
 A. N.-DAT resemble-PROGR.3SG
 ‘Ali resembles Napoleon.’
- b. *Ali-yi Napoleon-a benze-t-ti-m.*
 A.-ACC N.-DAT resemble-CAUS-PAST-1SG
 ‘I likened Ali to Napoleon.’

In some languages there exist restrictions on derivation of causatives immediately from lexical reciprocals. Thus, in Kabardian (Kazenin, Ch. 17), due to the peculiarities of the marking of simple reciprocal constructions mentioned in 4.1.3, causative marking requires either a comitative arrangement of symmetric actants or an insertion of the reciprocal marker.

5. Conditions for symmetry of lexical reciprocals

As was mentioned in Section 1, logical symmetry is not to be regarded as an obligatory property of lexical reciprocals in a natural language. The possibility of interchanging the actants of a lexical reciprocal without changing its meaning, is determined by a number of heterogeneous factors. They cover, firstly, pragmatic and referential as well as some other properties of the actants of a lexical reciprocal and, secondly, some semantic features of the predicate itself.

5.1 Pragmatic ordering of actants

As has been repeatedly pointed out (see, among others, Yomdin 1981:104; Krysin 1988:333–5; Kemmer 1988:138), the order in which the symmetric actants are mentioned is not arbitrary. The one mentioned second is, most commonly, senior, or more known, or of a higher prestige, or has existed for a longer time than the one mentioned first. Compare the well-formed sentence in (100) signalling the symmetric relation of resemblance in which the role of the “point of reference” is assigned to Napoleon (as against a certain Ali), and the following two sentences the second of which is only (if ever) possible under some specific conditions:

- (101) a. *Syn poxož na otc-a.*
 son.M.SG.NOM resemble.SG.M at father.M-SG.ACC
 ‘The son resembles his father.’
- b. *²Otec poxož na syn-a.*
 father.M.SG.NOM resemble.SG.M at son.M-SG.ACC
 lit. ‘The father resembles his son.’

By way of summing up, we may conclude that the degree of familiarity of the actants of a symmetric predicate is inversely correlated with the degree of their interchangeability. The principal psychological regularities of establishing the hierarchy of the actants in the case of relations of similarity are discussed in depth by Tversky (1977:327–52).

Somewhat similar factors are relevant for the expression of symmetric spatial relations. The entity chosen as ground, is, usually, more stable, bigger in size, more complex geometrically than the figure (Talmy 1983:231). The actants of reversible spatial constructions such as (36) possess these parameters, whereas those of irreversible ones (although with the same lexical reciprocal) do not:

- (102) a. *The bicycle is near the house.*
 b. *?The house is near the bicycle.*

These two examples are discontinuous reciprocal constructions. As for simple reciprocal constructions, it should be noted that co-ordinated noun phrases as a whole (not only those used in reciprocal constructions) tend to be ordered in conformity with the “Me First Principle” (Cooper & Ross 1975). According to this principle, the entity mentioned first usually possesses a set of qualities that are considered to be characteristic of the prototype speaker, i.e. being here, now, adult, positive, singular, friendly, alive, etc. The one mentioned second lacks some of these features. A similar general conclusion was drawn by R. Jakobson in the course of a discussion of the principle of iconicity in language. He pointed out that the order of conjoined nouns tends to mirror a hierarchy of entities denoted by them. In his discussion of the sentence

- (103) *The president and the secretary of state attended the meeting,*

he pointed out that this order of naming the participants of the situation described here “is far more usual than the reverse, because the initial position in the clause reflects the priority in official standing (Jakobson 1990:412).

It is remarkable that in Russian there is a specific way of making the participants of a collective action pragmatically unordered. I have in mind collocations with the plural form of the pronoun functioning as “comitatif inclusif” (Garde 1995:112–3; see also Mrázek 1988:116):

- (104) *my s toboj* lit. ‘we with you’ = ‘I and you’
my s nim lit. ‘we with him’ = ‘I and he’
oni s nej lit. ‘they with her’ = ‘he and she’
my s sosedom lit. ‘we with a neighbour’ = ‘I and a neighbour’
oni s sosedom lit. ‘they with a neighbour’ = ‘he/she with a neighbour.’

The first component of these collocations denotes total combination of the subjects or objects, while the second one (expressed by the instrumental with the preposition *s* ‘with’) specifies its composition; cf. the following line from a song:

- (105) *My s tob-oj dv-a bereg-a u odn-oj rek-i.*
 we.NOM with you.SG-INST two-NOM bank-SG.GEN at one-F.SG-INST river.F-SG.GEN
 ‘You and me (lit. ‘we with you’) are two banks of the same river.’

5.2 Referential modes of actants

As N. D. Arutjunova (1983:6) pointed out, the relations of similarity are really symmetrical and reversible if what is described comprises two entities which are included in the same class; cf.

- (106) a. *Ajv-a po vid-u sxodn-a s jablok-om.*
 quince-SG.NOM in appearance similar-SG.F with apple.N-SG.INST
 ‘A quince resembles an apple in appearance.’
 b. *Jablok-o po vid-u sxodn-o s ajv-oj.*
 apple-SG.NOM in appearance similar-SG.N with quince-SG.INST
 ‘An apple resembles a quince in appearance.’

A disparity in taxonomic membership of the actants of a lexical reciprocal makes it difficult to reverse the objects of comparison: those who consider a man to be similar to a wolf do not necessarily hold the opinion that a wolf, in its turn, resembles a man.

The author also argues that the relation of similarity is commonly, if not always, maintained between entities of the same referential mode. Otherwise inversion of the actants is, as a rule, impossible:

- (107) a. *Pet-ja poxož na ispanc-a.*
 Petja-SG.NOM like.M.SG on Spaniard.M-SG.GEN
 ‘Petja looks like a Spaniard.’
 b. *?Ispan-ec poxož na Pet-ju.*
 Spaniard-SG.ACC like.M.SG at Petja-SG.GEN
 lit. ‘A Spaniard looks like Petja.’

5.3 Static vs. dynamic situations

Stativity has been repeatedly mentioned among features favourable for the real symmetry of a predicate (Fiengo & Lasnik 1973:465; Boadi 1975). The above discussion of examples (21) and (22) in Section 3.1.1.1 or (36) and (36) in Section 3.2.1.1 may be expanded by one more example taken from Boadi (1975). Sentences in (108) with stative predicates are synonymous:

- (108) a. *John resembles Harry.*
 b. *Harry resembles John.*

Meanwhile, the sentences in (109) that contain the same verb in the progressive form are not synonymous and reversible because they can easily refer to a pair of situations in which only one participant becomes different whereas the other remains as he or she was:

- (109) a. *John is resembling Harry (more and more every day).*
 b. *Harry is resembling John (more and more every day).*

Moreover, R. Mrázek argues that, on condition that the described situation is dynamic, the participant referred to by the surface subject acquires “the role of the initiator of the action (that of its protagonist in the interpretation of the speaker)” (Mrázek 1988: 116; see

also Lejkina 1978: 136). That may be the reason of typical irreversibility of the following sentences:

- (110) a. *Miš-a poznakomi-l-sja (possori-l-sja) s*
 M.-SG.NOM acquaint.PFV-PAST.SG.M-REFL quarrel.PFV-PAST.SG.M-REFL with
Pet-ej.
 P.-SG.INST
 'Misha got acquainted (has quarrelled) with Petja.'
- b. *Pet-ja poznakomi-l-sja (possori-l-sja) s*
 P.-SG.NOM acquaint.PFV-PAST.SG.M-REFL quarrel.PFV-PAST.SG.M-REFL with
Miš-ej.
 M.-SG.INST
 'Petja got acquainted (has quarrelled) with Misha.'

In (110a), it is most likely Misha who is the initiator of the action, whereas in (110b) this role is assigned to Petja. This difference prevents these sentences from being unreservedly symmetrical.

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CHAPTER 3

Encoding of the reciprocal meaning

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1. Introduction

1.1 Anaphoric and middle reciprocal markers

I will remind first that semantically two main types of reciprocal markers can be distinguished, *anaphoric* and *middle* (2.2.3 in Nedjalkov, Ch. 1).

Anaphoric markers express the reciprocal meaning alone or both the reciprocal and the reflexive meanings. Needless to say, the markers with the reflexive meaning alone are anaphoric by definition as well. Anaphoric markers are usually, though not exclusively, pronouns and/or adverbs. More rare are morphological anaphoric reciprocal markers, like the Chukchi suffix *-wəly* and Evenki suffix *-meet* with the reciprocal meaning only; cf.:

Chukchi

- (1) a. *təm*- 'to kill sb' → *təm-wəly*- 'to kill each other.'

Evenki

- b. *iče*- 'to see sb' → *iče-meet*- 'to see each other.'

Middle markers express the reciprocal and the reflexive meanings (both or one of them) and a number of certain other meanings, e.g. anticausative, absolutive (unspecified object), anticausative, potential-passive, passive, etc., which have developed due to detran-

sitivization (see Ch. 5, §2). Middle markers are usually, though not exclusively, affixes or clitics, rarely pronouns. Instances of the latter type are the Mbay reciprocal pronoun *nāā* and the Tzutujil relational noun *-iiʔ* which also has a number of other meanings and is thus a middle marker by definition:

Mbay (Keegan 1997:65, 66)

- (2) a. *tōl-n* ‘they killed sb’ → *tōl-n nāā* ‘they killed each other’ reciprocal
dūlō-n ‘they twisted sth’ → *dūlō-n nāā* ‘become twisted together’ anticausative

Tzutujil (Dayley 1985:336–337; *x-* = completive aspect; *-kee-/k-* = 3PL; *r-* = 3SG; *-iil* = absolutive form)

- b. *tz'atooj* ‘to see sb’ → *x-kee-tz'at k-iiʔ* ‘they saw themselves/each other’
xib'exik ‘to frighten sb’ → *xib'en r-iiʔ -iil* ‘to be afraid’ anticausative

The term *middle* does not refer to any particular meaning or form but to various markers with a certain semantic potential, including the meanings just mentioned. (For a discussion of this term see Kemmer 1993:1–4; Dixon & Aikhenvald 2000:11–12.)

- On the whole, the meanings considered here as middle correspond to Lyons’s definition (1968:373): “The implications of the middle (when it is in opposition with the active) are that the ‘action’ or ‘state’ affects the subject of the verb or his interests”.

1.2 Seven main types of reciprocal marking

Reciprocal markers may differ from markers of other categories in some respects (e.g. they have, relatively frequently, two-component structure, including reduplication) and also in the combinability with the markers of some categories, such as the applicative and the like.

The variety of reciprocal marking across languages is truly astonishing. Hardly any other valency-changing category (such as causative and resultative) can compete with reciprocals in this respect, except, probably, the reflexive, a semantic category closest to reciprocals, which may be nearly as varied in expression.

As mentioned in Ch. 1 (§2.1), seven main types of reciprocal marking can be distinguished. They are listed below in the order of decreasing syntactic complexity (this feature does not concern clitics which are therefore mentioned last).

Type A. Clause doubling with inverted arguments; see Section 2 below.

Type B. Pronominal marking (cover term for free reciprocal markers, i.e. words dependent on the predicate, e.g. nouns, pronouns, adverbs, etc.); Section 3 below.

Type C. Periphrastic marking: a participle or a converb with an auxiliary (Section 4).

Type D. Compounding: verb compounds with recurrent components (Section 5).

Type E. Affixing: affixes and inflection on the predicate, including zero marking (Section 6).

Type F. Root reduplication (Section 7).

Type G. Clitics: reciprocal markers with some features of affixes and free pronouns (kind of intermediate between Types B and E); Section 8.

There are also marginal devices, mostly affixes with a peripheral reciprocal function (Section 9).

A language may use more than one type of reciprocal marking, and even use them simultaneously (Section 10).

In the literature, the types of reciprocals most commonly distinguished are (pro)nomininal reciprocals, which are reciprocals with Type B markers (excepting adverbs), and verbal reciprocals which are of Type E in the first place. The term is also used with reference to Types C, D and G.

Type A markers are generally, though not always, monosemous and Type E (and also Type G) markers are the most polysemous. In Types A and B the locus of the reciprocal marker is outside the notional base verb, while in Types D and E the marker is a component of the notional verb. In Type C, the reciprocal meaning is expressed by the form as a whole rather than by any component. The distinction between some of the formal types of reciprocal markers is not always clearcut.

Among the languages of my sample, the most widely represented types of markers are B (syntactic markers) and E (morphological, especially affixal markers). Therefore they are naturally in the center of attention in this collective monograph.

2. Type A. Clause doubling with argument inversion

In this case reciprocity is encoded by two coordinate clauses with inverted arguments. The inversion may be syntactically explicit or indicated by grammaticalized pronouns or fossilized agreement markers. This type is represented by two subtypes: non-grammaticalized and grammaticalized constructions.

2.1 Non-grammaticalized constructions

The following subtypes are attested.

2.1.1 *Clauses with inverted arguments*

This type is similar to conjoined sentences (4a') and (4a'') in Ch. 1 whose joint semantic content roughly coincides with the reciprocal meaning of (4b). Roughly speaking, these are constructions structurally similar to (3) below which is not grammaticalized, either:

- (3) *Miranda stared at him and he stared back (at her).*

2.1.2 *Constructions with a substitute for the second clause*

In this case the second clause (with inverted arguments) is replaced by a special phrase, like the Latin borrowing *vice versa* 'and in reverse' used in English; cf.:

- (4) a. *Max loves Susan and vice versa (= and Susan loves Max) (McCawley 1970:278).*

In dialogues, some of the reciprocal specifiers (see 3.7.1) may be used instead of a reply as substitutes to denote a response action analogous to the action in the preceding remark, with the reciprocants referring to the communicants; cf.:

French (see Guentchéva & Rivière, Ch. 12, §8.2)

- (4) b. A.: *'Je; vous; souhaite de bonnes vacances!'* 'I wish you happy holidays!'
 B: *'Et réciproquement!'* 'Same to you!' (= *Je; vous; souhaite...*), lit. 'And reciprocally!'

2.2 Grammaticalized constructions

2.2.1 *Inverted clauses with both reciprocants named in each (Hua)*

I have no "pure" examples of this type. Grammaticalization of reciprocal markers proper does not take place here; it concerns the grammaticalized markers of switch-reference. (The subsequent description is based on Haiman 1980.) There are two types of such reciprocal constructions which differ between themselves in the simultaneity or sequentiality of the reciprocal subevents. The difference is in the nature of the use of switch-reference markers and also in the use of an auxiliary verb in the second type (with simultaneous subevents). There are two switch-reference markers: one agrees in person and number with the subject of the first clause and another is anticipatory and agrees with the subject of the second clause. (When the subjects of both clauses are non-distinct, only one reference marker is used, and the construction is naturally non-reciprocal.) Let us consider the two types.

The type with sequential subevents. The sequence of the predicates corresponds to the sequence of actions in the situation described.¹

Hua (Haiman 1980:532–3; *ebgi* 'to hit', *ga* = 3sg agreement marker of the first clause; *na* = 3sg agreement marker of the second clause; *e* = 3sg final)

- (5) a. *Joe Harry ebgi + ga + na Harry Joe ebgi + e.*
 'Joe hit Harry and Harry hit Joe.' (see also Haiman 1985:73–83 on Kâte)

The type with simultaneous subevents. In contrast to the prior case, in both clauses the switch-reference markers are repeated (*ga + na ... ga + na ...*). The repeated clauses are followed by the auxiliary verb *hu/ha/hi* 'to do' (the allomorph is determined by the subject person) followed in its turn by the final *?e* (= 2/3du.final) which expresses agreement with the conjunction of the subjects of both clauses.

- (5) b. *Joe Harry ebgi + ga + na Harry Joe ebgi + ga + na ha + ?e.*
 'Joe and Harry hit each other.'

1. Haiman (1980:532–3) comments on this type: "Here, if anywhere, we find the structure of language directly reflecting the structure of reality in a most ingenious, aesthetically satisfying way".

Hua also has other means of reciprocalization used if the reciprocants are expressed by one noun phrase, e.g. root reduplication in the perfective aspect in combination with an auxiliary verb (see (115) in Ch. 5, §4.2).

2.2.2 Clauses with an antecedent

Reciprocity can be expressed by inversion of “fossilized” 1SG and 2SG pronouns or by a fossilized 3SG agreement marker followed by a DS (= different subject) marker. Their person does not reflect the person of the antecedent.

2.2.2.1 *The structure* ‘[antecedent +] I + Verb + you, you + Verb + me’ (Chinese). The predicate is repeated with inverted permanent 1SG and 2SG pronouns ‘I ... you, you ... I/me’ serving as a reciprocal marker. It is not accidental that these particular pronouns are used: in the situation of a dialogue, they are in converse relations as they denote the communicants speaking by turns. In Chinese, where there are also other means of reciprocalization (see, for instance, (35), (100) in Nedjalkov, Ch. 1 and (47) and (48) below), this structure is typical of colloquial speech.

Modern Chinese (see also Hoa et al., Ch. 49, §9.3)

- (6) *Wǒmen/nǐmen/tāmen nǐ kàn wǒ, wǒ kàn nǐ.*
 we you they you.SG look I I look you.SG
 ‘We/you/they looked at each other.’
 lit. ‘We/you/they you looked at me I looked at you.’

The referential identity of the pronouns with the antecedent (the subject of the sentence) is possible by accident, when the antecedent happens to be of the same person as the pronoun(s) or agreement marker (cf. ‘we (antecedent) ... I ... you, you ... me’).

2.2.2.2 *The structure* ‘[antecedent +] Verb ... DS-3SG + Verb ... DS-3SG + AUX’ (Amele). This formula shows that in (7) and (8) below the 3SG agreement marker *-b* is used regardless of the person of the subject. The two coordinated verbs are identical in structure. The DS marker *-co* indicates different subjects in the underlying clauses and reciprocal relations between the subject referents. If the underlying sentence is transitive the object is zero-marked (see (7)), and if the object of the underlying clause is indirect the marker *-udo* is used, as in (8) (Roberts 1987:306–8, 131–4; on DS see pp. 116–9). Although this is a complex type the examples in Roberts (1987:132) show that it can express not only “canonical” subject-oriented reciprocals, as is shown in (7)–(8), but also “indirect” and “possessive” reciprocals, and it can be causativized.

Amele (ibid., p. 307)

- (7) *Dana ale qo-Ø-co-b qo-Ø-co-b esi-a.*
 man 3.DU hit-DO-DS-3SG hit-DO-DS-3SG 3.DU-PAST
 ‘The two men hit each other.’
- (8) *Ele ew-udo-co-b ew-udo-co-b ow-a.*
 1.DU despise-3SG-DS-3SG despise-3SG-DS-3SG 1.DU-PAST
 ‘We (two) despised each other.’

3. Type B. Pronominal marking (cover term for free reciprocal markers such as reciprocal pronouns, nouns, adverbs, auxiliaries, etc.)

Pronominal marking is a cover term for free reciprocal markers, such as reciprocal pronouns, nouns, pronouns, adverbs, auxiliaries, etc. These free words and phrases meaning ‘each other’, ‘mutually’ are mostly monosemous (although to a lesser degree than the previous type: some can express reflexivity and some other meanings). They do not appear in subject position, as a rule, and if they do they do not have the reciprocal sense (a special case is discussed in 3.1 below), as this position is reserved for the antecedent. The cases in 3.1 are an exception, where a noun appears as subject in a proverb; in (19), a personal pronoun used reciprocally in the direct object position also appears as subject without changing its form. As far as reciprocal pronouns are concerned, they either retain their meaning in the subject position, which is a rare case (as is shown in Shkarban & Rachkov, Ch. 22 on Tagalog, §8.1.2), or acquire a different meaning, e.g. distributive (cf. ‘each’ in Tuvan; see Kuular, Ch. 27, §4.1.1).

In my material, seven principal subtypes of syntactic marking are registered. Some of the subtypes are probably intermediate.

3.1 A repeated noun phrase in the subject and object positions

This type is represented in our material by proverbs like (9): the noun phrases in these constructions are non-referential and used in the generalized sense ‘each person’: a sentence of this type implies another sentence with the reversed order of the same noun phrases:

- (9) *Homo; homini; lupus est.* (= *Homo; homini; lupus est.*)
 ‘Man to man is wolf.’

This is a generalized formula structured as a discontinuous construction. As a proverb, it cannot be transformed into a simple construction or into a construction with a reciprocal pronoun. Compare Russian:

- (10) a. *Rybak rybak-a vidit izdaleka.*
 fisherman.NOM fisherman-ACC sees from.afar
 ‘Birds of a feather flock together.’
 lit. ‘A fisherman sees a fisherman from afar.’
 b. **Rybaki vidjat izdaleka.*
 ‘Fishermen see from afar (whom?).’
 c. *Rybaki vidjat drug druga izdaleka.*
 fishermen see each other from.afar
 ‘The fishermen see each other from afar.’ (literal sense)

3.2 Reciprocal pronouns

Generally, reciprocal pronouns function as verbal arguments. They can occur with post- and prepositions, and, in inflecting languages, they can be inflected for case and person,

number, gender or animacy. One of the components of a reciprocal pronoun often takes the case form of the subject and the other that of the underlying object or attribute. For instance, in (10c) the Russian reciprocal pronoun *drug* (NOM) *drug-a* (ACC) ‘each other’ repeats the case forms of the subject and object of (10a), i.e. *Rybak* (NOM) *rybak-a* (ACC)...

In comparison with morphological markers, the pronouns are more flexible syntactically and can be used, as a rule, in all the syntactic positions typical of noun phrases (except for the subject). They are used not only with transitive and bitransitive verbs but also with verbs requiring a prepositional object, which is sometimes outruled for the morphological markers (cf. (104)–(107) in Nedjalkov, Ch. 1). On the other hand, these pronouns cannot have a singular antecedent (an exception is the German indefinite-personal pronoun *man*), while morphological reciprocals in a number of languages can be used in discontinuous constructions with a singular subject (see (29b), (30a, a’), (34b), etc. in Ch. 1).

Reciprocal pronouns can be classified into a number of types on the basis of such features as etymology, the number of the components, etc. Frequently, these pronouns are a relatively late development and came into being during the time registered in written records; cf. the reciprocal pronouns of the Indo-European languages. Note that the Turkic languages with the genetically common reciprocal suffix *-s/-š/...* may have different reciprocal pronouns, cf. the Kirghiz and Yakut pronouns below. I propose the following subdivision.

1. *One-component reciprocal pronouns*. Judging by the available data, they may be descended from: (a) a reflexive pronoun (11a), (b) a noun phrase meaning ‘body’ (11b), or (c) a lexical reciprocal (11c):

- (11) a. Polish *siebie* (ACC) i. ‘oneself’, ii. ‘each other’ (*sobie* (DAT))
 b. Hausa *jūnā* ‘each other’ (Jaggar 2001:66, 207, 413; see also (27), (28))
 c. Koyra Chiini *čere* ‘friend, peer, mate’ – *čere* ‘each other’ (Heath 1999:341–3)
 Fulani *band-* ‘relative’ – *band-ībe* ‘each other’ (*-ībe* = POSS; Klingenhoben 1963:142).

2. *Two-component reciprocal pronouns*. In many languages these pronouns are composed of two components, typically a reduplication of the same word (often a reflexive pronoun). The following subtypes are registered.

2a. *Pronouns descended from lexical reciprocals*

- (12) Udehe *za*: ‘relative, friend, associate’ – *za:fi-za:fi* ‘each other’ (*-fi* = POSS.REFL; Nikolaeva, Ch. 23, §§2, 4.1 and 4.6).

2b. *Pronouns derived from reflexive pronouns by reduplication*. Reflexive pronouns in their turn can be descended from words meaning ‘body’, ‘head’, ‘person’, etc. (in the Yakut pronoun *-leri-* = POSS.3PL, *-n* = ACC).

- (13) Yakut *beje-leri-n* ‘(one)self’ – *beje-beje-leri-n* ‘each other’
 Udehe *mene* ‘(one)self’ – *mene-mene* ‘each other’ (Nikolaeva, Ch. 23, §4.6)
 Korafe *tofo* ‘(one)self’ – *tofo tofo* ‘each other’ (Farr & Farr 1975:738)
 Lezghian *čeb* ‘(one)self’ – *čpi-čeb* ‘each other’ (Haspelmath 1993:415–6)
 Twi *hō* ‘(one)self’ – *hō hō* ‘each other’ (Boadi 1975:55)

Sinhala *tamat* '(one)self' – *tamat-taman* 'oneselves/each other'
(Gair & Karunatillake 2000: 723).

2c. *Pronouns containing components with the meaning 'one', 'another', 'each', 'person'.*

- | | | | |
|------|---------------|--------------------------------|---------------------------------------|
| (14) | English | <i>each other, one another</i> | |
| | Kirghiz | <i>biri biri-n</i> (3PL) | lit. 'one one-ACC' |
| | Russian | <i>drug druga</i> | lit. 'other other' ² |
| | German | <i>einander</i> | lit. 'one.other' |
| | Latvian | <i>viens otru, cits citu</i> | lit. 'one second', 'another another' |
| | Lithuanian | <i>vienas kita, kitas kita</i> | lit. 'one another', 'another another' |
| | Malayalam | <i>oraal ... oraal</i> | lit. 'one person ... one person' |
| | Ancient Greek | <i>ἀλλήλους</i> | lit. 'other.other.' |

2d. "Exotic" formations. For instance, in Sinhala, along with other reciprocal pronouns (e.g. reflexive-reciprocal *tamat-taman* mentioned above) there are formations based on reduplicated numerals denoting the number of the participants, like 'two two', 'three three', etc. (Gair & Karunatillake 2000: 723).

Sinhala (ibid., p. 723)

- (15) *Siri-yi Gunapaala-yi Sunil-uyi tundenaa-Tə+tundenaa-Ø aadareyi.*
S.-and G.-and S.-and three.ANIM-DAT+three.ANIM-NOM love.PRED
'Siri, Gunapala and Sunil love each other.' (lit. '... love three-to-three')

2e. (In)separability of two-component pronouns. I mean the degree of fusion: the possibility of including a noun, pre- or postposition, or a case marker between the components and the possibility of changing their sequence. The degree of fusion manifests the degree of grammaticalization of a reciprocal pronoun.

For instance, in the German pronoun *einander* 'each other' the sequence of the components (*ein-ander*) cannot be changed, and they cannot be separated by other morphemes and often form one entity with prepositions (cf. *aufeinander* lit 'one on the other'; cf. (190) in §13.3 of Ch. 1). Thus, it is highly grammaticalized.

A language can use both separable and inseparable forms of a reciprocal pronoun (cf. (16a) and (16b), and (16c) and (16d)). In Kirghiz, the reciprocal pronoun generally has the case marking on the second component, i.e. in this case the components are inseparable; but sometimes the case marking is on the first component and in certain cases the personal-possessive marker is added to both components; the postpositions are usually inserted between the components.

Kirghiz

- (16) a. *biri biri-Ø-n* 'each other' (Ø = 3PL, -n = ACC)
b. *biri-Ø-n biri* 'each other'
c. *biri-biri-biz-di* 'each other' (-biz- = 1PL, -di = ACC)
d. *biri-biz-di biri-biz* 'each other.'

2. The native speaker of Russian perceives the reciprocal pronoun *drug drug-a* as 'friend.NOM friend-ACC' rather than as 'other-NOM other-ACC'.

Interrupted separable reciprocal pronouns are attested in Malayalam. There are *six* of them (besides *five* reciprocal adverbs; see 3.4 below). They are inflected for case, the non-nominative case marker being placed after the first component.

Malayalam (Jayaseelan 2000: 119; Asher & Kumari 1997: 168–9)

- | | | | | |
|------|----|-----------------------------------|--------------------------------|--|
| (17) | a. | <i>oraaL... oraaL</i> | ‘one person ... one person’ | |
| | b. | <i>oraaL... matte aaL</i> | ‘one person ... other person’ | |
| | c. | <i>oorooruttarum... matte aaL</i> | ‘each person ... other person’ | |
| | d. | <i>onnə... onnə</i> | ‘one thing ... one thing’ | |
| | e. | <i>onnə... mattonnə</i> | ‘one thing ... other thing’ | |
| | f. | <i>oru... marrə...</i> | ‘one ... other’. | |

3. *Some more examples.* The examples are from two languages with numerous reciprocal pronouns. For instance, in Gujarati, besides four “adverbial expressions” (Mistry 2000: 241), there are at least five anaphoric reciprocal pronouns, not counting the distributive *potpote* ‘each one’, lit. ‘self self’ (ibid., p. 340): *ekbijaa*, *ekmek*, *paraspar*, *anyonya*, *arasparas*. The last three items are borrowings from Sanskrit. They are stylistic variants of the more common *ekmek* and *ekbijaa*. Likewise, the Marathi language has a number of pronouns genetically related to the Gujarati pronouns: *ekamek* ‘each other’ and *ekadustra*, *paraspar*, *annyonya* (the last two forms are borrowed from Sanskrit (see Wali 2000: 518). Note that words with the reciprocal meaning can be borrowings.

3.2.1 Non-specialized reciprocal pronouns

3.2.1.1 *Personal pronouns as reciprocal markers* (German, To’aba’ita). The use of personal pronouns in the reflexive and/or reciprocal meaning more commonly occurs in the 1st and 2nd persons (18b–d), and a specialized reflexive pronoun is used in the 3rd person (18c’):

German

- | | | | | |
|------|-----|------------------------|-----------------------------|------------|
| (18) | a. | <i>sie lieben uns</i> | ‘they love us’ | |
| | a’. | <i>wir lieben uns</i> | i. ‘we love each other’ | reciprocal |
| | | | ii. ‘we love ourselves’ | reflexive |
| | b. | <i>wir lieben euch</i> | ‘we love you (PL)’ | |
| | b’. | <i>ihr liebt euch</i> | i. ‘you love each other’ | reciprocal |
| | | | ii. ‘you love yourselves’ | reflexive |
| | c. | <i>sie lieben sie</i> | ‘they love them’ | |
| | c’. | <i>sie lieben sich</i> | i. ‘they love each other’ | reciprocal |
| | | | ii. ‘they love themselves’. | reflexive |

However, there occur instances when a 3rd person pronoun is used in this way, i.e. both as a personal, reciprocal and reflexive pronoun (see (iii), (i) and (ii) respectively in (19)). For instance, the pronominal reciprocal (reflexive) marker in To’aba’ita (which has another two reciprocal markers, the prefix *kwai-* and adverb *kwai-liu*) is formally identical with the corresponding personal pronouns:

To’aba’ita (Lichtenberk 1991: 172)

- | | | | | |
|------|----------------|-------------|-----------------|------------------|
| (19) | <i>keero’a</i> | <i>keko</i> | <i>thathami</i> | <i>keero’a</i> . |
| | they.DU | they.DU | like | they.DU |

- i. ‘They like *each other*.’
- ii. ‘They like *themselves*.’
- iii. ‘They_i like *them_j*.’

I will note in passing that in Old and Middle English all the personal pronouns in object position had not only a personal meaning, like (iii) in (19), but also a reflexive meaning, like (ii) in (19); cf. *hi hie þa up ahofon* (Alfred Oros. 94) (cited from Mustanoja 1960: 430), i.e. ‘they rose then’, lit. ‘they_i; them_{i/j}; then up raised’. As Curme (1935: 157) states, “[t]his older usage lingers on in Shakespeare” (although the forms with *-self* are more common); e.g.: ‘A (= he) bears *him* like a portly gentleman.’ (Romeo and Juliet, I, v, 68) (ibid.).

3.2.1.2 *A distributive pronoun as a reciprocal marker (Pirahã).* The word *xogiágaó* ‘everyone’ is defined by Everett (1986: 217–8) as a “collective pronoun”. Judging from the examples, this word can function both as object (20a) and subject (20b) and in both instances the sentence allows reciprocal and other interpretations; note that in the second instance the polysemy is broader. Unfortunately, the brief description available leaves unclear several details of the reciprocal constructions; I hope that the researchers of the Amazonian languages will clarify this issue.

Pirahã (ibid., p. 217; *-áo-* = TELIC, *-b-* = PERF, *-á-* = REMOTE; *-há* = COMPLETE.CERT; *hi* = ‘s/he’, ‘him/her’, ‘they/them’; there is no plural)

- | | | | |
|---------|---|----|---|
| (20) a. | <i>hi hi xib-áo-b-á-há xogiágaó.</i> | b. | <i>xogiágaó hi xobai-xiig-á.</i> |
| | 3 3 hit- everyone | | everyone 3 see-CONT- |
| | i. ‘Everyone hit <i>themselves</i> ’ or | | i. ‘Everyone sees <i>each other</i> ’ or |
| | ii. ‘Everyone hit <i>each other</i> .’ | | ii. ‘Everyone sees <i>themselves</i> ’ or |
| | | | iii. ‘Everyone sees <i>him</i> ’ or |
| | | | iv. ‘Everyone sees.’ ³ |

3.2.2 *Specialized reciprocal pronouns. Two main types with respect to the retention of the antecedents when a reciprocal is embedded*

Both types can be inflected for person or not inflected (cf. (21a) and (21b), (27a) and (27b)).

3.2.2.1 *The long-distance antecedent can or must replace the antecedent of the base reciprocal.* Two formal subtypes are attested: in Subtype 1 the change of the antecedent is not obligatory (or even impossible if the matrix subject is singular), and in Subtype 2 the change of the antecedent is obligatory (the matrix subject in the singular is ungrammatical).

Subtype 1. Pronouns that can be used for the long-distance antecedent (English, Russian, Yakut). When the reciprocal construction is embedded, the antecedent can be retained in

3. The author writes about the ambiguity of (20b) (= (78) in his paper): “The ambiguity of (78) as seen in (i)–(iv) is both structural and semantic. Semantically, the pronoun *hi* is, as has been shown, ambiguous as to number and reflexivity/reciprocity. Syntactically, *hi* can be analyzed in (78) as direct object or a type of agreement marker. When really necessary to express unambiguous reciprocity, the preference is simply to list the participants or, more “commonly” (in quotes because the notion in any form is rare), to use *separate* clauses.”

the base construction. If the matrix subject is singular this antecedent does not change (cf. (22a) and (22c) below and (23c), (24c) in Ch.1, §5.2.1), if it is plural the construction can be ambiguous (see (22b) below and (23b) and (24b) in §5.2.1 of Ch. 1). Here belong two subtypes of pronouns: pronouns unmarked for person like English *each other* and Russian *drug druga* and pronouns marked for person like Yakut *beje-beje-leri-n*; cf. (-n = ACC, the case marker is preceded by a personal-possessive suffix indicating the person):

- (21) a. *each other* b. *beje-beje-biti-n* – for 1PL antecedent
 each other *beje-beje-yiti-n* – for 2PL antecedent
 each other *beje-beje-leri-n* – for 3PL antecedent

In (22b) *each other* can refer to *P. and M.* as its long-distance antecedent or to the subject of the embedded clause *they*, i.e. in the same way as in (22a):

- (22) a. *They loved each other.*
 b. *Peter and Mary said that they loved each other.*
 i. ‘P. and M. said that they (≠ P. and M.) loved each other.’
 ii. ‘P. and M. said that they (= P. and M.) loved each other.’
 c. *He said that they loved each other.*

Subtype 2. Pronouns that must be used for the long-distance antecedent (Even). In the case of embedding, a reciprocal pronoun can refer only to the subject. This type is represented by the Even reciprocal pronoun with the reflexive-possessive plural suffix *-ur/-wur* (when it is used, the accusative is zero-marked). It is the reflexive meaning of the suffix that relates the reciprocal pronoun to the subject. Note that this suffix is not used on the reciprocal pronoun only: its main use is on nouns, as in *bödel-ur* ‘ones’ (PL) feet’, *bödel-i* ‘one’s (SG) feet’.

Even (Malchukov, Ch. 39, §4.2.2)

- (23) *meen meen-Ø-ur* ‘each other’ for the 1PL subject as antecedent
 meen meen-Ø-ur ‘each other’ for the 2PL subject as antecedent
 meen meen-Ø-ur ‘each other’ for the 3PL subject as antecedent.

(24a), which is analogous to (21a) but contains a pronoun marked for the subject-oriented antecedent only, can be converted into a construction like (24b) with reading (ii) ‘the dogs bite the boys’, i.e. into a distant subject-oriented reciprocal. Reading (i) is ungrammatical even if the subject is singular (cf. (24c)), because of the marking for the subject antecedent on the pronoun. Thus, in other words, retention of the subject-oriented reciprocal pronoun in the embedded clause in (24b) either makes the sentence ungrammatical, if the subject is singular (24c), or changes the antecedent if the subject is plural, as is shown in (24b).

Even (Malchukov, Ch. 39, ex. (60); §4.2.1)

- (24) a. *ɲina-l meen meen-Ø-ur itme-Ø-r.*
 dog-PL each other-ACC-PL.REFL bite-NFUT.PL
 ‘The dogs were biting each other.’
 b. *Žör hurke-r₁ hina-l-bu₂ meen meen-Ø-ur₁ itme-mken-Ø-Ø.*
 two youth-PL dog-PL-ACC each other-ACC-PL.REFL bite-CAUS-NFUT.3PL

- i. *‘The two youths caused the dogs to bite each other (= dogs).’
 ii. ‘The two youths caused the dogs to bite each other (= youths); (i.e. hounded each other with dogs).’
 c. *Hurken *hina-l-bu meen meen-Ø-ur₁ itme-mken-Ø-ni*.
 youth dog-PL-ACC each other-ACC.-PLREFL bite-CAUS-NFUT-3SG
 (intended meaning:) ‘The youth caused the dogs to bite each other.’

3.2.2.2 Pronouns that cannot refer to a long-distance antecedent. In such cases the antecedent must be contained in the same clause as the reciprocal pronoun. The reciprocal pronoun can either agree with the antecedent in person (see (25) and (27a)) or not (27b). The embedding of the subject-oriented reciprocals may require a change of the reciprocal pronoun if the antecedent is to be retained. Two subtypes of reciprocal pronouns can be distinguished: those that are used in object-oriented reciprocal constructions only and those that can be used in both subject- and object-oriented constructions.

Subtype 1. Pronouns not used in subject-oriented constructions (Even). Instead of the reflexive-possessive suffixes in (23) and (24b), *personal*-possessive suffixes are used on these pronouns. They relate the reciprocal pronoun to the preceding noun phrase (e.g., to the direct object *hina-l-bu₂* in (26)). Note that these suffixes are used mainly on nouns; cf. *bödel-u-t* ‘our feet’ *bödel-u-hen* ‘your feet’, *bödel-u-ten* ‘their feet’ (*-u* = ACC). Here are the forms:

Even (Malchukov, Ch. 39, §4.2.2; *-me* = ACC)

- (25) *meen meen-me-t* ‘each other’ for the 1PL object as antecedent
meen meen-me-hen ‘each other’ for the 2PL object as antecedent
meen meen-me-ten ‘each other’ for the 3PL object as antecedent.

In order to make (24c) grammatical and retain the antecedent of (24a), the reciprocal pronoun marked for the subject antecedent should be replaced by the reciprocal pronoun marked for the object antecedent (25). Sentence (26) remains grammatical even if the subject of the matrix clause is singular.

Even (Malchukov, Ch. 39, ex. (60); §§4.2.1; 4.2.3)

- (26) *Žör hurke-r₁ hina-l-bu₂ meen meen-me-ten₂ itme-mken-Ø-Ø*.
 two youth-PL dog-PL-ACC each other-ACC-3PL bite-CAUS-NFUT-3PL
 ‘The two youths caused the dogs to bite each other (=dogs).’

Subtype 2. Pronouns used in subject- and object-oriented constructions (Hausa). The reciprocal pronoun in Hausa consists of two parts, *jūna-* (derived from a noun meaning ‘body’; the reflexive pronoun is formed from the noun *kāi* ‘head’) and optional bound 1PL, 2PL, 3PL possessive pronouns with the linker *-n-*; the form *jūnā* can be used for all persons (Jaggar 2001:66, 207, 413; 381); cf. *sun san jūnā* ‘they know each other’ (ibid., p. 207). Here are the forms:

- (27) a. *jūna-n-mù* or b. *jūnā* ‘each other’ for 1PL
jūna-n-kù or *jūnā* ‘each other’ for 2PL
jūna-n-sù or *jūnā* ‘each other’ for 3PL

In embedded constructions the antecedent remains the same. Thus, in (28b) the antecedents are *Bàla* and *Tankò*:

Hausa (Newman 2000: 531)

- (28) a. *Bàla dà Tankò sun cūci jūnā.*
 B. and T. they cheat each other
 ‘Bala and Tinko cheated each other.’
- b. *Kānde dà Jummaj sun san (cēwā) [Bàla dà Tankò]j sun cūci*
 K. and J. they know that B. and T. them cheat
jūnāj.
 each other
 ‘Kande and Jummaj know (that) Bala and Tanko cheated each other.’

3.3 Reciprocal semi-pronouns (Chukchi, Eskimo)

Unlike the reciprocal pronouns discussed above, reciprocal semi-pronouns (in another terminology, reciprocal pronominal adverbs) cannot be used in direct object position. The items labelled here semi-pronouns are attested in two languages of my corpus only, Chukchi and Eskimo which are geographically adjacent ergative languages (an areal phenomenon?). Like reciprocal pronouns of type (27a), they have forms marked for person but not for case (the case marker on these forms is fossilized); but they cannot appear as direct objects. When used with a semi-pronoun, a transitive verb undergoes detransitivization (= antipassivization in the ergative languages; marked with the suffix *-tku/-tko* in Chukchi, with a change of agreement in Eskimo). Note that in Chukchi the reflexive marker *uwik* (meaning ‘body’ when used as a noun) can take the direct object position, in an ergative construction.

1. *Chukchi*. This language has three forms of the monosemous reciprocal semi-pronoun derived from pronominal bases: *muri* ‘we’ - *mur-γ-in* ‘our’, *turi* ‘you.PL’ - *tur-γ-in* ‘your’, *ətri* (*ərrī*) ‘they’ - *ər-γ-in* ‘their’ where the possessive marker *-in* is attached to the locative marker *-k* changed into *-γ-* due to morphophonemic conditions. The complex suffix *-γ-ičγ-u* is perceived as a single unit although historically it consists of three suffixes (locative suffix *-γ*, polysemous “magnifying-honorific” *-čγ* and fossilized essive *-u*). This complex suffix does not occur in any other form (see also Nedjalkov, Ch. 40, case 2 in §8).

Chukchi

- (29) 1_{PL} *mur-γ-ičγ-u* ‘we mutually/each other’
 2_{PL} *tur-γ-ičγ-u* ‘you mutually/each other’
 3_{PL} *ər-γ-ičγ-u* ‘they mutually/each other.’

When used with two-place intransitive verbs, these semi-pronouns replace a non-direct object, and no other device is used to encode reciprocity, the absolutive structure of the underlying construction being retained. If they occur with transitives, the verb should be first intransitivized and the underlying ergative construction transformed into absolutive:

Chukchi (Nedjalkov, Ch. 40, §§4.2.1 and 4.2.2).

- (30) a. *Ajwanal̄-a ʔeqel̄-ət nə-yite-qinet.*
 Eskimo-INST enemy-PL.ABS IMPF-look-3PL+3PL
 ‘The Eskimos looked at the enemies.’
 b. *Ajwanal̄-ət payčeq-etə nə-yite-tku-qinet əryič̄yu.*
 Eskimo-PL.ABS CURIOUS-ADV IMPF-look-APASS-3PL they.mutually
 ‘The Eskimos looked at each other with curiosity.’

2. *West Greenlandic Eskimo.* Unlike the Chukchi reciprocal semi-pronouns, the corresponding Eskimo reciprocal lexeme has a reflexive meaning and in this usage it is also inflected for number and case but it lacks an absolutive form (i.e. the form used for the direct object). In the singular number this semi-pronoun has a reflexive reading while in the plural number it conflates both meanings. It is used in the fossilized allative case with the suffix *-nut* only. The plural forms are most frequently reciprocal (Fortescue 1984: 166). This is the main device for rendering the reciprocal meaning in Eskimo.

The Eskimo semi-pronoun has six such forms, three for the singular which can be reflexive only (see (31a)) and three for the plural with a reciprocal/reflexive polysemy disambiguated by context (see (31b) and (32b)). The reflexive SG semi-pronoun is *immi-* and PL is *immiC-* marked for person. Here are the plural forms:

West Greenlandic Eskimo (Fortescue, Ch. 19, §2.2.3)

- (31) a. *immi-nut* ‘myself, yourself, him/herself’
 b. *immi-tsin-nut* ‘ourselves/each other’, lit. ‘to ourselves’
immi-ssin-nut ‘yourselves/each other’, lit. ‘to yourselves’
immin-nut ‘themselves/each other’, lit. ‘to themselves.’

As in Chukchi, the use of this semi-pronoun requires intransitivization of a transitive verb; cf.:

West Greenlandic Eskimo (Fortescue 1984: 160)

- (32) a. *Tuqup-paa.* → b. *Imminnut tuqup-put.*
 kill-3SG+3SG self.3PL.ALL kill-3PL
 ‘He killed him.’ ‘They killed *themselves/each other*.’

3.4 Reciprocal adverbs (Malayalam, Modern Chinese)

In Malayalam, besides six reciprocal pronouns (see (17) above), there are also four reciprocal adverbs: *anyoonyam* ‘mutually, other-other’, *parasparam* ‘mutually’ (both borrowings from Sanskrit where they were reciprocal pronouns), *tammil* ‘in them’ or ‘among them(selves)’, *tammil-tammil* ‘in them-in them’, *añṇooTTum-iñṇooTTum* ‘that way this way’ (Jayaseelan 2000: 119; Asher & Kumari 1997: 168). Since in inflectional languages reciprocal adverbs are not inflected (while pronouns are), constructions with adverbs are perceived “as less transitive” when an adverb replaces a direct object. Jayaseelan (ibid., p. 121) comments: “Their presence (of the adverbials – V.N.) in the Verb Phrase “intransitivizes” a verb, so that no direct object argument surfaces”; cf.:

Malayalam (ibid., p. 121)

- (33) *awar aηηooTTum-iηηooTTum kaN-Du.*
 they that.way-this.way see-PAST
 ‘They saw each other.’

If there is no case inflection in a language, distinguishing between the adverbial and pronominal status of a reciprocal lexeme may pose problems. The distinctive criteria are (a) the fixed position of the reciprocal adverb relative to the predicate (which differs from the position of the direct object) and (b) the ability to be used with prepositions and postpositions. In particular, the Chinese reciprocal marker *hùxiāng* should be analyzed as an adverb (as it is not used with prepositions, usually placed in contact pre-position to the predicate, unlike a direct object which usually follows the predicate; see Hoa (1983:21–64) and example (85) in Nedjalkov, Ch. 1). Unlike the Chinese *hùxiāng*, the Vietnamese reciprocal marker *nhau* can take the syntactic positions of a noun and combine with prepositions. Therefore it is considered by some specialists a pronoun (see Bystrov & Stankevich, Ch. 47, §1.2); other scholars use the term reciprocal substitute (Nguyen Dinh-Hoa 1997:137). In Bamana, an isolating language, the marker *ɲɔŋɲɛ* ‘each other’ used with postpositions is considered a pronoun (cf. *ɲɔŋɲɛ fɛ* ‘with each other, together’; Vydrine, Ch. 46, §1.2).

There are also reciprocal markers that can function both as pronouns (if inflected for case) and adverbs; this is so for each of the two Korean reciprocal markers: *selo* ‘mutually, each other, together’ used for the antecedent with more than one animate referents and *selo-selo* (same) for the antecedent with more than two referent (Sohn Ho-min 1994:164–7). (On different reciprocal markers depending on the number of the referents see Nedjalkov, Ch. 1, §6.)

3.5 Auxiliary reciprocal words (Indonesian, Ancient Chinese)

A typical instance of this type of reciprocal markers is Indonesian *saling*, the most neutral and least restricted marker of reciprocity in Indonesian. In a way, it is intermediate between an auxiliary verb and a prefix. It cannot be separated from the verb by other words; it does not occur with any other part of speech; it always immediately precedes the predicate. Its linear position differs from that of the direct object, i.e. the phrase it replaces. It is unique in the sense that there seem to be no other words with similar properties in Indonesian (Ogloblin & Nedjalkov, Ch. 33, §6). In reciprocal constructions derived from two-place intransitives, the preposition of the base indirect object is not used:

Indonesian (ibid., ex. (120))

- (34) a. *Amir cinta kepada Fatimah.* ‘Amir loves Fatima.’ (lit. ‘... with Fatima’)
 b. *Amir dan Fatimah saling cinta.* ‘Amir and Fatima love each other.’

Note in this connection that Indonesian employs two more productive markers of reciprocity, a circumfix *ber-...-an* and pre-reduplication of the root; cf. *me-mandang* ‘to look

at' → *ber-pandang-an* 'to look at each other', *pandang-me-mandang* (same), cf. *saling me-mandang* and *saling ber-pandang-an* (same) (ibid., §1.2).

Yakhontov (Ch. 48, §3) notes that in traditional works by Chinese linguists, the Ancient Chinese reciprocal marker *xiāng* 'mutually, each other' is viewed as an "empty" word, while in Western linguistics a word of this class would be regarded as an auxiliary word, a pronoun or an adverb. He himself argues for its auxiliary status because it has an abstract grammatical meaning and belongs to a small closed set of words characterized by a distinctive set of properties, although it combines with prepositions (namely, with *yǔ* 'with', *wèi* 'for'; cf. *xiāng yǔ* 'with each other, together', *xiāng wèi* 'for each other'; ibid., §7).

3.6 Reciprocal adverbs of limited usage (Nivkh)

In Nivkh, there are adverbs *orχ+orχ*, and *rolo* meaning 'mutually', 'reciprocally', which can occur with two-place intransitive verbs and form reciprocal constructions on their own, i.e. they can be the only reciprocal device in a sentence. According to the informant, they are most natural with verbs denoting negative (emotional) relations; e.g.:

Nivkh (Otaina & Nedjalkov, Ch. 41, §6)

- (35) a. *əmək atək-roχ t'axta-d'*
 mother father-ALL get.angry-FIN
 'Mother got angry with Father.'
- b. *əmək-xe atək-xe orχ+orχ t'axta-d'-yu.*
 mother-COM.DU father-COM.DU mutually get.angry-FIN-PL
 'Mother and Father got angry with each other.'

Cf. also examples in Hoa et al. (Ch. 49, §4.3) where the use of a special postposition *zhijiàn* 'among' with nominalizations of verbs denoting emotions and attitudes (like "They developed a mistrust *between us*") is discussed, and paragraph (b) in 6.1.3 on Modern Greek where the medio-passive form used to express reciprocity mostly on emotive verbs is discussed.

3.7 Reciprocal specifiers

Reciprocal specifiers are words and phrases that cannot be used to encode reciprocity on their own. They co-occur with grammatical or lexical reciprocals either for emphasis or for disambiguation (cf. (36a) and (36b) below).

3.7.1 Specifiers of the adverbial ('mutually') type (German, French, English, Polish)

Reciprocal adverbs are used with reciprocally marked verbs only (thus they are additional markers), cf. German *gegenseitig* lit. '(on) the opposite' which occurs (almost exclusively) with the clitic reciprocals (with *sich*):

German (= (87a, b, c) in Nedjalkov, Ch. 1)

- (36) a. *Sie liebten sich.* i. ‘They loved *themselves*’, ii. ‘They loved *each other*.’
 b. *Sie liebten sich gegenseitig.* lit. ‘They loved *each other mutually*.’
 c. **Sie liebten gegenseitig.* lit. ‘They loved *mutually*.’

Other examples of reciprocal specifiers are Polish *nawzajem/wzajemnie* ‘mutually’ (see Wiemer, Ch. 11, §6.1) and Tuvan *udur-dedir* ‘mutually’, ‘face to face’ (see Kuular, Ch. 27, §3.1.5). Judging by the data at my disposal, the Ainu reciprocal adverb *u-tas-pa* ‘mutually, each other, by turns’ (containing a reciprocal prefix) combines with morphological and lexical reciprocals (see Alpatov et al., Ch. 42, §13). Most likely, the To’aba’ita marker *kwai-liu* <REC-walk.past/around, pass (by), roam (about)> (Lichtenberk, Ch. 36, §6) is also a reciprocal specifier if we take into consideration the fact that in the examples cited in Lichtenberk (1991:171–83, 1999:31–62; Ch. 36) it is used either with morphological reciprocals with the prefix *kwai-* pleonastically or with pronominal reciprocals of type (9) for disambiguation.

In Vietnamese, the reciprocal specifier *lãn* i. ‘mutually’, ii. ‘together’ (descended from the verb *lãn* ‘to mix’, ‘to confuse’), is proposed to the reciprocal pronoun *nhau* to stress reciprocity (Bystrov & Stankevich, Ch. 47, §2.7, case 2). The constraints on the use of *nhau* with *lãn* are not quite clear. Thus, the phrases *day lãn nhau* ‘to teach each other’ and *giup do lãn nhau* ‘to help each other’ are grammatical while *yeu lãn nhau* ‘to love each other’ is not.

Note that some of such adverbial specifiers are ungrammatical when used with verbs (36c), but acceptable when used attributively in nominalizations (36d), although there is a restricted selectivity in the latter case (36e) (see also Wiemer, Ch. 11, §§4.6.1, 6.2.2; Wiemer & Nedjalkov, Ch. 10, §4.6). Grammaticality of (36d) is probably due to the fact that nouns like *love* are two-place and can form base constructions of the type *My love for Mary – Mary’s love for me*; cf. *Our (mutual) love* where the adjective *mutual* inherits the syntactic position of the agentive attribute (cf. also (39), (40)). For similar reasons, phrases with reciprocal adjectives like (36d) are correct in German and English, and phrases like (36e) are not: emotive verbs (see Nedjalkov, Ch. 1, §2.4) have a weaker degree of transitivity than verbs like *ermorden* ‘to murder’, and the absence of an object on the noun is less noticeable.

- (36) d. *gegenseitige Liebe* ‘mutual love’
gegenseitiger Hass ‘mutual hatred’
 e. *der gegenseitige Mord* lit. ‘*mutual murder.’

3.7.2 Specifiers of the pronominal type (‘among/between ourselves/.../themselves’)

Like the previous type, these specifiers are peculiar in that they do not encode reciprocity on their own, but they differ from the previous type in that they serve to stress that *the action is confined to the subject referents*, or that the participants are thought of as a group. They occur in many languages, cf. Tuvan *arazanda* ‘among/between themselves’ (see Kuular Ch. 27, §3.1.5). In some languages they are rarely or never used with non-reciprocal predicates, i.e. they are confined to morphological or lexical reciprocals and their deriva-

tives (see Yomdin 1981:103–4). Thus, the Lithuanian reciprocal specifier *tarpusavyje* ‘between selves’, its paraphrase *tarp savęs* with the same meaning and *savo tarpe* lit. ‘in our/your/their midst’ are never used with non-reciprocal verbs. Contrary to the phrase *vienas kitą* ‘each other’, these latter specifiers are used mostly for emphasis. They may refer to many as well as to two participants. These phrases are most common with morphological reciprocals meaning ‘to scold each other’, ‘to quarrel’, ‘to fight’, ‘to talk/whisper to each other’, etc. With some of the reciprocals (cf. (37c)) they are ungrammatical, but the reasons are not clear.

Lithuanian (Geniušienė, Ch. 14, §9)

- (37) a. *Juodu su-si-žvalgė tarpusavyje.*
 ‘They.two(M) exchanged glances between themselves.’
 b. *Jiedvi bara-si tarp savęs.*
 lit. ‘They.two(F) are abusing each other between themselves.’
 c. **Jie su-si-žiedavo tarp savęs.*
 ‘They exchanged rings (got betrothed) between themselves.’

In Even, the reciprocal specifier *meer dooli(-wur)* ‘among themselves’, ‘(to) each other’ is mostly used pleonastically in combination with suffixed reciprocals:

Even (Malchukov, Ch. 39, §6)

- (38) *Heejeke-l hil-žihadur meer dooli maa-mač-čot-ta.*
 Yukaghir-PL suffer-CONV among themselves kill-REC-ITER-NFUT.3PL
 ‘The Yukaghirs killed each other (among themselves) in order not to suffer (not to be tortured).’

3.7.3 Relations between reciprocal pronouns and reciprocal specifiers

In some languages, syntactic reciprocal markers can develop into reciprocal specifiers, or vice versa.

1. *Reciprocal pronoun > specifier.* In some Romance languages, reciprocal pronouns show a tendency to function as reciprocal specifiers, i.e. they fall out of use as independent markers of reciprocity. Thus, French *l’un l’autre* ‘each other’ has lost its pronominal nature on verbs with the reflexive clitic,⁴ and it retains its reciprocal function on verbs constructed with a prepositional object (cf. (94)–(95) in Ch. 1); cf. also Bulgarian *edin drug* (see (90)–(91) in Section 1) and Telugu where the use of the reciprocal pronoun *okaLLa-ni okaLLu* ‘one-ACC one.NOM’ does not require omission of the marker *kon-* on so-called ‘verbal reflexives’ (Subbarao & Lalitha 2000:226; on verbal reflexives in Dravidian languages see Nedjalkov, Ch. 1, §11.4).⁵

2. *Reciprocal specifier > reciprocal marker.*

4. A similar situation is observed in Italian where *l’un l’altro* cannot take the direct object position and co-occurs only with the reflexive clitic *si*, which makes Belletti (1982/1983: 103, 127–8) regard it as an adverbial.

5. Note that in closely related Kannada the reciprocal marking on the verb termed reflexive in Dravidian linguistics (see (79) in Ch. 5) is optional if a reciprocal pronoun is used (Amritavalli 2000:85–6; Subbarao & Lalitha 2000:260).

2a. Specifiers of the *adverbial* ('mutually') type (see 3.7.1) do occur as reciprocal markers, although the examples at my disposal are not always beyond doubt. Here belongs Russian example (39) from fiction, though it is not accepted by some native speakers; this specifier is ungrammatical with verbs, cf. **Oni vzaimno ljubjat* lit. 'They mutually love', but possible in attributive usage, as in *vzaimnaja ljubov'* lit. 'mutual love'. Here, as in a number of other cases, the head words denote emotions and actions (e.g. reprimands, insults, provocations, compliments, services, help, etc.) normally caused by emotions; cf. (4) in 1.2.3, and (36d) in 3.7.1. It is interesting to note that some authors accept the use of the English specifier *reciprocally* as the only reciprocal marker acceptable with certain verbs (according to Miller (1993:194), it "is grammatical though rare", cf. (40)):

(39) *Oni byli vzaimno raspolozheny.* lit. 'They were mutually disposed.'

(40) *They loved reciprocally.* (ibid., p. 193).

Another example is the German specifier *gegenseitig* 'mutually' in the translations of Japanese reciprocals (*-a* = REC) as the only reciprocal marker encountered in a Japanese-German dictionary: *syutyoosi-a-u* 'gegenseitig behaupten', *seme-a-u* 'gegenseitig kritisieren', but cf. *wakari-a-u* 'sich gegenseitig verstehen' (Hasselberg 1996:42, 44).

2b. Specifiers of the *pronominal* ('among selves') type (see 3.7.2). Such cases are also rare. An interesting example is the Latin marker *inter se* 'each other', lit. 'among/between themselves' (*A et B inter se amant* 'A and B love one another') which seems to have developed from a specifier. Another example is Udehe, where, in contrast to the closely related Even language (cf. (38) above), the specifier *mene dolo* 'among themselves' can also function as the only marker of reciprocity, though mostly with intransitive verbs (probably because most of the morphological reciprocals are intransitive).

Udehe (Nikolaeva, Ch. 23, §4)

(41) *Mene dolo e-iti asa.*
REFL within NEG-3PL respect
'They don't respect each other.'

4. Type C. Periphrastic (analytical) constructions

Three periphrastic devices are registered so far.

4.1 Active participle + auxiliary verb (Kiranti)

In such constructions the reciprocal meaning cannot be ascribed to any one of the components. (This is also characteristic of Type A, but in A two notional verbs in two clauses are used, and here we find one notional verb with an auxiliary.) This idiosyncratic device for reciprocalization is attested in the Kiranti languages: for instance, in Bantawa the periphrastic reciprocal construction consists of an active participle with the suffix *-pa* and the postposed inflected auxiliary verb *mi* 'to do'. This construction has a morphological

variant with the agreement marker attached (preposed) to the participle: cf. *tī-* and *im-* in (42) and (43) respectively. In this case, the whole formation should be regarded as an instance of Type D or even Type E, with *-pa-* in (42b) and (43b) as an infix.

Bantawa (Ebert 1994: 54; ex. (43) – K. Ebert, p.c.)

- (42) a. *dhat-pa* *tī-mī-a-nin.* b. *tī-dhat-pa-mī-a-nin.*
 beat-ACT.PART 2-DO-PAST-2PL 2-beat-ACT.PART-DO-PAST-2PL
 ‘you beat each other’, lit. ‘you made fighter’ (same as (a)).
- (43) a. *nop-pa* *im-mī.* b. *im-nop-pa-mī.*
 touch-ACT.PART 3PL-DO 3PL-TOUCH-ACT.PART-DO
 ‘they touch each other’ (same as (a)).

4.2 Detransitivized notional verb + reciprocal auxiliary (Mvtwang dialect of Dulong/Rawang)

In this dialect of a Tibeto-Burman language, reciprocals are formed by means of the intransitivizing prefix *v-* alone (it can also form anticausatives but not reflexives which are formed by the reflexive/middle marker *-shi*):

Dulong/Rawang (Mvtwang dialect; LaPolla 2000:288–9)

- (44) a. *ang-maq v-shvt-ē.*
 3PL PREF-hit/kill-NONPAST
 ‘They are arguing/fighting.’

In this dialect, however, combination of a notional verb with an auxiliary verb is another means of marking reciprocals: “the verb *kē ~ kē* ‘eat (meat), bite’ has grammaticalized into an auxiliary reciprocal marker, and generally the two markers are used together” (ibid.); cf.:

- b. *ang-maq v-yvng kē-ē.*
 3PL PREF-see REC-NONPAST
 ‘They are looking at each other.’

4.3 Deverbal substantive + auxiliary (Kâte)

This reciprocal form is attested in one language where it is derived from a small number of bases and consists of a deverbal noun whose initial syllable undergoes reduplication and an auxiliary verb *e* (Pillhofer 1933:99–101). Reciprocals derived from nouns of action are marked with reduplication of the auxiliary verb.

Kâte (ibid., p. 99)

- (45) a. *baficke* ‘to help/love’ → *ba-bafic e* ‘to help/love each other’
 b. *sopecke* ‘to scold’ → *so-sopec e* ‘to curse each other.’
- (46) a. *bulec* ‘a lie’ → *bulec eec e* ‘to lie to each other’
 b. *pelec* ‘argument’ → *pelec eec e* ‘to argue with each other.’

5. Type D. Compounds with recurrent components (Chinese, Tucano, Japanese)

I have in mind components which are used in many compounds. As Aikhenvald (Ch. 30, §5.1) claims, “[t]ypologically, the use of verb compounding to mark reciprocals is an extremely rare phenomenon”.

1. *Chinese*. The general tendency to replace monosyllabic words with synonymous disyllabic words in Chinese (cf. *bāng* ‘to help’ + *zhù* ‘to help’ → *bāng-zhù* ‘to help’) gives rise to compound reciprocals, built as combinations of two lexical reciprocals (see (47a)).⁶

In such instances the use of the recurrent components *jiāo* ‘to intersect/cross’, ‘to join’, *duì* ‘to be opposite (to) each other’, and some others does not essentially change the meaning of the base verbs. Alongside some compounds of type (47a), the verb *jiāo* and other analogous components form a second group of compounds where the reciprocal meaning is expressed by this initial component. Thus, in (47a) the meaning of the initial component is practically not represented in the semantic structure of the compounds, while in (47b) it is.

Modern Chinese (Hoa et al., Ch. 49, §7)

- | | | | |
|---------|-------------------------------------|---|---|
| (47) a. | <i>hǎo</i> ‘to be friends’ | → | <i>jiāo-hǎo</i> (same) |
| | <i>bǐ</i> ‘to compare sth with sth’ | → | <i>duì-bǐ</i> (same) |
| b. | <i>bài</i> ‘to bow to sb’ | → | <i>jiāo-bài</i> ‘to bow to each other’ |
| | <i>liú</i> ‘to flow’ | → | <i>jiāo-liú</i> ‘to flow together (into one place)’ |
| | <i>kàn</i> ‘to look’ | → | <i>duì-kàn</i> ‘to exchange glances’ |
| | <i>mà</i> ‘to scold’ | → | <i>duì-mà</i> ‘to scold each other.’ |

Compounds with the recurrent initial components borrowed from Chinese are also encountered in Vietnamese (Bystrov & Stankevich, Ch. 47, ex. (47)–(50)).

In the following type of compounds we observe reduplication of the lexical verb combined with the grammaticalized use of the verbs *lái* ‘to come’ and *qù* ‘to go’, denoting motion in opposite directions (this form is more commonly used to denote iterativity):⁷

Chinese (Liu 1999: 124–32; (48) = (18) in Ch. 1)

- | | | | |
|---------|------------------------|----|----------------------------|
| (48) a. | <i>Tāmen dǎ-le ta.</i> | b. | <i>Tāmen dǎ-lái-dǎ-qù.</i> |
| | they hit-PERF he | | they hit-come-hit-go |
| | ‘They hit him.’ | | ‘They hit each other.’ |

2. *Tucano*. In Tucano (see Aikhenvald, Ch. 30), reciprocals are formed by compounding either the verb *poteō* ‘to equalize, restitute, counterbalance’ or *amē* ‘to do each other, do back, retribute, reward’ with a lexical verb. The first verb comes before the lexical verb and the second goes after it. Both verbs can co-occur in the same compound, with a slight difference in meaning.

6. These processes are characteristic not only of reciprocals in Chinese: over two thirds of verbs in everyday vocabulary of Chinese are disyllabic; Hoa et al., Ch. 49, §2.2.

7. The use of verbs meaning ‘to come’ and ‘to go’, i.e. motion in opposite directions, for marking iterativity and, later, reciprocity, reminds one of the fact that the term *reciprocal* is derived from the Latin *reciprocus* ‘reverse, back (motion), moving back and forth’.

Tucano (ibid., §§5.3.1 and 5.3.2)

- (49) *kē* ‘to hit sb’ → *amē-kē-/amē-kē-poteō* ‘to hit each other’
iyá ‘to look at sb’ → *malī iyā-poteā-lā* *we.*
 we look-equalize-PL do
 ‘We are looking at one another (i.e., you are looking at me and I am looking at you back an equal number of times).’

3. *Japanese*. In this language, there is a number of reciprocal verbs derived according to an unproductive pattern with the prefix *a-i-*.

Japanese (Alpatov & Nedjalkov, Ch. 25, §9, ex. (76))

- (50) *koros-u* ‘to kill’ → a. *a-i-koros-u* ‘to kill each other’
 b. *korosi-a-u* (same).

This prefix has evolved from a deverbal noun with the suffix *-i* (cf. *hanasi-a-u* ‘to discuss’ – *hanasi-a-i* ‘discussion’). Thus, the intransitive verb *ai-koros-u* (50a) diachronically is a compound composed of the action noun *a-i* and the transitive verb *koros-u* ‘to kill’. A productive reciprocal marker is the suffix *-a-* (positional variants *-aw-/at-*) going back to the lexical verb *a-u* ‘to meet, fit’ (see Ch. 25, §13). This is a peculiar case because the prefix *a-i-* is also descended from this verb. It is interesting to note that if the prefix *ai-* had retained its productivity it would be the only verbal prefix in Modern Japanese (if we disregard the honorific prefix *o-*).

6. Type E. Affixing, including inflection and zero marking on the predicate

This type is much more varied than the previous ones. Some of the markers are much more polysemous than most markers of Types A-D listed in §1.2 above. In this section, I will discuss seven main morphological means of marking reciprocity:

1. Detransitivization without any derivational means (§6.1).
2. Reciprocal marker in the agreement slot: it acts here as a kind of filler-in (6.2).
3. Prefixation; from a certain point of view, this type overlaps with type 2 (6.3).
4. Suffixation (6.4).
5. Infixation (6.5).
6. Circumfixation (= confixation; 6.6).

In contrast to subtype 2, affixes of subtypes 3–6 do not fill in the slot of any agreement markers. Affixation can be applied simultaneously with reduplication (see (71) and (72)) below).

Although basically the means of expressing reciprocity are formally of the same types as in the case of other grammatical categories, they have a number of peculiarities.

- The reciprocal marker may be the only prefix or the only infix in a language (it is probably not accidental that a language where the only suffix is reciprocal in meaning

has not occurred in my list, although the reasons are not clear to me).⁸ For instance, in Bari, the only verbal prefix *tɔ-* functions as a causative or reciprocal marker (Spagnolo 1933: 157). The reciprocal prefix *u-/v-* is the only prefix in Nivkh, if we disregard the reflexive prefix *p'*- (which can also be treated as a reflexive pronoun *p'i* 'self' in the direct object position), (Otaina & Nedjalkov, Ch. 41). The reciprocal marker *-ep-/pe-/p-/...* (cf. *lel* 'to see' → *le-pe-l* 'to see each other'; Osada, Ch. 37, §1.2) is the only infix in Mundari; in Proto-Munda, though, this infix was used in combination with the reciprocal prefix, and this marking is preserved only in the peripheral Gta? language (cf. *bi?* 'to give' → **ho-b-m-i?* → *ho-m-m-i?* 'to exchange'), while in some other languages of this family the prefix alone is preserved (cf. Juang *gata* 'to talk' → *ko-gata* 'to converse'; Zide & Anderson 2001: 519–20). In Itelmen (Volodin, Ch. 43), the reciprocal prefix *lu-/lo-* and the causative prefix *len-*, *ən-* (usually the initial part of the causative circumfix) are the only derivational prefixes. It is interesting to note that Nivkh, Ainu and Itelmen are in areal proximity and their reciprocal prefixes are formally identical or similar (63)–(65). Note also that Yukaghir surrounded on many sides by languages employing suffixation uses a prefix for denoting reciprocity (66).

- A peculiarity of reciprocal markers in some languages is their frequent co-occurrence with markers more or less close in meaning to them and also with the meaning of plurality (cf. Chukchi *-tku-waly-* in (83) and *-waly-čit-* in (85), Evenki *-ldə-maat-* in (86c), Buryat *-lda-lsa-* in (88b) and *-sa-lda-* in (88a), Udehe *-si-masi-* in (89b)).
- Other peculiarities are the obligatory co-occurrence of the reciprocal marker with a dual prefix in Awtuw even if the antecedent is plural (73), and the existence of a special marker for two participants and another for more than two in a number of languages (see 1.5.3). Root or affix reduplication is a manifestation of iconicity in reciprocal marking (see (71), (75) and Section 6.7).

6.1 Detransitivization without any derivational markers

Judging by the available sources, this type of marking is rare across languages and usually co-exists with some other reciprocalization markers.

6.1.1 Direct object deletion without change of inflection on the verb (English, Tariana)

The reciprocal meaning is expressed by the omission of the (direct) object, in the context of a non-singular subject, as in English sentences with a limited number of verbs, e.g.:

- | | | |
|---------------------------|---|----------------------|
| (51) <i>He kissed her</i> | → | <i>They kissed</i> |
| <i>He embraced her</i> | → | <i>They embraced</i> |
| <i>He met her</i> | → | <i>They met</i> |
| <i>He argued with her</i> | → | <i>They argued.</i> |

Faltz (1977: 12) considers this type of detransitivization as middle strategy: “Interestingly, the range of functions served by *-sja* and those served by the English middle strategies

8. Note in this connection that, as is known, suffixes are much more widespread across languages than prefixes.

overlap considerably, yet do not exactly coincide.” The same reciprocal strategy is observed in Tariana:

Tariana (Aikhenvald, Ch. 30, §3.1.3)

- (52) a. *naha na-kwisa wa-na.* → b. *naha na-kwisa.*
 they 3PL-hate 1PL-OBJ they 3PL-hate
 ‘They hate us.’ ‘They hate each other.’

6.1.2 *Subject agreement instead of subject-object agreement (Eskimo, Chukchi)*

In Eskimo, however, this marking is used together with an applicative suffix, and, usually, with a reflexive-reciprocal semi-pronoun (see (31), (32) above). In Chukchi the more productive markers are a reciprocal suffix *waly-* (83)–(85) and also a reciprocal semi-pronoun (29), (30b).

West Greenlandic Eskimo (Fortescue 1984: 166)

- (53) a. *kunip-paa* ‘he embraced him’ (-*paa* = 3SG+3SG ‘s/he... him/her/it’)
 b. *kunip-put* ‘they embraced’ (-*put* = 3PL ‘they’).

Chukchi (Nedjalkov, Ch. 40, ex. (84))

- (54) a. *ukwen-nin* ‘he kissed her’ (-*nin* = 3SG+3SG ‘s/he... him/her’)
 b. *ukwet-yʔet* ‘they kissed’ (-*yʔet* = 3PL ‘they’).

6.1.3 *Middle (passive) conjugation instead of active conjugation (Modern Greek)*

This type may be ascribed to the types discussed in 6.1 with reservations. The middle inflection is used to express a number of meanings, in particular, reciprocity and reflexivity among them. In Modern Greek, it is used with a limited number of transitives denoting emotional relations, such as love or hatred (cf. (55a–b)), as well as actions caused by these feelings (Joseph & Philippaki-Warburton 1987: 84). In the case of polysemy, the reciprocal prefix *alilo-* may be added for disambiguation, as in (55d), or the expression *metadzu tous* ‘between/among themselves’ (Mackridge 1985: 89).

Modern Greek (ibid., p. 84–5)

- (55) a. *ayap-ame* ‘we love sb’ → *ayap-iomaste* ‘we love each other/ourselves’
ayap-ate ‘you love sb’ → *ayap-iosaste* ‘you love each other/yourselves’
ayap-ane ‘they love sb’ → *ayap-iunde* ‘they love each other/themselves.’
 b. *mis-un* ‘they hate sb’ → *mis-junde* ‘they hate each other/themselves.’
 c. *kitáz-un* ‘they are looking at sb’
 d. *alilo-kitáz-onde* ‘they are looking at each other.’

6.2 Derivational-paradigmatic means

This device is a combination of overt morphological marking of reciprocity and unmarked agreement change. There are at least two distinct subtypes.

Subtype 1: a reciprocal marker is not attached to the verb stem but it is inserted in the object-agreement slot, the agreement marker being deleted (it may be separated from the root by another agreement marker, cf. Abaza *j-aba-xI-* ‘this-REC-we-’ in (57b)).

Subtype 2: a marker with the principal transitivity function (i.e. applicative: non-causative transitivity) marks reciprocity only if the derivative is simultaneously de-transitivized, which is reflected in the substitution of subject agreement for subject-object agreement. If detransitivization does not take place, the same marker has a different meaning (62b).

6.2.1 A reciprocal marker substituted for an agreement affix

The position of the agreement marker is filled by a reciprocal marker.

6.2.1.1 *One marker for subject and direct object reciprocalization, another for other cases (Kabardian).* In Kabardian, the reciprocal marker *zə-r(ə)-* is used to mark reciprocal relations between subject and direct object on a transitive verb, and *zə-* in other cases, namely, between subject and non-direct object, direct and non-direct objects; see (127b) and (141b)–(141’b) in Ch. 1 (Kazenin, Ch. 17, §1.3). The object-agreement marker is omitted and a reciprocal marker fills its position in the verb structure; cf.:

Kabardian (ibid., §§3.2.1.1.1–3.2.1.1.3)

- (56) a. *a-xə-m uə u-a[-o]-cIəx-Ø.*
 they-PL-ERG you 2SG-3PL-DYN-KNOW-PRES
 ‘They know you.’
 b. *a-xə-r Ø-zər-o-cIəx-Ø.*
 they-PL-ABS 3PL-REC-DYN-KNOW-PRES
 ‘They know each other.’

6.2.1.2 *One marker for two- and three-place transitives, another for two-place intransitives (Abaza).* Sentences (57) and (58) from Abaza (genetically related to Kabardian) illustrate this type of marking for three-place transitives. In (57b) and (58b), i.e. in subject-oriented “indirect” and object-oriented reciprocals, the reciprocal prefix *aba-* (< *aj-ba-*) takes the position of the non-direct object marker *-la-/-l-* after the direct object agreement marker and before the subject agreement marker.

Abaza (Tabulova 1976:192)

- (57) a. *j-la-j-xIv-tI* → b. *j-aba-xI-xIv-tI*
 this-she-he-tell-PAST this-REC-we-tell-PAST
 ‘He told her this.’ ‘We told this to each other.’
 (58) a. *də-l-də-r-ba-tI* → b. *xI-aba-də-r-ba-tI*
 he-she-they-CAUS-see-PAST we-REC-they-CAUS-see-PAST
 ‘They showed him to her.’ ‘They showed us to each other.’

Two-place transitives also take the prefix *aba-* but it occupies another position in the word (cf. *də-r-* ‘s/he-they-’ and *j-aba-* ‘they-REC’ in (59)). On two-place intransitives the recip-

rocal marker *aj-/a-* occupies the position of the [non-direct-]object agreement marker, as in (57) and (58); cf. *s-la-* and *xI-aj-* in (60).

Abaza (Tabulova 1976: 191–2, 193)

- | | | | | |
|---------|-----------------------|---|----|---------------------------|
| (59) a. | <i>də-r-dər-itI</i> | → | b. | <i>j-aba-dər-itI</i> |
| | s/he-they-know-PRES | | | they-REC-know-PRES |
| | ‘They know him/her.’ | | | ‘They know each other.’ |
| (60) a. | <i>s-la-čvažva-tI</i> | → | b. | <i>xI-aj-čvažva-tI</i> |
| | I-she-speak-PAST | | | we-REC-speak-PAST |
| | ‘I spoke to her.’ | | | ‘We spoke to each other.’ |

Abaza has at least five more, though unproductive, reciprocal markers (72).

6.2.1.3 *Reciprocalization of two-place intransitives only via transitivization by means of an applicative marker (Ainu).* In Ainu, the reciprocal prefix *u-* takes the position of the object-agreement marker, which means that only transitives can be reciprocalized. The reciprocalization of two-place intransitives is possible only after transitivization by means of the applicative prefix *ko-* (see Alpatov et al., Ch. 42, §3.1.1.2).

Ainu (ibid.; *-as* ‘we’, *eci-un-* ‘you(PL)-us’)

- | | | | |
|---------|-----------------------|--|--------------|
| (61) a. | <i>itak-as</i> | ‘we (INC) speak’ (addressee cannot be named) | one-place vi |
| b. | <i>eci-un-ko-ytak</i> | ‘you (PL) speak to us’ | two-place vt |
| c. | <i>eci-u-ko-ytak</i> | ‘you (PL) speak to each other.’ | one-place vi |

6.2.1.4 *An applicative marker used to mark reciprocity via detransitivization (Eskimo).* This case is entered here in this section with reservations. As mentioned above, a marker here acquires the reciprocal meaning only if the derivative is intransitivized, which is reflected in the change of the agreement marking (as is shown in (62) below) and substitution of the nominative construction for the ergative. In cases (63)–(66) the predicate is also intransitivized but it is marked on the stem (cf. Itelmen *tnete-* ‘to push sb’ → *lu-tnete-* ‘to push each other’ in (65)), i.e. the stem shows that it is a derivative, while cases like (62) require an inflected intransitive form. Reciprocals in Eskimo contain a highly polysemous suffix *-ut(i)* (assimilated as *-up/-u/-ap*) with the main applicative function. It introduces a (new) direct object with meanings like ‘for someone’, ‘with someone’, ‘instead of someone’, ‘together with something’, etc., depending on the lexical meaning of the base verb and context. In principle, these meanings can be expressed by the transitive stem *malirsu-up-* in (62b). As mentioned, this applicative may acquire the reciprocal meaning when this form is intransitivized. Thus we can claim that two operations, viz. addition of the applicative suffix *-up* in (62b) and detransitivization, are applied simultaneously.

West-Greenlandic Eskimo (Fortescue, Ch. 19, §3.2.1)

- | | | |
|---------|-----------------------|---|
| (62) a. | <i>malirsur-paa</i> | ‘he pursued him’ (<i>-paa</i> = 3SG+3SG ‘s/he... him/her/it’) |
| → b. | <i>malirsu-up-put</i> | ‘they pursued one another’ (<i>-put</i> = 3PL ‘they’); cf. (40). |

6.3 Prefixation

6.3.1 *Prefixation without special features.*

The prefix is the main or the only marker of reciprocalization.

- Nivkh (Otaina 1978:121)
 (63) -*γ*- 'to kill'
 → *u-γ*- 'to kill each other.'

- Ainu (Tamura 1996:753)
 (64) *kasuy* 'to help'
 → *u-kasuy* 'to help each other.'

- Itelmen (Volodin 1976:210–1)
 (65) *tnete-* 'to push sb'
 → *lu-tnete-* 'to push each other.'

- Yukaghir (Maslova, Ch. 44, ex. (1))
 (66) *juö* 'to see'
 → *n'e-juö* 'to see each other.'

While in many Indo-European languages reciprocity is expressed by a reflexive clitic (see Section 8) (English, Albanian and Greek employ other means), the Celtic languages use a prefix:

- Welsh (H. Pilch, p.c.)
 (67) a. *gweld* 'to see'
 → *ym-weld* 'to see each other'
 b. *dadlu* 'to debate'
 → *ym-ddadlu* 'debate with each other'

- Breton (H. Pilch, p.c.)
 (68) a. *karout* 'to love'
 → *en em-garout* 'love each other'
 b. *kasaat* 'to hate'
 → *en em-gasaat* 'hate each other.'

Note that this prefix displays a polysemy typical of the Indo-European reflexive clitics: it also has a reflexive meaning, depending on the context and the number of the subject (cf. Welsh *ym-olchodd Wyn* 'Wyn washed himself'; Awbery 1976:134). This prefix is practically lost in Irish but still productive in Welsh (*ym-* < *ambi-*) and Breton (*en em-*, *en* being a fossilized 3SG pronoun used irrespective of the person and number of the subject). This prefix is related to the German *um-*, Old English *ymbe-*, Latin *ambi-*, Greek *ἀμφί-*. Like its German cognate, Celtic *um* also functions as a preposition (see Lewis & Pedersen 1961:264; Vendryes 1927:49–62; Thurneysen 1892:523–7).

6.3.2 *Prefixation with special features*

These special features may concern the structure and form of a reciprocal prefix, conditions of its inclusion in the verb structure, distribution among various valency verb classes, etc.

6.3.2.1 *Different reciprocal markers for the 1st and non-1st persons (Huichol and some other Southern Uto-Aztecan languages).* Below, the reader will find the set of prefixes in Huichol, which render both the reflexive and (in the plural the) reciprocal meanings.⁹

9. The use of *yu-* in 2PL is probably accounted for by the expansion of 3PL, which can also be typologically expected.

Huichol (Langacker 1976:36)

- | | | | |
|------|--|------|--|
| (69) | SG PL
1. <i>ne- ta-</i>
2. <i>ʔa- yu-</i>
3. <i>yu- yu-</i> | (70) | <i>we-pl-yuu-naaki²eri</i>
3PL-ASSR-REFL-love
‘They love each other.’ |
|------|--|------|--|

Alternation of the markers for person and number resembles alternation of pronouns in German (18) and alternation of endings in Greek (55).

6.3.2.2 Reduplication of a reflexive-reciprocal prefix (Apalai). The prefix *os-/ot-/at-/e-* in Apalai denotes both reflexivity and reciprocity, but its *reduplicated* variant is reciprocal only. In our material, the reduplication of affixes is much less common than the root reduplication in reciprocal pronouns (cf. (13)–(17) above).

Apalai (Koehn & Koehn 1986:44)

- (71) *at-at-apoi-Vko toto.*
 REFL-REFL-grab-CONT 3PL
 ‘They (were) grabbing each other (fighting).’

6.3.2.3 Fossilized reduplicated non-reciprocal prefixes used as reciprocal markers (Abaza). In (72) the reciprocal markers are reduplicated fossilized prefixes of comitatives / sociatives (72a), bene- and malefactive (72b, c) and preverbs (72d, e). This is an unproductive type, the productive type being discussed in 6.2.1.2.

Abaza (Tabulova 1976:194–6)

- | | | |
|------|--|---|
| (72) | a. <i>-c-xrəgara</i> ‘to help sb’
<i>-c-naxčəlra</i> ‘to envy sb’
b. <i>-z-x’aclara</i> ‘to believe sb/sth’
<i>-z-clɣlara</i> ‘to ask sb’
c. <i>-čv-bxlara</i> ‘express resentment’
<i>-čv-pxaščara</i> ‘be shy before sb’
d. <i>-šI-pšra</i> ‘to imitate sb’
e. <i>-x’v-lapšra</i> ‘to look at sb’ | → <i>ac-ac-xrəgara</i> ‘to help each other’
→ <i>ac-ac-naxčəlra</i> ‘to envy each other’
→ <i>az-az-x’aclara</i> ‘to believe each other’
→ <i>az-az-clɣlara</i> ‘to ask each other’
→ <i>ačv-ačv-bxlara</i> ‘to resent each other’
→ <i>ačv-ačv-pxaščara</i> ‘be shy before each other’
→ <i>ašI-ašI-pšra</i> ‘to imitate each other’
→ <i>ax’v-ax’v-lapšra</i> ‘to exchange glances.’ |
|------|--|---|

6.3.2.4 Reciprocal prefix + dual marker (Awtuw). In Awtuw, the reciprocal prefix *n-* is obligatorily accompanied by a dual subject prefix (*ti-* in (73)). This double marker is used on the predicate not only if the subject is dual but also with a plural subject (see *-m* in (73)), in which case the verb acquires a plural suffix as well. In other cases, the co-occurrence of a dual prefix and plural suffix in the same form is not allowed (see Feldman 1986:67):

Awtuw (ibid.)

- (73) *Nalpet Kamlakw yakruk ti-n-iy-m-e.*
 Taute Kamnun once DU-REC-SHOOT-PL-PAST
 ‘Taute and Kamnun once had a war (lit. shot at each other).’

6.3.2.5 *A reciprocal prefix ousting a causative prefix (Palauan)*. This rare case is represented by a group of Palauan verbs with the reciprocal prefix *kai-/ka-/kau-/kajuɛ-* which fills the position of the fossilized causative prefix *ol(ɛ)-*, although on some other verbs it is merely attached to the base. The direction of derivation is not obvious here.

Palauan (Josephs 1975: 221)

- (74) *olɛ-ngɛseu* ‘to help’ → *kai-ngɛseu* ‘to help each other’
ol-siuekl ‘to meet’ → *kai-siuekl* ‘to meet each other’
ol-toir ‘to chase’ → *kaiuɛ-toir* ‘to chase each other’
ol-dingɛl ‘to visit’ → *kaiuɛ-dingɛl* ‘to visit each other’
ol-durokl ‘to send’ → *kau-durokl* ‘to send (sth) to each other.’

See also Hagège (1986: 66–7).

6.4 Suffixation

6.4.1 Suffixation without special features

This is probably the most common type of reciprocal marking across languages with prevalent suffixed derivation, e.g. in Turkic, Tungusic, Mongolian, also Quechua, Indonesian, Tagalog, Bantu, etc.; cf.:

- | | |
|--|---|
| <p>Tariana (Aikhenvald, Ch. 30, §1.2)</p> <p>(75) <i>kwisa</i> ‘to hate sb’
 → <i>kwisa-kaka</i> ‘to hate each other.’</p> | <p>Warekena (Aikhenvald, Ch. 20, §2.1)</p> <p>(76) <i>we</i> ‘to leave sb’
 → <i>we-na</i> ‘to leave each other.’</p> |
|--|---|

- | | |
|---|--|
| <p>Bare (Ch. 20, §3.1)</p> <p>(77) <i>kuuyud’ä</i> ‘to embrace sb’
 → <i>kuuyud’a-tini</i> ‘to embrace each other.’</p> | <p>Baniwa of Içana (Ch. 20, §4.1)</p> <p>(78) <i>inua</i> ‘to kill sb’
 → <i>inua-kawa</i> ‘to kill each other.’</p> |
|---|--|

- Warrungu (Tsunoda, Ch. 32, §1.2)
- (79) *paja* ‘to bite’
→ *paja-wa* ‘to bite each other.’

6.4.2 Suffixation with special features

6.4.2.1 *Different suffixes for plural and dual forms (Limbu)*. In order to express reciprocity, Limbu uses the reflexive/reciprocal suffix *-siŋ* on plural forms (on singular forms it has a reflexive meaning; see (28) in Ch. 1) and *-ne* on dual forms (van Driem 1987: 86). On different markers for the varying number of participants, see Ch.1, §5.3.

Limbu (van Driem 1987: 86, 87; the glossing is van Driem’s)

- (80) a. \emptyset -mɛ-bi-siŋ-ɛ- \emptyset
3-NON.SG-gIVE-REFL-PAST-PFV
‘They gave each other [gifts].’
b. *anchige nik-ne-tchi-ge* ...
we.DU fuck-REFL-dPS-EXC (-dPS = dual patient-subject agreement marker)
‘... we are having an illicit relationship.’ (lit. ‘we are fucking each other’ – V.N.).

When used on singular forms, the suffix *-siŋ* expresses the reflexive meaning:

- c. *warum-siŋ-aŋ-Ø*
 bathe(vt)-REFL-1SPS/PAST-PFV (-SPS = SG patient-subject agreement marker)
 ‘I took a bath /I bathed.’

6.4.2.2 *Overlapping suffixes for non-causative and causative reciprocals (Bolivian Quechua, Yakut).* In Bolivian Quechua, the non-causative reciprocal marker *-na-ku* incorporates the reflexive suffix *-ku* which is always subject-oriented (cf. *maylla-ku-* ‘to wash oneself’) and therefore does not appear in the causative-reciprocal marker *-na-chi* (*-chi* = CAUS) which occurs in the object-oriented construction.

Bolivian Quechua (van de Kerke, Ch. 31, §§1.2 and 5.1)

- (81) a. *maylla-* ‘to wash sb’
 → b. *maylla-na-ku-* ‘to wash each other’
 → c. *maylla-na-chi-* ‘to make sb wash each other.’

The opposite is observed in Yakut: causative derivation from reciprocals obligatorily involves the use of the reflexive suffix (*-in* in (82c)) together with the reciprocal:

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §4.2; cf. also 14.3; *-as* > *-ah* in intervocalic position)

- (82) a. *kör-* ‘to look, see’ (cf. *kör-ən* ‘to see oneself’)
 → b. *kör-əs-* ‘to see each other, meet’
 → c. *kör-əh-ən-ner-* ‘to make sb meet’ (*-ner* = CAUS).

6.4.2.3 *Suffixes often co-occurrent with a reciprocal marker (Chukchi, Evenki, Udehe, Khalkha-Mongol, Buryat).* Most commonly, a reciprocal suffix combines with suffixes of similar semantics.

1. The *Chukchi* reciprocal suffix *-wəly* often co-occurs with the polysemous suffix *-tku/-tko* which may be used as an iterative and an antipassive marker. It can be placed either before or after the reciprocal suffix, with an unclear difference in meaning (83a–b), and sometimes it is repeated in both positions to emphasize the verbal meaning (84). *-wəly* may also co-occur with the suffix *-čit/-čət* (with iterative, competitive and reciprocal meanings; cf. (85)). Both *-tku* and *-čit* can express reciprocity on a limited number of bases. In combination with *-wəly* they stress reciprocity or iterativity.

Chukchi (Nedjalkov, Ch. 40, §§3.1.1.1, 5.2.2; *-ə* = epenthetic vowel)

- (83) a. *yite-* ‘to glance, look at sb’
 → *yite-wəly-* ‘to look at each other’
 → *yite-wəly-ə-tku-* ‘to exchange glances repeatedly’
 b. *yite-tku-* ‘to glance, look repeatedly’
 → *yite-tku-wəly-* ‘to exchange glances repeatedly.’

- (84) *Qənwer, təm-ə-tko-wəly-ə-tko-γʔat* (*-γʔat* = 3PL)
 ‘At last (they) killed each other (of many, repeatedly).’

- (85) a. *ləlep-* ‘to look’ (vi/vt)
 → *ləlep-wəly-/ləlep-čit-* ‘to look at each other’
 → *ləlep-wəly-čit-* (same translation).

2. In *Evenki*, the monosemous reciprocal suffix *-maat/-meet/-moot* sometimes co-occurs with the sociative suffix *-ldə*, and thus forms a synonymous complex suffix *-ldə-maat*. This is probably due to the fact that *-ldə* is an ancient marker of reciprocity and probably sociativity which was ousted by the later marker *-maat* in the reciprocal function. On some verbs, the fossilized *-ldə* has retained its reciprocal meaning. As a result, there are three alternative reciprocal forms:

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §§4 and 6.2)

- | | | | | |
|------|----------------------------|---|--|------------|
| (86) | <i>ana-</i> ‘to push’ (vt) | → | a. <i>ana-maat-</i> ‘to push each other’ | reciprocal |
| | | | b. <i>ana-ldə-</i> (same) | reciprocal |
| | | | → c. <i>ana-ldə-maat-</i> (same) | reciprocal |
| (87) | <i>ηene-</i> ‘to go’ (vi) | → | <i>ηene-ldə-</i> ‘to go together’ | sociative |

3. In *Khalkha-Mongol* and *Buryat*, alongside the reciprocal suffix *-lda*, its expanded forms *-ca-lda* (Khalkha) and *-sa-lda* (Buryat) are used. In present-day language, the first component is unproductive and its own meaning is unclear (cf. *nüxer-* ‘friend’ → *nüxese-* ‘to become friends’, *murge-* ‘to collide’ → *mürge-se-* ‘to collide’). Historically it may be related to the second part of the sociative suffix *-l-ca/-l-sa* (the first component being (genetically) related to the plural and iterativity marker; cf. Khalkha *cox-* ‘to hit’ → *coxi-l-* ‘to hit repeatedly’). The expanded variants have the same meanings as *-lda* but occur much more rarely (probably for emphasis). Most of the registered reciprocals denote violent and hostile actions (cf. (88a)). The suffixes *-lda* and *-lsa* are sometimes used indiscriminately both as reciprocal and sociative markers (the choice between them is sometimes unclear) and therefore their co-occurrence is possible, which may result in the formation of three synonyms (88b).

Buryat (Nedjalkov et al., Ch. 29, §5)

- | | | | | | | |
|------|----|-------------------------------|---|--|---|------------------------------|
| (88) | a. | <i>yobur-</i> ‘to hit’ | → | <i>yoboro-ldo-</i> ‘to hit each other’ | → | <i>yobor-so-ldo-</i> (same) |
| | | <i>xatxa-</i> ‘to stab’ | → | <i>xatxa-lda-</i> ‘to stab each other’ | → | <i>xatxa-sa-lda-</i> (same). |
| | b. | <i>xubaa-</i> ‘to divide sth’ | → | <i>xubaa-lda- = xubaa-lsa- = xubaa-lda-lsa-</i> ‘to divide sth among oneself.’ | | |

4. In *Udehe*, the reciprocal suffix *-masi* is very frequently combined with the aspectual suffix *-si* meaning ‘many (subjects or objects)’, and also expressing the imperfective, progressive, multiplicative, diversative and other meanings.

Udehe (Nikolaeva, Ch. 23, §3.4)

- | | | | | | | |
|------|----|-------------------------|---|----------------------|-----|--|
| (89) | a. | <i>teti-</i> ‘to dress’ | → | <i>teti-si-</i> | i. | ‘to dress <i>many children</i> ’ |
| | | | | | ii. | ‘to dress one child <i>many times</i> .’ |
| | b. | <i>bele-</i> ‘to help’ | → | <i>bele-masi-</i> | i. | ‘to help <i>each other</i> ’ |
| | | | | <i>bele-si-masi-</i> | ii. | ‘to help <i>each other</i> .’ |

6.5 Infixation (Mundari, Sobei)

Reciprocals with infix markers are attested in Munda (Mundari, Santali, etc.) and Austronesian (Sobei) languages.

A reciprocal infix seems to be the only means of encoding reciprocity in Mundari (Osada, Ch. 37). In both Mundari and Sobei there are no other infixes (in Sobei, the reciprocal suffix also has an iterative meaning; R. H. Sterner 1975: 137–8; J. K. Sterner 1987: 53).

Sobei (Sterner 1987: 31; *-ra-/-rer-/-...* = REC infix)

- (90) *ri-fe* ‘they beat’ (*ri-* = ‘they’) → *ri-f-ra-fe* ‘they beat each other’
me-toput ‘you hold’ (*me-* = ‘you.PL’) → *me-t-rer-put* ‘you hold each other.’

Mundari (Osada, Ch. 37, ex. (1), (15); *-pe-/-p-/-...* = REC infix)

- (91) *lel* ‘to see’ → *le-pe-l* ‘to see each other’
dal ‘to hit’ → *da-pa-l* ‘to hit each other.’

6.6 Circumfixation and quasi-circumfixation (Austronesian languages)

6.6.1 Circumfixes (*Tongan, East-Futunan, Kusaiean, Nêlêmwa, To’aba’ita, Indonesian*)

In Tongan, the first component of the circumfix is the prefix *fe-* (which may be used on its own as well) and the second is the suffix *-’aki*, sometimes *-faki* or *-laki*. In East Futunan, the principal means of reciprocal derivation is the circumfix *fe-...-’aki*. In Kusaiean, when the reciprocal prefix *a-* is used, the suffix *-i* is also commonly found on verbs (although its function is not quite clear; in a number of the Polynesian languages it is used with underlying transitives only; thus, being a marker of transitivity when used without the reciprocal prefix it nevertheless occurs on reciprocals though they are intransitive). The underlying verbs are usually two-place intransitives, but transitive underlying verbs also occur (see (95b) below). In To’aba’ita (Lichtenberk, Ch. 36, §4) verbal reciprocals are formed with the prefix *kwai-* often accompanied by the suffix *-i* (used only in conjunction with *kwai-*). In Indonesian, reciprocal circumfixes also occur alongside with other markers. Compare:

Tongan (Churchward 1953: 256)

- (92) *’ita* (vi) ‘to be angry’ → *fe-ita-’aki* (vi) ‘to be angry with one another’
kata (vi) ‘to laugh’ → *fe-kata-’aki* (vi) ‘to laugh at one another.’

East Futunan (Moyses-Faurie, Ch. 34, §3.3.1.1.2)

- (93) *’ite* (vi) ‘to be angry’ → *fe-ite-’aki* (vi) ‘to be angry with one another.’

Nêlêmwa (Bril, Ch. 34, §3.1.1.2, see also 3.1.1.3; in certain cases the suffix is not used)

- (94) *ko* ‘to chase’ → *pe-xo-i* ‘to chase each other.’

Kusaiean (Lee 1975: 201–3)

- (95) a. *muhtwacta* (vi) ‘to visit’ → *a-muhtwacta-i* ‘to visit each other’
futfut (vi) ‘to kick’ → *a-futfut-i* ‘to kick each other’
 b. *lohng* (vt) ‘to hear’ → *a-lohng-i* ‘to listen to each other’
kihsruhng (vt) ‘to collide’ → *a-kihsruhng-i* ‘to collide with each other.’

To'aba'ita (Lichtenberk, Ch. 36, §4)

- (96) *'oli* 'to embrace sb' → *kwai-'oli-i* 'to embrace each other.'

Indonesian (Ogloblin & Nedjalkov, Ch. 33, §4.2; the suffix is sometimes optional)

- (97) *me-nubruk* 'to bump (into)' → *ber-tubruk-an* 'to collide'
men-cium 'to kiss sb' → *ber-cium[-an]* 'to kiss each other.'

6.6.2 Quasi-circumfixes? (Tagalog)

In Tagalog, reciprocal formations appear to use circumfixation, being derived with the prefix *mag-* and suffix *-an* (homonymous to the passive suffix *-an*); cf. (98). Nonetheless there is a reason for considering this as a fixed prefix-suffix combination rather than a circumfix: each affix marks a separate derivational step (see Shkarban & Rachkov, Ch. 22, §§1.2, 4.1). Morphologically, these reciprocals are derived from reciprocal nouns with the suffix *-an* by means of the prefix *mag-*. Their interpretation as circumfixed derivatives cannot however be ruled out (I dare say reciprocal verbs like *mag-halik-an* 'to kiss each other' may be more common than respective reciprocal nouns like *halik-an* 'mutual kiss') i.e. there are grounds to assume that the prefix and suffix are attached to the base simultaneously.

Tagalog (Shkarban & Rachkov, Ch. 22, §4.3.1; *-um* = "active" voice)

- (98) a. *h-um-alik* 'to kiss sb' [*halik-an* 'to be kissed']
 → *halik-an* 'mutual kiss'
 → *mag-halik-an* 'to kiss each other.'
 b. *um-ubig* 'to love sb' [*ibig-an* 'to be loved']
 → *ibig-an* 'mutual love'
 → *mag-ibig-an* 'to love each other.'

7. Root reduplication

Cases of marking reciprocity by means of root reduplication alone are rather rare, and so is its joint usage with prefixes (see 6.3.2.1–6.3.2.3 above). More commonly, root reduplication co-occurs with a reciprocal suffix as a means of reciprocalization.

7.1 Root reduplication only (Indonesian)

Reciprocal reduplication termed pre-reduplication in Indonesian grammars is attested in Indonesian, alongside other reciprocal devices.

Indonesian (Ogloblin & Nedjalkov, Ch. 33, §4.5.1)

- (99) *mem-bunuh* 'to kill sb' → *bunuh-mem-bunuh* 'to kill each other'
me-nolong 'to help sb' → *tolong-me-nolong* 'to help each other.'

This type of reciprocals is also attested in Yami, Pacoh and Tzeltal (Moravcsik 1978:320).

In Udehe, where root reduplication is very active in general (cf., for instance, the above mentioned reduplication of postposition *dä*: ‘next to sb’ → *dä:dä*: ‘next to each other’), reciprocals can also be formed by reduplication from adjectives, adverbs and numerals. Reduplicated adjectives can be used as predicatives and prenominal modifiers, cf.:

Udehe (Nikolaeva, Ch. 23, §5.2)

- (100) *Xa:-mule bejeku bejeku bi:-ni.*
 relative-NR similar similar be-3sg
 ‘Relatives look like each other.’

7.2 Root reduplication + affix

7.2.1 Root reduplication + prefix (Urubu-Kaapor, Amharic)

The prefix *ju-* in Urubu-Kaapor encodes both reflexivity and reciprocity, but on a reduplicated root it is reciprocal only. In Amharic (Amberber 2000: 325, 326, 327, 315, 313–4), the reflexive-reciprocal prefix *t(ə)-* has a special reduplicated stem when used reciprocally but not reflexively (see (102)). This prefix can also be used as an anticausative (cf. *səbbərə* ‘to break’ (vt) - *tə-səbbərə* ‘to break’ (vi)) and passive marker (cf. *gənəbba* ‘to build’ - *tə-gənəbba* ‘to be built’).

Urubu-Kaapor (Kakumasu 1986: 340)

- (101) ... *ju-tuka tuka* ...
 3REFL-hit hit
 ‘... they (he and the jaguar) bumped [into] each other.’

Amharic (Amberber 2000: 325, 327)

- (102) a. *nəkəsə* ‘bit’ – *tə-nəkəkəs-u* ‘(they) bit each other’
 cf. b. *at’t’əbə* ‘to wash sb’ – *t-at’t’əbə* ‘to wash oneself’

7.2.2 Root reduplication + suffix (Dyirbal, Bete, Fula, Tauya, Motuna)

Combination of a reciprocal suffix with root reduplication seems to be rather more common than that of prefixes or circumfixes.

In Dyirbal, reduplication in combination with the suffix *-bariy* is the only means of reciprocalization. In Bete, reduplication is coupled with the suffix *-li*. In Fula, there are three reciprocal markers all containing the same component; cf.: *-in-dir*, *-oo-tir* and reduplicated form with *-tir*. These markers differ in the classes of the roots to which they apply. In Arnott (1970: 361) the reduplicated form with *-tir* is termed iterative-reciprocal, the iterative meaning (especially with many participants) being expressed by reduplication (103). Reduplication of stems by itself expresses an intensive-iterative meaning (Klingenberg 1963: 212). Dixon (1980: 433, 1972: 92–3, 251) points out a similar phenomenon in Dyirbal noting that root reduplication (the reciprocal suffix *-(n)bariy* is always coupled with it), has its own function of encoding iterativity or intensity, cf. *balgan* ‘to hit’ → *balga-balgan* ‘to hit too much’. In Tauya, reciprocals are formed by the suffix *wa’ane-*, the verb stem being frequently reduplicated (106). In Motuna, the reciprocal suffix is applied together with root reduplication (107).

Dyirbal (Dixon 1972:92–3)

- (103) *ɖurgay* ‘to spear sb’ → *ɖurgay-ɖurgay-bariy* ‘to spear each other.’

Bete (Sportiche 1987:297)

- (104) *là* ‘to call sb’ → *là-là-li* ‘to call each other.’

Fula (Arnott 1970:362)

- (105) *ndaara* ‘to look at sb’ → *be-ndaar-ndaar-tir-i* ‘they kept on looking at each other.’

Tauya (MacDonald 1990:205)

- (106) *tu-tu-wa²ane-ene-²a*.
give-give-REC-1/2p-IND
‘We gave (it) to each other.’

Motuna (Onishi 2000:137)

- (107) *manni noo-noo-uru-kuu-ng*.
they gather-gather-REC-3paucal/PL.S-imaginative-M
‘they would gather together.’

7.2.3 Root reduplication + circumfix (Tigak)

In Tigak, the reciprocal prefix *e-* which is sometimes accompanied by the suffix *-ai* can also be used in combination with root reduplication; cf.:

Tigak (Beaumont 1979:93–4)

- (108) *rik e-tu-tuk-ai*
‘they stand about together’ (i.e. ‘next to one another’ – V.N.).

8. Clitics (Indo-European languages)¹⁰

8.1 Introductory notes

Clitics, including clitic-like items, are markers like German *sich* (ACC/DAT), French *se* (ACC/DAT), Spanish *se* (ACC/DAT), Polish *się* (ACC), Bulgarian *se* (ACC) and *si* (DAT). By way of extending the domain and in order to remind of the diachronic perspective, I will regard these clitics (see 8.2), reflexive pronouns of the Latin *sē* (ACC) and Russian *sebjā*

10. Needless to say, clitics with the reciprocal meaning are registered not only in the Indo-European languages; cf., for instance, Somali *Wāy is arkeen* i. ‘They saw each other’, ii. ‘They saw themselves’ (*is* = ‘self’ Saeed 1999:77–8). I have chosen the Indo-European languages because of the availability of data.

(ACC) type¹¹ together, from which the clitics have developed (8.3),¹² and affixes, like Scandinavian *-s/-st*, Surselvan *se-*, Russian *-sja/-s'*, Latvian *-s* and Lithuanian *-si/-s*, which have developed from clitics of reflexive origin (8.4). The clitics and the latter type of markers can be labelled together as reflexive-middle markers (a more precise term would be middle markers of reflexive origin). Further on, simultaneous use of reflexive-middle markers and other markers is considered (8.5) and, finally, areal characteristics of the decrease of the reciprocal function of reflexive-middle markers (8.6) conclude this section.

The two main formal types of reflexive-middle markers, viz. (a) clitics and clitic-like markers and (b) affixes, can be said to represent different stages of the decay of their pronominal properties and evolution on the way of integration into the verb (they are sometimes spelt together with the base).

Both types of reflexive-middle markers share the following: (a) their polysemy generally does not exceed a certain range of meanings and bears considerable semantic similarity (for the list of the main meanings see Ch. 5, §2.1); (b) they follow a more or less predictable path of formal and semantic evolution; (c) they are or have once been clitics or clitic-like items.¹³ All of the clitics mentioned above have the reflexive and reciprocal meanings. Some of them have retained certain features of free morphemes, like German *sich*, which can be used as a proclitic and enclitic on the host verb and even be distantly placed from the predicate, according to the general prosodic regularities for all kinds of non-stressed pronouns:

- (109) a. *Sie verteidigten sich immer.* 'They always defended *themselves/each other*.'
 b. *Sie werden sich verteidigen.* 'They will defend *themselves/each other*.'
 c. *Sie werden sich immer verteidigen.* 'They will always defend *themselves/each other*.'

The analogous placement of *sich* is also observed when it is used as a marker in impersonal constructions:

- d. *Hier sitzt es sich bequem.* 'It is convenient to sit here.'
 e. *Er sagt, das es sich hier bequem sitzt.* 'He says that it is convenient to sit here.'

As is known, the distinctive feature of clitics is their non-stressed status: they attach themselves to the stressed host and therefore cannot appear in the position of stressed focus. Clitics cannot be coordinated with nouns and they cannot be topicalized (see, for instance, Zwicky 1977: 2–3; Plungian 2000: 28–35; Haspelmath 2002: 150–5). However, German *sich* has not entirely turned into a clitic and it may be regarded as a clitic-like marker. But for prosodic and other reasons it is convenient to label it as a clitic.

11. They are descended, in their turn, from the Indo-European reflexive pronominal root **sve-* (**se*).

12. As Faltz (1977:53) asserts, "... all verbal reflexives have their origin in NP-reflexives ..."; cf. also "I know of no case of a verbal reflexive which is demonstrably derived historically from a source other than an NP-reflexive" (ibid., p. 223).

13. These issues are discussed in detail in the chapter "How Reflexives Change" in Faltz (1977:208–86) and in the chapter "Diachronic Developments" in Kemmer (1993:151–200).

The clitics in question differ in a number of features, including (a) the degree of boundedness, (b) reflexive proper and/or reciprocal use, (c) case distinctions – accusative and dative, (d) combinability with prepositions, (e) the use of the reflexive form in the 3SG/PL only or in all the persons and numbers.

The clitics differ significantly from affixal markers as the problems of combinability with prepositions and case forms do not exist for the latter. The markers in question are intermediate between Type B markers (namely, reciprocal pronouns, i.e. the subtype considered in 3.2 where the Polish pronoun *siebie* ‘oneself/each other’ is mentioned, see (11a) above) and affixal subtype of Type E, in particular (see prefixation in 6.3 and suffixation in 6.4).

8.2 Full reflexive pronouns as the source of reflexive clitics

Full reflexive pronouns can be subdivided into two subgroups: with the reflexive meaning only and with both the reflexive and reciprocal meanings.

1. *The meaning is reflexive only.* As is known, the reflexive-middle markers of Indo-European languages have evolved from the following two main types of reflexive pronouns with anaphoric functions only:

1a. *Reflexive pronouns* used as the 3SG/PL form only, ordinary personal pronouns being used in the 1st and 2nd persons; cf. Latin *sē* (ACC):

- (110) *amō mē* ‘I love myself’ (lit. ‘... me’) *amāmus nōs* ‘we love ourselves’ (‘... us’)
amās tē ‘you love yourself’ (‘... you’) *amātis vōs* ‘you love yourselves’ (‘... you’)
amat sē ‘he loves himself’ (‘... self’) *amant sē* ‘they love themselves’ (‘... self’).

This distribution of pronouns is not unexpected: in the 1st and 2nd persons the personal or reflexive use of pronouns is quite transparent (see, for instance, Faltz 1977:43), while the use of a personal pronoun in the 3rd person is ambiguous and it may be interpreted either as reflexive or personal referring to a “fourth” person.

1b. *The reflexive pronoun* is used for all the persons and both numbers; cf. Russian *sebja* (ACC):

- (111) *ja ljublju sebja* ‘I love myself’ *my ljubim sebja* ‘we love ourselves’
ty ljubish’ sebja ‘you love yourself’ *vy ljubite sebja* ‘you love yourselves’
on ljubit sebja ‘he loves himself’ *oni ljubjat sebja* ‘they love themselves.’

The distinction shown in Type 1a is retained by the reflexive-middle markers in most of the Romance languages. Among the Germanic languages, this characteristic pertains to German *sich*, Gothic *sik* and Scandinavian *sig* (Swedish, Danish, Icelandic, Faroese)/*seg* (Norwegian). The type shown in 1b is represented by the reflexive-middle markers of the Slavic, Baltic and Scandinavian (-s in Norwegian, Swedish and Danish; -st in Icelandic and Faroese) languages.

2. *The meaning is reflexive and reciprocal.*

2a. With both meanings, the same form for all the persons and both numbers,¹⁴ is registered (cf. Type *1b* above). An example is the Polish reflexive pronoun *siebie*, as in (112), it has no other meanings except reflexive and reciprocal (i.e. the the reciprocal meaning of the reflexive pronoun is not dependent on the development of middle meanings).

(112) *Przyjaciele bronili siebie długo.*

- i. 'The friends defended *themselves* for a long time.'
- ii. The friends defended *each other* for a long time.'

2b. Among Indo-European languages, it seems, only full pronouns with the same form for all the persons and both numbers, are registered in the reflexive and reciprocal meanings. As for full reflexive pronouns used in the 3SG/PL form only, ordinary personal pronouns being used in the 1st and 2nd persons, they are not used in the reciprocal meaning.

To be more precise, there are markers with both anaphoric meanings but they are not full pronouns any longer and have acquired some features of clitics and are in the process of acquiring some middle meanings, as is the case in German and in Romance languages (cf. (109), (118)). This is one of the possible evolutionary paths.

There is also another path of the semantic evolution of full reflexive pronouns characteristic of a number of Indo-European languages: the development of the middle meanings bypassing the development of the reciprocal meaning (as the data of other than Indo-European languages also show; cf. Geniušienė 1987:345–7). This is characteristic of the North-Germanic and East-Germanic languages. For instance, the reflexive pronoun *sig/seg* of the Scandinavian languages and Gothic reflexive pronoun *sik* lack the reciprocal usage although they have already acquired some middle meanings (recall that the Goths once neighboured with Ancient Scandinavians). Thus, semantic expansion of reflexive-middle markers does not necessarily include the reciprocal meaning.

The Scandinavian reflexive pronoun *sig/seg*, the only means of expressing the reflexive meaning in these languages, is descended from the Proto-Germanic pronoun **sik* (which is of Type *1a*), entering into a paradigm with the personal pronouns, like Swedish *mig* (1SG), *dig* (2SG), *oss* (1PL) and *er* (2PL). It should be stressed that although the reciprocal meaning is semantically close to the reflexive (at least much closer than, for instance, anticausative), some languages possess reflexive pronouns with a number of middle meanings and no reciprocal meaning (which is expressed by reciprocal pronouns meaning 'each other', like Swedish *varandra*). Cf. Swedish:

- (113) a. *forsvåra* 'to defend sb' → *forsvåra sig* 'to defend *oneself*', not *'to defend each other'
 b. *sätta* 'to seat sb' → *sätta sig* 'to sit down' autocausative
 c. *öppna* 'to open' (vt) → *öppna sig* 'to open' (vi) anticausative

14. The initial form of the Indo-European reflexive pronoun is traditionally regarded to have been of this type. Faltz (1977:226) cites this point of view with reference to Meillet 1964, Brugman 1911, etc. Faltz does not rule out a pronoun of Type *1a* as the initial one and cites arguments in support of this opinion (*ibid.*, p. 229).

In Scandinavian languages, the pronoun *sig/seg* can be used with prepositions, as the following Icelandic example shows:

(114) *hann talar um sig* ‘he talks about himself.’ (Glendening 1973:14).

As mentioned, the Gothic reflexive pronoun *sik* has the same characteristics: it has no reciprocal meaning while it is used reflexively and in some middle meanings; cf. (borrowed from Streitberg 1928:53, 52, 164):

(115) a. *hāhan* ‘to hang sth/sb’ → *us-hahan sik* ‘to hang oneself’ reflexive
 b. *ushaffjan* ‘to raise sth’ → *ushaffjan sik* ‘to rise’ autocausative
 e. *inwagjan* ‘to make indignant’ → *inwagjan sik* ‘to be indignant’ anticausative

These two types of reflexive-middle markers are considered below.

8.3 Reflexive pronominal clitics

This type comprises German *sich*, French *se*, Spanish *se*, Bulgarian *se*, Polish *się*, with no particular restrictions on their reflexive and reciprocal usage. These markers, excepting German *sich* (see (116b)), do not combine with prepositions. They are productive enough in the middle meanings, such as autocausative, anticausative, potential passive, etc. With regard to the passive function, the German and Polish markers in question practically lack it. The French clitic is used in this function, and it is highly productive in Spanish and Bulgarian. Below, I will briefly illustrate some formal features of the clitics.

1. The reflexive markers of the first three languages are 3SG/PL, i.e. of the type illustrated in (110); cf. German (see also (18) above):

(116) a. *Sie achten sich* ‘They respect *themselves/each other*.’
 b. *Ihr achtet euch* ‘You respect *yourselves/each other*.’
 c. *Wir achten uns* ‘We respect *ourselves/each other*.’

The German marker *sich* has more freedom in regard of the host verb than the other markers listed (109): it can be coordinated with a noun (117a); it also combines with prepositions¹⁵ when used reflexively but not reciprocally (117b). The other four languages do not allow such usage (cf. also Faltz 1977:52–5).

(117) a. *Sie liebten sich und die Eltern.* i. ‘They loved *themselves* and their parents.’
 ii. *‘They loved *each other* and their parents.’
 b. *Sie glaubten an sich.* i. ‘They believed *in themselves*.’
 ii. *‘They believed *in each other*.’

The French clitic *se* and Spanish *se* are mostly proclitic, but in periphrastic verbal forms they are separated from the base verb by an auxiliary; cf. French (118a) and (118b) respectively. In both languages, the clitic is replaced by the emphatic form of the pronoun in the imperative form without negation (118c). In indirect object contexts, the clitic can be sep-

15. Note that Faltz (1977:215) claims that “... the reflexive pronoun must lose the ability to occur in oblique NP’s” in order to become a verbal reflexive.

arated from the host verb by the object clitic (cf. (118d–c)). In the infinitive, the position of the clitic differs in the two languages: it is proclitic in French (cf. *se respecter* ‘to respect each other/themselves’) and enclitic in Spanish (cf. *respetarse* with the same meaning).

- | | | | |
|-------|----|---------------------------------|---|
| (118) | a. | <i>Ils se respectent.</i> | ‘They respect <i>each other/themselves</i> .’ |
| | b. | <i>Ils se sont respecté.</i> | ‘They respected <i>each other/themselves</i> .’ |
| | c. | <i>Respecte-vous.</i> | ‘Respect <i>yourselves/each other</i> .’ |
| | d. | <i>Marie s’achète une robe.</i> | ‘Marie is buying <i>herself</i> a dress.’ |
| | e. | <i>Elle se l’achète.</i> | ‘She is buying it <i>for herself</i> .’ |

2. As in Bulgarian and other Slavic languages, the Polish reflexive pronoun *się* is common for all the three persons in both numbers, as in the type illustrated in (111). This middle marker is usually enclitic (119a); it may be proclitic, e.g. in impersonal constructions, cf. (119b)). Note that *się* is in subtle relations of synonymy with the reflexive pronoun *siebie* as a marker of the reflexive and reciprocal meanings (see, for instance, Wiemer 1999:300–13). The dative clitic *si* has gone out of use and the dative case form *sobie* of the free reflexive pronoun *siebie* is used instead (cf. *wierzyć sobie* ‘to trust each other/themselves’).

- | | | | | |
|-------|----|---------------------------------------|-----|---|
| (119) | a. | <i>Przyjaciele bronili się długo.</i> | i. | ‘The friends defended <i>themselves</i> for a long time.’ |
| | | | ii. | The friends defended <i>each other</i> .’ |
| | b. | <i>Tu się mówi po niemiecku.</i> | | ‘German is spoken here.’ |

The Bulgarian *se* is proclitic if the subject is explicit, and enclitic if the subject is omitted. In indirect object position, this clitic has the dative case form *si*:

- | | | | |
|-------|----|-------------------------------------|--|
| (120) | a. | <i>Nie se viždame / Viždame se.</i> | ‘We see <i>each other/themselves</i> .’ |
| | b. | <i>Te si pomagat / Pomagat si.</i> | ‘They help <i>each other/themselves</i> .’ |

The middle markers in question are considered in the following chapters of this monograph: Wiemer & Nedjalkov on German (Ch. 10), Guentchéva & Rivière on French (Ch. 12), Wiemer on Polish (Ch. 11), and Penchev on Bulgarian (Ch. 13). The examples cited in this section are borrowed from these papers.

8.4 Affixal reflexive-middle markers

This type is represented by the Icelandic postfix *-st*, Surselvan prefix *se*, Russian postfix *-sja/-s’*, Latvian postfix *-s*, and Lithuanian infix-postfix *-si/-s* (postfix = a marker in postinflectional position after the infinitival or agreement marker). Thus, formally, they are of Type E rather than F, and they are considered here for reasons mentioned in 8.1.

These reflexive-middle markers do not alternate for person and number. The Icelandic postfix *-st* (as well as its cognates in other Scandinavian languages) and Surselvan *se*-developed this usage in the process of evolution from the type of expression exemplified in

(110) and (115),¹⁶ while in Russian and Baltic languages, this property is inherited from the markers of the type illustrated in (111).

The markers in question are unproductive with regard to the reflexive and reciprocal meanings, though the number of these derivatives varies considerably across these languages: cf. 160 reciprocals in Lithuanian (more than in Latvian and Russian) and 15 at the most in Icelandic which retains the greatest number of reciprocals with the postfix among the Scandinavian languages. These Scandinavian reciprocals are in fact *relic* formations. With one or two exceptions (cf. the reflexive-like (121a)), the postfix *-s/-st*, in Icelandic and other Scandinavian languages is practically not used in the reflexive meaning, the pronoun *sig/seg* being used in this function. The decay of the reciprocal meaning also finds expression in the obligatory use of the reciprocal pronoun *hver annan* with at least two Icelandic reciprocals (see (121d)). As for Surselvan, Stimm (1973:84) cites textual examples with verbs meaning ‘to suffer’, ‘to pinch’ and ‘to love’ used with the reciprocal pronoun *in l’auter* ‘each other’ rather than the prefix *se-*, and he notes that the prefix cannot be used on the verb meaning ‘to love’. This indicates that reciprocals with *se-* are at least lexically restricted (cf. also Kemmer 1993:176).

A semantic peculiarity of these markers is the high productivity of middle semantics, though to varying degrees, but they differ in expressing the passive meaning: in Lithuanian, Latvian and Surselvan there are no passives with these markers at all, although there are potential passives; reflexive passives are productive in Russian and Swedish, less productive in Norwegian and Danish and lexically restricted in Icelandic and Faroese (Berkov 1985:68).

Here are examples (hyphens are not a part of the orthography):

Icelandic (Berkov 1985:63, 58; *-ti-* = PAST)

- | | | | |
|----------|---------------------------------|---|--|
| (121) a. | <i>klæða</i> ‘to dress sb’ | → | <i>klæða-st</i> , also <i>klæða sig</i> ‘to dress (oneself)’ |
| b. | <i>hata</i> ‘to hate sb’ | → | <i>hata-st</i> ‘to hate each other’ |
| c. | <i>kalla á</i> ‘to call sb’ | → | <i>kalla-st á</i> ‘to call each other’ |
| d. | <i>þeir forða-st hvor annan</i> | | ‘they avoid each other’ |
| e. | <i>greinin bir-ti-st í ...</i> | | ‘the article was published’ (passive). |

Surselvan (Stimm 1973:70, 84)

- | | |
|----------|--|
| (122) a. | <i>jeu se-lavel</i> (vi) ‘I wash (myself).’ |
| b. | <i>Nus se-vesein lu aunc in dil!</i> (Gad. Tsch. 41, p. 124)
‘Once, we shall see each other again.’ |

16. These two markers are not the only cases among the Germanic and Romance languages. Expansion of the reflexive clitic over the 1st and 2nd persons is observed in some other languages of these families, an example is *zix* in Yiddish, which might have acquired this usage under the Slavic influence (Faltz 1977:212, 279). This usage has developed in a number of Romance languages. Besides the Surselvan prefix *se-*, it is registered in some northern French dialects, colloquial French, Catalan, some dialects of Castilian and American Spanish. It is also attested in some northern Italian dialects, also in Rome, Occitan (Turley (1997:25), with reference to Wunderli (1989) and Martin Zorraquín (1979)).

- c. *S'enconuschevan els?* (Rev., p. 57)
'Did they know each other?'

Russian (-*t*' = INF)

- (123) a. *zaščiča-t'* 'to defend' → *zaščiča-t'-sja* 'to defend oneself'
b. *obnima-t'* 'to embrace' → *obnima-t'-sja* 'to embrace each other.'

Latvian (-*t/-tie-* = INF)

- (124) a. *apseg-t* 'to cover (sb/sth)' → *apseg-tie-s* 'to cover oneself'
b. *apkamp-t* 'to embrace' → *apkamp-tie-s* 'to embrace each other.'

Lithuanian (-*si/-s* is a postfix on unprefix verbs and an infix between prefix and root on prefixed verbs; -*ti* = INF)

- (125) a. *gin-ti* 'to defend' (IPFV) → *gin-ti-s* 'to defend oneself' (IPFV)
ap-gin-ti 'to defend' (PFV) → *ap-si-gin-ti* 'to defend oneself' (PFV)
b. *labin-ti* 'to say hello' (IPFV) → *labin-ti-s* 'to say hello to each other' (IPFV)
pa-labin-ti 'to say hello' (PFV) → *pa-si-labin-ti* 'to say hello to each other' (PFV)

It may be surmised that the ratio of derivatives with different meanings shown in (126) below is not accidental. Note that the middle markers in Russian, Latvian and Lithuanian do not derive any new reflexives and reciprocals. In these languages, reciprocals with the middle markers are less numerous than reflexives. On the other hand, in Russian, the reciprocals are the least numerous and anticausatives the most numerous. The passive function, which is absent in the Baltic languages, is the most productive (the postfix -*sja/-s*' derives passives practically from all the imperfective transitives; Korolev (1968: 17); the Russian data for (126) are borrowed from Korolev (1968: 10, 17, 21), Latvian and Lithuanian from Geniušienė (1987: 74, 97)).

(126)		Reciprocal	Reflexive	Anticausative	Passive
	Russian	40	200	1400	4300
	Latvian	80	190	810	–
	Lithuanian	160	290	800	–

It is tempting to generalize the inverse relation between the number of reciprocals and middle meanings over other languages. Note in this respect that there is an opinion that the reflexive-middle markers may have lost their productivity in the reflexive and reciprocal meanings because of the productive passive function (as in Swedish and Russian), but, on the other hand, there is no passive in the Baltic languages and the reflexive and reciprocal meanings are not productive either. At the same time, the passive is highly productive in Spanish and Italian where the reflexive and reciprocal meanings are also productive. It follows that we should look for the explanation elsewhere, possibly in the degree of productivity of the anticausative function.

8.5 Reflexive-middle markers in combination with other affixes

Such combinations can have various meanings, e.g. they may denote reciprocity.

1. The additional component can emphasize the reciprocal meaning, as in a limited number of French reciprocals; analogous formations existed in German but they have gone out of use (Wiemer & Nedjalkov, Ch. 10, §7.4.1).

- (127) *tuer* 'to kill sb'
 → *se tuer* i. 'to kill oneself', ii. 'to kill each other'
 → *s'entre-tuer* 'to kill each other.'

2. In Russian, it is a number of circumfixes with the following functions:

2a. The circumfix *pere-...yva-...-sja*, derives a small group of iterative reciprocals, mostly with the meaning of exchanging information, cf.:

Russian (-*yva-* = IPFV; -*t'/-ti* = INF)

- (128) *pis-a-t'* 'to write' [→ **pis-yva-t'-sja*]
 → *pere-pis-yva-t'-sja* 'to exchange letters, write to each other.'

2b. The circumfixes with different first components and the same postfix: *s-...-sja*, *raz-...-sja* express the meanings of coming together or dispersing/separating (in the locative and/or figurative sense). The derivatives below have neither postfixed counterparts without a prefix nor prefixed counterparts without the postfix (the asterisked forms in (129) are either meaningless or do not have the intended meaning):

- (129) *polz-ti* 'to crawl' [→ **polz-ti-s'*, **s-polz-ti*, **raz-polz-ti*]
 → *s-polz-ti-s'* '(of many) to crawl together (from different places to one place)'
 → *ras-polz-ti-s'* '(of many) to crawl away from one place in many directions.'

8.6 Areal characteristics

In regard of Indo-European languages, one can observe certain areas with mainly reflexive middle marking of the reciprocal meaning and areas where this meaning is expressed by reciprocal pronouns. These languages can be arranged in the order of decreasing productivity, even to the point of extinction, of the reciprocal use of reflexive middle markers. Roughly speaking, the productivity of the reciprocal function decreases from west to east and from south to north (see also Maslova & Nedjalkov 2005: 430–3).

These tendencies are characteristic of the languages of the so-called Circum-Baltic area, excepting Polish. Reciprocals with a middle marker are very limited in number in all Scandinavian languages; for instance, in Swedish there are only a few verbs like *kyssa-s* 'to kiss each other' and the regular marker is the reciprocal pronoun (cf. *kyssa varandra* 'to kiss each other'), combinations with the reflexive pronoun *sig* (cf. *kamma sig* 'to comb oneself') like **kyssa sig* with the intended meaning 'to kiss each other' being ungrammatical. Reciprocals with a middle marker are more numerous in the East Slavic languages, even more numerous in the Baltic languages though unproductive in both families, their lexical range generally not exceeding that of lexical reciprocals (see Nedjalkov, Ch. 1, §§2.3.

and 16), or what is termed “natural reciprocals” in Kemmer (1993: 100–8). A reflexive pronoun was originally absent in Low German and it was later borrowed from High German (Behaghel 1928: 541). In Dutch, the reflexive pronoun *zich* (also borrowed from High German) has neither a reciprocal nor a reflexive meaning (the latter is expressed by the compound pronoun *zichzelf*) and serves to express middle meanings (i.e. the meanings that often accompany the reflexive meaning and develop from it). Reflexive middle markers have not been attested in English and Celtic languages in the known historical period (Faltz 1977: 267–8, 274, 281; Pedersen 1909–13; 2:1, 137).

Reflexive middle markers are highly productive in general and also as markers of the reflexive and reciprocal meanings in High German, South Slavic, West Slavic and also Romance languages, excepting Surselvan (Stimm 1973: 84).

Two opposite tendencies in the marking of reciprocity should be noted: one tendency is observed in Scandinavian languages where the postfix *-s/-st* has practically lost the reciprocal and reflexive meanings and the pronoun *sig/seg* is not used in the reciprocal function. The free niche is filled by reciprocal pronouns. A different tendency is observed in Polish: though a Circum-Baltic language, it is sharply distinct from all the other languages of this area in that it uses both reflexive pronouns, *się* and *siebie*, as reciprocal markers (cf. (112), (119a)).

It remains to note that among the languages of the Circum-Baltic area affixal reflexive middle markers are prevalent, while to the south of this area the prevalent markers are clitics, with the exception of Surselvan.

9. Marginal affixal means of reciprocalization (Latin, Chukchi)

Affixal reciprocal markers have been considered above, and in some languages we find affixes with a marginal reciprocal function, whose main meaning(s) may be sociative, spatial reciprocal, sequential, or competitive, which are usually close to the reciprocal proper meaning in one way or another (cf. the Abaza unproductive marker in the fossilized reciprocals in (72) and the productive marker in 6.2.1.2 above). These markers are (or were, in the case of Latin) more or less active as reciprocalizers and can derive a limited number of proper reciprocals. Two instances will be considered here.

1. *Latin*. In Latin, the main reciprocal marker is the phrase *inter se*, and a number of reciprocals are derived by means of the prefix *con-* whose main meanings are sociative and spatial reciprocal.

(130) a.	<i>bibo</i> ‘drink’	→	<i>com-bibo</i> ‘drink together’	sociative
b.	<i>rīdeo</i> ‘laugh’	→	<i>cor-rīdeo</i> ‘laugh together’	sociative
c.	<i>fluo</i> ‘flow’	→	<i>con-fluo</i> ‘flow together’	spatial reciprocal vi
d.	<i>fundo</i> ‘pour (out)’	→	<i>con-fundo</i> ‘pour into one place’	spatial reciprocal vt

Alongside these meanings, there is a limited number of reciprocals proper:

- e. *ruo* ‘throw oneself’ → *cor-ruo* ‘throw oneself upon each other’
- f. *spondeo* ‘swear solemnly’ → *con-spondeo* ‘swear solemnly to each other’
- g. *fligo* ‘hit’ → *con-fligo* ‘fight.’

For more details see Zaliznjak & Shmelev, Ch. 4, §2.

2. *Chukchi*. In this language, there are two main reciprocal markers, both monosemous: the suffix *-wəly* (see (1) in 1.1) and the semi-pronoun *əryičy* (see case 1 in 3.3 and 1 in 6.4.2.3). There is also a polysemous suffix *-čit/-čet* (with vowel harmony alternation) which is occasionally used to derive reciprocals. The former two main markers seem to have no restrictions on reciprocal derivation, while *-čit/-čet* has unclear restrictions on this function, although in texts one can find new formations with this suffix. Most frequently, this marker denotes competitiveness and play-acting, iterativity, acting by turns and intensity, and there are numerous lexicalized derivations with it (which indicates its ancient character; note that the monosemous reciprocal suffix *-wəly* is more recent). Its reciprocal meaning is context-dependent and of low productivity.

- (131) a. *piri-* ‘to catch, grasp’ → *piri-čit-* ‘to catch sth one after another’
- b. *piŋu-* ‘to jump’ → *piŋu-čit-* i. ‘to jump repeatedly’
ii. ‘to compete in jumping’
- c. *tiŋu-* ‘to pull’ → *tiŋu-čit-* ‘to compete in rope-pulling’
- d. *kelə* ‘devil’ → *kelle-čit-* ‘to play devils’
- e. *atčə-* ‘to hide’ → *atčə-čet-* ‘to play hide and seek’.

Derivation of reciprocals proper with this suffix is probably due to the affinity of the reciprocal meaning proper to the competitive. The reciprocals most commonly denote antagonistic actions. This suffix does not intransitivize verbs and is attached either to intransitives or labile verbs (131h, i) or it combines with the suffix *-tku-/-tko-* which in this case functions as an antipassive marker (131f, g); it is also used in this function if the reciprocal semi-pronoun *əryičy* is present (30b).

- f. *rəttelə-* ‘to push sb’ → *rəttelə-tko-čet-* ‘to push each other, jostle’
- g. *ʔelemqute-* ‘to oust sb’ → *ʔelemqute-tku-čit-* ‘to oust each other’
- h. *wənw-* ‘place’ → *wənw-o-* ‘to force sb out’, lit. ‘to take place from sb’
- *wənw-o-čet-* ‘to force each other out’ (*-o-/-u-* = ‘to take, get, kill’)
- i. *məmə* ‘lice’ → *məml-u-* ‘to look for lice on sb’
- *məml-u-čit-* ‘to look for lice on each other.’

10. Two or more reciprocal markers in a language; possible differences

In languages with more than one reciprocal markers, their number can reach five, as in *Chukchi*, six, as in Indonesian, and even eleven, as in Malayalam (see (17) and §3.4). Some of the reciprocal markers can be interchangeable without noticeable differences, while other reciprocal markers can differ to a greater or lesser degree. Below, are discussed a number of diverse features with respect to which the markers of a language can differ. Some of the markers may differ in two or more features.

10.1 Frequency

A good example of the difference in frequency are the English pronouns *each other* and *one another* which has been widely discussed in the literature (see, among others, Jørgensen 1985:351–7, 1988:355–7; Stuurman 1987:353–9, 1989:356–9; Lees & Klima 1963:26–7). They are the only markers of reciprocity in English (not counting *together* which is used to mark spatial reciprocity; on the meanings like ‘to tie together’ see Ch. 1, §13). The pronoun *each other* is generally more frequent in texts than the other. The million-word Brown Corpus of American English contains 114 instances of *each other* and 45 of *one another* (Raumolin-Brunberg 1997:227). In a selection from 33 English novels by 26 authors, 18 of the authors prefer *each other*, 6 prefer *one another* and 2 use both with equal frequency (E. Geniušienė, p.c.); there seems to be a tendency to prefer the latter if the reciprocants are inanimate, and also after verbs like *to follow*, *to pursue*, etc. A similar pair of markers are the Russian pronouns: productive *drug druga* ‘each other’ and much less common *odin drugogo* lit. ‘one another’ (in colloquial Russian, the synonymous *odin odnogo* is also used).

Especially pronounced can be the difference in the frequency of verbal and pronominal reciprocal markers. An example of this tendency may be Yakut, Tuvan, and Kirghiz, where the main reciprocal marker is a suffix and a reciprocal pronoun is used much less frequently and, often, pleonastically with suffixed reciprocals. Thus, for instance, the reciprocal pronoun is used only once in 6,000 lines of the Yakut epic poem “Kiiš Debeliye” (1993:132) in the clause *Beje-beje-leri-n kör-s-ön tur-but-tar-a...* <each-other-3.POSS-ACC look-REC-CONV AUX-PAST-PL-CONV> ‘(They) having looked at each other...’ where, characteristically, the predicate verb contains the reciprocal suffix *-s-*. In another Yakut epic poem (“Modun Er Sohotox” (“The Powerful Er Sogotox”), more than 6,400 lines), the reciprocal pronoun does not occur at all. It is interesting to note that on p. 217 of the Russian translation of this epic eight pronominal reciprocals with *drug druga* ‘each other’ are used to translate suffixed reciprocals of the original.

10.2 Productivity

In many languages, a reciprocal affix is unproductive and occurs on a small number of verbs, and a reciprocal pronoun is productive. For instance, in Russian, reciprocals with the postfix *-sja* are unproductive (about 40 verbs) and the main reciprocal pronoun *drug druga* does not have any significant restrictions on its usage. The same situation is observed in the Baltic and Scandinavian languages (see 8.4 above). Similarly, in Nivkh the reciprocal prefix *u-/v-* forms about 60 items and the pronoun *p’ñafq ñafq* ‘each other’ is used without particular restrictions (Otaina & Nedjalkov, Ch. 41 on Nivkh). The same concerns the Karachay-Balkar reciprocal suffix *-š* (about 60 reciprocals) and pronoun *biri biri-n* ‘each other’ used on an unlimited number of verbs (Nedjalkov & Nedjalkov, Ch. 24 on Karachay-Balkar): for instance, a suffixed reciprocal *teber-iš-* ‘to push each other’ can be derived from *teber-* ‘to push sb’, but the form **maxta-š-* with the intended meaning ‘to

praise each other' (< *maxta-* 'to praise sb') does not exist though its meaning is clear for the native speaker.

In some languages with two affixal markers, the "heavier" affix may be more productive than the "lighter" one. This is observed in East Futunan, where the reciprocal suffix *fe-* is unproductive and the circumfix *fe-...-'aki* containing it is productive (Moyse-Faurie, Ch. 35, §§3.1-3.3). Another instance is Indonesian where the preserved reciprocals with the prefix *ber-* acquire optionally the additional suffix *-an* by analogy with one of the two productive morphological derivational patterns, viz. with the circumfix *ber-... -an*; cf. *men-cium* 'to kiss' → *ber-cium[-an]* 'to kiss each other' (the other pattern involves pre-reduplication; cf. (138) below).

Needless to say, productivity is not always linked with frequency. For instance, the Russian unproductive reciprocals in *-sja* are unlikely to be less frequent in usage than reciprocals with the productive marker *drug druga*.

10.3 Stylistic differentiation

This can be exemplified by the German productive reciprocal markers, the reflexive clitic *sich* and full pronoun *einander*. In colloquial speech, with certain exceptions, the clitic *sich* is used, as a rule, and *einander* sounds bookish, lofty and solemn (Berger et al. 1972:544); cf.:

- (132) a. *Sie lieben sich.* 'They love each other.'
 b. *Sie lieben einander.* (same).

Another instance is Chinese: according to Wang Liaoyi (1957:59), in colloquial speech the common people (lit. 'the man in the street') usually express reciprocity by means of the simultaneous parallel use of the personal pronouns *wǒ* 'I' ... *nǐ* 'you' (SG), *nǐ* ... *wǒ* (see (6) above) rather than by the pronoun *xiāng* 'mutually, each other' (in Chinese, there are at least two more reciprocal devices; see (47)–(48) above).

Compare also case 3 in 3.2.

10.4 The arguments involved in reciprocalization

Two main cases can be distinguished:

(a) one of the reciprocal markers can be used for the direct object and another for the indirect and oblique object reciprocalization;

(b) one is used for the direct and indirect object and another for an oblique object (the term oblique object is a cover term for postpositional, prepositional objects, and semantically it often denotes spatial relations).

The first of these cases is registered in Kabardian where reciprocalization of the direct object is marked by the prefix *zə-r(ə)-* (133a), and that of the indirect object (133b) by *zə-* (see (133b); cf. also 6.2.1.1).

- (133) a. \emptyset -zər-ocIə-x (= (56b) above)
 they-REC-know-PL
 ‘they (= \emptyset) know each other.’
 b. dā-zə-psəlv-a-sI
 we-REC-talk-PAST-ASS
 ‘we (=dā) had a talk with each other.’

Polish is also of this type, but the system of marking is more complex: reciprocalization of the direct object is marked by the clitic *się* (ACC) and also by the pronoun *siebie* (ACC) (cf. (119a) and (112) respectively); in other cases *siebie* is used: its dative case form *sobie* for the indirect object reciprocalization (dative *si* being out of use), and *siebie* or *sobie* with prepositions for oblique objects (recall that both *się* and *siebie* can be reflexive and reciprocal); cf.:

- (134) a. *One* (F) *liubili się/siebie* (ACC). ‘They liked *each other/themselves*.’
 b. *Oni* (M) *wierzyli sobie* (DAT). ‘They believed *each other/themselves*.’
 (135) a. *Przyjaciele* *czekali na niego*. ‘The friends waited *for him*.’
 b. *Przyjaciele* *czekali na siebie* /**na się*. ‘The friends waited *for each other*.’

German is of type (b): the direct and indirect object are reciprocalized by means of the marker *sich* (and the reciprocal pronoun *einander*) and prepositional objects by *einander*, and never by a combination of *sich* with a preposition which can have a reflexive reading only ((136c).

- (136) a. *Sie küßten sich/einander* (ACC). ‘They kissed.’
 b. *Sie stimmten sich/einander* (DAT) *zu*. ‘They agreed with each other.’
 c. *Sie glaubten an sich*. ‘They believed *in themselves/*in each other*.’
 d. *Sie glaubten aneinander*. ‘They believed *in each other*.’

10.5 The number of the reciprocants

In this case different markers are used for a different number of reciprocants. Three cases of formal relations between the markers are attested.

1. *Affixes are entirely different*. One of the markers may be used for more than two participants and the other for two participants only; cf. Limbu *-siŋ* and *-ne* respectively (see (81) above).

2. *One affix contains another*. For instance, the Tagalog reciprocal circumfix *mag-...-an* contains the marker *mag-*; cf.: *mag-away* ‘to fight with each other’ (of two or more persons) → *mag-away-an* ‘to fight with each other’ (of more than two persons) (see (26) in Ch. 1).

3. *Dual and plural pronouns are used*. Compare Latin *alter alterum* ‘each other’ (for two persons) and *alius alium* ‘each other’ (of more than two persons).

(For details see Nedjalkov, Ch. 1, §6.)

10.6 Co-occurrence and interchangeability

A combination of these two features yields four logical types of which only three are attested. Needless to say, with regard to interchangeability only the general tendency can be shown, and the statements do not concern all reciprocals.

1. The markers are not interchangeable and they do not co-occur, thus being in complementary distribution. This type is not attested in my data.

2. The markers can co-occur and they are interchangeable. This most commonly applies to verbal and pronominal markers (the latter is used pleonastically or for disambiguation in the case of a polysemous verbal marker); cf. Chukchi (*-tko* is an antipassive marker here; cf. 3.3 above):

- (137) *təm-* ‘to kill’ →
- a. *təm-wəly-* ‘to kill each other’
 - b. *əryičyu təmə-tko-* ‘(same)’
 - c. *əryičyu təmə-wəly-* ‘(same)’.

Similarly in Evenki: *iče-* ‘to see’ → *iče-meet-* ‘to see each other’, *memelgiwer iče-* (same), *memelgiwer iče-meet-* (same).

3. The markers are interchangeable but cannot be used simultaneously. This is characteristic of reciprocal pronouns, e.g. *each other* and *one another*, Russian *drug druga* and *odin drugogo*, less frequently it is observed among verbal reciprocals; in the following example the circumfix can alternate with root pre-reduplication; cf. Indonesian (Ogloblin & Nedjalkov, Ch. 33, §1.2):

- (138) a. *me-mandang* ‘to look at sb’
 b. *ber-pandang-an* ‘to look at each other’
 c. *pandang-me-mandang* (same).

Similarly in German and Polish where the respective *sich* and *einander* and *się* and *siebie/jeden drugiego* cannot be used simultaneously (cf. *Sie küßten sich* ‘They kissed (each other)’, *Sie küßten einander* (same), but **Sie küßten sich einander*).

4. The markers are not interchangeable but they can be used simultaneously. This type is attested in languages with a verbal and a pronominal reciprocal markers. In this case the problem of the dominating marker arises. Two main strategies are possible here.

4a. The dominating marker is the verbal one. It is the main one and the syntactic marker is used without the verbal marker and preserves its nominal properties with a limited set of base verbs (mostly those taking a prepositional object), as in French and Bulgarian. Otherwise, i.e. in collocation with reciprocal verbs, the syntactic marker loses its nominal properties and functions very much like a reciprocal specifier (see 3.7). Compare French:

- (139) a. *Jean embrasse Marie.* ‘John embraces Mary.’
 b. *Jean et Marie s’embrassent.* ‘John and Mary embrace each other.’
 c. *Jean et Marie s’embrassent l’un l’autre.* ‘John and Mary embrace each other.’
 d. **Jean et Marie embrassent l’un l’autre.* (same intended meaning).
 (= (94) in Nedjalkov, Ch. 1). (For more details see Ch.1, §11.)

4b. The dominating marker is the syntactic one, and the verbal marker which can optionally co-occur with the syntactic marker is retained as the only marker on a limited set of fossilized derivatives, most of them lexical reciprocals. For instance, in Kannada where the reciprocal pronoun *obbar-anna obbaru* <one-ACC one.NOM> ‘each other’ optionally combines with the highly polysemous verbal marker *-kol/-koN-* (Amritavalli 2000:54).

Outside the limits of 4b, two more instances of the use of the syntactic markers in the Dravidian languages may be pointed out: (a) in Telugu, a syntactic marker must be used simultaneously with a verbal one, as a rule, and this can be regarded as a complex two-component marker (Subbarao & Lalitha 2000:226); (b) in Malayalam, where there are at least ten syntactic reciprocal markers, a verbal marker is lost and syntactic markers are in use (see (17) above and §3.4) (Jayaseelan 2000:119; Asher & Kumari 1997:168).

Across languages with competing syntactic and verbal markers, the tendency for syntactic markers to oust the verbal ones seems to be more common than the opposite one (although the South-Slavic and some of the Romance languages are counterexamples). At least one of the causes of the tendency may be the polysemy of the verbal markers, especially such meanings as the anticausative, passive and other middle meanings. Besides, verbal markers seem to tend to lose productivity in general. The greater or lesser degree of the domination of a syntactic marker over a verbal one is attested not only in the Dravidian languages but also in most of the languages of the Circum-Baltic area (Scandinavian, Baltic, East Slavic) and in a number of Turkic (e.g. Karachay-Balkar and Turkish) languages.

10.7 Semantic differences

As one of the widespread differences between verbal and pronominal reciprocals, the temporal difference is often pointed out, viz. verbal reciprocals with light markers are claimed to denote simultaneous actions of the reciprocants and pronominal reciprocals with heavy markers may be simultaneous or sequential. It seems that these differences are not always related to the character of the reciprocal markers. For instance, two light reciprocal markers may also differ in this respect. Let us consider certain differences that can correlate with temporal differences. To quote Kemmer (1993:109), “[l]ight reciprocal marking is strongly associated with simultaneity, while heavy reciprocal markers are temporally indifferent.” This insightful observation which [being often enough justified] explains many cases analyzed by Kemmer, needs some amplification. In the first place, this difference may take place between (a) two light markers of a language and, in the second place, (b) there are light markers in numerous languages that in combination with certain verbs can express only sequential subevents.

Case (a) is trivial and can be illustrated by Even reciprocals with different light markers: one of them, the suffix *-lda/-lde* with the main sociative meaning is unproductive as a reciprocal marker (it has this function on about ten items) and its derivatives are lexicalized, and the suffix *-mat/-met* derives standard reciprocals: it is productive and monosemous. The semantic difference between derivatives with these markers may be partially temporal and at the same time lexical (140–142), especially in the case of lexi-

calized and non-lexicalized reciprocals with the same stem. Analogous semantic relations between productive and unproductive same stem reciprocals also occur in other languages (sometimes the same temporal difference may exist between two meanings of a derivative with the same marker.) The meaning of a lexicalized derivative is usually more complex and often includes the meaning of the non-lexicalized partners. These derivatives are also entered in a different way in the dictionaries: in an Even-Russian dictionary both types of derivatives can be entered, while in a Russian-Even dictionary derivatives in *-mat/-met* cannot be found because there are no entries like Russian *videt' drug druga* 'to see each other', and the like. These relations can be further complicated by the existence of parallel reciprocals with the heavy marker (cf. *meen meen-ur it-* 'to see each other') which has no distinct restriction on its usage but occurs less frequently than reciprocals with *-mat/-met*.

Even (Malchukov, Ch. 39, §9.1.2)

- (140) *it-* 'to see' → a. *iči-lde-* 'to meet'
 b. *it-met-* 'to see each other.'
- (141) *göön-* 'to say, tell' → a. *göö-lde-* 'to come to an agreement'
 b. *göö-met-* 'to say to each other.'
- (142) *žav-* 'to grasp' → a. *žava-lda-* 'to shake hands', 'struggle'
 b. *žav-mat-* 'to grasp each other', etc.

As regards case (b), it should be noted that the number of reciprocals with light markers denoting sequential arrangement of the subevents is not so small, and this meaning is determined by the lexical meaning of the base verbs if they denote actions that cannot be performed simultaneously upon each other for pragmatic reasons. Compare German:

- (143) *Sie wuschen sich gegenseitig den Rücken* 'They washed each other's back.'

Especially convincing is the following sentence from a Chukchi fairytale where the sequentiality of the subevents is explicated in the text itself.

- (144) *Naqam emrənyite palomtel-wəly-a n-it-qinet: evər ənnen nə-wetyaw-qen,*
 well by.turns listen-REC-INST IMPF-AUX-3PL when one IMPF-tell-3SG
qol-əm nə-palomtel-qen.
 other-EMPH IMPF-listen-3SG
 'Well, they listened to each other by turns: when one talked the other listened.'

And lastly, there is one more case which is often enough used as proof that light markers always denote simultaneous subevents. This favourite example illustrating simultaneity of reciprocal subevents and potential sequence are the verbal and the pronominal derivatives meaning 'to kiss' and 'to kiss each other'. For instance, as Kemmer (1993:111) notes, in the English equivalents of the following German sentences "the two might be kissing each other on the cheek, sequentially", but in the second, "there is almost certainly only one kiss involved"; cf. (bold type is mine – V.N.):

- (145) a. *Hans und Maria haben einander geküßt.* – *John and Mary kissed each other.*
 b. *Hans und Maria haben sich geküßt.* (p. 112) – *John and Mary kissed.*

I will note in passing that simultaneity of actions in (145b) is accounted for by the “technical aspects” of the European kiss which do not allow to describe “kissing each other on the cheek, i.e. sequentially” by means of a reciprocal with a light marker. On the other hand, in some languages the light marker is used to denote “kissing sequentially”: the Kirghiz traditional mutual kiss is on the neck (they never kiss on the lips) and this cannot be performed simultaneously, but it is nevertheless denoted by the reciprocal *öb-üš-* (< *öp-* ‘to kiss sb’). The heavy marker *birin biri* is not used with the verb *öp-* for the trivial reason that frequent events are preferably expressed by shorter items. As regards the choice between *sich* and *einander*, in colloquial German, the former is preferable and (145a) is unlikely. But *einander* is the only one possible in reciprocalization of prepositional objects (136). On the other hand, *einander* can be used instead of *sich* if the derivative is polysemous; cf. *Sie trösteten sich damit* ‘They got consoled with it’; a much less likely interpretation is ‘They consoled each other with it’. For this meaning the proper expression is *Sie trösteten einander damit*. In this and similar cases the issue of simultaneity or sequentiality is more or less irrelevant. This also holds for the (146b) where the heavy reciprocal German marker *einander* translates the English light (= zero) marker (examples from Wandruszka 1969:449; bold type is mine – V.N.):

- (146) a. *Cathleen bent down and Melanie tiptoed. They kissed.* (M. Mitchell)
 b. *Cathleen beugte sich herab und Melly erhob sich auf den Zehenspitzen, und sie küßten einander.*

To conclude the discussion of this example, I will note that the number of such pairs as *to kiss – sich küssen* and *to kiss each other – einander küssen* is relatively limited. In English, the number of pairs like *kiss – kiss each other* hardly exceeds 20.

11. Concluding remarks

I wish to stress the following.

11.1 Iconicity in the expression of the reciprocal meaning

A prototypical reciprocal situation is often represented schematically as *two* points connected by *two* arrows with opposite directions, the schema encoding two participants and their two actions directed at each other (iteration of the same subaction by different subjects). This dual number is iconically reflected in the reciprocal markers in a variety of ways.

The iconicity is reflected in *the two-component structure of many types of reciprocal marking*:

1. Doubling of clauses with argument inversion; here are several subtypes (see §2, especially examples (3), (4), (5)).

2. Verb root reduplication; cf. (100), (101); in most cases it is used in combination with reciprocal affixes, cf. (102)–(108); in (45) the first syllable of the root and in (46) the auxiliary is reduplicated rather than the notional verb.

3. Reciprocal pronouns and adverbs with two-component structure, as is shown in (12), (14), (15), (16), (17).

4. Reduplication of reciprocal pronouns, as is shown in (13), (21b), (23).

5. Reduplication of affixes, including reflexive ones, as is shown in (71), (72).

6. Attachment to the reciprocal affix of optional or obligatory other markers with the meanings of

- (a) iterativity (84), (85);
- (b) iterativity and reciprocity (86);
- (c) iterativity and plurality (89);
- (d) reflexivity (82), (81);
- (e) sociativity and reciprocity (86c), (89b);
- (f) reciprocity (49).

Some of the additional components are not used alone (e.g. Kabardian *-rə-* in 6.2.1.1, Abaza *-ba-* in 6.2.1.2, Buryat *-sa-* in (88a)). It seems that in case 6 the tendency towards a two-component structure also plays a role.

The iconicity of a prototypical reciprocal situation, i.e. a situation with two participants, is also reflected in special reciprocal markers for two reciprocants only different from the markers for situations with more than two reciprocants (cf. the Limbu reciprocal suffixes *-ne* and *-siŋ* respectively in 6.4.2.1 above; see also Ch. 1, §6 for more details), and also by the obligatory use of dual subject agreement marker in Awtuw even on reciprocals describing situations with more than two reciprocants and containing a plural subject agreement marker (73).

The opposite direction of the actions in a reciprocal situation is reflected in markers with deictic complementary (contrasting) words as the source of the reciprocal meaning, like the Chinese markers with double auxiliary components of the types ‘*I* (1SG) *V you* (2SG), *you V me*’ (6) and ‘*V come V go*’ with the meaning of repeated motion in opposite directions (48). The Malayalam reciprocal adverb with the literal meaning ‘this way that way’ (33) can be assigned to this type, and markers whose literal meaning implies the opposite direction of the prior action, like Tucano *amē-* ‘do back’ (49).

Note in passing that reduplication is often used as a marker of iterativity of actions and plurality of participants, among other meanings. The reciprocal meaning overlaps with the meanings named (including sociativity), and a reciprocal situation can be described as a repetition of the same action involving the same participants but with participant roles reversed (in this connection see Moravcsik 1978:316–21).

11.2 Possible differences between reciprocal markers within one language

If a language possesses two or more reciprocal markers, they can be used either more or less indiscriminately though displaying slight differences that are sometimes hard to explicate (cf. (137a) and (137b), (138b) and (138c)), or they may be in overlapping (cf.

(134a), (136a, b)) or complementary (cf. (134b), (135b)) distribution, or they may co-occur, when used simultaneously for emphasis (137c), pleonastically (for no particular reason) or for disambiguation, especially if one of the markers is polysemous and another monosemous.

Apart from the formal differences on the basis of which the six types listed above are distinguished (see 1.2), the reciprocal markers of a language can also differ in frequency, productivity, stylistic characteristics, syntactic status of the reciprocalized arguments, number of the antecedent, mutual co-occurrence and interchangeability, and semantics. Two (or more) reciprocal markers can differ in two or more respects (see Section 10).

If there are both syntactic and verbal reciprocal markers in a language, they may be on competing terms; the former seem to have a better chance of achieving the dominating position. This is the case, for instance, in a number of the Turkic, Dravidian and Indo-European languages (cf. 10.6).

On the other hand, syntactic markers seem to be less stable in the sense that they may be ousted by newer coinages. For instance, all the Turkic languages share the same ancient reciprocal suffix (cf. Yakut *-is-*, Karachay-Balkar *-iŝ-*, etc.), while the reciprocal pronouns differ across these languages (cf. Yakut *beje-beje-leri-n* <each-other-3PL-ACC> and Karachay-Balkar *biri-biri-Ø-n* (same)).

There are certain lexical groups of two-place verbs which can have reciprocal markers not used on other verbs; for instance, reciprocal specifiers are used on a lexically limited range of verbs, e.g. on verbs denoting emotions. This is probably due to their lesser degree of transitivity in comparison with verbs of action like ‘to kill’ (see, for instance, (36d) and the preceding discussion, case 2 in 3.7.3, and also §3.6).

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Sociativity, conjoining, reciprocity, and the Latin prefix *com-*

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1. Introduction. Definitions. Two main meanings of the prefix *com-*

This paper is concerned with the Latin prefix *com-* (the allomorphs are *com-*, *con-*, *cor-*, *col-*, *co-*; the choice is determined by the initial phoneme of the stem). The main point of interest is verbs, and sometimes nouns with this prefix are also taken into consideration.¹ In case of polysemy, each lexical meaning of a word with the prefix *com-* is regarded as a separate unit and numbered accordingly if a different meaning of the prefix is realized in it. Thus each word represents as many units of analysis as the number of meanings of the prefix *com-* in combination with a given stem. As it is, one index may cover a variety of lexical meanings within one meaning of the prefix.

According to tradition we quote Latin verbs in the 1sg form. We do not take into account figurative and similar secondary meanings of prefixed verbs as this stage of semantic derivation is not immediately related to the problem we are concerned with (for instance, cf. the meaning ‘to study thoroughly’ of the verb *combibo* which is a result of metaphorical development of the meaning ‘imbibe/absorb/drink in’ with the “additive” meaning of the prefix *com-*).

The prefix *com-* may undergo desemantization, in cases when it duplicates a component of meaning potentially present in the verbal stem.

Two main classes can be distinguished among Latin verbs on which the prefix *com-* retains a high enough *degree of semantic autonomy* (see Zaliznjak 1995: 150) for us to speak of the meaning of this prefix:

- *Class A* comprises verbs whose definitions contain the component ‘together with sb/sth’; cf.:
 - (1) *compasco* ‘graze (cattle) together’
condolesco ‘suffer together’, cf. (2):
 - (2) *animus corpori condolescit* ‘spirit/soul suffers together with body’
cf. French *condolérance* ‘condolence.’
- *Class B* comprises verbs with the semantic component ‘draw/bring sth together, come together, join/unite’ (vt/vi); cf.:
 - (3) *committo* ‘bring together’, ‘compare’, ‘join’ (vt)
coeo ‘gather/come together, meet.’

Sometimes, the prefix *com-* adds different meanings when combined with the same stem, e.g.:

- (4) a. *concurro*
 - i. ‘compete’ (← ‘run together’ – the meaning of joint action)
 - ii. ‘come [running] together’ (the meaning of drawing close together)
- b. *combibo*
 - i. ‘drink together with sb’
 - ii. ‘absorb/imbibe, drink/take in’; cf. (5):

1. The sources of Latin data are *A Latin-English Dictionary* (White, Oxon & Riddle 1876) and *the Latin-Russian dictionary* (Dvoreckij 1976).

- (5) *et sicco lacrimas conbibat ore tuas.* (Ovidius. *Ars amatoria*, II, 326)
 ‘and she drank your tears with her dry lips.’

Class A is clear-cut enough: in this meaning the Latin prefix *com-* can be compared to the German *mit-* (cf. Latin *compassio* ‘compassion, sympathy’ and German *Mitleid* ‘compassion’, where this meaning is the main one, in contrast to the Russian prefix *so-* which appears in this meaning mostly in loan words).

The boundaries of *Class B* are less distinct, due to the diffuse nature of the semantic component introduced by the prefix. In this meaning the prefix *com-* undergoes desemantization quite easily: if the idea of ‘drawing together’ is contained in the meaning of the verbal stem the prefix functions as a marker of completion (a kind of “perfectivizer”); cf.:

- (6) *connecto* ‘connect, join together’
commisceo ‘mix’ (vt), etc.

Class B also covers some modifications of the meaning of ‘drawing/coming together’, such as ‘pressing together’, ‘embracing/inclusion’, ‘covering’, etc., which may combine with the meaning of ‘completion’ (‘terminativity’). Among these, especially numerous are verbs on which the prefix is desemantized or is hardly analyzable semantically; cf.:

- (7) *compleo* ‘fill’
commemoro ‘recall, remember.’

Such verbs are of less interest to us.

Thus, the prefix *com-* has two principal meanings, of ‘joint action’ and ‘bringing/coming together’ (cf. two principal meanings of the English adverb *together* in Lasersohn 1990). In the case of joint, or collective action one semantic role is performed by more than one participant (this meaning may be termed *sociative*). The status of this semantic role determines a more precise nature of the semantic effect and changes in the syntactic pattern the prefix produces on the derivative.

In the case of a one-place predicate the prefix indicates that the only semantic role is performed by more than one participant. This is subject-oriented sociativity. Syntactically, it may find expression in two ways: either the only syntactic valency is obligatorily filled with a plural noun (i.e. a noun phrase denoting plurality of entities: a noun in the plural number, a collective noun like *class*, *family*, *multitude*, a conjoined or comitative noun group), or the derivative acquires an additional valency (*cum-* + ABL). Thus, the verb *cubo* means ‘to lie’ and may describe a situation with one participant, while *concu(m)bo* obligatorily implies two participants, which finds syntactic expression either in a plural subject or in the obligatory valency *cum aliquo* ‘with someone’. Similarly, the verb *loquor* ‘talk, speak’ may have a case frame comprised of the subject alone, although it allows variants with a plural subject and an object with the preposition *cum* ‘with’. Contrary to it, the verb *colloquor* ‘talk, converse’ makes one of the two variants obligatory: either a plural subject (in this case *inter se* ‘between selves’ is often added) or an object *cum aliquo* ‘with somebody’ (i.e. the second participant must be named in one way or the other).

So far, we have spoken of joint (collective) actions in the domain of one-place verbs. With two-place verbs that have both a subject and an object valency, the expression of the

sociative meaning is more varied. Thus, an action may be performed on more than one referent, in which case the syntactic object is a plural noun. This may be termed *object-oriented sociativity*. On the other hand, sociativity may concern the subject, and in this case it is the subject that is expressed by a plural noun: like one-place intransitives, these two-place verbs with a plural subject are *subject-oriented sociatives*. Sociativity involving both subject and object is possible if only the agent of one action is simultaneously the patient of another identical action, and vice versa (cf. *to kiss each other*, *to abuse each other*). Verbs of this type are termed reciprocal and they are typically related to two-place transitive bases. Close to these reciprocals are verbs derived from one-place intransitives which acquire a second valency along with the prefix *com-*. Consider the verb *concumbo* ‘lie together’: clearly if X is lying with Y, Y is lying with X at the same time. The underlying *cubo* ‘to lie’ has no object, but the derivative acquires a second participant performing a role analogous to the role of patient of a reciprocal verb. That is, the verb meaning ‘lie together’ differs from the verb meaning ‘to abuse each other’ in that its underlying verb is not transitive (cf. *to abuse vt*). In other words, *concumbo* differs from *confligo* ‘hit each other, collide’ (← *fligo* ‘hit’) or from *confutuo* ‘have sexual intercourse’ in that it is derived from a one-place intransitive verb while the latter two are derived from two-place transitives. However the additional valency *cum aliquo* which the verb *concumbo* has acquired is identical to the analogous valency of *confutuo*. Verbs like *concumbo* may be termed *secondary reciprocals*.

Let us consider the semantic classes of verbs with the prefix *com-* in more detail.

2. Class A: Non-spatial meanings

As has been mentioned, this is a class of verbs with the prefix *com-* indicating sociativity (in the broad sense). They may be further divided into the following subclasses:

- Verbs denoting joint action of two (or more) participants (they are subdivided into verbs of “equal” actions and verbs of “attendant” action).
- Verbs denoting an action of a single agent upon two patients (this is a small subclass).
- Verbs denoting reciprocal actions.

2.1 Joint (sociative) action: ‘Doing sth together (with another subject)’

Joint actions differ from identical actions performed by two or more persons (even if they are performed simultaneously and in the same place) in that they are conceptualized as acts of one joint action. Thus, for instance, if two persons are in the same room and each is writing his/her own paper, this does not form any joint action (unless they are writing papers for a collective monograph). On the contrary, if they are writing the same paper (if they are co-authors of the same paper, whatever the distribution of their roles), they are performing a joint action. Of course, there happen more complex situations. For instance, if a group of students is listening to a lecture together it is likely to be conceived as a joint

action, but if two groups of students listen to the same lecture at different times it is less likely to be conceived as a joint action.

A significant feature of the prefix *com-* is that it tends to indicate participation of a number of persons in the same joint action rather than in a number of identical actions performed by different participants simultaneously or by turns. Such situations are possible, though rare, cf. *compugno*₂ ‘suppress, annihilate together or simultaneously’ (e.g., *amaritudinem* ‘vexation, anger’). Note that the Greek prefix *ἀντι-* which has a set of meanings partially overlapping with that of *com-* can also denote identical actions of different participants/agents (see 4.2.2).

It should be noted, however, that the “degree” of sociativity expressed by verbs with the prefix *com-* depends on the syntactic construction. It is minimal in a clause with the subject expressed by a conjoined group or a plural noun: this type of construction generally can be understood as describing two independent actions (cf. one of the readings of the sentence *Peter and Kate went out for a smoke* = each went out on his/her own). But even when it denotes a joint action its degree of sociativity is less than in a construction with a different case frame. Thus, the verb *competo* with a plural subject means ‘strive, seek after, try to achieve sth (the same goal) together’. Moreover, this construction may have the meaning of secondary reciprocal (cf. *competo* ‘come together, rally, coincide’: *viae competunt* ‘the roads converge’; see 2.3). The degree of sociativity is somewhat higher in constructions with the comitative phrase *cum* + ABL: in this case the more likely reading is that the participants have combined their efforts while a construction with a plural subject is likely to imply separate efforts of each participant. Constructions with the (obligatory) dative case denote joint actions exclusively: thus the verb *competo* used with a dative object renders the meanings ‘to coincide/converge’ and ‘to correspond/suit’; cf.:

- (8) *tanto Othonis animo nequaquam corpus <...> competit.* (Svet.)
 ‘Othon’s body didn’t answer to such spirit of him.’

2.1.1 Participation on equal grounds (*sociative and comitative meaning*)

Verbs of “equal” actions (i.e. verbs denoting situations in which two or more participants act “on an equal footing”) may have two case frames which realize the sociative and the comitative meaning respectively: ‘X and Y do sth together’ and ‘X does sth together with Y’. They may be either transitive or intransitive and the subject may be either animate (human) or inanimate. Examples:

- (9) *coepulor* ‘feast together, share a meal with sb’ ← *epulor* ‘eat, dine, feast’
coadolesco ‘grow up, ripen together’ ← *adolesco* ‘grow up, ripen’
coaegresco ‘fall ill together’ ← *aegresco* ‘fall ill’, cf. (10)
compasco ‘tend (cattle) together’ ← *pasco* ‘tend (cattle).’
- (10) *corpus animae coaegrescit* ‘the body falls ill together with the soul.’

Within this class of verbs, the meaning of participation in some joint activity can be distinguished:

- (11) *cohonesto* ‘participate (together with others) in worship(ping)’
 ← *honesto* ‘worship/honor’
coaltercor ‘participate in an argument’ ← *altercor* ‘argue’
collaboro ‘collaborate, work together’ ← *laboro* ‘work’
colludo ‘play together’ ← *ludo* ‘play’
collugeo ‘mourn together’ ← *lugeo* ‘mourn’
commilito ‘serve in the army together’ ← *mito* ‘serve in the army.’

It is not easy to draw a borderline between these subgroups in Latin; note that in German this distinction is more consistent (see 3.3.1).

Here are a few more verbs of the latter type:

- (12) *combibo* ‘drink together’
*commorior*₁ ‘die together’
*compatior*₁ ‘suffer together’
compecco ‘sin together with sb’
competo ‘strive after sth together’
*comploro*₂ ‘mourn (over the dead) together’ (← *ploro*₂ ‘mourn’)
concado ‘fall/go down together’
*conclamo*₁ ‘shout together’
concino ‘sing together’ (← *cano* ‘to sing’)
condisco ‘learn in company with’
conspiro ‘sound/ring out together, be heard simultaneously’; cf.:
 (13) *cornua conspirant* ‘the horns sound together.’

2.1.2 “Concomitant” action (assistive meaning)

Here belong verbs with an *assistive* meaning (‘to help, assist sb in sth’). The principal agent is signified by the dative case. Compare:

- (14) a. *comitor* ‘see sb off/escort, accompany’ (← *eo* ‘go’ via *comes*, *-itis* ‘fellow-traveller’)
*concino*₂ (*alicui*) ‘join in singing, accompany’ (← *cano* ‘sing’).

The following verbs probably also belong here:

- b. *compatior*₂ (*alicui*) ‘feel compassion (for)’ (← *patior* ‘to suffer’)
*condolesco*₂ ‘suffer together’; cf.:
 (15) *animus corpori condolescit* ‘spirit suffers together with the body.’

Such verbs usually have a *sociative* meaning along with the assistive; cf.:

- (16) *concino*₁ ‘sing together (in unison, harmoniously).’

The meaning of “*attendant*” action is relatively rare. In fact, it is a modification of the previous meaning (2.1.1): the subject referent performs an attendant role while the main role (of the action named by the base verb) is performed by the object referent in an oblique case, cf. *confloreo* ‘bloom together’ in:

- (17) *conflorens mihi flore adulescentiae* (Aug. Conf.)
lit. ‘blooming with me with the blossoms of youth’, i.e.
‘being like me in the bloom of youth.’

These verbs differ from those of “equal” action in that they do not have the pattern ‘X and Y’.

2.2 Action upon two objects

This type of meaning is found in a small group of transitive verbs with a plural object expressed either by a noun in the plural, or a conjoined or comitative phrase. Here belong verbs like the following:

- (18) *coaestimo* ‘estimate sth together, include sth in the overall estimation’
compendo ‘weigh (two things) together’
compenso ‘counterbalance, compensate’, e.g. (19)
concoquo ‘boil together (one thing with another).’
- (19) *compensabatur cum summis doloribus laetitia.*
‘greatest sufferings neutralize the joy.’

2.3 Reciprocal action

The definition of these verbs contains the component ‘each other’, ‘with each other’, etc. which is determined by two factors.

In one group of verbs with the prefix *com-* the respective unprefixes have the same meaning, although it may be slightly more general, i.e., they denote actions that are usually (though not necessarily) performed together or with respect to each other, thus these actions presuppose a counteragent. The prefix *com-* on these verbs serves to narrow down the meaning: as a result, the prefixed verbs can denote reciprocal actions only. For instance, *colloquor cum aliquo* means ‘talk/converse with sb’, while *loquor aliquid* means ‘say, speak, tell sth’, although it may take a comitative object of addressee (*cum aliquo*) optionally. The verb *certo* (*cum aliquo*) has two meanings: ‘rival, compete, vie’, as in (20a), and ‘fight, struggle’, as in (20b):

- (20) a. *cives cum civibus de virtute certabant.* (Sl.)
‘citizens compete with one another in virtue.’
b. *certo cum hostibus*
‘struggle with the enemy.’

Its prefixed derivative *concerto* has the very same meanings, i.e., the prefix simply marks the semantic component already present in the underlying verb.

The following examples illustrate this type of verbs:

- (21) *loquor aliquid* ‘speak, talk, tell sth’ → *colloquor cum aliquo* ‘talk with sb’
certo [*cum aliquo*] → *concerto cum aliquo* i. ‘rival, compete’, ii. ‘struggle, fight’
*pugno*₁ → *compugno*₁ *cum aliquo* ‘fight with sb’
luctor → *colluctor cum aliquo* ‘compete, contend with sb.’

All these verbs have a reciprocal ('A competes with B') rather than a sociative ('A together with B competes (*with C*)') meaning, the object *cum aliquo* indicating the "adversary" and not an "ally".

The other group comprises verbs that acquire a reciprocal meaning due to the prefix *com-* only; cf.:

- (22) *lido* 'hit' → *collido* 'hit sth against each other, bring together'
morior 'destroy' → *commorior* 'destroy each other', cf. (23)
multiplico 'multiply' → *commultiplico* 'multiply mutually.'
- (23) *duo venena commoriuntur* 'two poisons mutually perish.'

Generally speaking, the meaning of reciprocal action is very close to the meaning of 'bringing/coming together' (i.e. *Class B*). When used with the prefix *com-*, verbs denoting motion or any dynamic action can acquire the meaning of meeting, i.e., motion that involves coming from different directions and meeting (or an action performed upon each other). The result of such motion can be metaphorically reinterpreted in two ways, as a *conflict* (meanings like 'collide', 'contradict each other', 'be in contrast/at variance with each other', etc.; cf. (24)), or, on the contrary, as *harmony* (meanings like 'coincide', 'correspond', 'tally', 'meet', 'come together', etc.; cf. (25)).

- (24) a. *fligo* 'hit' → *confligo* 'hit against each other, collide, conflict'; cf.:
 b. *leges diversae configunt* 'different laws are at variance.'
- (25) a. *curro* 'run' → *concurro* i. 'happen together' (25b), ii. 'correspond' (25c):
 b. *quae ut concurrant omnia, optabile est.* (Cic.)
 'the coincidence of all [those things] is desirable.'
 c. *concurrere cum veritas* 'agree with the truth.'

Manifestation of one or another of these two meanings is partly determined by the semantics of the underlying verbs (cf. the meaning 'correspond' of the verb *consto* derived from *sto* 'stand'); but this dependence is not rigid and one verb may have both of these meanings: thus *concurro* means not only 'coincide', but also 'collide'; cf.:

- (26) *prorae concurrunt* 'the ships collided.'

3. Class B: Spatial meanings

Besides the meaning of joint (collective) action, verbs with the prefix *com-* can also have the meaning of coming together and/or joining (sth) together. This may involve the subject referents of a one-place verb (cf. *coalesco* 'coalesce, come together and unite into one substance, group') or object referents of a two-place verb (cf. *coagmento* 'join/connect sth together'). The situation of coming together of the subject referents of a two-place verb is practically impossible: in this case a verb acquires the meaning of joint action. This distribution of the meanings is determined by the following factor: the idea of coming or bringing together implies motion, and the moving entity is either the subject referent of a one-place verb (*to run, to walk*), or the object referent of a two-place verb (*to carry sth, to*

move sth). As well as in *Class A*, there are variants of meaning: the participants of a situation may be “equal” in their involvement, i.e. perform identical roles in the situation, or they may be “unequal”, when one of the participants performs the main role and the other an auxiliary role, i.e. assisting the main participant.

The logic of the semantic development of the prefix *com-* in its second meaning is this:

coming/bringing together > linking/connecting > totality (intensity) > completion.

3.1 The objects that come/are brought together are “equal”

3.1.1 *Subject-oriented reciprocals (intransitive verbs)*

Here belong the following verbs:

- | | | | |
|------|----------------------|---|--|
| (27) | <i>alesco</i> ‘grow’ | → | <i>coalesco</i> ‘coalesce/grow together’ |
| | <i>eo</i> ‘go’ | → | <i>coeo</i> ₁ ‘meet, come together’ |
| | <i>curro</i> ‘run’ | → | <i>concurro</i> ₁ ‘gather running, come running together’ |
| | <i>fluo</i> ‘flow’ | → | <i>confluo</i> ‘flow together, join’, etc. |

When the subject referents of a one-place verb come together this meaning of coming together may be manifested in the derived verb in two ways: it either remains a one-place verb in which case it requires a plural subject, or it becomes two-place and acquires an additional valency *cum aliquo* ‘with sb/sth’ (cf. above). The choice of one or the other variant with each verb is to a large degree idiosyncratic. Thus, the verb *coalesco* is practically always used as a one-place intransitive with a plural subject:

- | | | | |
|------|----|---|---|
| (28) | a. | <i>inter se palpebrae coalescunt</i> | ‘the eyelids close (= come together).’ |
| | b. | <i>multitudo coalescit in corpus unius populi</i> | ‘multitude grows into a single people.’ |

In (28a) the subject is a noun in the plural, and in (28b) a noun in the singular is used, but it is semantically plural.

The verb *coeo* equally allows both possibilities, i.e., it may remain one-place with a plural subject or it may be two-place and take an object with the preposition *cum* ‘with’; cf. respectively:

- | | | | |
|------|----|-------------------------------|--|
| (29) | a. | <i>jam agmena coibant</i> | ‘the hordes were coming together.’ |
| | b. | <i>coire cum aliena uxore</i> | ‘take up (become intimate) with sb else’s wife.’ |

3.1.2 *Object-oriented reciprocals (transitive verbs)*

3.1.2.1 *Bringing two entities together.* The class of verbs with the prefix *com-* whose meaning contains the idea of bringing two (or more) objects together comprises the following transitives:

- | | | |
|------|---|-----------------------------------|
| (30) | <i>colligo</i> I (< <i>collegare</i>) | ‘connect / link / bind’ |
| | <i>colligo</i> II (< <i>collegere</i>) | ‘gather’ |
| | <i>commino</i> (<i>pecua</i>) | ‘drive (cattle) together’ |
| | <i>committo</i> | ‘bring together (as competitors)’ |
| | <i>compello</i> | ‘drive together / gather’ |

<i>compingo</i>	‘knock together’ (← <i>pango</i> ‘hammer in’)
<i>compono</i>	‘pile / put / join together’
<i>comporto</i>	‘bring / pile up together’
<i>comprehendo₁</i>	‘fasten / tie together’ (ships with a rope)
<i>comprimo</i>	‘shut / close (one’s eyes, eyelids)’
<i>concipio</i>	‘gather, compile’ (← <i>cipio</i> ‘to take’)
<i>condo</i>	‘erect, compose, put together’
<i>conduco</i>	‘bring together / gather, draw up’
<i>confero</i>	‘join’
<i>configo</i>	‘fasten together’, etc.

If the meaning of an unprefixed verb contains the idea of bringing/joining things together the prefix *com-* duplicates this semantic component and is thus semantically empty: in other words, it undergoes desemantization and the prefixed verb is practically identical in meaning to its unprefixed counterpart; cf.:

- (31) *connecto* ‘connect, join’ ← *necto* ‘connect, tie’
commisceo ‘mix’ ← *misceo* ‘mix, stir’, etc.

3.1.2.2 *Bringing parts of the same entity together.* A particular case of bringing two equal object referents (of a transitive verb) together is bringing together of parts of a single subject referent, the latter entity being conceptualized as consisting of a given number of constituent parts. Bringing together in this case takes shape of pressing together, condensing a single entity. Thus, the verb *comprehendo* means ‘fasten/tie (probably two entities with each other)’ and also ‘take hold (of one entity)’. Note that this semantic development is also characteristic of the Russian prefix *s-*; cf. *s-vjazat’ dva brevna drug s drugom* ‘to tie two logs together (lit. ‘with each other’)’ and *s-vjazat’ človeka* ‘to tie up a man’. Examples of this type of verbs:

- (32) *cogo₂* ‘thicken, condense’
coeo₂ ‘become thick/pressed together, congeal’ (vi!)
complector ‘clasp around, seize, embrace’
comprehendo₂ ‘take hold of sth’
comprimo₂ ‘press, squeeze’
conresco ‘harden, thicken, congeal’
concipio₃ ‘grasp, catch’, fig. ‘perceive in mind, understand’ (← *cipio* ‘take’).

3.2 The objects that come/are brought together are not “equal”

Four semantic subclasses can be distinguished here.

3.2.1 *The meaning of complete involvement, totality, intensity*

Complete involvement may be of two kinds. On the one hand, it may concern the object referent, and on the other the subject referent. Sometimes both variants can be expressed by the same verb; cf.:

- (33) a. *combibo*₂ i. 'drink up, swallow down'
 ii. 'drink one's fill'; 'imbibe, absorb'; cf.:
 b. *combibere salem* 'become saturated with salt.'

But there are also other aspects of intensification. Let us compare the verbs *lacrimo* 'cry' and *collacrimo*. The former has a broad meaning including many of the meanings of the latter. The prefix *com-* introduces the meaning of intensity which may manifest itself in two ways: it may imply copious tears, in which case the prefixed verb means 'weep hard', or it may imply that tears cover a body up, hence the rarer meaning 'beveil, deplore'. In the following example from Seneca the verb *lacrimo* is contrasted with *ploro* as weaker in meaning; of course it cannot be replaced by its prefixed derivative here:

- (34) *lacrimandum est, non plorandum.* (Sen.)
 'one may shed a few tears but one should not drown in one's tears/cry one's eyes out.'

Note that *collacrimo* has one more meaning, viz. 'weep together', which is not entered in Dvoreckij (1976) although it occurs in Latin texts; cf.:

- (35) *Simul omnes collacrimarunt.* (Pl.)
 'Simultaneously all weep together.'

The meaning of overall involvement coded by the prefix *com-* may take shape of the meaning of "covering"; cf.:

- (36) *coaedificio* 'cover (a site) with buildings/build up (a site)'
coaggero (aliquid aliqua re) 'fill up, cover up with a pile/pile up with.'

In this case the prefixed verb changes its case frame: both the underlying verb and derivative are transitive, the direct object of the unprefixed verb changing into an instrumental object in the derived construction and the underlying locative becoming a direct object (cf. analogous changes in some of the Russian verbs with the prefix *za-*; see Zaliznjak 1995: 161):

- (37) a. *On po-stroil dom-a v pol-e.*
 he built house-ACC.PL in field-LOC.SG
 'He built houses in the field.'
 b. *On za-stroil pole domami.*
 he built.up field-ACC.SG house-INST.PL
 'He built the field up with houses.'

Besides, a verb with the prefix *com-* may have more specific modifications of the meanings listed above (which may or may not involve a change of the syntactic pattern); e.g.:

- (38) *probo* 'approve' → *comprobo* i. 'approve', ii. 'confirm loyalty'

The prefix narrows and somewhat modifies the meaning of the derivative here, as the underlying verb does not have the meaning 'to confirm loyalty'. Compare also:

- (39) a. *damno* 'bring in a verdict of guilty, convict'
 → *condemno* 'sentence (in court), condemn'
 b. *pungo* 'prick, puncture'

→	<i>compungo</i>	‘prick or puncture severely; tattoo; mark’
c.	<i>puto</i>	‘ponder, consider, suppose’
→	<i>computo</i>	‘sum up, compute’, etc.

In all these instances the derived verb acquires a narrower meaning which may be regarded as a modification of the meaning of intensity.

Sometimes, prefixation with *com-* changes the actant structure of the derived construction which may be illustrated by the following examples:

- (40) a. *pugno cum* + DAT ‘struggle/argue with sb’
 → *compugno* + ACC (same)
 b. *credo* + DAT ‘trust, confide in sb’
 → *concredo* + ACC + DAT ‘trust sth to sb.’

3.2.1.1 *The meaning of intensity.* The intensive meaning proper may be acquired by both intransitives and transitives; the following verbs are an illustration of this meaning:

- (41) Intransitive verbs:

<i>commadeo</i>	‘be very moist’
<i>commarceo</i>	‘be wholly faint or inactive’
<i>colluceo</i>	‘be wholly illuminated, shine, give light on every side’
<i>collumino</i>	‘illuminate on all sides’
<i>concaleo</i>	‘become thoroughly warm’
<i>concrepo</i>	‘rattle, creak, grate, clash’ (← <i>crepo</i> ‘rattle, creak, rustle’)
<i>condeliquesco</i>	‘melt (down) entirely’
<i>condolesco</i> ₁	‘feel severe pain.’

- (42) Transitive verbs:

<i>colluo</i>	‘wash, rinse thoroughly’
<i>collustro</i>	‘illuminate, survey/examine’
<i>commanduco</i>	‘masticate, chew thoroughly’ (← <i>manduco</i> ‘masticate/chew’)
<i>commastico</i>	‘masticate, chew thoroughly’ (← <i>mastico</i> ‘masticate/chew’)
<i>commemini</i>	‘recollect in all particulars’
<i>commereo</i>	‘entirely merit, fully deserve’
<i>commetior</i> ₁	‘measure all over’ (← <i>metior</i> ‘measure’)
<i>commonstro</i>	‘show or point out fully or distinctly’
<i>commordeo</i>	‘bite all over’
<i>commoveo</i>	‘put in violent motion’
<i>communio</i>	‘fortify strongly or on all sides’
<i>commulco</i>	‘beat violently’
<i>compavesco</i>	‘be very much afraid’
<i>concalefacio</i>	‘warm thoroughly’
<i>concelebro</i>	‘do sth thoroughly/with zeal; celebrate solemnly’
<i>concelo</i>	‘hide/conceal carefully/thoroughly’
<i>conclamo</i> ₂	‘proclaim, shout loudly’
<i>conculco</i>	‘trample, crush up’ (← <i>calco</i> ‘trample’)
<i>concutio</i>	‘shake with force’ (← <i>quatio</i> ‘shake’)
<i>condecoro</i>	‘decorate in all ways possible’
<i>concaco</i>	‘foul up.’

There is a number of verbs prefixed with *com-* that are derived from adjectives and also have this meaning; cf.:

- (43) *lutulentus* ‘dirty’ → *collutulento* ‘make very muddy’
locuples ‘rich’ → *collocupletto* ‘make very rich.’

3.2.1.2 *The meaning of completion.* In some terminative verbs the meaning of totality (intensity) turns into that of completion; e.g.:

- (44) *conflagro* ‘burn up, destroy by fire’
comedo ‘eat entirely up’
commalaxo ‘soften entirely’
commitigo ‘make quite soft’
commuto ‘change entirely’
compurgo ‘purify completely’
computresco ‘become wholly putrid’
conficio ‘accomplish’
condisco₂ ‘learn well’
collino ‘besmear, cover up’ (e.g. bread with butter; ← *lino* ‘smear/spread’).

It is of course next to impossible to draw a borderline between the “pure” meaning of completion and that of completion in combination with intensity.

3.2.1.3 *“Empty” prefix.* In numerous verbs with the prefix *com-* the meaning of totality is practically lost, and as a result a prefixed verb is more or less identical in meaning to its unprefixed counterpart; here belong:

- (45) *coacesco* ‘go sour’
colloco₁ ‘lay, put, place’
commaneo ‘remain’
commemoro ‘keep in mind, mention’
commeo ‘come and go; pass backwards and forwards’
commolior ‘set in motion’
commoneo ‘remind’
commoror ‘be (somewhere), stay, remain’
commulceo ‘caress, sooth’
compalpo ‘stroke, caress’
compaciscor ‘make an agreement’
comparco ‘save, husband well’
compareo ‘appear’
comparo₁ ‘make ready’
complico ‘fold together’
comminuo ‘lessen, diminish’
complaceo ‘be pleasing’
concoquo₂ ‘digest (food)’
concupisco ‘long much for, be very desirous of, strive after’
condelector ‘delight one’s self with’, etc.

4. The Latin prefix *com-* among other prefixes

Latin, Greek, German and Russian display indisputable typological similarity of prefixed derivation, and in this respect they are clearly opposed to English and French with an entirely different system of prefixation. They share at least the following features: each possesses a considerable number of verbal prefixes (about 15); most of the latter have a spatial meaning; most of them are relatable to prepositions; verbal prefixation is an active derivational procedure. With regard to the meanings of the prefixes it may be asserted that the range of these meanings is to a large degree language-specific: in each language the prefixes may have meanings that are either absent or peripheral in the other languages). Therefore the unit of cross-linguistic comparison can be a separate meaning of a prefix, which involves, among others things, all the difficulties connected with prefix polysemy. The task of interlingual comparison is further complicated by the fact that the languages in question have influenced each other to a considerable degree (direct borrowings, loan translations, and also borrowing of prefixes with a partial change or modification of their meaning), which resulted in a kind of assimilation of the prefixation systems of the languages we are concerned with. Description of all these processes is far beyond the scope of this paper; and we shall confine ourselves to a brief description of two types of paradigmatic relations of the prefix *com-*: its place among other Latin prefixes, on the one hand, and its brief characterization in comparison with semantically similar prefixes of Greek, German and Russian, on the other.

4.1 The system of Latin prefixes

It comprises the following prefixes:

1) *a-*, *ab-*, *abs-* denotes separation, moving off/away; deviation, digression, negation; cf. the Russian prefix *ot-* ‘from’.

2) *ad-* with the meaning of approaching, being next to; addition, joining; cf. the Russian prefix *pri-*; all these meanings are similar to those of *com-*; cf.:

- (46) *ad-aequo* ‘compare’ ← *equus* ‘equal’
com-paro ‘compare’ ← *par* ‘equal.’

They seem to differ in that *ad-* establishes unequal relations, while *com-* rather implies an equal status of the participants, i.e. *ad-aequo* means ‘equate sth with sth, put on the same footing’; *ad-* may also have an inceptive meaning, cf. *ad-amo* ‘fall in love’.

3) *com-* denotes joint (sociative) action (cf. Russian *so-* in *so-suščestvovat* ‘to co-exist’, *so-glasovat* ‘to co-ordinate’), and also coming/bringing together (cf. Russian *s-/so-* in *s-dvinut* ‘to move/push together’, *so-stavit* ‘to put sth together, compile’).

4) *de-* expresses the meaning of going/moving down, separation, removal, lack/shortage of sth; cf. Russian *s-* in one of its meanings: *s-brosit* ‘to throw down’.

5) *dis-* denotes division, cf. Russian *raz-*, as in *raz-drobit* ‘to break/smash to pieces’.

6) *ex-* denotes moving out(side), cf. Russian *vy-* in *vy-bežat* ‘to run out’.

7) *in-* denotes moving in(side), cf. Russian *v-* as in *v-bežat'* 'to run in'; it is close to *com-* in verbs like *com-bibo = v-pityvat'* = 'to absorb, imbibe'.

8) *inter-* signifies moving in(side), between; cf. Russian *v-*, *pere-*.

9) *ob-* has a vague meaning 'forward, around, downwards'.

10) *per-* denotes going through, motion towards destruction (cf. *per-eo* 'perish', *per-do* 'ruin'), cf. Russian *pro-*, as in *pro-brat'sja* 'to make one's way through', *pro-past'* 'to perish'; it may also denote motion towards oneself, cf. *per-cipio* 'take in, acquire, perceive'.

11) *prae-* denotes being in front of or before sth, cf. Russian *pred-*.

12) *pro-* renders the meaning of moving forward.

13) *re-* adds the meaning of reciprocation (cf. *re-saluto* 'respond to a greeting'), repetition, counteraction, contrast; cf. Greek *ἀντι-*.

14) *sub-* denotes being under sth, latency, low degree; cf. Russian *pod-*.

15) *super-* denotes motion through or above sth, on the surface, or upwards (cf. Russian *pere-*, *pre-*), or additional action (cf. Russian *do-*).

16) *trans-* denotes motion through or across sth; cf. Russian *pere-*, *pro-*.

Among the Latin prefixes, *com-* is contiguous to *ad-* in the meaning of addition, joining sth to sth, and to the prefix *re-* in the meaning of response action (which may be identical to the underlying action, e.g. *re-saluto* 'respond to a greeting'). Latin *re-* is very much like Greek *ἀντι-* which also has the meaning of response action (see below). Among Greek prefixes, the closest to *com-* is *συν-* (moreover, it is the closest one to *com-* among all the prefixes discussed in this paper). In Russian, sometimes the prefix *s-/so-*, and also the Church Slavonic *so-* (which has no other allomorphs and occurs mostly in loan translations like *so-suščestvovat'* 'to co-exist'), corresponds to Latin *com-*. In German, there are two prefixes which can be compared with the Latin prefix under discussion: *mit-* (denoting an attendant action which is identical or not identical to the main action) and *zusammen-* (denoting joint action or coming/bringing together).

4.2 The prefix *com-* in comparison with Greek *συν-* and *ἀντι-*²

4.2.1 The meanings of *συν-* corresponding to those of *com-*

They are:

1. The sociative meaning of joint action on "equal" grounds (2.1.1). In this meaning *συν-* combines practically with any verb, either transitive or intransitive. It is clearly the prevalent meaning of this prefix.

(47) <i>σύνειμι</i>	'be, live together'
<i>συνεκθνήσκω</i>	'die together'
<i>συγελάω</i>	'laugh together'
<i>συνδακρύω</i>	'cry, bemoan together'
<i>συνάρχω</i>	'be co-governor'
<i>συγγεωργέω</i>	'cultivate land together'

2. The Greek data are collected from the *Ancient Greek-Russian dictionary* (Dvoreckij 1958) and a *Greek-Russian dictionary* (Veisman 1991).

<i>συγγιγνώσκω</i>	‘decide together, share an opinion’
<i>συγγνωρίζω</i>	‘know sth together with sb, share knowledge with sb’
<i>συγκαθαγίζω</i>	‘make a sacrifice together’
<i>συγκαθεύδω</i>	‘sleep together’
<i>συγκαθίστημι</i>	‘establish, found together / jointly’
<i>συγκαταγηράσκω</i>	‘live together into old age’
<i>συναλγέω</i>	‘suffer together, endure sth together’, etc.

2. The meaning of concomitant action (see 2.1.2):

- (48) *συνάχθομαι* ‘condole with sb’
συναλγέω₁ ‘sympathize with sb.’

3. Action upon two objects (see 2.2):

- (49) *συγκαθείργω* ‘lock (sb with sb) in together’
συνδεκάζω ‘bribe sb and sb together’ (e.g. all the judges)
συνελαύνω ‘drive together.’

4. Two subjects coming together (meaning 3.1.1):

- (50) *συνέρχομαι* ‘come together, gather, join together’
συντρέχω ‘come running together’
συρρέω ‘flow together’
συρράσσω ‘collide.’

5. Bringing two objects together (meaning 3.1.2.1):

- (51) *συνάπτω* ‘tie/bind, join/connect together’
συναναπλέκω ‘entwine (sth with sth)’
συναριθμέω ‘count up’
συναρμόζω ‘tie/bind, join/connect, erect’
συνασπιδόω ‘close shields together’
συνδέω ‘tie/bind’
συνεξομοιόω ‘liken, make similar, compare’
συνέχο ‘restrain, hold in’ (cf. Latin *conhibeo*, Russian *sderživat’*)
συνίστημι ‘compose, compile, join together’
συράπτω ‘sew together.’

6. Bringing/pressing parts of an object together (meaning 3.1.2.2):

- (52) *συναιρέω* ‘grasp, comprehend’
συσπίαω ‘bring together’
συνελαύνω ‘press, squeeze, compress, hamper.’

7. Bringing together, joining two unequal elements (meaning 3.2):

- (53) *συναρπάζω* ‘grasp, take away, carry along/away’
συναρχαιρεσιάζω ‘support sb at elections’
συνηγορέω ‘intercede for/defend sb’
συναγορέω ‘agree/consent, confirm, approve, defend’ (← *ἀγορέω* ‘speak (publicly)’).

8. The meaning of completion (rare):

- (54)
- συναποτελέω*
- 'finish up.'

4.2.2 The meanings of *ἀντι-* corresponding to those of *com-*

1. The meaning of *reciprocity* (cf. 2.3). This meaning is acquired by the prefix in question in the context of verbs denoting reciprocal actions. A prefixed verb may be synonymous to the underlying verb (if the latter is a lexical reciprocal; cf. Latin *coaltercor*):

- (55) *ἀνταγωνίζομαι* 'fight/struggle,' 'argue' (synonymous to the unprefixed counterpart in one of its meanings)
ἀνταμείβομαι 'exchange sth'
ἀντιδεξιόομαι 'shake hands, exchange handshakes.'

In other cases the reciprocal meaning is coded by the prefix alone; cf.:

- (56) *ἀντιαιδέομαι* 'show mutual respect'
ἀνταναιρέω 'destroy mutually'
ἀντευκαλέω 'accuse each other'
ἀντεπιθυμέω 'mutually strive for intimacy'
ἀντεράω₁ 'love each other'
ἀντεθνοέω 'sympathize with each other'
ἀντιβάλλω 'converse with each other', etc.

2. The meaning of *reciprocating an action* ('in response to action V of agent A, to perform action V'). It is contiguous to the reciprocal meaning proper. It is highly characteristic of the Greek prefix and less so of Latin *com-* (in this meaning, *ἀντι-* is closer to *re-* rather than to *com-*; it may be noted in passing that a similar meaning is coded by the German prefix *gegen-* but it combines with nouns only: *Gegenleistung* 'reciprocal good turn', *Gegenkraft* 'counteraction', *Gegenmaßnahme* 'countermeasure', etc.).

- (57) *ἀνταδικέω* 'repay offence with offence'
ἀνταποκτείνω 'render death for death'
ἀντιδιαβάλλω 'slander in return for slander'
ἀντικακοθργέω 'render evil for evil', etc.

3. *Other meanings.* The Greek prefix *ἀντι-* has a number of meanings absent in the Latin *com-*; e.g.:

(a) 'rivalry', cf.:

- (58) *ἀντεράω₂* 'be a rival in love'
ἀντιδημαγωγέω 'vie in demagoguery'

(b) 'substitution', cf.:

- (59) a. *ἀντικαταλαμβάνω* 'take possession of sth in one's turn.'

(c) 'in return', cf.:

- b. *ἀντικαταθνήσκω* 'be killed in return.'

4.3 The prefix *com-* in comparison with German *mit-* and *zusammen-*

Quite a number of German verbs with the prefix *mit-* have two meanings (contrasted to a larger or lesser degree): one of them involves an action performed simultaneously and in co-operation with analogous “equal” actions of other referents who are “backgrounded” (as in (60)), the other meaning describes a situation involving two “unequal” actions, the “main” and an “attendant” action, cf. (61):

- | | | |
|------|----------------------------------|--|
| (60) | <i>mit-arbeiten</i> ₁ | ‘to collaborate with sb, work somewhere’ |
| | <i>mit-spielen</i> | ‘to act together in a play, performance’ |
| (61) | <i>mit-denken</i> | i. ‘to think together with sb’ |
| | | ii. ‘to follow sb’s train of thought’ |
| | <i>mit-sprechen</i> | i. ‘to speak together with sb’ |
| | | ii. ‘to repeat after sb.’ |

The first of these meanings combines comitative and sociative, and the second meaning is assistive. These two types of meanings are not distinguished consistently in the German dictionaries.

4.3.1 *The meanings of mit- corresponding to those of com-*

These meanings are:

1. Participation on equal grounds (cf. 2.1.1):

- | | | |
|------|--|--|
| (62) | <i>mit-denken</i> ₁ | ‘to think together’ |
| | <i>mit-fliegen</i> | ‘to fly together’ |
| | <i>mit-benutzen</i> | ‘to use sth jointly’ |
| | <i>Mit-besitz</i> | ‘joint ownership/possession’ |
| | <i>mit-entscheiden</i> | ‘to take part in a joint decision’ |
| | <i>mit-erleben</i> ₁ | ‘to experience/go through sth together’ |
| | <i>mit-fahren</i> ₁ | ‘to go/travel together’ |
| | <i>mit-gehen</i> | ‘to go/walk together’ |
| | <i>mit-halten</i> ₁ (<i>eine Zeitung</i>) | ‘to subscribe (to a newspaper) together with sb’ |
| | <i>mit-helfen</i> | ‘to help sb together with others’ |
| | | (<i>Mithilfe</i> – “active” help, when several persons give help) |
| | <i>mit-kämpfen</i> | ‘to fight together’ |
| | <i>mit-klingen</i> ₁ | ‘to sound in unison’ |
| | <i>mit-kommen</i> | ‘to come together’ |
| | <i>mit-lachen</i> | ‘to laugh together with others’ |
| | <i>mit-laufen</i> | ‘to run together’ |
| | <i>mit-lesen</i> | ‘to read together’ |
| | <i>mit-schreiben</i> | ‘to write together with sb’ |
| | <i>Mit-schuld</i> | ‘co-participation’ |
| | <i>mit-singen</i> | ‘to sing together with sb’ |
| | <i>mit-tun</i> | ‘to do sth together with sb’ |
| | <i>mit-übernehmen</i> | ‘to undertake (an obligation) together’, etc. |

The meaning of numerous nouns with the prefix *mit-* contains the component ‘with respect to sb performing the same role’; cf.:

(63)	<i>Mit-autor</i>	‘co-author’
	<i>Mit-bürger</i>	‘compatriot’
	<i>Mit-begründer</i>	‘co-founder’
	<i>Mit-esser</i>	‘table-companion’
	<i>Mit-herasugeber</i>	‘co-editor’
	<i>Mit-schüler</i>	‘schoolmate’; etc.

2. The assistive meaning (cf. 2.1.2):

(64)	<i>mit-arbeiten</i> ₂	‘to cooperate, assist (the teacher in class)’
	<i>mit-denken</i> ₂	‘to follow sb’s train of thought’
	<i>mit-empfinden</i>	‘to sympathize (with sb)’
	<i>mit-erleben</i> ₂	‘to feel empathy’
	<i>mit-fahren</i> ₂	‘to be a fellow traveller’
	<i>mit-fühlen</i>	‘to sympathize (with sb)’
	<i>mit-hören</i>	‘to eavesdrop (deliberately or inintentionally)’
	<i>mit-leiden</i>	‘to feel compassion, sympathize’
	<i>mit-ziehen</i> ₂	‘to go/travel together with sb’, etc.

Contiguous to the assistive is the meaning of ‘involvement in a joint enterprise’:

(65)	<i>mit-arbeiten</i>	‘to work somewhere, be an employee’
	<i>mit-halten</i>	‘to participate in sth (together with others)’
	<i>Mit-bestimmung</i>	‘participation in making a decision’
	<i>mit-machen</i>	‘to participate in sth’
	<i>mit-mischen</i>	‘to take an active part in sth’
	<i>mit-reden</i>	‘to take part in a conversation’
	<i>mit-sprechen</i>	‘to take part in conversation’
	<i>mit-wirken</i>	‘to assist, collaborate’, etc.

3. Action upon two objects (either “equal” or “unequal” in status) (cf. 2.2):

(66)	<i>Mit-angeklagte</i>	‘co-defendant’
	<i>Mit-fahrer</i>	‘fellow-traveller’
	<i>Mit-gefangene</i>	‘fellow-prisoner’
	<i>mit-schicken</i>	‘to send together with sth else’
	<i>mit-rechnen</i>	‘to include in the bill’
	<i>mit-zählen</i>	‘to include in the bill, to add to sth’, etc.

The prefix *mit-* also has a specific meaning of handling an object accompanying the subject referent (comitative-reflexive meaning ‘with oneself’ similar to the meaning expressed by the reflexive marker in Lithuanian in verbs like *atnešti* ‘to bring sth’ → *at-si-nešti* ‘to bring sth *with oneself*’, *atvesti* ‘to bring sb’ → *at-si-vesti* ‘to bring sb *with oneself*’ (see Geniušienė 1987: 135–6)):

(67)	<i>mit-bringen</i>	‘to bring <i>with oneself</i> ’
	<i>mit-führen</i>	‘to carry <i>with oneself</i> ’
	<i>mit-bekommen</i>	‘to get in order to take <i>with oneself</i> [e.g. when travelling]’
	<i>mit-geben</i>	‘to give sth to sb to take away [e.g. when leaving]’

<i>mit-nehmen</i>	'to take away'
<i>mit-ziehen</i>	'to drag <i>behind oneself</i> '

4. The meaning of completion (rare):

- (68) *mit-stenographieren* 'to take down in shorthand.'

4.3.2 The meanings of *zusammen-* corresponding to those of *com-*

They are:

1. The sociative meaning of joint action (on "equal" grounds; see 2.1.1):

- (69) *zusammen-arbeiten*₁ 'to work together, collaborate'
zusammen-wirken 'to act jointly, interact', and probably the following:
zusammen-bleiben 'to stay/remain together'
zusammen-lassen 'to leave sth together'
zusammen-leben 'to keep house together, co-habit.'

Although *zusammen* also functions as an adverb with the meaning 'together', the meaning of joint action is not generally characteristic of verbs with this prefix.

2. The reciprocal meaning (see 2.3):

- (70) *zusammen-gehören* 'to suit each other'
zusammen-passen 'to suit each other'
*zusammen-fallen*₂ 'to coincide'
zusammen-schlagen 'to hit sth against each other'
zusammen-stoßen 'to collide, come into contact with each other', etc.

3. Coming together and bringing together (see 2.1):

- (71) *zusammen-arbeiten* 'to join/adjust sth and sth'
zusammen-backen 'to coagulate, cake together'
zusammen-bauen 'to assemble, fit sth'
zusammen-fegen 'to sweep sth into a pile'
zusammen-mischen 'to mix sth and sth'
zusammen-packen 'to pack up, fold up, put/lay together'
zusammen-tragen 'to carry into one place'
zusammen-hängen 'to be tied together.'

4. Bringing parts of an entity together (see the meaning in 3.1.2.2):

- (72) *zusammen-ballen* 'to clench [one's fists]'
zusammen-beißen 'to clench [one's teeth]'
zusammen-drehen 'to fold up, roll up.'

5. The meaning of totality, intensity (cf. 3.3):

- (73) *zusammen-brechen* 'to break out [about a war]'
zusammen-schießen 'to execute by shooting'
zusammen-stürzen 'to collapse, tumble down'
zusammen-fallen 'to tumble down'; etc.

The material considered here shows that the meanings of the Latin prefix *com-* are distributed between the German prefixes *mit-* and *zusammen-*: the former of these two prefixes expresses mostly the sociative meaning of joint action (in all its variants), and the latter the meanings of coming and bringing together, partially reciprocal action, and also that of intensity. Besides, *mit-* may render the specific (comitative-reflexive) meaning ‘with oneself’ not registered in *com-* (and in the other prefixes discussed here).

5. Conclusion

The analysis of the semantics of the Latin prefix *com-* we have undertaken here and also its comparison with the semantics of its counterparts in other languages brings us to a conclusion that expression of the meanings of “coming together” and “joint action” (“reciprocal action” is a particular case of the latter) by means of one and the same prefix is a regular enough phenomenon determined by the proximity of these two meanings. Indeed, joint activity seems to bring together and spatial proximity leads to joint activity. The issue of the direction of semantic derivation is not quite clear: direction from “the material” to the “ideal”, i.e. from spatial proximity to joint activity *a priori* seems to be the more likely, though we have no reliable evidence. In any case, an intermediate meaning is probably sociativity with regard to the object referents: an action (at least of physical nature) carried out by a single subject referent on two (or more) object referents necessarily involves bringing them into spatial proximity. The subject referents of a joint action are less bound spatially (for instance, co-authors may write a collective paper even if they live in different countries), but typically, joint activity implies spatial proximity: thus, it is hard to say whether the Latin verb *convivo* ‘to live together’ denotes joint activity or spatial proximity. This distinction is drawn by linguists and corresponds to different ways of conceptualizing reality, and sometimes to the same way.

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Polysemy of reciprocal markers

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1. Introductory notes. Typological investigation of the polysemy of reciprocal markers

As is known, a study of the polysemy of grammatical markers raises the question of interrelations and possible implicational relations between meanings: some meanings may imply the existence of certain other meanings; some meanings are directly related to the reciprocal while some others have developed from the non-reciprocal meanings of the marker. Accordingly, needless to say, equally detailed descriptions of the polysemy of reciprocal markers in individual languages are needed – otherwise the differences in the range of meanings between languages may merely represent differences in the accuracy and adequacy of description. As Heine (1999: 1) asserts, “<...> the information contained in grammatical descriptions reveals only a part of the actual polysemy existing in these languages.” However, even if there are no comparable and exhaustive descriptions, a summary of the available data may be useful.

In the first place, polysemy concerns verbal reciprocal markers (i.e. morphological markers and reflexive (clitic) pronouns). In most languages, these markers are polysemous and express a number of non-reciprocal meanings. Some of these meanings may be productive. Thus, for instance, the reflexive meaning of German *sich* is more productive than reciprocal; the sociative meaning of the marker *-an-* in Rwanda is more productive than the reciprocal; in Chinese, the compound *V-lái-V-qù* is more productive in the iterative meaning than in the reciprocal. Some other non-reciprocal meanings may be rare and only occur in a few derivatives (cf. (4) in 1.2.2 below). Still, their existence may be significant if they recur across languages.

Genetically (closely) related languages or even dialects of the same language may differ markedly in the domain of the polysemy of reciprocal markers. Thus, for instance, in Tuvan the sociative and assistive meanings of the reciprocal suffix are highly productive, whereas in Kirghiz its sociative meaning is no longer productive, and in Azerbaijani the cognate suffix has no assistive meaning.

A typological study of the polysemy of reciprocal markers aims at establishing (a) the maximum range of meanings concomitant with the reciprocal, regardless of whether this

meaning is primary or secondary (or even unproductive) and (b) semantic and implicational relations between these meanings.

What is of interest is not only typical patterns established in the literature, such as reflexive-reciprocal and reciprocal-sociative, but also polysemy patterns with less common concomitant meanings, even represented merely by a few derivatives, including those found in one language only. Needless to say, typology is interested in all the peculiarities in the relations between form and meaning, even those peculiarities that are very rare, provided they occur in unrelated languages.

Finally, combinations of reciprocal markers with other markers are also of interest, as their meaning is not always the sum of the meanings of the component markers.

Polysemy of reciprocal markers also includes their use on non-verbal stems. Reciprocal derivatives from the latter stems will be briefly considered in Chapter 7.

Note that monosemy is usually typical of “young” morphological markers. As regards “old” markers (as, for instance, in some Bantu languages), their concomitant meanings are sometimes lexicalized and they are often used together with other valency-changing markers. Most “suitable” for the study of polysemy are therefore languages with “middle-aged” reciprocal markers.

Unfortunately, there are rather few detailed and reliable descriptions of reciprocals in individual languages at present. As a rule, grammars and special papers on reciprocals rarely offer substantial descriptions. It usually remains unclear whether reciprocal markers have any other meanings, whether they are productive or not, and whether a given meaning, including reciprocal, is productive or represents an instance of lexicalization.

Chapter 5 is organized as follows.

In the introductory section, general problems of the polysemy of reciprocal markers are discussed. The affinity and common features of the reciprocal meaning with three other meanings, viz. reflexive, sociative and iterative meanings, are shown. The conditions of the actualization of these and some other concomitant (comitative, assistive, etc.) meanings are considered. A calculus establishes six prototypical types of the polysemy of reciprocal markers:

- *three main types of polysemy* when a marker has only two of the four meanings in question, viz. reflexive-reciprocal, reciprocal-sociative, iterative-reciprocal (the latter two types are opposed to the first as nonreflexive to reflexive-reciprocal), and
- *three extended types of polysemy* with three main meanings of the marker, viz. reflexive-reciprocal-sociative, iterative-reciprocal-reflexive, and iterative-reciprocal-sociative polysemy.

Sections 2, 3, and 4 are concerned with the three main types of polysemy (i.e. reflexive-reciprocal, reciprocal-sociative, and iterative-reciprocal) and their distribution across languages; the secondary concomitant meanings of the markers are also discussed.

Sections 5, 6, and 7 deal with the extended (reflexive-reciprocal-sociative, iterative-reciprocal-reflexive, and iterative-reciprocal-sociative) types of polysemy and their distribution across languages, the concomitant meanings of the markers also being considered.

Section 8 concerns languages with non-prototypical types of polysemy, when a reciprocal marker can express such meanings as intensive, antipassive, causative, anticausative, etc., but not reflexive, sociative or iterative.

In Section 9, the meanings shared by reflexive-reciprocal and nonreflexive-reciprocal markers are discussed (e.g. anticausative, antipassive, potential-passive, passive, competitive).

Section 10 deals with certain unique usages of monosemous reciprocal markers (as markers of relativization or response reciprocity).

Section 11 concerns meanings attested among nonreflexive-reciprocal markers only (plural meaning, pseudo-reciprocal meaning).

In Section 12 the use of reciprocal markers within complex affixes is shown (in the markers of sociativity, spatial relation, intensity, etc.).

Sections 13, 14, and 15 deal with specific issues of polysemy, including lexicalization and development of new meanings in sociative-reciprocal markers.

1.1 Three main types of languages with regard to the monosemy/polysemy of the reciprocal markers

The following types of languages can be established:

- languages with monosemous markers only,
- languages with polysemous markers only, and
- languages with both types of reciprocal markers.

1.1.1 Languages with monosemous markers only

Monosemous reciprocal markers are typically free items (mostly pronouns and adverbs) or reduplicated clauses with reversed arguments (see Ch. 3, §§2 and 3), more rarely affixes. I have also included here languages that have parallel polysemous reciprocal markers if they are unproductive and of highly limited use. For instance, Russian can be included here because the postfix *-sja* is unproductive in the reciprocal function, the main marker being the pronoun *drug druga* ‘each other’.

Examples of monosemous syntactic markers with the meaning ‘each other’ are Vietnamese *nhau*, Bamana *ɲɔŋɲɔ*, Kashmiri *akh əkis* ‘one another’, etc. There are also languages with two or more monosemous reciprocal markers, with minimal differences between them, as, for instance, English *each other* and *one another*.

Examples of monosemous reciprocal affixes are the Kolyma Yukaghir reciprocal prefix *neʹ-* (see Maslova, Ch. 44, §1.2) and the Chukchi suffix *-wəly* (another monosemous reciprocal marker in Chukchi is the antipassive construction with the semi-pronoun *əryičyu* (it cannot take the direct object position); see §3.3 and case 1 in Ch. 3, §6.4.2.3); cf.:

Chukchi

- | | | | | |
|-----|----|----------------------------|----------------------------|------------|
| (1) | a. | <i>čičew-</i> | ‘to understand’ | |
| | b. | <i>čiček-wəly-</i> | ‘to understand each other’ | reciprocal |
| | c. | <i>əryičyu čičewə-tku-</i> | ‘to understand each other’ | reciprocal |
| | d. | <i>əryičyu čiček-wəly-</i> | ‘to understand each other’ | reciprocal |

1.1.2 Languages with polysemous markers only

There are languages without monosemous (specialized) reciprocal markers, all the reciprocal markers being used in other senses as well. This is, for instance, the case in Tagalog (which has one of the most complex systems of reciprocal devices; see (87) below; cf. also Shkarban & Rachkov, Ch. 22, §1.2); cf. also:

East Futunan (Moyses-Faurie, Ch. 35, §1.2)

- | | | | | | |
|-----|----|--------------------------|---|--|------------|
| (2) | a. | <i>alofa</i> ‘to love’ | → | <i>fe-alofa-’aki</i> ‘to love each other’ | reciprocal |
| | b. | <i>ano</i> ‘to go, walk’ | → | <i>fa-ano-’aki</i> ‘to go, walk together’ | sociative |
| | c. | <i>tapa</i> ‘to sparkle’ | → | <i>fe-tapa-’aki</i> ‘to sparkle again and again’ | iterative |

1.1.3 Languages with both polysemous and monosemous markers. Their joint use

The Yakut example (3) below illustrates three variants of a reciprocal construction: (a) with a monosemous reciprocal pronoun alone (3c), (b) with a polysemous reciprocal suffix alone (3b), and (c) with both markers used simultaneously (cf. (3d)), either pleonastically, mostly for highlighting the reciprocal meaning, or for disambiguation of the polysemous reciprocal suffix. Needless to say, a syntactic reciprocal marker cannot combine with derivatives with the meanings illustrated in (4), namely, anticausative, converse, etc.

Yakut

- | | | | | |
|-----|----|----------------------------------|--|-----------------|
| (3) | a. | <i>ölör-</i> | ‘to kill’ | (vt) |
| | b. | <i>ölör-üs-</i> | i. ‘to kill <i>each other</i> ’ | reciprocal (vi) |
| | | | ii. ‘to kill <i>sb together</i> ’ | sociative (vt) |
| | | | iii. ‘ <i>together with sb</i> to kill <i>sb</i> ’ | comitative (vb) |
| | | | iv. ‘to <i>help sb</i> to kill <i>sb</i> ’ | assistive (vb) |
| | c. | <i>beje-beje-leri-n ölör-</i> | ‘to kill each other’ | reciprocal (vt) |
| | d. | <i>beje-beje-leri-n ölör-üs-</i> | ‘to kill each other’ | reciprocal (vi) |

In (3d) the reciprocal morphological derivative is described as intransitive by analogy with (3b.i). In this case the reciprocal pronoun loses its nominal properties and functions as a kind of reciprocal specifier (see case 6 in 1.3).

While the polysemous marker has the assistive meaning the monosemous reciprocal pronoun encodes reciprocity on the assistive derivative; e.g., if the word *xardarata* is replaced by the pronoun *beje-beje-leri-n* ‘each other’ in (7b) the sentence would have the meaning ‘They help *each other* to cart hay’.¹

The pleonastic use (or the use for emphasis) of reciprocal markers is common cross-linguistically: it is not only that a polysemous marker may co-occur with a monosemous one (which is easy to explain), but two monosemous markers, e.g. both a pronoun and an affix, can be used together. Thus, in Juang there are reciprocal pronouns (reduplicated formations which take a case marker (CM) after the first or the second component: *aapein.CM.aapein* (‘self self’) or *aapein.aapein.CM*, *aaraakaa.CM.aaraakaan* or *aapein.CM.aaraakaa*, etc.) and a reciprocal prefix *ku-*. It follows from the description in

1. Note that some polysemous derivatives with a single reciprocal marker allow assistive-reciprocal meaning as well, see, for instance, (iv) in (101b) and (122d, e).

Patnaik & Subbarao (2000:844, 846) that all three variants of reciprocal expression are possible: (a) a reciprocal pronoun alone, (b) the reciprocal prefix only, and (c) a reciprocal pronoun and reciprocal prefix together (the same can be observed in (3b), (3c) and (3d); see also (1d) above).

1.2 Three uses of the term ‘polysemy’

The term *polysemy of reciprocal markers* is used in three meanings in this section.

The meanings of a polysemous marker are often defined rather loosely, namely, according to the affinity to the meanings listed in Charts (40), (85) and (111). In the literature used as sources of empirical data on individual languages, the English translations of some derivatives are sometimes ambiguous, vacillating between two meanings. In such cases I choose one of them or give my own interpretation on my own responsibility.

In many cases, the meaning of a derivative is indicated on the right, even if it is named in the preceding text.

1.2.1 Polysemy of a given derivative

Different meanings of a reciprocal affix may be (a) actualized on different verb stems or (b) expressed on the same stem; cf. (3b) where the Yakut reciprocal form *ölör-üs-* has four readings. In this case we deal with the polysemy of a given derivative.

1.2.2 Polysemy of all derivatives with a given marker in a given language

In addition to the four meanings cited in (3b) which are the principal ones and very productive, found on large numbers of verbs in Yakut, it has seven unproductive meanings (attested in a few verbs each): in (4a) the derivative is anticausative and thus its meaning becomes simpler, in (4b, c, d) the meaning is either retained or acquires an additional nuance of meaning (e.g., deaccusative involves demotion of the direct object; antipassive = unspecified object), and in (4e, f, g) the meaning becomes more complex.

Yakut

- | | | | | | |
|-----|----|-------------------------------------|---|---|---------------|
| (4) | a. | <i>xolboo-</i> ‘to join sth to sth’ | → | <i>xolbo-s-</i> ‘to join (of sth and sth) | anticausative |
| | b. | <i>atəlaa-</i> ‘to sell sth to sb’ | → | <i>atəla-s-</i> ‘to buy sth from sb’ | converse |
| | c. | <i>tut-</i> ‘to hold/grasp sb/sth’ | → | <i>tut-us-</i> ‘to hold onto sb/sth’ (vi) | deaccusative |
| | d. | <i>üöyüü-</i> ‘to scold sb’ | → | <i>üögü-s-</i> ‘to swear’ | antipassive |
| | e. | <i>maḡəraa-</i> ‘to moo’ | → | <i>maḡəra-s-</i> ‘to moo in response’ | response |
| | f. | <i>tardəlaa-</i> ‘to pull sth/sb’ | → | <i>tardəla-s-</i> ‘to pull with an effort’ | intensive |
| | g. | <i>əstanqalaa-</i> ‘to jump’ | → | <i>əstanqala-s-</i> ‘to compete in jumping’ | competitive |

These meanings, which may seem accidental for the Yakut reciprocal suffix, are not accidental typologically, as they are concomitant with the reciprocal meaning in quite a number of languages; see 9.1 for the anticausative meaning, (58) and (125f) for the converse, (52) for the deaccusative, 8.2 for the antipassive, 10.2 for response action, 8.1 for the intensive, 9.4 for the competitive (note that a meaning like ‘to outrun sb’ already implies competition).

Derivatives with the meanings listed in (4) can also have the meanings entered in (3b). Thus, for instance, *tut-us-* under (4c) may also mean (i) ‘to hold *each other*’, (ii) ‘to hold *each other’s* hands’ (= ‘to shake hands with each other’; when used with the noun *ilii* ‘hand’) (both meanings are reciprocal – “canonical” and “possessive”, respectively), (iii) ‘to hold sth *together*’ (sociative), (iv) ‘to *take part* in holding/catching sth’ (comitative), (v) ‘to *help* sb to hold sth/sb’ (assistive).

A reciprocal marker is also considered to be polysemous if its different meanings are realized on different sets of verbs; cf., for instance, Russian where derivatives with reflexive and reciprocal meanings do not overlap (with one or two exceptions),² or the prevalent use of the reciprocal marker in the sociative meaning on intransitive verbs and the reciprocal on transitive verbs in Tatar.

I take into account not only non-productive meanings of productive reciprocal markers (see (4)) but also the meanings of unproductive reciprocal markers (e.g. (119), (124), and (125)).

1.2.3 Polysemy of reciprocal markers across languages

This requires listing and study of meanings the verbs with reciprocal markers can have in the world’s languages. A cross-linguistic study of the polysemy of reciprocal markers is based of course on the study of the previous two types of polysemy. This also requires investigation of appropriate conditions of actualization of the different meanings of reciprocal markers.

A special problem is the lexicalization of reciprocals. Lexicalization may result in retaining reciprocity while there is a shift in the lexical meaning, and such shifts may be to a certain degree predictable cross-linguistically. Thus, for instance, a reciprocal verb meaning ‘to talk with each other’ (< ‘to talk’) may acquire the meaning ‘to quarrel’ as a result of lexicalization while retaining its standard meaning.

1.3 Actualization of the meanings of reciprocal markers

A given derivative with a polysemous marker may have the reciprocal meaning or another meaning as a permanent feature, or a meaning may appear in a certain context due to some conditions. I will illustrate some cases.

1. *The meaning is permanent* (the derivative is thus monosemous). This may concern an individual derivative or a class of derivatives. Thus, the Yakut derivative (*tapta-* ‘to love’ →) *tapta-s-* has the meaning ‘to love each other’ only, in contrast to *tiej-s-* in (7b) which has at least four meanings. As to classes of derivatives, in Lithuanian, as well as in Russian, true reflexives and reciprocals almost never overlap. For example, Lithuanian *ginti-s* is always reflexive with the meaning ‘to defend oneself’ (never ‘to defend each other’), and *barti-s* is reciprocal ‘to abuse each other’ (not reflexive ‘to abuse oneself’) (Geniušienė,

2. The only exception I know is the verb *streljat’-sja* (< *streljat’* ‘to shoot, fire’) with two lexicalized meanings i. ‘to shoot at oneself in order to commit suicide’, ii. ‘to fight a duel with pistols’ (this verb was suggested to me by N. Sumbatova, p.c.).

Ch. 14, §4.3), i.e. the reflexive-reciprocal polysemy of the middle markers is realized as reflexive on some bases and reciprocal on other verbs.

In the case of polysemy of a derivative, the meaning is mostly determined by the following factors.

2. *The singular or plural number of the subject noun phrase.* Thus, the four readings in (3b) are possible with a plural subject, but a singular subject allows only the assistive and comitative readings.

In the case of the reflexive-reciprocal polysemy, the reciprocal reading is prevalent if the subject is plural and it is generally impossible with a singular subject (with some special exceptions – for instance, in the discontinuous construction; cf. (26), (31a) in Ch. 1). In this case the reflexive meaning alone is realized.

Such a tendency is observed in some Australian languages; cf.: “In some languages a single suffix is used for both reflexive and reciprocal – Yolŋu, Guugu Yimidhirr and Bardi <...> are examples. If the S(ubject) NP is singular the verb is taken to be reflexive; if S has plural reference then the verb will normally have a reciprocal sense” (Dixon 1980:433).

3. *The presence or absence of a direct object.* If the syntactic structure of a transitive base construction is retained the reciprocal meaning is ruled out. Thus, the Yakut verb *kərba-s-* has the sociative meaning ‘to beat somebody together’ when used with a direct object and reciprocal ‘to beat each other’ when used intransitively. One more example:

Karango (Marconnès 1931:195)

(5) *Ti no chek-an-a [nyama].*

we *no* cut-REC-IND meat

i. ‘We shall cut the meat *together*.’ (with the object included)

sociative

ii. ‘We shall cut *each other*.’ (without the object)

reciprocal

4. *Transitivity or intransitivity of the base verb.* As a rule, one-place intransitivity of the base verb rules out the reciprocal reading of the derivative. Thus, in Yakut and some other languages, derivatives of intransitives are mostly sociative and those of transitives are mostly reciprocal.

5. *The case form of the object.* The dative object (cf. *miixe* ‘for me’ in (6a)) indicates the assistive meaning, while a comitative noun phrase (marked with a comitative affix or postposition or preposition) indicates the comitative meaning (cf. *miigin katta* ‘with me’ in (6b)). The absence of such specifying objects makes a sentence ambiguous (cf. (7b)).

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §§9.2.2.2 and 9.2.3.1)

(6) a. *Aya-m miixe üleli-h-ir.*

assistive

father-my I.DAT work-REC-PRES.3SG

‘Father *helps* me to work.’

b. *Aya-m miigin katta üleli-h-ir.*

comitative

father-my I.ACC with work-REC-PRES.3SG

‘Father works *with me*.’

6. *Reciprocal specifiers.* Sometimes only the broader context, which includes adverbial specifiers, disambiguates a particular verb form (cf. the adverb *xardarəta* ‘by turns’, ‘mutually’ in (7b) and also German *gegenseitig* (cf. *Sie liebten sich [gegenseitig]*: with-

out this adverb the sentence is ambiguous as ‘They loved *themselves/each other*’, and with this adverb it is reciprocal only). As often as not, realization of the reciprocal meaning in Yakut does not need any additional lexical means, e.g. like *tapta-s-* ‘to love each other’, *öjdö-s-* ‘to understand each other’. However, sometimes, for instance, in derivatives taking an inanimate direct object (but not formed from ditransitives) the reciprocal specifier serves to express the reciprocal meaning. In its absence, the form has other meanings (cf. (7b.i, ii, iii)): or it is ungrammatical. This is the case in the following Yakut example where the reciprocal reading alone is possible in the context of the adverb *xardarata* ‘by turns’, ‘mutually’, ‘entgegen’ (I failed to find an adequate English equivalent for this German translation – V.N.). The readings of (7b) are arranged in the order of preference.

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §1.2; = (54) of Ch. 1; cf. also (60) in Ch. 1)

- (7) a. *Kiniler xardarata ot tiej-el-ler.*
 they by.turns hay.NOM cart-PRES-3PL
 ‘They cart hay *by turns*.’
- b. *Kiniler [xardarata] ot tiej-s-el-ler.*
 i. ‘They *help* somebody to cart hay.’ assistive
 ii. ‘They cart hay *with somebody*.’ comitative
 iii. ‘They cart hay *together*.’ sociative
 iv. ‘They cart hay *to each other*.’ reciprocal

7. *Semantic factors.* Thus, for semantic reasons the reciprocal meaning ‘to cook each other’ is outruled for the derivative of Yakut *belemnee-* ‘to cook sth’, while the other three meanings listed in (3b) are possible: *belemne-s-* i. ‘to cook sth *together*’, ii. ‘to cook sth *with sb*’, iii. ‘to *help* sb cook sth’.

In Tuvan (8), the lexical meaning of the predicate makes the assistive reading unlikely. In (6) the assistive reading is more likely although the comitative is also possible.

Tuvan (Kuular, Ch. 27, §5.3; -ž = REC, -əp = CONV, tur- = AUX, -lar = 3PL)

- (8) a. *Olar ərla-ž-əp tur-lar.* ‘They are singing *together*.’ sociative
 b. *Ol ərla-ž-əp tur-Ø.* i. ‘He is singing *with someone else*.’ comitative
 ii. ‘He is *helping* somebody to sing.’ assistive

Tuvan (ibid., §5.4)

- (9) *Men čer aŋdar-ž-əp tur-du-m.*
 I soil plough-REC-CONV AUX-PAST-1SG
 i. ‘I *helped* somebody else to plough the soil.’ assistive
 ii. ‘I ploughed the soil *together with others*.’ comitative

The actualization of one or another meaning in the case of reflexive-reciprocal polysemy is subject to similar conditions. For instance, in (10a) the reciprocal reading is foremost and in (10b) the reflexive one is preferable:

Polish (Wiemer, Ch. 11, §5.2.2)

- (10) a. *Przyjaciele wierzyli sobie.*
 friends trusted oneselves.DAT

- | | | |
|-----|---|------------|
| i. | ‘The friends trusted <i>each other</i> .’ | reciprocal |
| ii. | ‘The friends trusted <i>themselves</i> .’ | reflexive |
| b. | <i>Przyjaciele bronili się długo.</i> | |
| | friends defended REFL.ACC for a long time | |
| i. | ‘The friends were defending <i>themselves</i> for a long time.’ | reflexive |
| ii. | ‘The friends were defending <i>each other</i> for a long time.’ | reciprocal |

The following may be relevant. The singular subject, needless to say, rules out the reciprocal meaning. If the subject is plural, both readings are possible, but in reality the reciprocal reading is more common. Thus, out of 480 derivatives with the reflexive-reciprocal marker in German:

- 76% are interpreted by native speakers as reciprocal by default (e.g. *sich umarmen* ‘to hug each other’, *sich grüßen* ‘to greet each other’, *sich necken* ‘to tease each other’, *sich jagen* ‘to chase each other’, *sich unterstützen* ‘to support each other’, etc.),
- 10% are interpreted as reflexive (*sich loben* ‘to boast’, *sich putzen* ‘to clean oneself’, *sich verletzen* ‘to hurt oneself’, *sich waschen* ‘to wash oneself’, etc.), and
- 14% allow both readings with no preference (*sich achten* i. ‘to respect oneself’, ii. ‘to respect each other’, *sich umbringen* i. ‘to ruin oneself’, ii. ‘to ruin each other’, *sich ablecken* i. ‘to lick oneself’, ii. ‘to lick each other’, *sich unterschätzen* i. ‘to underestimate oneself’, ii. ‘to underestimate each other’, etc.) (Wiemer & Nedjalkov, Ch. 10, §4.2.1).

There is a kind of asymmetry in the distribution of derivatives with the predominantly reciprocal and predominantly reflexive interpretation: any derivative with reflexive interpretation can be interpreted as reciprocal in a suitable context (one of the possible exceptions is the reflexive with the meaning ‘to hang oneself’; the corresponding reciprocal ‘to hang each other’ for two persons is pragmatically unlikely; S. Say, p.c.), but the opposite is not always true. Compare, for instance, the unnaturalness of *er grüßte sich* ‘he greeted himself’, *er umarmte sich* ‘he embraced himself’, *er neckte sich* ‘he teased himself’, etc., although even for these one could find suitable artificial situations.

1.4 Semantic, formal and etymological relationships between the reciprocal meaning and the reflexive, sociative and iterative meanings

This subsection also briefly concerns the main patterns of the polysemy of reciprocal markers. A calculus of combinability of the main meanings in polysemous markers is proposed. These issues have been considered briefly in Section 3 of Ch. 1. They will be amplified here, and each of the three types of polysemy and a number of other related matters will be considered separately. As mentioned, besides three main types, i.e. *reflexive-reciprocal*, *reciprocal-sociative* and *iterative-reciprocal*, there are three extended types of polysemy: *reflexive-reciprocal-sociative*, *iterative-reciprocal-reflexive*, and *iterative-reciprocal-sociative*. Brief comments on the relations within all these types of polysemy follow.

1.4.1 *Reflexive and reciprocal are anaphoric*

But reciprocal anaphora is further complicated by obligatory non-singular subject and cross-reference. Thus, the reciprocal meaning is more complex than reflexive; when encoded by verbal markers, both meanings may result in detransitivization. The reflexive meaning implies that the subject referent (singular or plural) is both agent and patient of its own action. The reciprocal meaning also implies two semantic roles for each referent. The definition of the reflexive meaning is broader than that of the reciprocal, i.e. it may be applied to reciprocals, but with the specification just mentioned that the subject is non-singular and the roles are cross-coreferenced.

If a reflexive and a reciprocal markers are formally similar, they may be related in two ways.

1. *Both meanings are expressed by the same marker* (a combined marker). In many languages this takes place due to the reflexive marking acquiring the reciprocal function while it retains its own meaning. For instance, in a number of Bantu languages, e.g. in Luvale, the reflexive prefix *li-* (11a) acquired the reciprocal meaning (11b), which was earlier expressed by the reciprocal suffix *-asan-*, and at the same time it took over the sociative meaning from the latter suffix (11c).

Luvale (Horton 1949: 103, 117, 101; see also Aksenova 1990: 179, 181; *-ilil* is a proximative suffix; cf. also (8) in Ch. 1)

- | | | | | |
|------|----|----------------------------|------------------------|------------|
| (11) | a. | <i>a-li-pihis-a</i> | ‘he dirtied himself’ | reflexive |
| | b. | <i>vali na-ku-li-vet-a</i> | ‘they beat each other’ | reciprocal |
| | c. | <i>-li-hah-ilil-a</i> | ‘to run together’ | sociative |

The opposite evolution, from reciprocal to reflexive, is much less common. For instance, in Juwaljai, the reflexive suffix *-lelana* is descended from a reciprocal suffix (though the “new” reciprocal suffix *lɥili-* has in its turn developed from the reflexive, i.e. a kind of exchange of markers has taken place; to cite: “... there is in Juwaljai an apparent crossing of the functions of the two suffixes: that which was reciprocal becomes reflexive and vice versa” (Capell 1956: 52; for details see 2.2.4). Across languages, besides entirely distinct reflexive and reciprocal markers and reflexive-reciprocal markers, there also exist reciprocal markers partially coincident with reflexive ones.

2. *A reflexive and a reciprocal markers share a common component.* In this case the reflexive marker is usually a part of the reciprocal one. Reflexive markers containing a reciprocal marker are highly unlikely (but cases are registered when a reflexive marker is “heavier” than the reciprocal one; cf. the reflexive suffix *-(ɲi)djiliŋa* and reciprocal *-l-ana* in Wiradjuri (Capell 1956: 75); but generally, as a rule, heavier semantic content tends to have iconically a heavier marker). This concerns both morphological and syntactic reciprocal markers.

2a. *Complex morphological markers.* There are two types of complex reciprocal markers.

(i) In a reciprocal marker, a reflexive one is pre-posed or post-posed to some other marker, and historically it is likely to have been added to the latter; cf.:

- (12) the reciprocal suffix *-ni-βa/-yβa* in Uradhi, in which *-ni* is a reflexive suffix and the form *-yβa* of the second component is used in one of the four conjugational paradigms of transitive verbs (Crowley 1983:365):

Uradhi (ibid.)

- (13) a. *ute* ‘to cut’ → *uta-ni* ‘to cut oneself’
 b. *uta-niβa* ‘to cut each other.’
- (14) The reciprocal suffix *-na-ku* (cf. *riku-na-ku* ‘to look at each other’) in Bolivian Quechua, where *-ku* is a reflexive suffix when used by itself (cf. *riku-ku* ‘to look at oneself’) and *-na* occurs without *-ku* with the causative suffix *-chi* (cf. *riku-na-chi* ‘to make sb look at each other’) (Muysken 1981:454, 464).
- (15) The reciprocal suffix *-ep-ew* in Yurok, where *-ep* is a reflexive suffix and the second component is an allomorph of a passive marker (Robins 1958:78–9, 47–8);
- (16) The reciprocal prefix *ma-ku-* in Tidore, in which *ma-* is a reflexive prefix and the second component does not seem to occur separately (van Staden 2000:115–7).

(ii) A reciprocal marker is a reduplication of a reflexive-reciprocal marker; cf.:

- (17) The reciprocal prefix *at-at-* in Apalai, *at-* being a reflexive-reciprocal marker (Koehn & Koehn 1986:44).

See also Bhat (1978:49–50).

2b. Complex syntactic markers. They are often reduplicated reflexive markers (needless to say, they do not imply two reflexive actions), the latter having usually evolved from nouns meaning ‘person’, ‘body’, ‘head’, ‘soul’, or from emphatic reflexive pronouns, or intensifiers (like German *selbst*, Russian *sam*) and the like (see, for instance, Cassirer 1923:211; Schladt 1999:103–22); e.g.:

- (18) The Yakut reflexive pronoun *bej-leri-n* <EMPH.REFL-POSS.3PL-ACC> ‘themselves’ and reciprocal *beje-beje-leri-n* <EMPH.REFL-EMPH.REFL-POSS.3PL-ACC> ‘they each other’;³ cf. also Tuvan 3PL.ACC *bot-tar-ən* ‘themselves’ and *bot-bot-tar-ən* ‘each other’.

But there are hardly any reflexive markers comprised of a reduplicated reciprocal marker.

- (19) The Juang reflexive pronoun *aapein-te* <EMPH.REFL-ACC> ‘oneself’ and *aapein-te aapein* <EMPH.REFL-ACC EMPH.REFL> ‘each other’ (Patnaik & Subbarao 2000:842–4).
- (20) The Lezgian reflexive 3PL pronoun *čeb* <EMPH.ABS> ‘themselves’ and reciprocal 3PL *čpi-čeb* <EMPH.ERG-EMPH.ABS> ‘they each other’ (Haspelmath 1993:415–6).

3. The reflexive pronoun in its turn has evolved from an emphatic pronoun, cf. *min beje-m* ‘I myself’, *kini beje-te* ‘he himself’, *kiniler beje-lere* ‘they themselves’. In Yakut, the word *beje* also means ‘one’s own’, ‘body’, ‘creature’ (Pekarskij 1959:422–3). This word is also used in languages that are or have been in areal proximity to Yakut. For instance, in Tungusic languages, e.g. Evenki *beje* means ‘person’ (Nedjalkov 1997:337). In Mongolic languages, e.g. Buryat, the word *beye* means ‘body’, ‘personality’, and it has developed into the reciprocal pronoun *beye beyee* ‘each other’ (Cheremisov 1973:129–30).

Otherwise, reciprocal pronouns are often descended from lexical reciprocal nouns meaning ‘comrade’, ‘friend’, etc.;⁴ cf., for instance, *čere* ‘friend, comrade, equal’ in Koyra Chini (Heath 1999:342–3), *daße* ‘comrade’ in Gola and *band-* ‘relative’ in Fulani (Heine 1999:21).

To sum up, if the markers of reflexivity and reciprocity in a language have a common component the latter is likely to be materially identical with the reflexive marker.⁵

1.4.2 Sociative and reciprocal require a non-singular subject

Both are linked with plurality of actions, i.e. a kind of iterativity. However, iterativity is backgrounded because the actions of plural subject referents are usually performed simultaneously. The sociative meaning does not entail valency change, while, as just mentioned, the reciprocal in most cases entails detransitivization. Therefore reciprocals do not differ syntactically from sociatives of intransitive bases (note that in some languages sociatives derive from intransitives only).⁶ The reciprocal is more complex semantically than the sociative. The definition of sociatives (plural subject referents performing the same single semantic role simultaneously in the same situation) is broader than that of reciprocals with two semantic roles for each participant.

Although the reciprocal meaning is more complex than the sociative, there are special sociative markers which include a reciprocal marker, but I have no knowledge of special reciprocal markers containing a sociative marker as a permanent component (in a way this is analogous to the relation between anticausatives and causatives, i.e. semantic complexity is not always expressed by more complex markers).

If a sociative and a reciprocal markers are formally similar, they can be related in two ways.

1. *Both meanings are expressed by the same marker.* An example of this is (5). In this case mostly a reciprocal marker acquires the sociative meaning while retaining its meaning. This path of semantic evolution is reconstructed for some Bantu languages. Doke (1938:199) points out that in the Bantu languages the sociative is derived from a limited number of verbs and is thus less productive than the reciprocal.⁷ On this basis, Dammann (1954:167) concludes that the sociative has probably developed from the reciprocal. Similarly, Gerdt (1999:133–60) regards sociativity, which she terms “collective”, as a secondary

4. But, as is known, the Russian reciprocal pronoun *drug druga* ‘each other’ has developed from the adjective *drugoj* ‘another, different’ and not from the noun *drug* ‘friend’ (Vasmer 1986:543), although today it is interpreted as ‘friend friend.ACC’.

5. A unique example, which is significant in this respect, is the meaning ‘to embrace/hug (each other)’ in Yakut which is derived from the reflexive verb meaning ‘to hug oneself’: *kuus-* ‘to embrace/hug sb’ → *kuuh-un-* ‘to hug oneself’ (*s > h* in intervocalic position; ‘to cross one’s arms on one’s breast’ as an expression of respect to a superior) → *kuus-t-us-* ‘to hug each other’ (reflexive suffix *-n- > -t-*; *-us-* is a reciprocal suffix).

6. In this connection, it is noteworthy that there is an opinion that sociatives in Bantu were initially intransitive (see Dammann 1954:168).

7. While agreeing that the sociative meaning is less frequent than reciprocal, Aksenova (1990:177) claims that in some Bantu languages, e.g. Rwanda, it is the main meaning of the reciprocal form.

meaning that has developed from the reciprocal in Halkomelem. In her book on the languages of Native North America, Mithun (1999:93) also claims: “Collective markers also often develop from reciprocals”. Lichtenberk (1985:39) views the relationship between reciprocal and “plurality, collectivity” in Oceanic languages as follows: “<...> comparative evidence makes it clear that the collective-plural marking function is not historically primary but a later innovation”⁸

2. *A sociative and a reciprocal markers share a common component.* In this case, a reciprocal marker becomes a part of a sociative marker (see also Section 12 below).

2a. *Complex morphological markers.* A reciprocal marker may be added, for instance, to an applicative marker, as is the case in Adyghe, where the sociative prefix *zə-də-* is composed of the applicative comitative prefix *-də-* and the reciprocal prefix *zə-* (marking reciprocity on two-place intransitive base verbs); cf.:

Adyghe (Rogava & Kerasheva 1966:272, 269, 277–9)

- | | | | |
|---------|-------------------|-----------------------------|-----------------------------------|
| (21) a. | <i>Iuklən</i> | ‘to meet sb’ | two-place intransitive |
| → b. | <i>zə-Iuklən</i> | ‘to meet (with) each other’ | one-place reciprocal intransitive |
| (22) a. | <i>kIon</i> | ‘to go’ | one-place intransitive |
| → b. | <i>də-kIon</i> | ‘to go together with sb’ | two-place intransitive comitative |
| → c. | <i>zə-də-kIon</i> | ‘to go together’ | one-place sociative. |

As we see, the sociative form in (22c) is in fact a reciprocal form of the comitative.

In Ainu, the situation is somewhat similar: the sociative marker *u-ko-* is composed of the reciprocal prefix *u-* and applicative *ko-*. The latter prefix denotes non-causative transitivity of base verbs resulting in a variety of semantic changes, the comitative interpretation being very rare. One of these cases is (23b) which is generally used to refer to spouses.

Ainu (Tamura 1996:471, 760; *-pa* = PL)

- | | | | |
|---------|---------------------|--------------------------------|----------------------------------|
| (23) a. | <i>onne</i> | ‘to age, grow old’ | intransitive |
| b. | <i>ko-onne-pa</i> | ‘to grow old together with sb’ | two-place transitive applicative |
| → c. | <i>u-ko-onne-pa</i> | ‘to grow old together’ | one-place sociative |

8. But the possibility of the reciprocal use of a sociative marker cannot be entirely ruled out; cf.:

- (i) *They met so near with their lips that their breaths embraced together* [= *each other* – V.N.]. (Othello, II, i, 266–7)
- (ii) *Sir, we have known together* [= *each other* – V.N.] *in Orleans*. (Cymbeline, I, iv, 38).

Nor, incidentally, can the reciprocal use of a reflexive marker be necessarily retained in a language, as was the case in the 16th century English:

- (iii) *King Henry’s peers and chief nobility / Destroy’d themselves* [= *each other* – V.N.], *and lost the realm of France!* (1 Henry VI, IV, i, 143–7);
- (iv) *We’ll hear ourselves* [= *each other* – V.N.] *again*. (Macbeth, III, iv, 31–2).

The examples from W. Shakespeare are borrowed from Potter (1953:252–3); compare also Curme (1935:159).

There are numerous sociatives in Ainu whose respective applicative forms are either nonexistent or unrelated to them in meaning. Thus, unlike in Adyghe, we observe a merging of the applicative and the reciprocal markers and the grammaticalization of *uko-*.

2b. Complex syntactic markers. The semantic derivational pattern exemplified by Adyghe (22) is also attested among syntactic sociative markers in many languages where they involve a comitative marker (preposition, postposition, etc.) and a syntactic reciprocal marker according to the pattern similar to the Russian *drug s drugom* ‘with each other’:

- (24) a. *Ivan razgovarivaet s Petrom.* ‘Ivan talks *with* Petr.’
 b. *Ivan i Petr razgovarivajut drug s drugom.* ‘Ivan and Petr talk *with each other*.’

To my knowledge, the opposite development is not reported in the literature.

To sum up: if the markers of sociativity and reciprocity share a component it is likely to be materially identical with the reciprocal marker.

1.4.3 *Iterative and reciprocal differ semantically to a greater degree than reflexive and reciprocal, and sociative and reciprocal*

Like sociative, the iterative does not entail valency change. The common component of the iterative and the reciprocal is plurality of actions. In the case of the iterative, this is a sequence of (several) actions. In the case of reciprocals, the plurality of actions is interrelated with the plural subject. The iterative is less complex semantically than the reciprocal.

There is less information about the diachronic relationship between the reciprocal and iterative meanings than in the two cases discussed in 1.4.1 and 1.4.2 above. This is probably due to the fact that the same marker is used for encoding both meanings much more rarely across languages than the reflexive-reciprocal and the reciprocal-sociative polysemy. There is at least one piece of evidence of the reciprocal meaning being secondary to the iterative: Liu (1999: 124–32) claims that the reciprocal meaning developed in the marker composed of the auxiliary verbs *lái* ‘to come’ and *qù* ‘to go’ whose primary meaning was iterative (see case 1 in 4.2 below).

If an iterative and a reciprocal markers are formally similar, they can be related in two ways.

1. Both meanings can be expressed by the same marker. An iterative marker can acquire the reciprocal meaning, while retaining its original iterative meaning in the same or other derivatives. Iterativity is regarded as the initial and the main meaning of one of the reciprocal markers in Chinese: to express reciprocity, the base verb is repeated and the auxiliary verbs *lái* ‘to come’ and *qù* ‘to go (away)’ are used, which in its own turn implies that the iterative meaning has evolved from the reciprocative (movement in opposite directions); cf.:

Modern Chinese (Liu 1999: 124–32)

- (25) a. *dǎ* ‘to hit sb’ two-place transitive
 → *dǎ-lái-dǎ-qù*
 hit-come-hit-go
 i. ‘to beat *each other*.’ one-place reciprocal
 ii. ‘to fight *several times or for some time*.’ one-place iterative/durative

Similarly, in Hua, the reciprocal form consists of the repeated base verb and the auxiliary verb *hu* (Haiman 1980:124–32). As Davies (2000:123–43) claims, in Madur, expression of the reciprocal meaning is related to the expression of iterativity by the same form. In Qiang, reduplication of a verb expresses iterativity as well as reciprocity (LaPolla 2003:121). Repetition of actions in these forms is iconically denoted by repetition of the verb.

2. *An iterative and a reciprocal markers share a component.* In this case, the iterative marker becomes a part of the reciprocal marker. This is attested among both morphological and syntactic markers. Two variants are registered.

2a. *An iterative marker within a complex marker does not denote repetition of a reciprocal situation.* However, it retains its meaning when used alone. An example is Dyrbal where the reciprocal suffix *-(n)bariy* is obligatorily combined with the reduplication of the first two syllables of the base verb, reduplication being a marker of iterativity by itself (Dixon 1972:92–3). In Bilin, the reciprocal marker *-st-əŋi* consists of the passive suffix *-st-* and frequentative suffix *-əŋi-* (Palmer 1957:132, 134, 135).

In Manam, there are two reciprocal markers, the prefix *e-* alone and the same prefix in complex with the iterative suffix *-i* which does not express repetition of the reciprocal situation (Lichtenberk 1983:211–4).

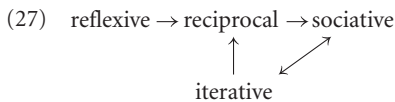
2b. *An iterative marker in a complex marker denotes repetition of a reciprocal situation.* When used alone it also retains this meaning. Thus, in this case the reciprocal meaning is obligatorily combined with the iterative. This type is represented by a limited set of Russian verbs on which reciprocity is marked by the circumfix *pere-...-sja*, and repetition of subevents by turns by the imperfective aspect marker *-iva-/-yva-* (Zaliznjak & Shmelev 2000:125–6; Knjazev, Ch. 15, §4); cf.:

- (26) a. *stuč-a-t'* 'to knock'
 → b. *pere-stuk-iva-t'-sja* 'to exchange knocks, knock to each other.'

To sum up, if the markers of iterativity and reciprocity have a common component it is likely to materially coincide with the iterative marker.

1.4.4 Possible etymological relations between the four meanings

If the markers of some of the meanings in question coincide entirely or partially, the etymological relationships between these meanings are likely to be as follows:



The arrows show the most likely direction of the semantic development of the markers. The semantic affinity indicated by the arrows and discussed above motivates the main types of polysemy patterns. This path of development has been claimed for a number of languages. The arrow between iterative and sociative signifies that they share the semantic component of plurality (see (29); cf. also Swadesh 1946:325).

As is shown in (27), the reflexive meaning is not related directly to sociative and iterative but via the reciprocal. Since these meanings do not share any obvious features. We may predict that if a marker can express both (i) the reflexive and the sociative meanings or (ii) reflexive and iterative, this same marker necessarily expresses the reciprocal meaning as well. Case (i) is illustrated in (11). Here is an example illustrating case (ii):

Tagalog (Shkarban & Rachkov, Ch. 22, §3.1.1)

- (28) a. *um-ahit* ‘to shave sb’ → *mag-ahit* ‘to shave oneself’ reflexive
 b. *k-um-ain* ‘to eat’ → *mag-kain* ‘to eat much and often’ iterative intensive
 c. *y-um-akap* ‘to hug sb’ → *mag-yakap* ‘to hug each other’ reciprocal

Iterative and sociative seem to be more akin to each other than iterative and reciprocal: neither changes the base valency and the common feature of the plurality of actions is more pronounced than in the previous case.

Note that in a number of languages verbal plural markers (=sociatives?) and iterative markers are formally identical. Similarly, the use of the same verbal marker for referring both to iterative action and “plural collective argument” is attested in Panare for the prefix *pëti-* (Payne & Payne, forthcoming) (interpretations in (29) are mine – V.N.):

Panare

- (29) *y-aw-aaná’ - pëti-n.*
 3-INTR-JOIN-ITER-NONSPEC.I
 i. ‘S/he kept visiting.’ iterative
 ii. ‘A bunch of them came to visit.’ sociative
 iii. ‘A bunch of them kept visiting.’ sociative and iterative

This type of polysemy can also be illustrated by the East Futunan circumfix *fe-...-(C)i* (formed with the unproductive reciprocal prefix *fe-*; cf. (124)) whose main meanings are sociative and iterative (cf. *fe-tagi-si* ‘to cry together, at the same time, or again and again’, *fe-sopo-i* ‘to jump several times’) and which can be reciprocal in exceptional cases (cf. *fe-alofa-ni* ‘to like each other’; the main reciprocal marker is the circumfix *fe-...-(C)aki*; cf. (126) (Moyse-Faurie, Ch. 35, §3.2).

Note also the semantic affinity between the iterative and the intensive meanings, which is why both can be expressed by the same marker; this is attested, for instance, for Supyire (Carlson 1994:14); cf. also Tagalog (125b) below. There are also attested cases of a polysemous reciprocal marker expressing the sociative and intensive meanings simultaneously; see Buryat (105).

1.4.5 Other types of polysemy

If we take into account the most prominent meanings of polysemous reciprocal markers, i.e. reflexive, sociative and iterative, and make up a calculus of their possible combinations (subject to the natural condition that each combination contains the reciprocal meaning), we obtain eight logically possible types. Here is the list (with reference to the sections where they are considered below and to the examples illustrating each type):

Type 1. The reciprocal meaning without reflexive, sociative or iterative. Note that this definition covers both (i) monosemous markers (cf. 1.1.1) and also (ii) those that express other concomitant meanings except reflexive, sociative and iterative (for instance, the meanings listed in (4) above; cf. §8 below); e.g.:

- To'aba'ita (Lichtenberk, Ch. 36, §§8.1.1; 7)
- | | | | | |
|------|----|------------------------|---------------------------------|-------------|
| (30) | a. | <i>kwai-'oli-i</i> | 'to embrace <i>each other</i> ' | reciprocal |
| | b. | <i>kwai-fa'ama'u-i</i> | 'to be frightening' | antipassive |

Type 2. Reflexive-reciprocal polysemy (Section 2; see example (10)).

Type 3. Reciprocal-sociative polysemy (Section 3; see (5)).

Type 4. Iterative-reciprocal polysemy (Section 4; see (25)).

Type 5. Reflexive-reciprocal-sociative polysemy (Section 5; see (11)).

Type 6. Iterative-reciprocal-reflexive polysemy (Section 6; see (28)).

Type 7. Iterative-reciprocal-reflexive polysemy (Section 7; see (2)).

Type 8. Reflexive-reciprocal-sociative-iterative polysemy (not attested).

All these types of polysemy are suggested as landmarks for investigating the polysemy of reciprocal markers.

As mentioned, a language may have two or more reciprocal markers with different sets of meanings, or with similar sets of meanings differing in productivity. Curiously enough, particularly rich polysemy is sometimes displayed by morphological markers that have lost their productivity and preserve the reciprocal meaning in a limited number of (highly frequent) derivatives, which are mostly "natural reciprocals" (Kemmer 1993:100–8); cf., for instance, Tagalog *mag-* (see Section 6), East Futunan *fe-* without a suffix (see case 2 in Section 5), Khmer *prv-* (see case 4 in 4.2). This may be due to the bleaching of the main meaning.

Sometimes, a language preserves the use of a reciprocal marker in a meaning that is not obviously related to the reciprocal meaning in the modern language and seems to be a remnant of a more archaic broader system of polysemy (e.g. the reciprocal marker on some numerals with the distributive meanings like 'two each', 'three each', and also with the intensifying meaning in combination with adjectives in Mundari; see Osada, Ch. 37, §9.2).

Besides the main types distinguished above there may also be less common and unclear cases of polysemy that require further study.

1.4.6 *Reflexive-based and nonreflexive-based reciprocal markers*

Reciprocal markers with Type 2 polysemy (1.4.5) can also be termed *reflexive-based* and they can be opposed to *nonreflexive-based* reciprocal markers, namely, sociative-reciprocal (Type 3) and iterative-reciprocal (Type 4). The latter two types can be combined together as *plurality-based*, because the relevant factor is the number of participants and/or actions implied by the sociative and the iterative meanings. Henceforth, in certain cases I will use these latter terms, i.e. nonreflexive-based (as an opposite to reflexive-based) and plurality-based (as a semantically motivated term), interchangeably.

The reflexive-based and nonreflexive-based reciprocal markers generally differ significantly in the range of their typical polysemy, i.e. the sets of meanings they can express cross-linguistically, though some of the meanings may be common for all the types in some languages.

In the case of *reflexive-based* reciprocal markers (most of the meanings involve de-transitivization, i.e. valency decrease; reflexivity involving anaphora), their polysemy is *in fact a polysemy of reflexive markers*, i.e. they are markers that are mostly reflexive by origin irrespective of whether they are productive in this meaning.

Plurality-based reciprocal markers, whose additional meanings entail valency increase (comitative, assistive and, rarely, causative) or retention (sociative and iterative, durative, intensive, etc.), in contrast to reflexive-based markers, do not generally seem to lend themselves to a unified classification of the type presented in (40). In different languages the meanings of nonreflexive-oriented reciprocal markers may vary considerably, and it is hard to establish any kind of hierarchy for them. Besides, as a matter of fact, their polysemy has been investigated to a lesser degree than that of reflexive-based markers.

1.4.7 *Comitative: Means of expression, relation to reciprocal, sociative and reflexive*

In this subsection, the main types of comitative expression are discussed and also possible semantic relationships with the markers of reciprocity, sociativity and reflexivity.

The comitative meaning has not been discussed above as one of the *main* meanings sometimes expressed with polysemous reciprocal markers. However, it is registered among the meanings of these markers; see, for instance (3b.iii), (6b), etc. It has also been mentioned above as a meaning expressed by specialized comitative markers which can denote sociativity when combined with reciprocal markers (22b). Semantically, the comitative meaning is closest to the sociative: in both cases the verb expresses simultaneous performance of an action (this is discussed in more detail in Ch. 1, §§8.1 and 8.2). But in the sociative situation two or more participants act jointly as a group, and all of them are named by the subject. And in the comitative situation, two participants, each single or collective, also acting jointly, are named separately, one by the subject and the other by a non-subject, i.e. by an object. The comitative meaning is essentially reciprocal, but denoted by a discontinuous construction (see Ch. 1, §7). When this meaning is expressed by a free word the latter is in fact a lexical reciprocal, like the preposition *with* in the following symmetrical constructions:

- (31) a. *Peter is working with John.*
 = b. *John is working with Peter.*
 = c. *John and Peter are working together* (\approx *with each other*).

As pointed out above, it is always a simple construction derived from a discontinuous one (cf. (Ch. 1, §16.1), as with other lexical verbal reciprocals; cf.:

- (32) a. *Peter met Mary = Mary met Peter = Mary and Peter met.*

Verbal and nominal comitatives can be distinguished: in the former the comitative marker is used on verbs and in the latter it occurs on nominals. In principle, both types of comitatives can generate similar constructions.

1. *Verbal comitatives.* The following main types are registered, which have been partially pointed out above.

1a. *The comitative may be one of the meanings of a verbal reciprocal marker.* Note that the comitative meaning increases valency by one; see (33), where comitativity is expressed twice: by the reciprocal marker *-h-* (in intervocalic position; < *-s-*) and by the postposition *kəttə* ‘with’, while the reciprocal meaning involves valency decrease, in particular detransitivization (cf. Yakut *tapta-* ‘to love sb’ → *tapta-s-* ‘to love each other’). If we omit the bracketed phrase, the sentence can also be interpreted as assistive, in the meaning ‘Father helps someone to work’. If the subject is plural and the prepositional phrase is omitted, a third interpretation, the sociative, is possible (33b). If we omit the suffix *-h-* in (33a) the comitative meaning is retained due to the prepositional phrase. Thus this meaning can be expressed in three ways: by the suffix *-h-* alone, by the postposition *kəttə* and by both together.

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §2.2.2)

- (33)=(6b) a. *Aya-m [miigin kəttə] üleli-h-ir.*
 father-my I.ACC with work-REC-PRES.3SG
 ‘Father works *with me*.’
- b. *Kiniler [miigin kəttə] üleli-h-el-ler.*
 they I.ACC with work-REC-PRES-3PL
 i. ‘They work *with me*.’ (if the bracketed phrase is used)
 ii. ‘They *help* [somebody] to work.’ (without the bracketed phrase)
 iii. ‘They work [*with somebody*].’ (without the bracketed phrase)
 iv. ‘They work *together*.’ (without the bracketed phrase).

If the base verb is transitive, the derived sentence with the reciprocal marker can also have a reciprocal reading (see (7b)).

1b. *The comitative meaning is expressed by a specialized prefix.* For instance, in Adyghe, reciprocity and comitativity are expressed by different markers, the former by the prefix *zə-* (cf. *Iuklən* ‘to meet sb’ → *zə-Iuklən* ‘to meet (with) each other’) and the latter by the prefix *də-*:

Adyghe (Rogava & Kerasheva 1966:277)

- (34)=(22) a. *kIon* ‘to go’ → b. *də-kIon* ‘to go together with sb.’

The sociative meaning is expressed by the reciprocal form of a comitative derivative:

- c. *zə-də-kIon* ‘to go together’ (see also (21), (22)).

1c. *The comitative meaning is expressed by a specialized prefix very similar to a sociative-reciprocal-reflexive suffix.* (The information is from Heath 1984:392.) This is the case in Nungubuyu and concerns the prefix *-an’ji* and the suffix *-n’ji-* which are most likely etymologically related (cf. also 2.2.5 below). The vast majority of comitatives involve in-

transitive stems (the subject can be singular and the second participant, if it is overt, is nominative). Examples of comitative derivatives:

Nunggubuyu (ibid., p. 392)

- | | | | |
|---------|---------------------------------|-----------------|------------|
| (35) a. | -an^yji-wunma- | ‘to fly with’ | comitative |
| | -an^yji-yi- | ‘to sleep with’ | comitative |

Examples of derivatives with the suffix **-n^yji-** (reflexivity is usually expressed by the suffix **-i-**, but on monosyllabic stems **-n^yji-** is used for this purpose):

- | | | | |
|----|---|--------------------------------|-------------|
| b. | -n^sandardi-n^yji- | ‘to snore together’ | sociative |
| | -ri-n^yji- | i. ‘to spear each other’ | reciprocal |
| | | ii. ‘to spear self’ | reflexive |
| | -lharma-n^yji- | i. ‘to chase each other’ | reciprocal |
| | | ii. ‘to be engaged in a chase’ | antipassive |

A derivative with both affixes in question is registered; in contrast to purely reciprocal derivatives, this one can be used with the singular subject:

- | | | |
|----|--|--|
| c. | -an^yji-lharma-n^yji- | ‘to be engaged in a chase with (the other party).’ |
|----|--|--|

1d. The comitative meaning is expressed by a suffix materially similar to the reflexive marker. For instance, in Takelma the comitative suffix **-(a)gw-**, reflexive **-gwi-** and indirect reflexive **-gwa-** nearly coincide (indirect reflexive – “reference to sth belonging to one’s self, not action in behalf one’s self”). Note in passing that the reciprocal suffix is **-an** and the causative suffix is **-(a)n** (Sapir 1922: 135–7, 148–9, 152–3). Sapir defines the comitative in Takelma as follows (the capitals are Sapir’s):

Comitatives, i.e., transitive forms with the general meaning of TO DO SOME ACTION (expressed by verb-stem) TOGETHER WITH, ATTENDED BY, HAVING SOMETHING (expressed by object of verb) may be formed only from intransitives by the suffix **-gw-<...>** (ibid., p. 137)

Here are examples of comitative and reflexive derivatives:

Takelma (ibid., pp. 137, 148; segmentation and bold type are mine – V.N.)

- | | | | |
|---------|--|----------------------------------|------------|
| (36) a. | lohoy-agw- | ‘die together with.’ | comitative |
| b. | ī-gaxgaga’x-gwa-^εn | ‘I scratch myself, i.e. my own.’ | reflexive |
| c. | se^εla’mt’-gwi-de^ε | ‘I shall paint myself.’ | reflexive |

There is no obvious semantic connection between the meanings of these two examples. But one of the components of the comitative meanings distinguished by Sapir, namely, HAVING SOMETHING, links both comitative and reflexive via the reflexive-possessive meaning of the suffix **-gwa-** illustrated by (36c). Thus there is an indirect semantic link between them.

- | | | | |
|----|---|-----------------|----------------------|
| c. | gini(g)- | ‘go to’ | |
| → | gimī^l-gwa-^εn | ‘I take it to.’ | reflexive-possessive |
| | (lit. ‘I go to (some place) having sth’ – V.N.) | | |

A typological parallel to this usage may be Lithuanian transitive reflexives derived from verbs meaning ‘to carry sth’, ‘to bring sth/sb’, ‘to bear sth’, ‘to take sth/sb away’, etc.; reflexives of this type acquire the meaning ‘with oneself, for oneself’ (see Geniušienė 1987:135–6); cf.:

- (37) a. *Petras at-si-ved-ė vaik-q i darb-q.*
 Peter PREF-REF-bring-PAST.3 child-ACC.SG to work
 ‘Peter brought the child to his office.’
 lit. ‘Peter brought *with himself* the child to his office.’ possessive-reflexive
- cf.: b. *Petras pri-si-vert-ė dirb-ti.*
 Peter PREF-REF-force-PAST.3 work-INF
 ‘Peter forced himself to work.’ reflexive

2. *Nominal comitatives.* In the literature, phonetic (and obvious semantic) similarity of reflexive, reflexive-reciprocal and reciprocal markers with a comitative marker on nouns in some languages has been established. There is an opinion that such coincidences are due to the etymological relations between these markers, although it is hard to trace the evolution of comitative affixes or comitative prepositions into a verbal affix and prove it convincingly.

2a. Nominal comitative affix and verbal reflexive affix. This case is described by Dixon (1980:433) in Yidiny:

There are a few languages in which the reflexive suffix to a verb has the same, or almost the same, form as the comitative derivational affix ‘with’ onto a nominal. In Yidiny nominal comitative is *-ji~yi* <...> and reflexive is *-Vji-n* <...>.

2b. Nominal suffix of “having” and verbal reflexive-reciprocal suffix. This coincidence is attested in Dhuwala/Dhuwal in Dixon (ibid.):

In Dhuwala/Dhuwal the reflexive-reciprocal verbal suffix is *-mi* (which takes future inflection *-rri*) and the ‘having’ suffix on nouns is *-mi* in some dialects, *-mirri* in others.

2c. Nominal comitative suffix and verbal reciprocal suffix. This coincidence is attested in Thargari and Yinggarda in Dixon (ibid.)

In Thargari and Yinggarda both reciprocal suffix to verbs and comitative suffix to nouns have the form *-parri*.

However, further on, Dixon expresses doubt about the etymological relatedness of the markers in all the three cases:

Interestingly, in Rembarrnga verbal reflexive-reciprocal is *-ttə*, identical to the privative suffix (‘without’) on nominals. The significance of these correspondences is not at present understood; indeed, they may be quite accidental.

Relations of type 2c are attested not only in Australian languages but also in a number of other unrelated languages: Yukaghir (Jochelson 1934:175), some Bantu languages, e.g. Nkore-Kiga (Taylor 1985:68), Eastern Pomo (McLendon 1975:84). These relations in a number of languages, including Venda and Kolyma Yukaghir, are analysed in depth

in Maslova (1999:161–78). In Venda, a comitative preposition *na* is used as a nominal comitative marker, and in Yukaghir it is a comitative postposition *-n'e*. The following examples borrowed from Maslova (*ibid.*, p. 161) show the formal identity of comitative and reciprocal markers:

Venda (Poulos 1990:188)

- (38) *Musidzana u-khou-rw-ana na mutukana.*
 girl 3SG-PRES.CONT-hit-REC COM boy
 'The girl and the boy are hitting each other.'
 lit. 'The girl is hitting each other with the boy.'

Kolyma Yukaghir (field notes of I. Nikolaeva; cited from Maslova, Ch. 44, ex. (29))

- (39) *Odu-pe kukujerd'i-pe-n'e n'e-nuk-telle n'e-lejtej-ngi.*
 Yukaghir-PL Even-PL-COM REC-find-SS.PFV REC-learn-3PL.INTR
 'Yukaghirs and Evens met each other and got to know each other.'

2. Reflexive-reciprocal polysemy

2.1 The range and distribution of typical meanings

Two main cases can be distinguished here:

- A reflexive-based marker has two meanings only, reflexive and reciprocal, thus performing anaphoric functions only; this type is represented by the Polish reflexive pronoun *sobie* in (10a). Markers of this type may be termed anaphoric.
- A marker has not only the reflexive and the reciprocal meanings but also a number of other meanings which are usually regarded as the meanings of middle forms and have developed on the basis of detransitivization. Traditionally, these markers are referred to as middle markers (see Kemmer 1993:15–40).

This section is concerned with the meanings which middle markers may have alongside the reflexive proper and the reciprocal. These meanings have been investigated in depth both in individual languages and cross-linguistically (Hatcher 1942; Janko-Trinickaja 1962; Geniušienė 1987; Kemmer 1993, etc.). Note that some of these meanings can also be expressed by nonreflexive-based reciprocal markers (see Section 9). The classification is based on Geniušienė (1987:65–177); most of the examples are from Lithuanian, where the polysemous reflexive marker is the morpheme *-si-/s-*.⁹ Most of the functions of middle markers have detransitivization in common. In fact, however, languages crucially differ in the patterns of intransitive derivations, the productivity of the different functions and their mapping onto the verbal lexicon (for the sake of simplicity, some types of reflexives are neglected). The cognitive characteristics of derivatives with middle markers are pre-

9. Both allomorphs are used in the final position on unprefixed verbs, with a complex system of the rules of distribution (see Geniušienė 1987:19), and *-si-* alone is used on prefixed verbs where it is placed between prefix and root.

sented in depth in Kemmer (1993:201–47). Below, I suggest a description of derivatives according to three features:

1. Valency changes, viz. detransitivization (decrease in all the groups of Chart (40), except groups 1.1.2 and 2.4) which retain the transitivity of the base verb (in group 2.4 the subject valency is lost); valency increase is not attested).

2. The type of semantic change (addition of a component of meaning in groups 1.1 and 2.2); subtraction of a semantic component in 2.1; retention of the meaning of the base verb in groups 1.2 and 2.3).

3. The derived meanings: within groups sharing the above two features, different finite semantic classes are distinguished, like anticausatives and resultatives in group 2.1, etc.

The chart shows the place of each type of derivatives among other types.

(40) The meanings of <i>middle</i> markers ¹⁰ (the numbers refer to the examples)		
1. Subject-oriented ¹¹		2. Object-oriented
<i>(Detransitivization in all cases except 1.1.2 and 2.4)</i>		
1.1. Group A (the meaning of the derivative is more complex)	1.2. Group B (intr.) (the meaning of the derivative is equal to that of the base) typical meanings: antipassive, deaccusative (51)–(52)	2.1. Group C (the meaning of the derivative is simpler): anticausative, resultative ¹² (53)–(54)
1.1.1. Group Aa (intr.): meanings: reflexive proper, partitive-reflexive, autocausative, reciprocal, etc. (41)–(46)		2.2. Group D (intr.) (the derived meaning is more complex); typical meanings: potential-passive, causative-reflexive, etc. (55), (57)
1.1.2. Group Ab (usu. tr.): indirect reflexives; typical meanings: reflexive-benefactive (47), reflexive-possessive (48), reflexive <i>commodi</i> (49)–(50)		2.3. Group E (intr.) (the meaning of the derivative is equal to that of the base): typical meaning passive proper (agentless or agentive) (59)
		2.4. Group F (tr. and intr.): impersonal ¹³ (60)

10. Between some of the listed meanings, implicational relations can be established: “1) If derivatives with a reflexive marker can have the passive meaning they (not necessarily of the same stem) also have the anticausative meaning, but not the other way round. 2) If derivatives with a reflexive marker have the antipassive meaning these same derivatives can most frequently have the reciprocal meaning” (Nedjalkov 1975:32). For a more detailed system of implicational relations see Geniušienė (1987:344–52).

11. The terms “subject-oriented” and “object-oriented” are not used here in the sense of diathesis types: here “subject-oriented” denotes subject retention in the derived construction and “object-oriented” denotes that the derived subject is identical with the underlying object.

12. I have in mind the principal type of resultatives, viz. object-oriented resultatives – forms expressing the state of the object of a prior action (Nedjalkov & Yakhontov 1988:6).

13. Impersonal derivatives can be regarded as object-oriented even though the direct object is not promoted to subject. This is supported by the fact that from the viewpoint of the syntactic word order the preserved direct object kind of substitutes for the deleted subject.

The following is meant to explain and illustrate the chart.

1) *Subject-oriented constructions*. Depending on whether the underlying subject is retained or deleted, two types are distinguished: subject-oriented and object-oriented reflexives. In subject-oriented constructions the subject coincides with that of the underlying construction.

1.1) *Group A*. The meaning of the derivative is more complex than that of the base verb. It contains an additional semantic component (e.g., reflexive, reciprocal, implication of the relevant body part, etc.). They express either *the reflexive proper or meanings directly related to it*.

1.1.1) *Group Aa*. *Detransitivization*. Here belong derivatives with object deletion or demotion.

(a) *Reflexives proper*. Compare Lithuanian:

- (41) a. *Jis privertė kaimyną dirbti*. 'He forced his neighbour to work.'
 b. *Jis pri-si-vertė dirbti*. 'He forced himself to work.'

(b) *Reflexives in the broad sense*. Unlike reflexives proper, they express meanings which can be expressed by verbs without reflexive marking in many languages. They fall into *partitive reflexives* denoting actions of the subject referent upon or with his body parts (subgroups (b1), (b2) and (b3)) and *autocausatives* denoting motion or change of posture (subgroup (b4)):

(b1) *Body care (grooming) and (un)dressing reflexives*, e.g.:

- (42) a. *Ji maudo vaik-ą* (ACC). 'She washes the child.'
 → b. *Ji maudo-si*. 'She washes herself.'

(b2) *Actions (often uncontrolled and negative) upon body parts*, e.g.:

- (43) a. *Jis sužeidė ranką*. 'He hurt his hand.'
 → b. *Jis su-si-žeidė*. 'He hurt himself.'

(b3) *Body part motion reflexives*, e.g.:

- (44) a. *Jis užmerkė ak-is* (ACC). 'He closed his eyes.'
 → b. *Jis už-si-merkė*. (same).

(b4) *Autocausative (motion or change of posture, or body move) reflexives*:

- (45) a. *Jis metė akmen-į* (ACC). 'He threw a stone.'
 → b. *Jis metė-si į priekį*. 'He threw himself forward.'¹⁴

(c) *Reciprocals*, e.g.:

- (46) a. *Jis erzina ją* (ACC). 'He teases her.'
 → b. *Jiedu erzina-si*. 'They-two tease each other.'

14. This example is not an individual lexicalised case, as it is registered in over 10 genetically unrelated languages of my list. It is a typologically predictable change of meaning.

1.1.2) Group Ab. No detransitivization.

(a) *Indirect reflexives*.¹⁵ Syntactic change involves indirect (dative) object deletion, the direct object being retained. The deleted indirect object is either *benefactive* (47) or *possessive* (48).

- (47) a. *Jis nupirko man* (DAT) *knyg-q* (ACC). 'He bought me a book.'
 → b. *Jis nu-si-pirko knyg-q* (ACC). 'He bought himself a book.'
- (48) a. *Motina prausia vaik-ui* (DAT) *veid-q* (ACC). 'Mother washes the child's face.'
 → b. *Motina prausia-si veid-q* (ACC). 'Mother washes her face.'

(b) *Commodi derivatives*. These derivatives differ from the previous type in that the reflexive morpheme does not mark any change in the syntactic structure of the base construction. The component 'for one's own benefit, pleasure', etc. is added, or the lexical meaning of the verb is emphasized (when translated into some other languages this sense is often omitted). Examples of transitive- and intransitive-based *-si*-derivatives are:

- (49) a. *Jis įkvėpė oro*. 'He inhaled (some) air.'
 → b. *Jis į-si-kvėpė oro*. (same translation).
- (50) a. *Svečiai suvažiavo*. 'The guests have gathered/arrived.'
 = b. *Svečiai su-si-važiavo*. (same translation).

1.2) Group B. The meaning of the derivative is (nearly) equal to that of the base verb. The derivatives (sometimes termed '*antipassives*'), like Group Aa above, undergo detransitivization, namely object deletion or demotion.

(a) *Antipassive, or absolutive (unspecified object) derivatives*, with object deletion (this type is also termed *depatientive*; see Lichtenberk, Ch. 36, §8.11):

- (51) a. *Vaikas muša kit-us* (ACC). 'The child beats others.'
 → b. *Vaikas muša-si*. 'The child is pugnacious.'

(b) *Deaccusative reflexives* with object demotion:

- (52) a. *Jis svaido akmen-is* (ACC). 'He throws stones.'
 → b. *Jis svaido-si akmen-imis* (INST). (same translation).

2) Object-oriented constructions. The subject of the derived construction corresponds to the object of the base construction, the underlying subject being deleted or demoted.

2.1) Group C. The meaning of the derivative is simpler than that of the base verb.

(a) *Anticausatives* (see also 9.1):

- (53) a. *Jis atidarė dur-is* (ACC). 'He opened the door.'
 → b. *Durys at-si-darė*. 'The door opened.'

15. Note that transitive reflexives comprise the largest class among *-si*-verbs in Lithuanian – over 1,000 out of 3,700 derivatives registered in the dictionaries.

(b) *Resultatives*, e.g.:

Maasai (Tucker & Mpaayei 1955: 135–6; *e-* = 3SG and 3PL)

- (54) a. *e-ik-a* ‘it is suspended, it hangs’ (*-a* = middle marker)
 cf.: b. *e-ik-i* ‘it is hung up by sb’ (*-i* = IMPR) (cf. also 2.2.4 below).

The main distinction between resultatives and anticausatives is that the former denote resultant states, and the latter processes. Both meanings differ from the passive in that the agent of the base construction is not retained in their semantic role structure. The passive denotes an action, which distinguishes it from resultatives but not from anticausatives.

2.2) *Group D. (Quasi-)passive derivatives are more complex in meaning*: they acquire additional *modal* or *causative* semantic components:

(a) *with a “generic” potential-passive meaning*; e.g.:

- (55) a. *Jis sudeda dviratj.* ‘He folds the bicycle.’
 → b. *Dviratis su-si-deda.* ‘The bicycle folds’ = ‘can be folded.’

(b) *With a “non-generic” passive meaning of unexpected result*:

- (56) a. *Mes suvalgėme vis-q duon-q* (ACC). ‘We have eaten all the bread.’
 → b. *Visa duon-a* (NOM) *su-si-valgė.* ‘All the bread got eaten up.’ (unexpected result)

(c) *With a causative-reflexive meaning*:

- (57) a. *Ji* (ACC) *gydo geras gydytojas* (NOM). ‘A good doctor treats him.’
 → b. *Jis gydo-si pas gerą gydytoją* (ACC). ‘He has himself treated by a good doctor.’

2.3) *Group E. In meaning, the derivatives are equal to the base verbs.*(a) *Converses proper* (with reversed arguments); cf.:

- (58) a. *Mane* (ACC) *žavi muzika* (NOM). ‘Music enchants me.’
 → b. *Aš* (NOM) *žaviuo-si muzika* (INST). ‘I am enchanted with music.’

(b) *Agentless and agentive passives* (in Lithuanian, the marker *-si/-s* is not used to mark the passive voice):

Danish (Hendriksen 1948: 73)

- (59) a. *Hus-et bygge-s* [*av murere*]. ‘The house is (being) built [by bricklayers].’

For some less common meanings (namely, sociative and competitive) of derivatives with markers of reflexives and reciprocals, see §§5 and 9.2 respectively.

2.4) *Group F. Impersonal derivatives with subject deletion* (encoding unspecified subject) and direct object retention, like Serbo-Croatian:

- (60) a. *On prodaje konj-a* (ACC). ‘He sells a horse.’
 → b. *Prodaje se konj-a* (ACC). ‘One sells a horse’, or ‘A horse is on sale.’

2.2 Reflexive and reciprocal markers across languages

The range of meanings presented in 2.1 reflects the polysemy of two types of markers: (a) reflexive-reciprocal markers only, and (b) (reflexive-)middle markers, i.e. markers of “general detransitivization”. This type of polysemy is widespread across languages.

As is seen from the list of languages below, reflexive-reciprocal polysemy occurs world-wide, especially in the European part of Eurasia. In the rest of Eurasia, with few exceptions, it seems (cf. the Mizo prefix cited below), non-reflexive reciprocals are prevalent. This is also observed in the Pacific area, the main exception being many Australian languages (see also Maslova & Nedjalkov 2005: 430–3).

Almost no language of the list has morphological sociatives.

- Indo-European languages; e.g. German *sich*, French *se*, Surselvan prefix *se-* (Stimm 1973: 11), Polish *się* and *siebie*, etc., and also Celtic prefixes (Welsh *ym-*, Breton *en em-*; see (67) and (68) in Ch. 3) and Ancient and Modern Greek middle inflection (Joseph & Philippaki-Warbuton 1987: 84–5), etc.
- Adyghe (Circassian) languages; e.g. the Adyghe and Kabardian reflexive and reciprocal prefix *z-*. In both languages there is also a complex reciprocal prefix *zə-rə-/zə-rə-* in complementary distribution with the reciprocal prefix *z-* (Kumaxov 1989: 244–5, 237–9; Kazenin, Ch. 17, §1.2).
- Finno-Ugric languages; e.g. the Mansi suffix *-xat/-axt* (Rombandeeva 1973: 148–52), Vepsian reflexive inflection (Zajceva 1981: 275–83), Mari suffix *-alt* (Kovedjaeva 1966: 234), Udmurt suffix *-s'k/-sk* (Tepljashina 1966: 273), Hungarian suffix *-kod/-koz/...* (Majtinskaja 1959: 106), etc.
- Semitic languages; e.g. the Amharic prefix *t(-ə)-* (Amberber 2000: 314–7, 325–7), etc.
- Dravidian languages; e.g. the Tamil reflexive pronoun *taanga* ‘self(PL)’ with reflexive-reciprocal reading on verbs with middle inflexion (so-called “verbal reflexive”); there are also reflexive only (*avan*) and reciprocal only (*oruttareoruttar*) pronouns (Annamalai 2000: 171, 176–7), etc. A similar set of means is attested in the areally adjacent Indo-European language Sinhala (cf. (80) below).
- Tibeto-Burman languages; e.g. the Mizo prefix *in-* (Lalitha & Subbarao 2000: 783, 787); Limbu suffixes *-siŋ* (for SG and PL) and *-nê* (for DU) (van Driem 1987: 86–8, 375–6).
- African languages; e.g. the Acooli suffix *-é* (Crazzolaro 1938: 106), Maasai suffix *-a* (Tucker & Mpaayei 1955: 134, 136), Kisi suffix *-nüŋ* (Tucker Childs 1995: 184–90), Somali clitic pronoun *is* (Saeed 1999: 77–9), Supyire pronoun *pi-yé* ‘themselves / they each other’ (Carlson 1994: 416–7), Luo (Dholuo) suffix *-re* (Tucker 1994: 428–31), etc.
- Australian languages; e.g. the Kalkatungu suffix *-ti* (Blake 1979: 86), Pittapitta suffix *-mali* (Capell 1956: 75), Guugu Yimidhirr suffix *-dhi* (Haviland 1979: 121–34), Walmatjari suffix *-nyanu* (Blake 1987: 113); see also Dixon (1980: 433).
- Polynesian languages; e.g. Maori reflexive-reciprocal pronoun consisting of personal pronouns *raaua* (3DU)/*raatou* (3PL) and *anoo* ‘again’ or related possessive pronouns (Bauer 1993: 186).

- North Amerindian; e.g. the Uto-Aztecan prefix *na-* (Langacker 1976:9, 12, 14ff.), Wikchamni suffix *-iwša-* (Gamble 1978:49), Yavapai suffix *-v-* (Kendall 1976:127–34), Klamath prefix *se-* (Barker 1964:112), Maricopa/Mojave particle-prefix *mat-* (Gordon 1986:65–6; Munro 1976:45–8), Jebero prefix *in-* (Bendor-Samuel 1961:85), Oneida suffix *-atat* (Lounsbury 1953:72), Athapaskan prefix *d-* (Rice 2000:178–81), K'iche' relational noun *-i:b'* (Campbell 2000:274–7), etc.
- South Amerindian languages; cf. the Hixkaryana prefix *e-/os-/ot-/...* (Derbyshire 1979:62–3, 66–7), Wayampi A prefix *ji-* (Jensen 1998:534–5), Warekena suffix *-na* (Aikhenvald, Ch. 20), Bare suffix *-tini* and Baniwa of Içana *-wa* (Aikhenvald, Ch. 20).

With a few exceptions, these languages display sets of meanings within the range shown in chart (48): reflexive, reciprocal, autocausative, anticausative, agentless passive, etc. As pointed out above, productivity of the reciprocal meaning may differ significantly in related languages, cf., for instance, the numbers for Russian, Latvian and Lithuanian, which possess about 40, 80 and 160 reciprocal derivatives respectively and where no new items are generally derived.

Semantic affinity of reflexive and reciprocal situations has brought about a number of cases of rather complicated and sometimes unexpected interrelations between the means of their expression. Below, the reader will find some fragmentary observations concerning some such cases across languages, which amplify the data presented in 2.1.

2.2.1 *The ratio of reflexive, reciprocal and reflexive-reciprocal markers (in a number of African languages)*

In this section, the counts are based on Heine (1999:1–29), where the polysemy of 78 reflexive and/or reciprocal markers in 62 African languages (Niger-Cordofanian, Nilo-Saharan, Afro-Asiatic and Khoisan families) is investigated. Although the number of the languages may seem insufficient for statistical analysis, the significant differences in the quantitative characteristics, it seems, may be indicative of the general tendencies (the figures refer to the number of languages for each meaning).

(61)	Meanings of the marker	
1.	reflexive without reciprocal	38
2.	reciprocal without reflexive	11
3.	reflexive and reciprocal	29
	Total	78

It is obvious that the overwhelming predominance of the reflexive-only and reflexive-reciprocal markers over reciprocal-only shows that in the reflexive-reciprocal polysemy the reflexive meaning is typically the primary one. This is probably determined by the prevalence of reflexive situations over reciprocal ones in reality.

The more than three-fold predominance of languages with reflexive markers (without the reciprocal function) over languages with reciprocal markers (without the reflexive meaning) correlates more or less with the predominance of the reflexive meaning over the reciprocal among derivatives with reflexive-reciprocal markers. In the table below, reflex-

ive and reciprocal derivatives do not overlap (cf. Russian *umyvát'-sja* 'to wash oneself (= one's face)' and *obnimát'-sja* 'to hug each other'); these meanings are not productive in the languages in question and they are represented by limited sets of verbs (the data are borrowed from Korolev (1968: 4, 10) and Geniušienė (1987: 75)).

(62)		Russian	Latvian	Lithuanian
	Reflexive	200	190	290
	Reciprocal	40	80	160

2.2.2 Ousting of reciprocal markers by reflexive ones

Two language groups can be mentioned here.

1. *Bantu languages*. As mentioned in Ch. 1, §3.2, the reciprocal suffix with sociative-reciprocal polysemy has been ousted by a reflexive-based reciprocal prefix in some Bantu languages. Aksenova (1990: 179–81) lists over ten such languages from different zones of the Bantu area: Bolia, Mongo-Nkundu (some of the dialects); Sukuma, Bungu, Rimi (= Nyaturu); Hehe; Holu, Chokwe, Luvale; Bangubangu, Kaonde. Here are illustrations from one of these languages (for Kimbundu cf. also Chatelain 1889/90: 190–1):

Shisumbwa (Capus 1898:64; *-i-* = REFL)

- (63) a. *-shima* 'to love' → *-i-shima* i. 'to love oneself' ii. 'to love each other'
 b. *-ihaga* 'to kill' → *-i-ihaga* i. 'to kill oneself' ii. 'to kill each other'
 c. *-gaya* 'to hate' → *-i-gaya* i. 'to hate oneself' ii. 'to hate each other'
 d. *-tema* 'to cut' → *-i-tema* i. 'to cut oneself' ii. 'to cut each other.'

But a certain number of relic derivatives with the suffix *-an-*, which are mostly lexical reciprocals, are still preserved:

- (64) a. *-tuk-an-a* 'to insult each other'
 b. *-gomb-an-a* 'to quarrel'
 c. *-tag-an-a* 'to part'
 d. *-lag-an-a* 'to promise to each other.'

2. *Tupi-Guarani languages*. In some Tupi-Guarani languages, the reflexive marker was originally a prefix *je-* and the reciprocal marker was *jo-*. In most of the 13 languages studied in Jensen (1998:593) these markers are retained, although some have changed their phonetic form. In three of them (Wayampi A, Wayampi J, Guajajára) the reflexive marker has come to be used reciprocally, too, and the former reciprocal prefix was lost; cf.:

Wayampi A (ibid., p. 534-5; *ji-* < *je-*)

- (65) *o-ji-nupā kupa*.
 3-REFL-hit PL
 i. 'They hit themselves', ii. 'They hit each other.'

And only in one of the languages (Urubú-Kapor; Jensen 1998:593; *ju-* < *jo-*) the descendant form of the reciprocal marker, when used alone, occurs in the reflexive meaning only; however, it retains reciprocity on reduplicated verb stems (cf. (66b); Kakumasu 1986: 340):

Urubú-Kaapor

- (66) a. *ju-mu'e* 'He learns/he teaches himself.'
 b. *ju-tuka-tuka* 'to bump each other.'

These data may serve as an example of the expansion of reflexive markers or meaning.

2.2.3 “Heavy” markers – reflexive or reciprocal pronouns – compete with “light” markers or replace them

Two language groups may serve as examples.

1. *West Slavic languages (Polish, Czech, Slovak)*. The relations between “heavy” and “light” markers are discussed here on the basis of Polish (the data are borrowed from Wiemer, Ch. 11; some information I owe to Anna Zielinska). The three West Slavic languages are typologically similar in this respect (see Ch. 1, §3.2).

In Polish, there are three main markers of reciprocity of which two are of reflexive origin, none of them marked for person. I will discuss the main cases of relations between them (for more details see Wiemer 1999: 300–12; see also Frajzyngier 1999: 130–5).

A. The highly polysemous reflexive clitic *się* is productive in both *the reflexive and reciprocal meanings*; although in most cases one or the other reading may be preferable or the only one possible due to the lexical meaning of the base and related pragmatic factors. For instance, in (67a) the reflexive reading is uppermost.

- (67) a. *Przyjaciele bronili się długo.* (= (10b))
 i. ‘The friends were defending *themselves* for a long time.’
 ii. ‘The friends were defending *each other* for a long time.’

One or the other reading is determined by the context, including adverbials. Thus, for instance, the reciprocal meaning may be supported by the reciprocal adverb *nawzajem* ‘mutually’ and the reflexive interpretation by the pronoun *sami* ‘themselves’ (which implies the sense ‘without outside help’). Beside the reflexive and reciprocal meanings, this clitic encodes most of the meanings listed in chart (40), e.g. autocausative, partitive-reciprocal, deaccusative, converse, anticausative (cf. (69a) below), reflexive-causative, potential-passive, agentless passive, impersonal, etc.

B. The orthotonic (“heavy”) reflexive pronoun *siebie*(ACC)/*sobie*(DAT)/*sobą*(INST) has only two meanings, *reflexive* (including reflexive-possessive and reflexive-benefactive) and *reciprocal*. When used instead of the clitic *się*, this pronoun makes the reflexive meaning come to the fore. Thus, in Polish a rivalry concerning the encoding of the two meanings has developed between the two – “light” and “heavy” – reflexive pronouns (although *się*, I repeat, has no significant restrictions on reciprocal usage); cf. (67a) and (67b). Incidentally, the preferable reading of (67b) is, in the opinion of some informants, reciprocal.

- (67) b. *Przyjaciele bronili siebie długo.*
 i. ‘The friends were defending *themselves* for a long time.’
 ii. ‘The friends were defending *each other* for a long time.’

On some bases, however, both readings of the pronoun *siebie* are equally possible, as in (68a), although the reciprocal reading is the first to come to the mind, while *się* on the same bases is reciprocal only (68b).

- (68) a. *Magda i Marta lubiły siebie* ...
 i. 'Magda and Marta liked *themselves*.'
 ii. 'Magda and Marta liked *each other*.'
 b. *Magda i Marta lubiły się* ...
 i. *'Magda and Marta liked *themselves*.'
 ii. 'Magda and Marta liked *each other*.'

Contrary to (68b), (69a) with *się* is neither reflexive nor reciprocal in meaning, the former meaning being impossible for pragmatic reasons (same with (69b) with *siebie*) and the latter is impossible because this verb is established as anticausative:

- (69) a. *Przyjaciele obudzili się*.
 i. 'The friends woke up.' anticausative
 ii. *'The friends woke *themselves* up.'
 iii. *'The friends woke *each other* up.'
 b. *Przyjaciele obudzili siebie*.
 i. *'The friends woke *themselves* up.'
 ii. 'The friends woke *each other* up (e.g., by snoring).' reciprocal

These are cases of reciprocalization of the accusative object. When reciprocalization involves a dative object the "heavy" reflexive pronoun alone can be used because the "light" dative reflexive pronoun *se* has gone out of use (in contrast to dative *si* in Czech and Slovak; cf. Czech *si říkt* 'to tell sth to *each other*') and *się* is not used with prepositions at all. The "heavy" pronoun can be either unambiguously reciprocal (70) or retain the reflexive-reciprocal polysemy (71):

- (70) *Oni pomogali sobie/*se* [odrobić zadania]. 'They helped each other [to do exercises].'
*Oni wierzyli sobie/*se*. 'They trusted each other.'
 (71) *Piotr i Paweł myli sobie twarz*.
 'Peter and Paul washed their faces' = i. 'each *his own* face', ii. '*each other's* face.'

The "heavy" reflexive pronoun alone is used with prepositions:

- (72) *Oni mrugali do siebie/*do się*. 'They winked to each other.'
*Oni czekali na siebie/*na się*. 'They waited for each other.'

C. The reciprocal pronoun *jeden drugiego* lit. 'one another' is less frequent in usage than the above two markers; it can replace them but does not co-occur with them (i.e. the state of things is typologically similar to that in German with *sich* and *einander*); in (73b) it is grammatical but slightly unnatural:

- (73) a. *Magda i Marta lubiły się*.
 'Magda and Marta liked each other.'
 b. *Magda i Marta lubiły jedna drugą*.
 'Magda and Marta liked each other.'

These Polish data show the process of ousting of a highly polysemous “light” marker in the reflexive and reciprocal functions by a “heavy” pronoun which has these two meanings only.

2. *North Germanic* (= *Scandinavian*) languages (*Danish, Faroese, Icelandic, Norwegian, Swedish*). (Most of the data are borrowed from Berkov 1985:56–74.) In the Scandinavian languages, there are three markers formally roughly corresponding to the relevant Polish markers. Two of them, the postfix *-s/-st* and reflexive pronoun *sig/seg/...*, are also of reflexive origin. To a certain degree, the Scandinavian system of the markers in question is similar to the Polish one formally but not always semantically, the main difference being the non-productivity of the postfix¹⁶ in the reciprocal meaning and the absence of this meaning in the reflexive pronoun.

A. The postfix *-s* (in Bokmål, Swedish and Danish) or *-st* (in Icelandic, Faroese and New Norse) is descended from the accusative case of the reflexive pronoun *sik* (this postfix is spelt together with the stem). The postfix is invariable for person. It has no cognates in other Germanic languages, the nearest analogy being Baltic *-si-/s* and East Slavic *-sja/s’*. As regards its meanings,

(a) *this postfix has practically lost the reflexive and the reciprocal meanings* (this may be due to the passive use of the postfix); the reciprocal meaning is retained by a few items, e.g. Bokmål *håndilse-s* ‘to shake hands’, *se-s* ‘to meet’, *kysse-s* ‘to kiss (each other)’, *bite-s* ‘to bite each other’, *snakke-s ved* ‘to talk with each other’, *hilse-s* ‘to greet each other’; Icelandic *kalla-st* ‘to shout at each other’; Faroese *bíta-st* ‘to bite each other’, etc.;

(b) a few derivatives have retained *the antipassive (absolutive) meaning* in some of the Scandinavian dialects; cf. Swedish dialectal *nässlan bränn-s* ‘nettle stings’ (see also (156) below);

(c) *it has retained the potential-passive meaning* (e.g. Danish *glas bøje-s ikke* ‘glass does not bend’; Icelandic *bletturinn þvæ-st ekki úr* ‘the spot does not wash out’) and

(d) *it is used as a passive marker*, cf. Swedish or Bokmål *porten stenge-s kl. 10 om aftenen* ‘the gates are closed at 10 o’clock’, which cannot be expressed by the reflexive pronoun.

B. The reflexive pronoun *seg* (Bokmål and New Norse) or *sig* (Swedish, Danish) or *ser* (DAT)/*sig* (ACC) (Icelandic) or *seg* (ACC)/*sær* (DAT) (Faroese) is used in the 3rd person only, the personal pronouns being used in the 1st and 2nd persons instead, as in German (cf. Swedish *jag glädjar mig* ‘I rejoice’, *du glädjar dig* ‘you rejoice’, *han glädjar sig* ‘he rejoices’). As mentioned, this pronoun cannot express the reciprocal meaning.

Its main meaning is reflexive, cf. Bokmål *verge seg* ‘to defend oneself’, *calte seg* ‘to call oneself’, *henge seg* ‘to hang oneself’.

The distribution of the other meanings of both markers varies across these languages: in Icelandic, Faroese and New Norse, the postfix is more widely used than in the other Scandinavian languages; some stems are used with either marker as synonyms. Both markers can also express the following meanings:

16. This term is used here to refer to markers with meanings which may be expressed by affixes in other languages and which always take the final position on the verb and can be separated from the stem by an ending.

(a) *partitive-reflexive* (e.g. Swedish *vaska-s* ‘to wash oneself’, New Norse *vaska-st* ‘to wash oneself’, Icelandic *klæða sig* / *klæða-st* ‘to dress oneself’, Faroese *raka sær* ‘to shave oneself’);

(b) *autocausative* (e.g. Bokmål *sette seg* ‘to sit down’, Swedish *sätte sig* ‘to sit down’, *resa sig* ‘to lift/raise oneself, stand up’, Icelandic *setja-st* ‘to sit down’, Faroese *seta-st* / *seta seg* ‘to sit down’, *røra seg* ‘to stir, move’);

(c) *anticausative* (e.g. New Norse *opna seg* ‘to open’ (vi), Danish *abne sig* / *abne-s* ‘to open’ (vi), Icelandic and Faroese *opna-st* ‘to open’ (vi), Swedish *glädja sig* / *glädja-st* ‘to rejoice’, Icelandic *ględja-st* and Faroese *glęđa-st* ‘to rejoice’); etc.

C. The reciprocal pronouns: Swedish *varandra* and *varann*, Norwegian *hverandre* and *hinannen*, Icelandic *hver annan* ‘each other’, Danish *hinanden* and *hverandre*. This is the main reciprocal marker in the Scandinavian languages. Among other Germanic languages, Dutch uses the pronouns *elkaar*, *elkander* (*malkaar*, *malkander*) as the main reciprocal markers, not to mention English *each other* and *one another*.¹⁷

Some postfixed derivatives with the reciprocal meaning have become bookish and are replaced by constructions with the reciprocal pronoun in spoken language, e.g. Bokmål *kysse hverandre* instead of *kysse*; cf. also *de hater/elsker hverandre* ‘they hate/love each other’. The forms *hates* and *elskes* are possible but their meaning is passive.

The logic of encoding reciprocity in Scandinavian languages differs from Polish where one productive reciprocal marker (the clitic *się*) is rivalled by the “heavy” pronoun *siebie*, the reciprocal pronoun *jeden drugiego* being very rarely used. The Scandinavian reflexive pronoun has failed to develop the reciprocal meaning and take the place of the postfix when the latter lost this meaning, the reciprocal pronoun being used instead.¹⁸ Typologically, the Scandinavian languages show a different path of the evolution of reciprocalizers in the sense that a “heavy” monosemous marker takes the place of a “lighter” and polysemous marker. The same state of things is observed in the Baltic and East Slavic languages where the main reciprocal markers are also reciprocal pronouns.

17. Thus, in the Germanic languages, with the exception of German, we observe the replacement of verbal reciprocal markers by syntactic – reciprocal pronouns. This is a tendency also attested outside the Germanic languages. The opposite development is less likely, although replacement of one syntactic marker by another is common enough; cf. Latin *inter se* ‘between/among themselves’, *invicem* ‘in turn’, *mutuo* ‘mutually’, *virum vir* ‘man to man’, *alius alium* lit. ‘another another’, etc. and French *l’un l’autre*, Italian *l’un l’altro*, Spanish *unos a otros* Surselvan *in l’auter* with the meaning ‘each other’.

18. Typologically, this development of the meanings of the reflexive pronoun *seg* and its cognates corresponds to the implicational path of semantic evolution of markers with the primary reflexive meaning proposed in Geniušienė (1987). For subject-oriented meanings the following path is proposed: (the meanings which *seg* has not developed are in square brackets): semantic reflexivity > ‘partitive object’ > and/or ‘autocausative’ [> antipassive and/or reciprocal] (ibid., p. 347); for object-oriented meanings: anticausative [> passive > impersonal] (ibid., p. 350).

2.2.4 Reflexive and reciprocal markers exchange places (“castling”). Why? (Juwajai)

As a quaint curiosity, the change in Juwaljai can be mentioned: in this language there occurred a diachronic alternation of reciprocal and reflexive markers.

The relations between the forms of expression of reciprocity and reflexivity in Australian languages are particularly interesting. Thus, Capell (1956:75) claims:

In point of fact, there is considerable confusion between reflexive and reciprocal over Australia as a whole. In some languages no inflectional form of reciprocal is found: Aranda is one such. In others, reflexive and reciprocal are identical: Durga is a case in point. The reflexive suffix in one language will appear as the reciprocal suffix in another, and vice versa: see examples from central New South Wales on p. 52. (a part of the chart from p. 52 is cited below as (74) – V.N.) The Dieri *-mali-* is reciprocal, Pittapitta *-mali-* is both reciprocal and reflexive, but Dieri has the quite isolated *-dari-* as reflexive.

As regards the chart a part of which is shown in (74), Capell writes:

<...> there is in Juwaljai an apparent crossing of the functions of the two suffixes: that which was reciprocal becomes reflexive, and vice versa. (ibid., p. 52)

(74)	Reciprocal	Reflexive
Wongaibon	<i>-l-ina</i>	<i>-djiliŋa-</i>
Gawambarai	<i>-l-ela-</i>	<i>-iŋili-</i>
Kamilaroi	<i>-l-ela-</i>	<i>-iŋili-</i>
Juwaljai	<i>-l-ŋili-</i>	<i>-lelana-</i>

(historically, *-l-* is not part of the marker and therefore it is hyphenated).

The table in (74) reflects the original state of things in the first three languages. On the whole, reciprocal markers seem to be more often ousted by reflexive markers than *vice versa*. The alternation in Juwaljai seems quite a riddle.

2.2.5 A sociative-reciprocal marker in the reflexive function on certain bases (Nunggubuyu)

In Nunggubuyu, the situation is complicated: the suffix *-nʷji-* has a reciprocal and sociative (in Heath’s terms, ‘joint involvement’) meanings; cf.:

	Nunggubuyu (Heath 1984:392, 398, 399; cf. (35) above)		
(75) a.	<i>-na-nʷji-</i>	‘to see each other’	reciprocal
b.	<i>-nʷandardi-nʷji-</i>	‘to snore together’	sociative
	<i>-lhagarari-nʷji-</i>	‘(group) to make noises together’	sociative
	<i>-millhs-nʷji-</i>	‘to shine together’	sociative

Derivatives with the suffix *-nʷji-* can also have a specific anticausative function with the optional additional sense ‘together’¹⁹ (76a). Heath comments on the derivative (76b): “<...> this form seems to be used even with singular referent”.

19. A similar type of anticausatives occurs in other languages; see Ainu examples (105)–(108) in 3.3.

(76) a.	<i>-bujbuj</i>	'withered, dried'	
→	<i>bujbuj-ga-</i>	'to wither sth'	causative
→	<i>-bujbuj-ga-nʸji-</i>	'to become withered together'	anticausative-sociative
b.	<i>-didi</i>	'tight, firm'	
→	<i>-didi-ga-</i>	'to make [it] tight, firm'	causative
→	<i>-didi-ga-nʸji-</i>	'to become tight, firm.'	anticausative

As mentioned, there is a special productive reflexive suffix *-i*; cf.:

(77) a.	<i>-balhu-</i>	'to cut'	→	<i>-balh-i-</i>	'to cut <i>self</i> up.'	(ibid., p. 390).
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But some verbs, mostly monosyllabic roots, seem to avoid the reflexive suffix and take the suffix *-nʸji*, the derivatives acquiring a reflexive and a reciprocal meaning (and passive); cf.:

(78) a.	<i>-ra-</i>	'to spear sb'	(ibid., p. 391)	
→ b.	<i>-ri-nʸji-</i>	i.	'to spear <i>self</i> '	reflexive
		ii.	'to spear <i>each other</i> ' (usual meaning)	reciprocal
		iii.	'to be speared'	passive

The reflexive meaning of (78b) may be due either to the original reflexive or reflexive-reciprocal meaning of the suffix *-nʸji* or to the semantic expansion of this suffix (note also that the monosyllabic reflexive suffix *-i* may be difficult to distinguish in monosyllabic words with a final vowel). The first explanation is supported by the fact that in most languages of the Nyulnyulan group the suffix *-nyji* and its cognates in complex with the prefix *ma-* function as regular reflexive and reciprocal markers, and this complex serves to mark solely the reciprocal meaning only in one of these languages (McGregor 1999: 89–91).

2.2.6 Reflexive-reciprocal, reflexive, or reciprocal markers? Partial overlap (Kannada, Sinhala, Telugu, Malayalam)

In these languages, the appropriate pronouns (or adverbs) and/or a middle marker are used for the expression of the meanings in question. There are specialized reflexive and reciprocal pronouns, rarely reflexive-reciprocal pronouns, and a polysemous middle marker is used to encode each of the meaning either by itself or in combination with a pronoun. On the whole, the situation is somewhat similar to that in the Indo-European languages of Europe but it is more varied.

1. *Kannada*. In a number of Dravidian languages, the reflex of the Proto-Dravidian verb *koL* (*koN* in the past tense) with the general meaning 'to take, receive' has become a suffix which is added to the past participial form of the verb which agrees with the subject and inflects for tense (Gair et al. 2000: 23; Sridhar 1990: 118; Lidz 1995: 706–7). Its primary meaning was reflexive and at present it has a number of concomitant meanings caused by detransitivization (Amritavalli 2000: 50–112), cf. reflexive-benefactive *ogi-* 'to wash (clothes)' → *oge-du-koL-* 'to wash (clothes) for oneself', autocausative (i.e. reflexive in the broad sense) *bacchiD* 'to hide' (vt) → *bacchiTTu-koL-* 'to hide' (vi), anticausative *mucch* 'to close' (vt) → *mucchi-koL-* 'to close' (vi), etc. (ibid., p. 55). These formations are called "verbal reflexives" in the literature. Their meanings are similar to those of the reflexive-middle markers in many Indo-European languages and they do not generally

exceed the range of meanings in chart (40). To quote Amritavalli (2000:53), “The verbal reflexive element *koLLu* exhibits a range of related functions which (interestingly) parallel functions noted in the literature for the Romance reflexive clitic *se* (French) and *si* (Italian)”.

In Kannada, there is one reflexive marking and three markings for reciprocity. These expressions are related as follows:

(79) Meaning	Means of expression		
	Pronoun		Middle marker
i. reflexive	<i>tannu</i> (SG), <i>taavu</i> (PL)*	+	<i>V-koL-^{**}</i>
ii. reciprocal	a. –		<i>V-koL^{***}</i>
	b. <i>obbaranna obbaru</i>	+	<i>V</i>
	c. <i>obbaranna obbaru^{****}</i>	+	<i>V-koL-</i>

Explanations:

* This reflexive pronoun inflected for person and case is used only with the 3rd p. subject; for the 1st and 2nd persons personal pronouns are used. With this pronoun, a verbal reflexive is obligatory (Amritavalli 2000: 53).

** The middle marker cannot occur on verbs used in the so-called dative subject construction (mostly with the dative of experiencer), i.e. on verbs with meanings like ‘to be angry’ (ibid., p. 54).

*** This type of marking is used with a small class of transitives like ‘to embrace’, ‘to meet’, ‘to kiss’, ‘to marry’, ‘to collide’, ‘to hug’, i.e. with verbs whose lexical meaning normally or mostly implies the same response action (Bhat 1978:38). These are verbs which Haiman (1985:168) calls introverted predicates as opposed to extraverted ones, like ‘to love’, which require a reciprocal pronoun for encoding the reciprocal meaning.

**** The reciprocal pronoun *obbaranna obbaru* <one.ACC one.NOM> + verb may be used both with a verbal reflexive or without it (ibid., p. 86). In the first case, as is claimed by Amritavalli (ibid., p. 85), the meaning of mutuality and simultaneity is emphasized. Thus, in this latter case the markers of reflexivity and reciprocity overlap as both include “verbal reflexives”. If there is no antecedent, the pronoun takes the Instrumental case ending and does not express any reciprocal meaning. Rather the meaning is “one of sequential actions” (Sridhar 1990:125–6), i.e. a distributive meaning like ‘from one to the other’ or ‘each one’ (the latter meaning occurs when the pronoun is in subject position).

2. *Sinhala*. The relationship between reflexive and reciprocal markers is more complex here than in Kannada. There are three reflexive, three reciprocal markers and one common marker (see (80); Gair & Karunatillake 2000:715–73). “Verbal reflexives”, which are parallel to the Kannada derivatives, are composed of the “auxiliary” *gan-nəwa* ‘to take’ and the perfect participle of the main verb. These compounds have arisen under the influence of the Dravidian (Tamil) compounds with *koLu*. The meaning of the auxiliary is generally defined as “subject-directed”, i.e. as ‘do sth for oneself’ or ‘to affect oneself’ (ibid., pp. 725, 727).

(80)	Means of expression		
	Meaning	Pronoun	Middle marker
i. reflexive	a.	<i>eyaa-wə</i> 'her/him'	+ V- <i>gan-nəwa</i>
	b.	<i>taman-wə</i> 'oneself' (generally 3rd p. in reference)	+ V
	c.	<i>eyaa-wə-mə</i> 'her/him', 'herself/himself'	+ V
ii. reciprocal	a.	–	+ V- <i>gan-nəwa</i>
	b.	<i>ek-ekke-na-Tə</i> 'one by one'	+ V- <i>gan-nəwa</i>
	c.	<i>den-na-Tə+den-na</i> 'each other' (of two)	+ V
iii. refl./recipr.		<i>tama-taman-Tə</i> 'themselves', 'each other'	+ V (see (81))

Morphological notes:

(1) The suffix *-wə* = ACC; *-mə* = emphatic clitic, *-Tə* = DAT; *-naa/-na-* = ANIM; *-nəwa* = INF.

(2) This type of reciprocal marking, i.e. without a reciprocal pronoun, is used only "with specific verbs" (ibid., p. 726). The range of "specific verbs" remains unclear. The authors cite only two examples with verbs of hostile actions: *gaha-gannəwa* 'to fight, hit each other' and *hapaa-gan-nəwa* 'to bite each other'.

(3) The distributive pronoun *ek-ekke-naa-Tə* <one + one-ANIM-DAT> 'one by one', when used with verbal reflexives, has the meaning 'each other' (ibid., pp. 722, 726).

(4) The reduplicated numerals like *den-na-Tə+den-na* <two-ANIM-DAT + two-ANIM.NOM> 'each other' (of two) indicate the number of the participants (ibid., p. 723).

Thus, only one of the seven markings for the reflexive and reciprocal meanings, namely the reduplicated pronoun *tama-taman-Tə* <self-self-DAT>, has both meanings (ibid., p. 722):

- (81) *siri-yi_i gunapaalə-yi_j tama-taman-Tə_{i+j/i,j} aadareyi.*
 S.-NOM-CONJ G.-NOM-CONJ self-self-DAT love-PRED
 'Siri_i and Gunapala_j love each other_{i+j} / themselves_{i,j}.' (ibid., p. 722)

3. *Telugu, Malayalam.* In Telugu, in contrast to the previous cases, the reciprocal pronoun *okaLLa-ni okaLLu* <one.PL-ACC one.PL>, as well as the reflexive pronoun *tana-ni* <self.SG-ACC>, *tama-ni* <self.PL-ACC> (both 3rd p.; personal pronouns are used in the 1st and 2nd persons, as in German, cf. *sich* and *mich, dich* ...), are as a rule accompanied by the middle marking on the verb. At least the reflexive meaning can be encoded by the middle marking alone, the reflexive pronoun being optional; cf. *Vanaja [tana-ni] tiTTu-kon-di* 'Vanaja scolded herself' and *WaaLLu okaLLa-ni okaLLu tiTTu-konn-aaru* 'They scolded each other' (Subbarao & Lalitha 2000: 219, 226, 228, 233). Thus, this marking is typologically similar to French where the pronoun *l'un l'autre* is usually coupled with the reflexive clitic *se*. Exceptions in both languages are comparable and they concern certain groups of verbs. In Telugu, like in Kannada, these are verbs with the dative subject (see Note ** beneath (79)), and in French they are verbs taking a prepositional object, i.e. in both cases the base verb takes no direct object that might be reciprocalized.

In contrast to the languages considered in this section, the Malayalam reflexive and reciprocal markers have no common components, as there is no middle marker and the reciprocal meaning is expressed by six reciprocal pronouns and five adverbs (see (17) and §3.4 in Ch. 3), e.g. by the pronoun *oraal-e oraal* <one person.PL-ACC one person.PL> (Jayaseelan 2000: 119), the reflexive meaning being expressed by the reflexive pronoun

tann-e <self.SG-ACC>, *taṅṅal-e* <self.PL-ACC>. Thus, in this language there is no overlap of the marking and no reflexive-reciprocal polysemy. Typologically, Malayalam is similar to English in this respect, the difference being that English has reflexive pronouns in all three persons, while Malayalam, like Telugu, employs personal pronouns in the 1st and 2nd persons instead of the reflexive.

With regard to the material of this section, I think that there is a tendency for the number of syntactic reciprocal markers to exceed the number of reflexive syntactic markers more often than the other way round.

2.2.7 Reciprocal and resultative meanings of a middle marker (Maasai, or Maa)

The polysemy of the Maa middle form, earlier called *neuter*, corresponds to the polysemy shown in 2.1. It is illustrated by (82)–(84) (my thanks to Doris Payne who provided me with important additional information concerning the Maasai middle – V.N.). The markers of this form are the suffixes *-a/-o* for the non-perfect(ive) aspect (82), (83), (84a, d), *-e* for the perfect(ive) and *-a(y)-u / -a(y)-o* (where *-u/-o* is inceptive, *-y-* is epenthetic) for the future and subjunctive (84c, f). Here are examples of the reflexive and reciprocal meanings of this form:

Maasai (Tucker & Mpaayei 1955: 134, 136; prefix *e-* = 3SG and 3PL)

- | | | | |
|------|-----------------|--|------------|
| (82) | <i>e-isuj-a</i> | (1) 'he gets washed without outside help, hence he washes <i>himself</i> ' | reflexive |
| | | (2) i. 'they wash <i>themselves</i> ' | reflexive |
| | | ii. 'they wash <i>each other</i> ' | reciprocal |
| (83) | <i>e-ar-a</i> | i. 'they beat <i>themselves</i> ' | |
| | | ii. 'they beat <i>each other</i> ', hence 'they fight.' | |

This form is nearly always intransitive and can be employed not only as reflexive, reciprocal, anticausative and potential, i.e. in the meanings common for middle markers cross-linguistically, but also as resultative/stative (84d), which is rather rare for middle markers (and probably presupposes the existence of the anticausative meaning). This meaning may be the end-point of the semantic evolution of reflexive-middle markers. There is no special passive proper form in Maasai, the form with the suffix *-i* (cf. (84b, e)) is most probably impersonal since the derived construction retains the direct object of the base construction, the subject being eliminated.

Maasai

- | | | | | | |
|------|--------|----------------|---|------------------------------------|--------------------|
| (84) | a. | <i>e-gil-a</i> | 'it gets broken <i>by itself</i> ', 'it breaks' | <i>anticausative</i> | |
| | cf. b. | <i>e-gil-i</i> | 'it is broken by someone' | impersonal | |
| | | c. | <i>k-e-gil-a(y)-u</i> | 'it is fragile', 'it is breakable' | potential |
| | | d. | <i>e-ik-a</i> | 'it is suspended, it hangs' | <i>resultative</i> |
| | cf. e. | <i>e-ik-i</i> | 'it is hung up <i>by someone</i> ' | impersonal | |
| | | f. | <i>e-ik-a(y)-u</i> | 'it can be hung up.' | potential |

The middle form has no antipassive (unspecified object) meaning, which is expressed by the suffix *-isho*.²⁰

3. Reciprocal-sociative polysemy

This type of polysemy is attested in Turkic, Mongolian, Tungusic languages, also in Japanese, Ainu, Tagalog, Indonesian, Palauan, Kusaiean, Halkomelem and in a number of Bantu languages, though with a different degree of productivity of the sociative meaning. Languages with this type of polysemy cover a significant part of Asia.

About half of the languages with sociative-reciprocal polysemy have a morphological reflexive marker (e.g., Turkic, Ainu, some Bantu languages, Halkomelem).

3.1 The range and distribution of the typical meanings

This type of polysemy covers meanings which involve an increase in the number of participants, (sociative), and/or an increase of valency (comitative, assistive). The competitive meaning involves an increase in the number of participants and/or of valency (depending on the use in the simple or discontinuous construction). The chart in (85) contains a description of derivatives according to three features:

- valency changes (increase, decrease and retention of the syntactic structure);
- addition or subtraction of a semantic component;
- the derived meanings: within groups sharing the above two features, different finite semantic classes are distinguished, like anticausatives and resultatives in Group A'.

In contrast to the derivatives with reflexive-reciprocal markers, detransitivization is less common here. On the other hand, addition of meaning is more common, and no cases of retention of meaning are attested.

20. A similar system of meanings of a middle marker including both reciprocal and resultative is attested in one more language, viz. Kisi (Tucker Childs 1995: 184–90). The middle marker here is the suffix *-nüŋ/-üŋ/-ŋ/...*; examples (the labelling of the meanings is partially my responsibility – V.N.): *dü* 'to kill' → *dü-nüŋ* 'to kill oneself' (reflexive) (p. 184), *tɔ* 'to wash sth/sb' → *tɔ-nüŋ* i. 'to wash oneself' (reflexive), ii. 'to wash sth for oneself' (reflexive-benefactive) (p. 188), *kààl* 'to love' → *kààl-iàŋ* 'to love each other' (reciprocal) (p. 190), *faanda* 'to throw' → *faanda-ŋ* 'to throw oneself' (autocausative) (p. 186), *hau* 'to stick sth' → *hau-nõŋ* 'to get stuck' (anticausative) (p. 186), *boli* 'to hurt sb' → *boli-ŋ* 'to be hurt/injured' (passive) (p. 187). The following derivatives have a resultative/stative meaning: *tei* 'to spread in the sun to dry' → *tei-ŋ* 'to be spread in the sun to dry' (cf. (167) below), *landu* 'to hang, be hanging' → *landu-ŋ* 'to be hanging' (ibid., p. 187; cf. (24a) above), *liwa* 'to be wet' → *liwa-ŋ* 'to be wet' (ibid., p. 189).

- (85) The meanings of reciprocal-sociative markers
(the numbers refer to the respective examples or sections)

<i>Valency reduction</i> (mostly detransitivization)	<i>No valency change</i> (increase of the number of the participants; the mean- ing is more complex)	<i>Valency increase</i> (the meaning is more complex)
Group A (the meaning is more complex) reciprocal (87b), (89c)	Group B sociative (87a), (89b) competitive* (86b), (84b), (87c) attendant action (108) alternative (89d), (96)	Group C comitative (3b), (95), (107) competitive (86c)
Group A' (the meaning is simpler) anticausative (§9.1) resultative (136)	Group B' 'many' (105) plural (§11.1)	Group C' assistive (7b), (3b), (6a)
Group A'' (no detransitivization) spatial transitive reciprocal*** (93), (103)		[Group D] [causative]**

The following comments may be useful.

* The presence of the competitive meaning in two columns requires explanation. Competitive derivatives are often highly heterogeneous and usually comprise a limited group of verbs denoting sport activities or other kinds of traditional contests; they can be formed from both transitives and intransitives; semantically they are intermediate between reciprocals and sociatives. The syntactic behaviour of the competitiveness in columns B and C follows the pattern of sociatives and comitatives.

Yakut (-*ar* = 3SG.PRES; -*s-* = REC; -*al* = PRES; -*lar* = PL; *kætta* = 'with')

- (86) a. *kini kələj-ar* 'he is jumping on one foot'
 b. *kiniler kələj-s-al-lar* 'they compete in jumping on one foot' B
 c. *kini aya-tən kætta kələj-s-ar* 'he competes in jumping with his father.' C

** The causative meaning is illustrated by a marker with causative-reciprocal polysemy in 8.3 and also by a marker with causative-reciprocal-iterative polysemy in 4.2 (see (119g), (122)). The absence of markers with sociative-reciprocal-causative polysemy is probably accidental, therefore this meaning is included in chart (85), although with reservations.

*** This meaning transforms a potential *discontinuous* reciprocal object-oriented construction into a *simple* one, as in (a) *He tied horse A to horse B* \approx (b) *He tied horse B to horse A* \approx (c) *He tied horses A and B together*. The three sentences are semantically identical because the verb is a lexical reciprocal (cf. *He led horse A to horse B* \neq *He led horse B to horse A* where the verb is not a lexical reciprocal) and the object referents belong to the same semantic class (cf. *He tied horse A to the fence* with object referents of different semantic classes). If we replace *to tie* by the verb *to lead*, the meaning of the third sentence *He led horses A and B together* becomes entirely different from (c). Probably, Pawley (1973:151) had in mind case (c) above when he used the phrase "unification of objects". For details see Ch. 1, §§5.2 and 13.

Further on in this section, the following issues are discussed:

- types of relationships between the sociative and the reciprocal meanings of the same marker; see 3.2–3.3.4;
- relationships between these meanings when they are expressed by different markers; see 3.5–3.6;
- the other meanings of reciprocal-sociative markers (e.g. assistive, etc.); see 3.4.

3.2 The sociative meaning of a reciprocal marker is productive (Tagalog, Kusaiean, Halkomelem, Palauan, Rwanda, Swahili)

Judging by the literature, the productive use of a reciprocal marker in the sociative sense is probably the most common case among languages with sociative-reciprocal polysemy. Sometimes, a marker with these two meanings may have a number of other, less productive meanings, e.g. competitive in Tagalog and alternative in Kusaiean (cf. (87c), (89d)). The reciprocal and the sociative meanings may differ in distribution on verbal stems, the sociative often being limited to intransitive stems. This seems to be the case in Halkomelem, judging by the attested derivatives (90a) and (90b); in this case sociatives do not differ syntactically from reciprocals derived from transitives. Or a derivative can have both meanings (88).

In the examples below the lexical meaning of the base verbs is recoverable from that of the derivatives.

Tagalog (Shkarban & Rachkov, Ch. 22, §4)

- | | | | | |
|------|----|---------------------|--|-----------------|
| (87) | a. | <i>mag-awit-an</i> | ‘to think <i>collectively</i> ’ | sociative |
| | b. | <i>mag-ibig-an</i> | ‘to love <i>each other</i> ’ | reciprocal |
| | c. | <i>mag-panah-an</i> | ‘to shoot arrows <i>in contest</i> .’ | competitive |
| (88) | | <i>mag-tulak-an</i> | i. ‘to push <i>each other</i> ’ | reciprocal (vi) |
| | | | ii. ‘to push sb <i>collectively</i> .’ | sociative (vt) |

Kusaiean (Lee 1975:202–4)

- | | | | | |
|------|----|--------------------------|--------------------------------------|-------------|
| (89) | a. | <i>Kuht a-pwacr-i</i> | ‘We are <i>all happy</i> ’ | sociative |
| | b. | <i>Eltahl a-pwacpa-i</i> | ‘They discuss <i>together</i> ’ | sociative |
| | c. | <i>Kuht a-etuh-i</i> | ‘We know <i>each other</i> ’ | reciprocal |
| | d. | <i>Eltahl a-rit-i</i> | ‘They <i>take turns</i> in reading.’ | alternative |

Halkomelem (Gerds 1999:133, 155)

- | | | | | |
|------|----|------------------------------|-----------------------------------|------------|
| (90) | a. | <i>ʔəlltən-təl</i> | ‘to eat <i>together</i> ’ | sociative |
| | | <i>ya:ys-təl</i> | ‘to work <i>together</i> ’ | sociative |
| | | <i>ʔiməs-təl</i> | ‘to walk <i>together</i> ’ | sociative |
| | | <i>ʔiyəs-təl</i> | ‘to be happy <i>together</i> ’ | sociative |
| | b. | <i>áawə-təl</i> | ‘to help <i>each other</i> ’ | reciprocal |
| | | <i>hičə-təl</i> | ‘to cut <i>each other</i> ’ | reciprocal |
| | | <i>maləq^w-təl</i> | ‘to mix with <i>each other</i> .’ | reciprocal |

Palauan (Josephs 1975: 221, 228)

- (91) a. *kai-d̥erurt* 'to run *together*' sociative
 ka-d̥er̥borb 'to sit *together*' sociative
 b. *kai-ng̥seu* 'to help *each other*.' reciprocal

Rwanda ((a)–(b) from Coupez (1985: 15); (c)–(e) from Aksenova (1994: 160, 177); in (b) and (d) *n'*- (before vowels; < *na-*) = 'with')

- (92) a. *-guh̄ng-an-a umurimá* 'to till the field *together*' sociative
 b. *-guh̄ng-an-a númwána* 'to till *together with* the child
 (who is also doing the tilling)' comitative
 c. *tu-kor-an-a* 'they work *together*' sociative
 d. *n-kor-an-a n'úmukoóbwa* 'I work *with* the girl' comitative
 e. *tu-reb-an-a* 'they look at *each other*.' reciprocal

Swahili (Ovir 1896: 258, 265)

- (93) a. *-shon-an-a* 'to sew *together*' sociative
 b. *-ng'o-an-a* 'to root out *together*' sociative
 c. *-pig-an-a* 'to hit *each other*' reciprocal
 d. *-fung-an-a* 'to tie sth and sth *together*' spatial-tr. reciprocal
 (< *-fung-a* 'to join sth with sth').

3.3 The sociative meaning of a reciprocal marker is of low productivity (Japanese, Ainu)

Two subtypes are attested: (a) there is no special sociative marker (Japanese); (b) there is a special sociative marker (Ainu).

1. *Japanese*. Although the sociative meaning of the reciprocal marker *-a/-aw/-at-* is registered in the literature and sometimes turns up in the informants' evaluations, it seems to be of low productivity (see Alpatov & Nedjalkov, Ch. 25, §5.1). Thus, in a corpus-based list of 285 forms with the reciprocal suffix *-a*, there are only 19 sociatives, mostly from intransitives; cf. *hibiki-a-u* 'to sound together', *kui-a-u* 'to eat together', *nomi-a-u* 'to drink together', *kaziri-a-u* 'to gnaw sth together' (Hasselberg 1996: 37–46). There are no derivatives **sini-a-u* with the intended meaning 'to die together', **tobi-a-u* 'to fly together'. It is hard to generalize the conditions when a derived form is sociative in meaning. Nevertheless, even if a derivative allows two or more readings the sociative reading is suggested by some (not all!) informants. Thus, the derivative in (94) allows both sociative and reciprocal interpretations: the interpretation is sociative (confirmed by three informants) if the bracketed words are used and it is reciprocal if they are omitted:

Japanese (ibid., §1.2, ex. (1h))

- (94) *Taroo to Akiko wa [zibun-tati no kodomo o] hagemasi-at-te-ta.*
 T. and A. TOP REFL-PL GEN child ACC encourage-REC-CONT-PAST
 i. 'Taro and Akiko were encouraging their own child(ren) *together*.'
 ii. 'Taro and Akiko were encouraging *each other*' (if the bracketed words are omitted).

The *competitive* meaning seems to be more productive, and it is sometimes the only meaning of a reciprocal form (ibid., §5.2). Example (95b) illustrates both meanings. It can also be interpreted as reciprocal ‘The students laughed at each other’, which is the most natural interpretation and is thus related to the meaning ‘to laugh at sb’ of the transitive base verb. The competitive meaning refers to laughing contests held annually in certain localities of Japan (T. Tsunoda, p.c.).

- (95) a. *Gakusei wa warait-ta.*
 student TOP laugh(vi)-PAST
 ‘The student(s) laughed.’
- b. *Gakusei wa warai-at-ta.*
 student TOP laugh(vi)-REC-PAST
- i. ?‘The students laughed *together*.’ sociative
- ii. ‘The students *competed* in laughing.’ competitive

Another example of a polysemous derivative:

- (96) *A ga B to inu o daki-a-u.*
- i. ‘A and B hold the dog in their arms *by turns*.’ alternative
- ii. ‘A and B embrace *each other’s* dogs.’ reciprocal
- iii. ‘A and B embraced the dog *together*.’ (ibid., ex. (87)) sociative

2. *Ainu*. The reciprocal prefix *u-* encodes sociativity in a limited number of fossilized derivatives. About ten such derivatives are attested of which only one is derived from an intransitive verb (98), the others being intransitive derivations from transitives. Sometimes, the meaning of a sociative derivative changes significantly (see (99) and (ii) in (100b) which are a kind of anticausatives or resultatives). Occasionally, the form may be reciprocal in meaning (see (i) in (100b)) (these data are borrowed from Alpatov et al., Ch. 42, §4.1.1).

- Ainu
- (97) a. *ciskar* ‘to cry about sb/sth’ (vt)
 b. *u-ciskar-pa* ‘to cry together’ (*-pa* = PL). sociative
- (98) a. *sipiras-pa* ‘to widen, enlarge’ (vi)
 b. *u-sipiras-pa* ‘for all to be spread out.’ sociative
- (99) a. *cip-e-kusa* ‘to take sth/sb across a river in a boat’ (*cip* ‘boat’; *-e-* = APPL)
 b. *u-cip-e-kusa* ‘to cross a river/sea together in a boat.’ sociative
- (100) a. *ronnu* ‘to kill (two or more people/animals)’
 b. *u-ronnu* i. ‘to kill *each other*’ reciprocal
 ii. ‘(of a lot of people) to be killed/die.’ sociative-anticausative?

The main sociative markers are the complex prefixes *u-ko-* and *u-e-* composed of the reciprocal marker and one of the two applicative prefixes (cf. 12.1.1 below). Unproductivity of the prefix *u-* as a sociative marker may be accounted for by the use of the specialized sociative markers.

3.4 The assistive and the comitative meanings of a reciprocal-sociative marker (Yakut, Tuvan)

The use of the same marker only for three meanings – assistives, comitatives and sociatives – is attested in some languages, e.g. in Ancient Greek (see (52), (53) in Ch. 1, §8.3). The four meanings, reciprocal, sociative, comitative and assistive, of the Yakut and Tuvan reciprocal suffix illustrated in (3b), (7b) and (101b) are closely related semantically: *all of them suggest at least two participants acting together in the same situation*. Their productivity varies across the Turkic languages, and some meanings are absent in some languages. The productivity of the Turkic reciprocal suffixes and their range of polysemy seems to diminish from east to west. Thus, in Yakut (Nedjalkov & Nedjalkov, Ch. 26) and Tuvan (Kuular, Ch. 27), the reciprocal suffix has all the four meanings.

Tuvan (ibid., ex. (2))

- (101) a. *Bis sigen kez-ip tur bis.*
 we hay mow-CONV AUX.PRES 1PL (= PRES.PROGR)
 ‘We are making hay.’
- b. *Bis sigen kes-č-ip tur bis.*
 we hay mow-REC-CONV AUX.PRES 1PL
- i. ‘We are making hay *together*.’ sociative
 - ii. ‘We are making hay *with somebody else*.’ comitative
 - iii. ‘We *help* somebody to make hay.’ assistive
 - iv. ‘We are making hay *together helping each other*.’ assistive-recipr.-sociative(!)

(iv) is a translation suggested by a native speaker – author of the sentence.

The assistive meaning can be explicated by the benefactive auxiliary verb *ber-* ‘to give’:

- c. *Bis sigen kes-č-ip ber-ip tur bis.*
 we hay mow-REC-CONV O.BEN-CONV AUX.PRES 1PL
 ‘We help [someone] to make hay.’ assistive

In Kirghiz, the reciprocal suffix has practically no sociative meaning (there are only isolated instances in the imperative mood; Nedjalkov, Ch. 28, §9.3), probably due to the use of the reciprocal suffix as an optional 3PL marker on verbs (see 11.1 below; the reciprocal suffix is also used as a 3PL marker in Kazakh and Uzbek). The assistive meaning is very productive in Yakut, Tuvan, Kirghiz and Tatar and practically absent in Azerbaijani, Turkish, Gagauz and Karachay-Balkar (see, for instance, Sevortjan 1962: 532, 539).²¹

21. The development of the assistive meaning (sharing semantic properties with the comitative and causative) on the reciprocal marker in the Turkic languages is not accidental. It is semantically motivated. It may be noted in passing that it can be expressed not only by a special marker, like the Ajmara suffix *-jaya/-jaa* (Middendorff 1891: 145; note that this suffix seems to contain the causative suffix *-ya/-aa*; cf. ibid., p. 148), but also by markers with such meanings as comitative (cf. the suffix *-ysi-* in Bolivian Quechua; van de Kerke, Ch. 31, §§2.6.1.2 and 2.6.1.3; of course, its meaning ‘to accompany sb’ is not a pure comitative meaning, but it implies the sense ‘for the purpose of giving assistance’, see Bills et al. 1969: 306–7), or causative (cf. the circumfix *a-...-in-* in Georgian (see Gecadze et al. 1969: 149–50) and suffix *-idz-* in Shona (Aksenova 1990: 172)). Cf. also the assistive meaning of the suffix *-lca-* (and its cognate *-lsa-*) in Mongolic languages (see 3.3.6).

I will note in passing that in the languages without the assistive meaning, the productivity of the reciprocal suffix in the other three meanings is weakened. Thus, in Karachay-Balkar (see Nedjalkov & Nedjalkov, Ch. 24) derivatives with the reciprocal meaning are not highly productive (maximum 80 derivatiöss) and they form a closed set; similarly in Turkish: "... this suffix is not very productive; there are only a certain number of <...> reciprocal verbs" (Kornfilt 1997: 159). The sociative meaning is very common in Yakut and Tuvan, but it is unproductive in Karachay-Balkar, where it occurs mostly on intransitives, as in Tatar.

3.5 A monosemous reciprocal marker and parallel reciprocal use of a sociative marker (Evenki)

In Evenki, there are specialized reciprocal and sociative markers. The reciprocal marker *-maat* is monosemous (102a)). The suffix *-lda/-ldə* generally has a sociative meaning (102b):

- (102) a. *Bu ana-maat-ta-p.* reciprocal
 we push-REC-NFUT-1PL
 'We push each other.'
- b. *Bu tatkit-tula ηene-ldə-re-p.* sociative
 we school-ALL.1 go-SOC-NFUT-1PL
 'We go to school together.'

If the subject is singular and the second participant is expressed by a comitative noun phrase or omitted but implied by the suffix *-ldə*, the meaning is unambiguously comitative (i.e. semantically akin to sociative, rather than to reciprocal):

- c. *Nuŋan tatkit-tula ηene-ldə-re-n.* comitative
 he school-ALL.1 go-SOC-NFUT-3SG
 'He goes to school with someone else.'

If the subject is plural, the sentence may be interpreted both as sociative and as comitative. Thus, (102b) may also be interpreted as 'We go to school with someone else'.

The sociative suffix *-lda/-ldə* can encode reciprocity as well, although much less commonly than *-maat*. (Note that historically *-lda/-ldə* seems to go back to a reciprocal marker which acquired the sociative function at a later date.) In some Evenki dialects it still serves as a productive reciprocal marker. For instance, in (102d) it has a reciprocal reading only if used without a direct object (which is parenthesized), and a sociative reading if used with the direct object.

- d. *Bu [kuŋaka-r-ve] ana-ldə-re-p.*
 we child-PL-ACC push-SOC-NFUT-1PL
- i. 'We pushed *each other*.' reciprocal
 ii. 'We *together* push the children.' sociative

There is a third reciprocal marker *-ldə-maat* composed of both suffixes (the opposite sequence of the suffixes is ungrammatical).

- e. *Bu ana-ldə-maat-ta-p.*
 we push-SOC-REC-NFUT-1PL
 ‘We push each other.’

reciprocal

Finally, note the optional use of *-lda/-ldə* on (approximately 10) three-place transitives in spatial object-oriented constructions:

- (103) *Tar beje mooka-r-we təpke-[ldə]-re-n.*
 that man stick-PL-ACC fix-SOC-NFUT-3SG
 ‘That man fixed the sticks (together).’

spatial reciprocal (vt)

3.6 Interchangeable use of reciprocal and sociative markers (Khalkha Mongol, Buryat)

(The data are from Nedjalkov et al., Ch. 29). The markers *-lda* and *-lca* (Buryat *-lsa*) labelled in the literature in both closely related Mongolian languages as reciprocal and sociative, respectively, are often used interchangeably, i.e. the reciprocal *-lda* is often used in the *sociative* meaning, and sociative *-lca* (*-lsa*) as a *reciprocal* marker. The rules of their interchangeability are unclear. Both markers can also express a number of other meanings: they differ in the sets of meanings and in productivity with respect to the same meanings; thus, for instance, *-lca* (*-lsa*) is highly productive in the *assistive* meaning and *-lda* is productive in the meaning ‘(of) many’. On the whole, the polysemy of the suffix *-lca* (*-lsa*) is richer than that of *-lda*. Below, case 1 concerns the sociative and reciprocal polysemy, and 2 the other meanings.

1. *Two main meanings of -lda and -lca (-lsa)*. As mentioned, each of these markers is used both in the reciprocal and the sociative meanings.

1a. Reciprocal meaning. The reciprocal use of both suffixes is registered in the dictionaries, e.g. *asuu-* ‘to ask sb’ → *asuu-lda-* ‘to ask each other’, *asuu-lsa-* (same meaning) (Cheremisov 1973:63). In Buryat (104), the reciprocal meaning is expressed on four verbs, twice by *-lda* and twice by *-lsa*:

Buryat

- (104) *Tani-lsa-aar tata-lda-xa, xara-lsa-aar xaza-lda-xa bolo-xo-mnai*
 recognize-SOC-CONV pull-REC-PART look-SOC-CONV bite-REC-PART AUX-PART-OUT

gü, übgen?

Q old.man

‘Why is it, old boy, as soon as we meet we start fighting, as soon as we see each other we start biting each other?’

1b. Sociative meaning. The sociative use of both suffixes is registered in the dictionaries, e.g. *oro-* ‘to enter’ → *oro-ldo-* ‘to enter together’, *oro-lso-* (same meaning) (Cheremisov 1973:363). More often, however, derivatives of the same stem differ in the types of sociative meaning, derivatives in *-lda* being translated with the help of the word ‘many’ (joint action is implied), e.g. *xašgara-* ‘to shout’ → *xašgara-lda-* ‘to shout (of many)’, *xašgara-lca-* ‘to shout (together)’. The former meaning is akin to the *intensive*:

Buryat

- (105) *Udabašyegüi ende tende xün-üüd xurxira-lda-ba.*
 soon here there man-PL snore-REC-PAST
 ‘Soon here and there (many) people snored (loudly).’ sociative, intensive

2. Other meanings of the suffixes *-lda* and *-lca(-lsa)*.

2a. Judging by the explications of sociatives with the suffix *-lca(-lsa)* in the literature, it seems that these forms have the *sociative* meaning less frequently than the comitative.

Buryat

- (106) *Axa-nar-iny gaixa-lsa-ba.* (Bur3. 340)
 older.brother-PL-his be.surprised-SOC-PAST
 ‘His older brothers were surprised.’

The *comitative* meaning is actualized when the second participant is expressed by a comitative noun phrase, as in (107a), or by a personal-possessive marker on the postposition, as in (107b), or this participant may be entirely suppressed, as in (107c). Quite often, the subject referent does not act simultaneously with the co-agent but repeats the action already performed by the latter (cf. ‘after him’ in the translation of (107b)).

Buryat

- (107) a. *Dorži esege-tei gaza gara-lsa-ba.* comitative
 D. father-COM outside go.out-SOC-PAST
 ‘Dorji together with his father went out into the street.’
 b. *Parxae ... xoino-hoo-ny gara-lsa-ba.* comitative
 P. behind-ABL-his go.out-SOC-PAST
 ‘Parxaj went out after him.’
 c. *Bi ošo-žo huu-lsa-xa-m.* comitative
 I go-CONV sit-REC-FUT-1SG
 ‘I’ll go and sit (together with them).’

Note especially the meaning of “attendant” action performed simultaneously with the main action in (108) and which is closely related to the comitative. It has not been attested for reciprocal or sociative markers in any other language.²²

Khalkha-Mongol

- (108) *Bat ter gutl-aa awa-lca-w.* “attendant” action
 B. those boots-ABL take-SOC-PAST
 ‘Bat took (bought) boots *together with other boots*’, or ‘Bat *also* took those boots.’

The assistive is one of the most common meanings of the suffix *-lca(-lsa)*, while *-lda* rarely has it. This meaning is very often given in the dictionaries either as the only one (e.g. *tee*- ‘to load sth’ → *tee-lse*- ‘to help load sth’; Chermisov 1973:460) or alongside a comita-

22. Note that the meaning of ‘attendant action’ can be expressed by the applicative suffix *-ut* in Eskimo along with the *sociative*, *comitative*, *benefactive*, and *assistive* meanings; cf. *kipute*- ‘to buy’ → *kipuy-ut-aa* i. ‘he is buying sth for her’, or ii. ‘he is buying it *along with other things*’. Applicative constructions are always transitive. When detransitivized, *-ut*- derivatives are mostly reciprocal in meaning (cf. 6.2.1.4 in Ch. 1; see also Jacobson 1984:571).

tive or sociative meaning (e.g. *elirüüle-* ‘to find out’ → *elirüüle-lse-* ‘to help find out’, ‘to find out together’, ‘to take part in finding out’; *ibid.*, p. 762). A sentential example of the assistive meaning follows.

- (109) *Düü min, či ax-iin-xaa adžl-aas xiy-lc-eeč.*
 younger.brother my you elder.brother-GEN-REFL work-ABL do-SOC-IMP
 ‘My younger brother, help (our) eldest brother to do work!’ assistive

2b. The reciprocal and sociative meanings and the meaning ‘many’ of the suffix *-lda* are illustrated above. It is rarely used in the other meanings, such as assistive, competitive, comitative, anticausative, etc. It derives anticausatives from three-place verbs of joining; cf. the following Khalkha example:

- (110) *xolyo-* ‘to mix sth and sth’ → *xolyo-ldo-* ‘to get mixed.’ anticausative

To conclude, in Yakut, Tuvan and also Khalkha-Mongol and Buryat, alongside the main reciprocal, sociative, comitative and assistive meanings, the reciprocal markers also have a number of other meanings, mostly unproductive or of low productivity, represented by a few (from two or three to a dozen) derivatives: reflexive, autocausative, converse, competitive, etc. (for Yakut see ex. (4) above).

4. Iterative-reciprocal polysemy

This type of polysemy is attested in Chinese, Hua, Bari, Khmer and otherwise mostly in Austronesian languages: Samoan, Tongan, Sobei.

4.1 The range and distribution of the typical meanings

The iterative meaning and meanings immediately connected with it, viz. durative, habitual, intensive, and reciprocative, differ from the reciprocal in that they can occur with a singular subject naming a single participant, and this sets them apart from the sociative-reciprocal polysemy. The dispersive, alternative and distributive meanings imply a multiple subject referent and in this respect they are close to the sociative meaning. All these meanings are common on intransitive stems and less common on transitive stems. Some of the meanings are restricted to special lexical classes of intransitives, viz. verbs of motion and location.

I will specify some of the meanings, to avoid misunderstanding possible because of different uses of the terms in the literature (the first four meanings do not need any clarification):

(1) *reciprocative* refers to iterativity of motion in opposite directions, such as ‘hither and thither’, ‘to and fro’, ‘here and there’ (see Churchward 1953:255);

(2) *alternative* denotes iterative actions with different participants repeating the same action by turns;

(3) *distributive* denotes iterative actions with two or more participants acting one after another, each act being performed by a different participant (sometimes this meaning is hard to distinguish from the alternative meaning);

(4) *dispersive* refers to motion ‘from one point in different/all directions’;

(5) ‘*aimless action*’ – the reciprocative and dispersive meanings can change into the meaning ‘quick, intensive action’ and next into that of ‘purposeless, disorderly action’. The meanings covered by the iterative polysemy are the domain of aspectology. (With respect to this feature this type of polysemy differs from reflexive-reciprocal polysemy, the latter being mostly intransitivizing).

Above, the meanings which are expressed by markers with the main iterative meaning with a greater or lesser degree of motivation, due to associative relations are listed at random.

Here is a chart of this range of meanings. It contains two characteristics of derivatives: (a) syntactic valency changes (decrease or retention); (b) the type of derivational meaning.

(111) The meanings of iterative-reciprocal markers (the numbers refer to the respective examples)		
(The meaning of all the derivatives is more complex than that of the bases)		
Plural subject only		
<i>Valency decrease</i>	<i>Valency retention</i>	<i>Valency retention</i>
reciprocal (113c), (116e, f), (117c)	alternative (116c) distributive (126e) dispersive (121a)	iterative (113b), (114), (116a) durative (113b), (117b) habitual (126d) intensive (119b), (122c, f) reciprocative (118), (116a) ‘aimless’ action (127j).

Most of the meanings entered in (111) occur to a greater or lesser degree on polysemous markers with the main distributive meaning. In this connection it seems reasonable to show the full range of polysemy of one of such affixes, viz. the distributive suffix in Cashinahua. The meanings associated with the iterative directly or indirectly are closely interrelated and they are often expressed by the same marker, which may lack the reciprocal meaning entirely *or* have it in isolated derivatives (cf. case 5) in (112) below); cf. the following Cashinahua examples (borrowed from Camargo, Ch. 45, §8.2) with the distributive suffix *-aki-aki-* (reduplication is iconic here). Most of the meanings contain the iterative component, but this suffix does not express “pure” iterativity. The distributive meaning seems to be more general than the alternative: the latter contains the former and an additional sense of alternation of the same participants. Both meanings share the plurality of participants. To a certain degree, both are similar to those reciprocals which cannot denote simultaneous actions, in situations like ‘They visited each other’, ‘They borrowed money from each other’, ‘They helped each other’ and the like. According to the additional component and other factors, the following classes of derivatives with this suffix can be distinguished:

- (112) 1. Derivatives with the meanings requiring two or more participants.
- 1.1. Distributive; the participants are chain-related:
 - a. subject-distributive, e.g. *mawa-akiaki-* ‘to die one after another’;
 - b. object-distributive, e.g. *diti-akiaki-* ‘to hit sb(PL) one after another’;
 - 1.2. alternative; the participants exchange roles, e.g. *daja-akiaki-* ‘to work by turns.’
 2. Derivatives with the meanings which may be termed reciprocative in the broad sense; they do not require two or more participants; the additional spatial feature divides them into the following subclasses:
 - 2.1. Directional-reciprocative, e.g. *ka-akiaki-* ‘to wander, go from one place to another.’
 - 2.2. Stative-reciprocative, e.g. *daja-akiaki-* ‘to work here and there.’
 - 2.3. Rotational-reciprocative, e.g. *i-akiaki-* ‘to roll over repeatedly.’
 3. Derivatives denoting aimless/indifferent actions; they easily associate with non-directional meanings like ‘here and there’, ‘from one place to another’, ‘everywhere’, cf.:
 - a. *uša-akiaki-* ‘to sleep here and there (wherever night finds one)’
 - b. *hiwi-akiaki-* ‘to live here and there (one doesn’t care where).’
 4. Derivatives with spatial reciprocal meanings (denoting spatial contact of subject or object referents; the iterative meaning may be absent):
 - 4.1. Spatial-intransitive, e.g. *tsau-akiaki-* ‘to sit next to each other.’
 - 4.2. Spatial-transitive, e.g. *macin-akiaki-* ‘to pile sth one on top of another.’
 5. Derivatives with reciprocal meanings (two cases are attested among lexical reciprocals):
 - a. *hanca-akiaki-* ‘to talk to one another’;
 - b. *cici-akiaki-* ‘to divide sth among oneself.’

The suffix can be added to suffixed reciprocals and retain its meaning (but reciprocals cannot be formed from derivatives in *-akiaki-*), e.g. *mia-nami-akiaki-* ‘to touch each other by turns’.

Some derivatives can have two meanings, depending on the lexical meaning of the stem and singular or plural subject; thus, *daja-akiaki-* with the singular subject means ‘to work here and there’ (reciprocative) and with a non-singular subject it can also mean ‘to work by turns’; the derivative *bijun-akiaki-* allows three readings:

- | | |
|---------------------------------------|------------------------|
| i. ‘to swing together here and there’ | reciprocative |
| ii. ‘to swing by turns’ | alternative |
| iii. ‘to swing each other by turns.’ | reciprocal-alternative |

4.2 Illustrations of iterative-reciprocal polysemy (Chinese, Hua, Samoan, Sobei, Tongan, Khmer, To’aba’ita, Bari)

I. Chinese. The following information is obtained from Liu (1999: 124–32) which is the first description of the reciprocal meaning of the compound pattern composed of a repeated monosyllabic lexical verb and the verbs *lái* ‘to come’ and *qù* ‘to go’. Notably, these two verbs denote repeated motion in opposite directions. The most prominent meaning of this pattern is iterative-durative, and it is the only possible meaning if the subject is singular. The reciprocal meaning of this compound seems to be a very recent development. The verbs in the attested examples are usually intransitive. The following examples show

the direction of semantic evolution of this pattern from the meaning ‘back and forth’ via the iterative/durative towards the reciprocal.

Chinese (Liu 1999: 124–6)

- (113) a. *Tā zài wūzi-lǐ zǒu-lái-zǒu-qù.*
 he at room-inside walk-come-walk-go
 ‘He’s walking back and forth in the room.’ reciprocal
- b. *Tā xiǎng-lái-xiǎng-qù...*
 he think-come-think-go
 ‘He thought and thought (for quite a while), and ...’ iterative/durative
- c. *Wǒmen/nǐmen/tāmen dǎ-lái-dǎ-qù.*
 we/you/they hit-come-hit-go
 ‘We/you/they fought with each other.’ reciprocal

2. *Hua*. In this language, one of the reciprocal markers (for another case see Ch. 3, §2.2.1) is composed of symmetrically conjoined verbs followed by the auxiliary verb *hu* and denotes “hectic, repeated or reciprocal activity” (Haiman 1980: 121–2); cf.:

Hua (ibid., p. 123; the stems are followed by *ro*, *ro’* or *ri’*)

- (114) a. *ri+na e+e* ‘he took it and came (= he brought it).’
 b. *rina o+ri’ rina o+ri’ hi+e* ‘he kept on bringing things.’ iterative
- (115) a. *habo +ne* ‘we helped (him).’
 b. *habo+ro habo+ro hu+ne* ‘we helped each other.’ reciprocal

3. *Oceanic languages*. Here are examples, mostly from Oceanic languages, of reciprocal and non-reciprocal (mostly aspectual) meanings of markers with the principal reciprocal meaning:

Samoan (Mosel & Hovdhaugen 1992: 180–3)

- (116) a. *a’a* ‘to kick’ → *fe-a’a* ‘to kick sth again and again’ iterative
 b. *gāsolo* ‘to run, flow’ → *fe-gāsolo-a’i* ‘to move to and fro’ reciprocal
 c. *tofu* ‘to dive’ → *fe-tofu-i* ‘dive in turn, one after another’ alternative
 d. *’eli* ‘to dig, paddle’ → *fe-’eli* ‘to paddle hard’ intensive
 e. *sogi* ‘to kiss’ → *fe-sogi* ‘to kiss each other’ reciprocal
 f. *mata* ‘to look’ → *fe-māta-a’i* ‘to look at each other.’ reciprocal

Sobei (Sterner 1987: 53; *re-* = ‘they’)

- (117) a. *re-fedfadnar* ‘they jump’ → *re-f-re-fadnar* ‘they jump repeatedly’ iterative
 b. *re-semsim* ‘they call’ → *re-s-re-msim* ‘they call repeatedly’ iterative
 c. *re-soro* ‘they help’ → *re-s-ro-ro* ‘they help each other.’ reciprocal

Tongan (Churchward 1953: 256)

- (118) a. *tafe* ‘to flow’ → *fe-tafe-aki* ‘to flow hither and thither’ reciprocal
 b. *’ofa* ‘to love’ → *fe-’ofa-’aki* ‘to love each other.’ reciprocal

4. *Khmer*. With a degree of uncertainty, I cite here examples with the marker of the relic reciprocal prefix *pru-*. This prefix is preserved on approximately 90 highly lexicalized

verbal stems many of which have retained a reciprocal or similar meaning. In a few cases, the iterative (in the broad sense) meaning is more or less obvious. Unfortunately, this interesting material is scantily represented in the dictionary.

Khmer (Gorgoniev 1984:440–57)

- | | | | | |
|----------|-----------------------------------|---|--|----------------|
| (119) a. | <i>beh</i> ‘to pick (e.g. fruit)’ | → | <i>prv-beh</i> ‘pick sth one after another’ | iterative |
| | <i>bvoc</i> ‘to pluck, nibble’ | → | <i>prv-bvoc</i> ‘pluck one after another’ | iterative |
| b. | <i>huə</i> ‘to peck’ | → | <i>prv-huə</i> ‘peck sth as if vying’ | intensive |
| c. | <i>dət</i> ‘to follow’ | → | <i>prv-dət</i> ‘walk one behind another’ | reciprocal |
| | <i>cap</i> ‘to grasp’ | → | <i>prv-cap</i> ‘wrestle, fight with each other’ | reciprocal |
| | <i>aop</i> ‘to embrace sb’ | → | <i>prv-aop</i> ‘embrace (each other)’ | reciprocal |
| | <i>biət</i> ‘to be next to’ | → | <i>prv-biət</i> ‘snuggle up to each other’ | reciprocal |
| | <i>kap</i> ‘to slash, cut’ | → | <i>prv-kap</i> ‘slash each other, fight’ | reciprocal |
| | <i>kham</i> ‘to bite’ | → | <i>prv-kham</i> ‘bite each other’ | reciprocal |
| d. | <i>tvp</i> ‘to fist’ | → | <i>prv-tvp</i> ‘reciprocate fist blows’ | response |
| e. | <i>ce:η</i> ‘to overcome’ | → | <i>prv-ce:η</i> ‘to compete’ | competitive |
| f. | <i>kvh</i> ‘to call sb up’ | → | <i>prv-kvp</i> ‘to pass sth from one to another’ | lexicalization |

Curiously enough, the *causative* meaning may be perceived in the first three derivatives in (119g) alongside the spatial meaning, the valency (at least semantic) being increased, as in the opposition ‘to lie across sth’ – ‘to put sth together crosswise’.

- | | | | | |
|----|-------------------------------------|---|--|-----------------------|
| g. | <i>douc</i> ‘to be like sb/sth’ | → | <i>prv-douc</i> ‘to compare sth with sth’ | causative |
| | <i>thuən</i> ‘to correspond’ | → | <i>prv-thuən</i> ‘to adjust, fit sth to sth’ | causative |
| | <i>təh</i> ‘to lie across sth’ | → | <i>prv-təh</i> ‘to put sth together crosswise’ | causative |
| h. | <i>kəη</i> ‘to put sth on sth’ | → | <i>prv-kəη</i> ‘to put one upon another’ | spatial recipr. |
| | <i>peak</i> ‘to thread, string sth’ | → | <i>prv-peak</i> ‘to hang sth one upon another’ | spatial
reciprocal |

5. *To’aba’ita*. In this language, reciprocity can be expressed by an affix, personal pronoun, and by two adverbs (Lichtenberk, Ch. 36, §8.2). The primary meaning of these adverbs is reciprocative and dispersive, respectively. The reciprocal adverb *oli-li* is a reduplication of the verb *oli* ‘to return, move back’. The adverb *kwai-liu* consists of *kwai-* = REC and *liu* = ‘to walk past/around’).

- | | | | | |
|----------|--------------------------|---|---|-------------------------------|
| (120) a. | <i>lae</i> ‘to go’ | → | <i>lae olili</i> ‘to go back and forth’ | reciprocative (ibid., §8.2.2) |
| cf.: b. | <i>fale</i> ‘to give’ | → | <i>fale olili</i> ‘to give (presents) to each other’ | reciprocal (ibid., §6) |
| (121) a. | <i>oli</i> ‘to return’ | → | <i>oli kwailiu</i> ‘to go back to (their) own places’ | dispersive |
| cf.: b. | <i>’oli</i> ‘to embrace’ | → | <i>’oli kwailiu</i> ‘to embrace each other.’ | reciprocal |

6. *Bari*. In this language, the only verbal prefix is *tə-*. Its main meanings are causative and reciprocal, and it can also encode the intensive²³ and frequentative meanings (or multiplication of agents and objects). Unfortunately, the author of the Bari grammar Spagnolo (1933) does not give any examples of the frequentative meaning. The other meanings

23. Causative-intensive polysemy is observed in other languages as well, e.g. in Zulu: *enza* ‘to work’ → *enz-isa-* i. ‘to make sb work’ (if the Causee is named), ii. ‘to work intensively’ (if there is no Causee); cf. also Mwera *pal-a* ‘to scratch’ → *pal-iy-a* i. ‘to cause to scratch’, ii. ‘to scratch hard’ (Harries 1950:72); see also (206) and (207).

named can be expressed by the same derivative. As regards (122d) and (122e) with the assistive-reciprocal meaning, this syncretic expression seems to be a pragmatic interpretation of the benefactive-reciprocal meaning ‘for each other’ (see, however, the meaning (101b.iv) above).²⁴ Reduplication of the first syllable (122e, f) denotes continuous action or plural subject (*ibid.*, p. 105).

24. The expression of the reciprocal and causative meanings by the same affix may be surprising, but such cases are attested in a number of other languages as well: in some cases, as, for instance, in Nakanai, Johnston (1980: 136; with reference to A. Pawley, p.c.) explains it by a merger of originally different Proto-Oceanic affixes **paka-* and **paRi-* into the resultant prefix *vi-/va-* due to the loss of **k* and **R*. The author claims that these meanings are mutually exclusive because causatives derive mainly from intransitive verbs and reciprocals from transitives; thus there are no polysemous derivatives (a similar situation is observed in Tanga related to Nakanai; see Capell 1977: xiv). Note that the assistive meaning also appears here.

Nakanai (*ibid.*, pp. 136–7)

- | | | | | |
|-----|----|------------------------------------|---|---|
| (i) | a. | <i>ubi-a</i> ‘to shoot him/her/it’ | → | <i>va-ubi</i> ‘to shoot each other’ |
| | b. | <i>lolo</i> ‘to hear’ | → | <i>va-lolo</i> ‘to cause to hear’ |
| | c. | <i>sae</i> ‘to climb up’ | → | <i>vi-sae-a</i> ‘to help sb up into a raised position.’ |

The use of the same marker (though unproductive) for the reciprocal and causative meanings, among others, is illustrated by Khmer (119c, g) and Tagalog (125c, d).

The second case of reciprocal-causative polysemy is claimed for the Maipuran Arawakan languages. Although very little data are published establishing a common marker for the reciprocal and causative meanings, I will cite these data because two specialists give evidence. In spite of scarcity, the data are worth mentioning. Wise (1990: 110) asserts: “I have glossed proto **-k^hak^h* as ‘reciprocal’ since that is its meaning in a wide range of (Maipuran – V.N.) languages. In others the meaning is ‘comitative’ which is clearly semantically related to ‘reciprocal’. In the Campa languages, the meaning changed from reciprocal to comitative to causative (in the sense of causing by enabling or helping). Thus, although causative and reciprocal normally are valence-changing opposites, the series of changes proposed could account for a reciprocal suffix in one language being cognate with a causative in another”. Even if we accept that there existed a common marker for the reciprocal and causative meanings in Proto-Maipuran, this type of polysemy is not steady. Therefore some Maipuran languages have retained this marker or its alleged cognates only as causative-comitative (cf. *-ag/-akak/-ak* (Nomatsiguenga), *-akag* (Caquinte), *-akaa* (Ashaninca), *-akag* (Pajonal Ashéninca), and reciprocity is expressed by other suffixes), while in other languages the alleged cognate suffixes have retained the reciprocal meaning only, having a different marker for the causative (cf. *-koko* (Baure), *-kaka* (Apurinã) *-koko/-kaka* (Terena), etc. (Wise 1990: 104). As we see, the suffixes with the reciprocal meaning are more similar in shape than the suffixes with the comitative-causative meaning. It is not unlikely that the similarity between the two sets of suffixes is accidental. However, there are two languages where, judging by the examples cited, the reciprocal and the causative suffixes seem identical in shape. These are Piro with the suffix *-kaka* (see §8.3 below) and Guajiro with the suffix *-hira* (*ibid.*, p. 93). Both of these causative-reciprocal suffixes are shown, among others, in Tables 2 and 3 (*ibid.*, pp. 104, 105). Note that in Piro there is also a reciprocal suffix *-wa* and a distant-causative suffix *-xitxa*, and Guajiro has a suffix *-wa* with reflexive, reciprocal and passive meanings and also a causative suffix *-t/-it/-ir* (*ibid.*, pp. 103–5).

On affixes with reciprocal and causative meanings see also Li (1991: 347–51).

Bari (ibid., pp. 157–9)

(122)		Reciprocal	Causative or intensive
a.	<i>met</i> ‘to see’ → <i>tɔ-met</i>	i. ‘to look at each other’	ii. ‘to <i>cause</i> to see’
b.	<i>rem</i> ‘to stab’ → <i>tɔ-rem</i>	i. ‘to stab each other’	ii. ‘to <i>cause</i> to stab’
c.	<i>mor</i> ‘to insult’ → <i>tɔ-mor</i>	i. ‘to insult each other’	ii. ‘to abuse <i>violently</i> ’
d.	<i>kor</i> ‘to till’ → <i>tɔ-kor</i>	‘to help each other with the tilling’ assistive-recipr.	
e.	<i>der</i> ‘to cook’ → <i>tɔ-tɔ-der</i>	‘to help each other to cook sth’ assistive-recipr.	
f.	<i>rem</i> ‘to stab’ → <i>tɔ-tɔ-rem</i>	‘to stab wildly at each other.’ intensive-recipr.	

Above, types of polysemy with two main meanings were considered. Below, I will discuss the types of polysemy with three main meanings. They are represented in a smaller number of languages than the above.

5. Reflexive-reciprocal-sociative polysemy

It is frequently pointed out that reciprocal markers often have either an additional reflexive or an additional sociative (collective) meaning, but not both. The explanation is obvious: the reciprocal and the reflexive meanings share one common feature, viz. the subject denotes both the agent(s) and the patient(s), and the reciprocal and the sociative share plurality of the subject, while the reflexive and the sociative do not have any common features. Therefore the existence of a common marker for all of these three meanings is rather unlikely. According to Kemmer (1993: 100), “The direct reflexive and the collective prototypes <...> are semantically distinct from one another, this making a three-way polysemy among these types unlikely” (see also Nedjalkov 1991: 280). Nevertheless, in the literature on more than two hundred languages and in the material of this collective monograph I have found some instances of such three-way polysemy.

Probably, as mentioned above, when the reflexive and the sociative are expressed by the same marker, the latter must have a reciprocal meaning as well (unless it has been lost in the course of time), because it is intermediate between them and has common features with both.

In two languages, viz. East Futunan and Tagalog, the reflexive-reciprocal-sociative polysemy is marked by unproductive markers, and it is not clear whether these meanings have ever been productive, or they are a result of lexicalization, and whether this polysemy has ever been regular.

5.1 Mayali, Ritharngu, Djaru, Nunggubuyu

The reflexive-reciprocal-sociative polysemy is confidently registered in Australian languages only; according to Evans (1995: 219–20), “Extension from reflexive/reciprocal to collective [= sociative – V.N.] is frequent in Australian languages”. In Mayali cited below, there is also a specialized sociative prefix *djarrk-* ‘all; all together’, but the reflexive-

reciprocal suffix *-rr* can be used instead of it in the meaning ‘all’ with reference to the plural subject “in situations where *djarrk-* would be inappropriate” (Evans 1995:217).

Mayali (ibid., pp. 219, 214)

- (123) a. ... *warkga-rr-*
hide-REC-
‘hide oneself.’ [p.214] reflexive
- b. *Barri-dowe-rr-inj*
they.PL-die-REC-PP
‘They all died.’ sociative
- c. ... *ani-bu-rre-ni*
we.two-hit-REC-PL
‘(... watched)... us fighting each other.’ [p. 219] reciprocal

This type of polysemy is also attested in at least two more Australian languages, viz. in Djaru (Tsunoda, Ch. 21, examples (1), (43)) and Ritharngu (Heath 1980:612, 183; see ex. (20) in Ch. 1). With reservations, we might add Nunggubuyu to these languages (see 2.2.5 above): in this language the sociative-reciprocal marker forms reflexive verbs from monosyllabic bases although there is a specialized reflexive suffix.

5.2 East Futunan

In this language (Moyses-Faurie, Ch. 35, §3.1.1), one of the three means of marking reciprocity is the prefix *fe-* (two other affixes contain this prefix and a suffix; they are not attested in the reflexive meaning; see Section 7 below). This prefix expresses a number of meanings: reciprocal involving only two participants (a dozen of verbs), sociative, reflexive and intensive.

East Futunan (Moyses-Faurie, Ch. 35, §3.1.1)

- (124) a. *'umo* ‘to pinch’ → *fe-'umo* ‘to pinch oneself’ reflexive
lomi ‘to massage’ → *fe-lomi* ‘to massage oneself’ reflexive
- b. *taki* ‘to carry’ → *fe-taki* ‘to carry sth together’ sociative
kapu ‘to run after sth’ → *fe-kapu* ‘to run after sth together’ sociative
- c. *sogi* ‘to kiss’ → *fe-sogi* ‘to kiss each other’ reciprocal
tuli ‘to chase’ → *fe-tuli* ‘to chase each other’ reciprocal
- d. *taki* ‘to carry’ → *fe-taki* ‘to carry with difficulty’ intensive
fai ‘to do’ → *fe-fai* ‘to do one’s best.’ intensive

The form *fe-taki* is sociative if the subject is non-singular (124b) and it is intensive if the subject is singular (124d).

5.3 Luvale

In this language, as well as in a number of other Bantu languages, the sociative-reciprocal suffix was replaced by a reflexive prefix (cf. case 1 in 2.2.2), which in some languages

resulted in the type of polysemy we are discussing (see Horton 1949:117); this case is pointed out in Ch. 1 (see ex. (16)).

6. Iterative-reciprocal-reflexive polysemy (Tagalog)

This type of polysemy is attested in one language so far. The Tagalog prefix *mag-* forms about 30 reciprocals (Shkarban & Rachkov, Ch. 22, §3.1.1). It also expresses the reflexive, iterative-intensive and a number of other meanings, e.g. anticausative, causative, converse, etc. All these meanings of the prefix are unproductive. It has no sociative meaning (the main reciprocal marker is the complex affix *mag-...-an* which also has a sociative function; cf. (87)). The derived meaning is mostly determined by the lexical meaning of the base.

Tagalog (ibid., §3.1.1)

- (125)
- | | | |
|----|--|--|
| | a. Reflexive | |
| a. | <i>um-ahit</i> ‘to shave sb’ | → <i>mag-ahit</i> ‘to shave oneself’ |
| | <i>p-um-igil</i> ‘to restrain sb’ | → <i>mag-pigil</i> ‘to restrain oneself’ |
| | <i>b-um-igti</i> ‘to kill sb by hanging’ | → <i>mag-bigti</i> ‘to kill oneself by hanging.’ |
| | b. Iterative/intensive | |
| b. | <i>s-um-ulat</i> ‘to write’ | → <i>mag-sulat</i> ‘to write much and often’ |
| | <i>k-um-ain</i> ‘to eat’ | → <i>mag-kain</i> ‘to eat much and often’ |
| | <i>b-um-asa</i> ‘to read’ | → <i>mag-basa</i> ‘to read much and often.’ |
| | c. Reciprocal | |
| c. | <i>y-um-akap</i> ‘to embrace’ | → <i>mag-yakap</i> ‘to embrace each other’ |
| | <i>s-um-unod</i> ‘to follow sb’ | → <i>mag-sunod</i> ‘to follow each other’ |
| | <i>d-um-ikit</i> ‘to stick to sth’ | → <i>mag-dikit</i> ‘to stick, get glued to one another.’ |
| | d. Anticausative, causative, converse respectively | |
| d. | <i>s-um-ugat</i> ‘to wound’ | → <i>mag-sugat</i> ‘to develop into a wound’ |
| e. | <i>um-alis</i> ‘to go away’ | → <i>mag-alis</i> ‘to remove’ |
| f. | <i>b-um-ili</i> ‘to buy’ | → <i>mag-bili</i> ‘to sell.’ |

7. Iterative-reciprocal-sociative polysemy (East Futunan, Nêlêmwa)

This type of polysemy is attested in two Oceanic languages. Thus, Pawley (1973:151) writes that, alongside the reciprocal meaning of derivatives with the prefixes descended from the Proto-Oceanic **paRi-*, “In many Oceanic languages <...> such verbs sometimes refer to unified or combined action by a plural subject, or repeated action by a singular subject, or unification of objects rather than the subject of the verb”. The meaning of “unification of objects” corresponds, it seems, to my term “meaning of joining or separating of objects”, i.e. “spatial reciprocal meaning” (127i).

1. *East Futunan*. A good example of this type in our corpus is the East Futunan reciprocal confix *fe-... (C)aki* with a surprising range of meanings (Moyse-Faurie, Ch. 35, §3.3). It is the main reciprocal marker (when used singly, the second component may

be comitative, causative and applicative; see Ch. 35, §2.7.1.3); it expresses the following meanings, with a different degree of productivity, some of them shading into one another (evaluations of the meanings are partially mine - V.N.)

East Futunan (ibid., §3.3)

- | | | | | |
|-------|----|----------------------|--|------------------------|
| (126) | a. | <i>fe-ligi-'aki</i> | 'to pour <i>several times</i> from one container into another' | iterative |
| | b. | <i>fe-ano-'aki</i> | 'to go <i>back and forth</i> ' | reciprocal |
| | c. | <i>fe-taka-'aki</i> | 'to go around <i>often</i> ' | habitual |
| | d. | <i>fe-koti-'aki</i> | 'to cut (with scissors) <i>together</i> ' | sociative |
| | e. | <i>fe-sulu-'aki</i> | 'to put on (clothing) <i>one after another</i> ' | distributive |
| | f. | <i>fe-lele-'aki</i> | 'to fly off <i>in all directions</i> ' | dispersive |
| | g. | <i>fe-pū-'aki</i> | 'to be perforated <i>all over</i> ' | diversative, intensive |
| | h. | <i>fe-tali-'aki</i> | 'to answer <i>each other</i> ' | reciprocal |
| | i. | <i>fe-sola-taki</i> | 'to help sb to flee' (unique case) | assistive |
| | j. | <i>fe-opoti-'aki</i> | 'to be piled <i>one on top of another</i> ' | spatial resultative |

The latter anticausative spatial resultative verb is derived from the three-place transitive *opoti* 'to put together' (cf. 9.1.2).

East Futunan has two more reciprocal markers operating on the verb and differing in the second component, also polysemous (about derivatives with *fe-* only see 5.2 above); the confix *fe-...-(C)i* which is practically unproductive in the (a) reciprocal meaning (see Ch. 35, §2.7.1.2) and productive in the (b) sociative and (c) iterative meanings (see (38)–(40)) and (41), (42) respectively in Ch. 16).

2. *Nêlêmwa*. In this language the prefix *pe-* (sometimes combined with the suffix *-i*) has the following meanings (Bril, Ch. 34; evaluations of the meanings are partially mine – V.N.):

- | | | | | |
|-------|----|------------------|--|-------------|
| (127) | a. | <i>pe-thalic</i> | 'to stumble <i>over and over again</i> ' (ibid., §8.3) | iterative |
| | b. | <i>pe-khuwo</i> | 'to eat <i>together</i> ' (ibid., 8.1.1) | sociative |
| | c. | <i>pe-hâgee</i> | 'to fish <i>together</i> ' (ibid., 8.4.2) | sociative |
| | d. | <i>pe-shaya</i> | 'to work, move <i>together</i> ' (ibid., 8.4.3) | sociative |
| | e. | <i>pe-hâgee</i> | 'to fish <i>here and there</i> ' (ibid., 8.4.2) | reciprocal |
| | f. | <i>pe-shaya</i> | 'to work, move <i>fast</i> ' (ibid., 8.3) | intensive |
| | g. | <i>pe-yage-i</i> | 'to help <i>each other</i> ' (ibid., 3.1.1.1.1) | reciprocal |
| | h. | <i>pe-khaaxa</i> | 'to <i>compete</i> in assagai throwing' (ibid., 8.2). | competitive |

Here is an example of the reciprocal prefix in the spatial reciprocal meaning:

- | | | | | | | |
|----|-----------|---------------------|---|--------------|-------------------------------|--------------------|
| i. | <i>na</i> | 'to put sth on sth' | → | <i>pe-na</i> | 'to pile sth up' (ibid., 3.2) | spatial transitive |
|----|-----------|---------------------|---|--------------|-------------------------------|--------------------|

In conclusion, note that the reciprocal marker *pe-* has a meaning which might tentatively be called "aimless action". To quote Bril (Ch. 34, §8.4.1): "With human agents, verbs such as *diya* 'to do', *pe-* denote a tentative undertaking done without any clear project, without any effort or specific intention, listlessly <...>":

- | | | | | |
|----|-----------|---|---------------------|------------------|
| j. | <i>va</i> | <i>pe-diya</i> | <i>fagau mwa</i> . | "aimless" action |
| | | 1PL.EXC | REC-make body house | |
| | | 'We have tried to build the wall of the house.' (as might be, without any preconceived plan or idea). | | |

8. Non-prototypical types of polysemy

By this I mean reciprocal markers whose polysemy does not contain a reflexive, sociative, or iterative meaning, although it contains some other meanings named in charts (40), (85) and (111), and a few more. It is not unlikely that some of the meanings that might be intermediate between these and reciprocal have disappeared. Thus, for Mundari (8.1 below) the expected intermediate meaning might be sociative and for Piro (8.3) it might be comitative and/or assistive. In some other languages these meanings (intensive, antipassive, etc.) are attested in reflexive-reciprocal and reciprocal-sociative markers (cf. 9.2, 9.1, etc.).

8.1 Reciprocal and intensive (Mundari)

The Mundari infix *-pa-/-pe-/-pi-/....* encodes the reciprocal meaning on verbs, and on adjectives it expresses the intensive meaning (see Osada, Ch. 37). As Osada puts it, verbs and adjectives comprise one word class covering two semantically different subclasses.

Mundari (ibid., §§9.2.1; 3.1.1)

- | | | | | | |
|-------|--------|-----------------------------|---|--------------------------------------|--------------------------|
| (128) | a. | <i>marang</i> ‘(to be) big’ | → | <i>ma-pa-rang</i> ‘(to be) very big’ | intensive |
| | cf. b. | <i>dal</i> ‘to hit’ | → | <i>da-pa-l</i> ‘to hit each other.’ | reciprocal ²⁵ |

8.2 Reciprocal and antipassive (To’aba’ita)

The To’aba’ita prefix *kwai-* encodes reciprocity but not, as Lichtenberk (Ch. 36, §8.1.1) stresses, the reflexive meaning; nevertheless it can express reflexive-related meanings, such as antipassive, or absolutive, or of unspecified object (depatientive in Lichtenberk’s (1991: 171–183) terminology). As the translation of (129a) shows, the meaning is modified to denote a property (rather than an action ‘to scare’):

To’aba’ita (ibid., §§8.1.1; 7; cf. also Lichtenberk 1999: 31–61)

- | | | | | |
|-------|--------|------------------------|-------------------------|-------------|
| (129) | a. | <i>kwai-fa’ama’u-i</i> | ‘to be frightening’ | antipassive |
| | cf. b. | <i>kwai’oli-i</i> | ‘to embrace each other’ | reciprocal |

I might as well mention the following fact: in contrast to these cases when object deletion entails a change of meaning, the reciprocal suffix *-var-* in Tolai (cf. *var-boboi* ‘to see each other’, *var-ubu* ‘to hit each other’) also has a detransitivizing function of deleting the object, but it is a purely syntactic operation which does not involve any change of meaning (Mosel 1984: 156); it is probably an antipassive function; cf.:

25. In Tschiluba, the suffix *-ánán-* is attested both in the reciprocal and intensive-durative meanings. Since neither Dammann (1954: 165) nor Burssens (1946: 74) give any derivatives with the sociative meaning, the type in question can be illustrated by the following derivatives with reservations: *-dim-a* ‘to hoe, dig’ → *-dim-ánán-a* ‘to hoe everywhere, all the time’, *mən-a* ‘to see’ → *mən-ánán-a* ‘to see each other’ (Dammann 1954: 165).

Tolai (ibid.; bold type mine – V.N.)

- (130) a. ..., *di ga va=ruk ia tai tika na pal.*
 they.DU TA CAUS=enter him in one C house
 ‘... they brought him into another house.’
 b. ..., *ma dia ga ubu-var=va=ruk.*
 and they.PL TA hit-INTR=CAUS=enter
 ‘... and they made (them) enter by force.’

8.3 Reciprocal and causative (Piro)

Matteson (1965:78) describes the Piro suffix *-kaka* as causative and reciprocal (it also derives collective nouns like *mhenoklu-n-kak-lu-ko* ‘jaguars among themselves’ and has the meaning ‘each’; ibid., p. 108). Her only example of the reciprocal use of *-kaka* and the other two examples of the causative meaning are given below. The author does not mention any other meanings of this suffix, therefore this language is placed here.

Piro (ibid., pp. 39, 41; *-na* = 3PL; *n-* = ‘I’, *-lu* = ‘him’)

- (131) a. *xepha ... -na* ‘they deloused.’
 → b. *xepha-kak-na* ‘they deloused *each other*.’ reciprocal
 (132) a. *yohlota* ‘to spear’
 → b. *n-yohlot-kak-lu* ‘I *cause* him to spear (sth).’ causative
 (133) a. *himleka* ‘to boil’ (vi)
 → b. *n-himle-kak-lu* ‘I *caused* it to boil.’ causative

8.4 Reciprocal and anticausative (Dulong/Rawang)

These meanings are expressed by the prefix *v-*, and the reflexive meaning by the suffix *-shi* termed reflexive-middle marker (LaPolla 2000:288–96). The main function of the prefix *v-* is intransitivization (ibid., p. 288); cf. (the verb forms are simplified and the evaluations added – V.N.):

- (134) a. *ngaq-* ‘push over’ → *v-ngaq-* ‘fall over’ anticausative
 b. *shvt-* ‘hit, kill’ → *v-shvt-* ‘argue, fight’ reciprocal
 cf. c. *kup-* ‘cover’ → *kup-shi-* ‘cover oneself.’ reflexive

Judging by the data cited in Crowley (1981:177–82), a similar picture is observed in Mpakwithi; cf.:

- (135) a. *bwa-* ‘to break sth’ → *bwa-pji-* ‘to break’ (vi) anticausative
 b. *bwi-* ‘to kill’ → *bwi-pji-* ‘to kill each other’ reciprocal
 cf. c. *?a-* ‘to cover sth’ → *?a-ti-* ‘to cover oneself.’ reflexive

8.5 Reciprocal and resultative (Muna)

In Muna, the standard reciprocal markers, the prefix *po-* for two participants and *po-* with simultaneous root reduplication for more than two, are also used to express the mean-

ings of separating and joining or, as the author puts it, “Meaning: ‘in parts, broken’; or: ‘connected’” (van den Berg 1989:314). The spatial meanings of joining and separating are dealt with in §13 of Ch. 1 on object-oriented reciprocals, i.e. transitive constructions of the type ‘He tied A *and* B *together*’ (cf. (93d), (119h), (127i) above) derived from constructions like ‘He tied A *with* B’. In contrast to this derivation, the Muna derivatives are detransitivized and seem to become anticausatives or resultatives (such derivations with spatial characteristics have been mentioned in case 2 in 12.4 below). Compare (examples from van den Berg (1989:314); the evaluations on the right are mine – V.N.):

- (136) a. (the reference is dual)
tai ‘to stick’ → *-po-tai* ‘to be connected, bound *together*’ spatial resultative
sobho ‘to mix’ → *-po-sobho* ‘to be mixed with’ spatial resultative
kuta ‘to break’ → *-po-kuta* ‘to be broken *into two pieces*’ spatial resultative
gunti ‘to cut’ → *-po-gunti* ‘to be cut *in two*’ spatial resultative
 cf. *intara* ‘to hold’ → *-po-intara* ‘to hold *each other*’ proper reciprocal
 b. (the reference is non-dual plural)
tai ‘to stick’ → *-po-tai-tai* ‘to be connected, bound *together*’ spatial resultative
 cf. *tumbu* ‘to hit’ → *-po-tumbu-tumbu* ‘to hit *each other*’ proper reciprocal

In Ewondo, the reciprocal suffix *-an-* “is used to form locative-stative verbs from action verbs and it means *be in a state/condition*” (Redden 1979:108). Judging by this characteristic, the derivatives in (137a) can be regarded as resultatives:

Ewondo (ibid., p. 108)

- (137) a. *kúb-* ‘to pour, spill (out)’ → *kúb-an-* ‘to be spilled (out)’ resultative
súm- ‘to stick into the ground’ → *súm-an-* ‘to be stuck into the ground’ resultative
 b. *láb-* ‘to plunge’ (vt) → *láb-an-* ‘to plunge’ (vi) anticausative
 cf. c. *sín-* ‘to hate’ → *sín-an-* ‘to hate each other’ reciprocal

9. The meanings attested with both reflexive-reciprocal and nonreflexive-reciprocal markers

The meanings of these two types of markers may overlap to a limited degree. Let us consider two interesting cases, anticausative and competitive meanings.

9.1 Anticausative

These derivations are also dealt with in Section 14 of Ch. 1 as one of the diathesis types.

9.1.1 Anticausatives with reflexive-reciprocal markers (Imbabura Quechua, German)

The anticausative function is characteristic of these markers in many languages; examples (see also (53) above):

Imbabura Quechua (Cole 1982:135, 90–1)

- (138) a. *vicha-* ‘to close sth’ → *vicha-ri-* ‘to close’ (vi) anticausative

- cf. b. *riku-* ‘to see sb’ → *riku-ri-* i. ‘to see *each other*’
 ii. ‘to see *oneselves*.’ reciprocal reflexive

German

- (139) a. *Er öffnete das Fenster* ‘He opened the window.’
 b. *Das Fenster öffnete sich* ‘The window opened.’ anticausative

The number of thus marked anticausatives may be considerable in a language, and it is likely that between the productivity of anticausatives and that of reciprocals there is a reverse relation; in any case, in the four languages in (140) this is obvious enough (the figures are approximate):

(140)	Russian	Lithuanian	Latvian	German
Number of anticausatives	1400	800	810	400
Number of reciprocals	40	160	80	480 ²⁶

Anticausatives are also attested with reflexive-sociative-reciprocal markers; e.g.:

Ritharngu (Heath 1980:61, 207; *-n(a)* = augment before derivational suffixes)

- (141) a. *manapa-* ‘to join, link, mix sth’
 → *manapa-n-mi-* ‘to get linked, mixed’ anticausative
 b. *dak-u-* ‘to cut sth/sb’
 → *dak-u-n-mi-* i. ‘to cut *each other*’ reciprocal
 ii. ‘to cut *oneself*’ reflexive
 c. *wa:ni-* ‘to go’
 → *wa:ni-na-mi-* ‘to go *together*’ sociative

9.1.2 Anticausatives with nonreflexive-reciprocal markers (*Muna*, Bolivian Quechua, Zulu)

In languages with these markers, the anticausative meaning is acquired by a limited number of derivatives, usually but not always from three-place lexical reciprocals of joining (actions with symmetrical objects), less commonly separating (resulting in symmetrical objects). Such usage may be accounted for by “mutual attraction” of the lexical and the grammatical reciprocal meanings. Note that in (142a) both lexical meanings are represented.

In languages which possess a reflexive marker alongside a reciprocal one, the synonymy of reflexively and reciprocally marked anticausatives is possible; cf. the Yakut reflexively marked anticausative in (147) (here *-n/-un/...* = REFL). In other languages, one of the anticausative synonyms may have mediopassive marking; cf. Krongo *àsárán-í* ‘to get torn, tear’ (*-í-* is a mediopassive suffix) and *àsárán-áncá-* ‘to get torn’ in (145).

26. The data for Russian are borrowed from Korolev (1968:10, 21), for Lithuanian and Latvian from Geniušienė (1987:97, 75); the number of reciprocals for German is borrowed from Wiemer & Nedjalkov (Ch. 10, §4.2) and that of anticausatives is my approximate count.

Muna (van den Berg 1989:206, 314)

- (142) a. *sobho* ‘to mix sth’ → *-po-sobho* ‘to be mixed with’ cf. (136a)
 kuta ‘to break sth’ → *-po-kuta* ‘to be broken into two pieces’ cf. (136a)
 cf. b. *intara* ‘to hold sth/sb’ → *-po-intara* ‘to hold each other’ reciprocal

Bolivian Quechua (van de Kerke, Ch. 31, §4.1.2.3)

- (143) a. *chaqru-* ‘to mix sth’ → *chaqru-naku-* ‘to get mixed’ anticausative
 cf. b. *qunqa-* ‘to forget sb’ → *qunqa-naku-* ‘to forget each other’ reciprocal

Zulu (Dammann 1954:164)

- (144) a. *æuba* ‘to mix sth’ → *æub-an-a* ‘to be/get mixed’ anticausative
 cf. b. *zonda* ‘to hate sb’ → *zond-an-a* ‘to hate each other’ reciprocal

Krongo (Reh 1985:230–2)

- (145) a. *àsáránà* ‘to tear sth’ → *àsárán-áncá-* ‘to get torn’ anticausative
 àbànà ‘to break sth’ → *àbàn-áncá-* ‘to get broken’ anticausative
 cf. c. *òcùsí* ‘to steal sth’ → *òcùs-òncá-* ‘to steal from each other.’

Yakut (Ch. 26, §§10.2.1, 2.7)

- (146) a. *bulkuj-* ‘to mix sth and sth’ → *bulku-s-* ‘to get mixed’ anticausative
 tüm- ‘to tie/gather sth’ → *tüm-üs-* ‘to gather’ (vi) anticausative
 cf. b. *ölör-* ‘to kill’ → *ölör-üs-* ‘to kill each other’ reciprocal
- (147) *silimnee-* ‘to stick sth and sth together’
 → *silimne-s-* ‘to get stuck together’ anticausative
 cf. *silimne-n-* ‘to get stuck together’ anticausative

The anticausative use of a reciprocal marker can expand to include verbs denoting actions that result in the object becoming denser or thicker or wrinkled (interaction between parts of an object rather than between separate objects), etc. In (148a) standard anticausatives and in (148b) “extended” anticausatives are cited:

Khalkha-Mongol (Nedjalkov et al., Ch. 29, §§12.2, 4.2)

- (148) a. *ani-* ‘to close (eyes)’ → *ani-lda* ‘to close (of eyes)’ anticausative
 oroo- ‘to wind sth around sth’ → *oroo-ldo-* ‘to get intertwined’ anticausative
 owoolo- ‘to pile sth in a heap’ → *owoolo-ldo-* ‘to (be) pile(d) up’ anticausative
 xolyo- ‘to mix sth with sth’ → *xolyo-ldo-* ‘to mix, be mixed’ anticausative
 b. *büre-* ‘to make (milk) sour’ → *büre-lde-* ‘to become sour’ anticausative
 ünge- ‘to rumple/crumple sth’ → *ünge-lde-* ‘to become crumpled’ anticausative
 cf. c. *dzodo-* ‘to beat sb’ → *dzodo-ldo-* ‘to beat each other’ reciprocal

Tatar (Zinnatullina 1969:194)

- (149) a. *bör-* ‘to wrinkle sth’ → *bör-eš-* ‘to wrinkle’ (vi) anticausative
 cf. b. *üb-* ‘to kiss sb’ → *üb-eš-* ‘to kiss each other’ reciprocal

Lexicalization of the form with a reciprocal marker derived from an intransitive verb in (150a) does not seem accidental when compared with (149a).

Ainu (Alpatov et al., Ch. 42, ex. (112f), (21))

- | | | | | | |
|-------|--------|---------------------------|---|-----------------------------------|----------------|
| (150) | a. | <i>kay</i> ‘to be broken’ | → | <i>u-kay</i> ‘to be wrinkled’ | lexicalization |
| | cf. b. | <i>e-</i> ‘to eat’ | → | <i>u-e</i> ‘to devour each other’ | reciprocal |

The above also explains the existence of parallel synonymous forms like the following:

Yakut (Kharitonov 1963:42)

- (151) *bölüö-* ‘to get dense(r)’ → *bölüö-s-* ‘to get dense(r)’

The endpoint of the semantic sequence ‘to become crumpled > wrinkled > dense’ expressed by a reciprocal marker is likely to be the Lambda derivative

- (152) *pap-akan-a* ‘to be smooth’ ← *pap-a* ‘to shrink’ (Doke 1938:198).

Similar oppositions involving two simultaneous derivational operations, viz. detransitivisation and addition of the spatial meaning ‘together’, can be marked by a reciprocal marker alone in other languages; an example may be the Mbay invariable reciprocal pronoun *nāā* which also has the meaning ‘together’ on intransitives (Keegan 1997:65); cf. (some of the diacritics are omitted for technical reasons):

- | | | | | |
|-------|----|------------------|----------------------------------|------------|
| (153) | a. | <i>tōl-n nāā</i> | ‘they killed <i>each other</i> ’ | reciprocal |
| | b. | <i>gō-n nāā</i> | ‘they laughed <i>together</i> ’ | sociative |

Keegan (1997:66) goes on to say that “With certain verbs which are both transitive and intransitive the reciprocal pronoun changes the meaning to ‘become’”. This is in fact an inchoative meaning, and derivatives from transitive bases are thus anticausative. Unfortunately, the author does not specify the meaning and valency of the base verbs for the derivatives he cites:

- | | | | | |
|-------|----|-------------------|---------------------------|---------------|
| (154) | a. | <i>dō-n nāā</i> | ‘become tied together’ | anticausative |
| | b. | <i>bīndā nāā</i> | ‘become entangled’ | anticausative |
| | c. | <i>dūlō-n nāā</i> | ‘become twisted together’ | anticausative |
| | d. | <i>tūtā-n nāā</i> | ‘become loose, untied’ | anticausative |

Semantically, the anticausative meaning of these derivatives is supplemented by the spatial meaning of joining (154a, b, c) or separating (154d), although, judging by the translations, the base verbs ought to have lexical spatial meanings. The first three derivatives roughly correspond to (148a), and the last one to (208b).

9.2 Antipassive (unspecified object, depatientive)

This meaning is attested in a number of reflexive-reciprocal and sociative-reciprocal markers (cf. also 8.2). This meaning often changes into that of habitual action, and the latter may become a permanent characteristic of the subject referent.

9.2.1 *Antipassives with reflexive-reciprocal markers (Russian; Swedish and Danish dialects)*

With respect to this meaning, it should be noted that in a number of languages, the lists of derivatives with reciprocal and antipassive meanings coincide or overlap to a significant degree. Thus, in Russian practically any reciprocal derivative (out of 40) can be used in the antipassive meaning; cf.:

Russian (Korolev 1968: 12; see also Knjazev 1992: 9–10)

- | | | | | |
|-------|----|---------------------------|---|-------------|
| (155) | a. | <i>Petuxi kljujut-sja</i> | ‘The cocks are pecking <i>each other</i> .’ | reciprocal |
| | b. | <i>Petux kljuet-sja</i> | i. ‘The cock is pecking (just now).’ | antipassive |
| | | | ii. ‘The cock <i>is in the habit</i> of pecking.’ | habitual |

A similar overlap of reciprocal and antipassive *-si-* derivatives is observed in Lithuanian (Geniušienė 1987: 92). As is seen from the example, the antipassive use can acquire a habitual sense. Note that in languages that have practically no restrictions on reciprocal derivation by means of reflexive markers, antipassive derivatives with the same marking are practically non-existent, as is the case, for instance, in German and French. In certain groups of dialects of Swedish and Danish there are a few antipassive derivatives (note that in these languages the marker *-s* has lost its productivity); e.g.:

Danish dialectal (Berkov 1985: 62)

- | | | | |
|-------|-----------------------|-------------------|--------------------------------|
| (156) | <i>hesten bid-s</i> | ‘the horse bites’ | antipassive, habitual |
| | <i>tidslen stik-s</i> | ‘thistle pricks’ | antipassive, permanent feature |

9.2.2 *Antipassives with sociative-reciprocal markers (Swazi, Ndonga, Tatar)*

In Swazi and Ndonga, antipassive derivatives with these markers can also acquire a habitual meaning, like in the Russian example just cited. They can also have an intensive meaning. Antipassives with both reflexive-reciprocal and reciprocal-sociative markers often denote negative actions or characteristics.²⁷

Swazi (Ziervogel 1952: 73)

- | | | Antipassive | Intensive |
|-------|----|----------------------|--|
| (157) | a. | <i>-lum-an-a</i> | i. ‘to be fierce’
ii. ‘to bite severely’ |
| | b. | <i>-hlab-an-a</i> | i. ‘to have the habit to gore’
ii. ‘to gore severely’ |
| | c. | <i>-khahlel-an-a</i> | i. ‘to have the habit to kick’
ii. ‘to kick severely’ |
| | d. | <i>-bulal-an-a</i> | ‘to be of a very severe nature’ |
| | e. | <i>-em-an-a</i> | ‘to be stingy.’ |

27. It is rather remarkable that in Vietnamese, the monosemous marker *nhau* ‘each other’ is registered in the antipassive sense on the base *đánh* ‘to hit’; cf. *Họ đánh nhau* ‘they fight’ and *Em không đùa+nghech, không đánh nhau* < I not naughty not hit REC > ‘I am not naughty and I do not fight’ (Bystrov & Stankevich, Ch. 47, §3.3). Most likely, of the same type is the derivative with the reciprocal marker in Tolai cited in Mosel (1984: 147): ‘The prefix *var-* does not exclusively mean reciprocity, but is also used to derive non-reciprocal intransitive verbs, e.g. *karat* ‘to bite’ (tr) – *var-karat* ‘to bite’ (intr) (cf. also (130) above). Note the negative character of this and Tanga antipassives *kais* ‘to bite’ → *pusi i fa-kais* ‘the cat bites’, *en* ‘to eat, cut’ → *pukfis i fa-en* ‘the knife cuts’; cf. reciprocal *fen* ‘to give’ → *fa-fen* ‘to give to each other’ (Capell 1977: xiv).

Ndonga (Dammann 1954: 174)

- | | | |
|-------|--------------------------------|--|
| | | Antipassive |
| (158) | a. <i>-ts-a</i> ‘to butt sb’ | → <i>-ts-an-a</i> ‘to be given to butting’ |
| | b. <i>-tuk-a</i> ‘to scold sb’ | → <i>-tuk-an-a</i> ‘to be querulous.’ |

Tatar (Zinnatullina 1969: 192–3; verbs with negative colouring are prevalent, as is the case in 9.2.1)

- | | | |
|-------|--|---|
| | | Antipassive |
| (159) | a. <i>jaz-</i> ‘to write’ | → <i>jaz-əš-</i> ‘to be engaged in writing’ |
| | b. <i>jun-</i> ‘to hew, trim’ | → <i>jun-əš-</i> ‘to be engaged in hewing’ |
| | c. <i>urla-</i> ‘to steal’ | → <i>urla-š-</i> ‘to be engaged in stealing, be a thief’ |
| | d. <i>alda-</i> ‘to deceive sb’ | → <i>alda-š-</i> ‘to deceive’ |
| | e. <i>könlə-</i> ‘to be jealous of sb’ | → <i>könlə-š-</i> ‘to be jealous, envious’ |
| | f. <i>əklə-</i> ‘to inform on sb’ | → <i>əklə-š-</i> ‘to inform on, sneak on sb.’ ²⁸ |

9.3 Potential-passive and passive

These meanings seem to be much more widespread among reflexive-reciprocal markers than among nonreflexive-reciprocal markers.

9.3.1 *Potential-passive and passive with reflexive-reciprocal markers (Russian, Lithuanian)*

Passive and potential-passive forms in Russian and potential-passive forms in Lithuanian are represented by numerous derivatives, e.g. at least 4,300 passive and more than 100 potential-passive forms in Russian (Korolev 1969: 17, 26), and 50 potential-passive forms in Lithuanian (Geniušienė 1987: 97). An example:

- Lithuanian (-*ti* = INF, -*s* = REFL)
- | | | | | | |
|-------|-------------------------|---|------------------|-------------------------------|-------------------|
| (160) | <i>maty-ti</i> ‘to see’ | → | <i>maty-ti-s</i> | i. ‘to be visible’ | potential-passive |
| | | | | ii. ‘to see each other, meet’ | reciprocal |

9.3.2 *Potential-passive and passive with nonreflexive-reciprocal markers (Bantu)*

In Bantu languages, the potential-passive meaning is usually expressed by the suffix *-ik* and its cognates. Sometimes both this suffix and the reciprocal marker are used simultaneously (see 12.4 below) but the latter can also occur with this meaning by itself.

- Noho (Dammann 1954: 173; -*en* = REC)
- | | | | | | |
|-------|-----------------------|---|-----------------|-------------------------|-------------------|
| (161) | <i>hen-e</i> ‘to see’ | → | <i>hen-en-e</i> | i. ‘to be visible’ | potential-passive |
| | | | | ii. ‘to see each other’ | reciprocal |

In some of the Bantu languages the reciprocal suffix occurs as a passive marker; cf.:

28. N.F. Katanov (1894: 31) explains the origin of this meaning by the fact that the suffix *-š-* which in most of its uses expresses identical actions of several agents, at the same time encodes repetition of the same action. The antipassive use is based on repetition of an action, hence the meaning of its habitual permanence as a characteristic of the agent.

Zulu (Dammann 1954: 164)

- (162) *vimb-a* ‘to close, stop’ → *vimb-an-a* i. ‘to be closed, blocked’ passive
 ii. ‘to stop each other’ reciprocal

9.4 Competitive

Anticausatives can be productive enough, but to a different degree, both with reflexive-reciprocal and nonreflexive-reciprocal markers, while the competitive meaning is rarely productive with both types of markers. It is productive in three languages of our list only, Bulgarian, Karachay-Balkar and Japanese, in the other instances competitiveness being closed sets of two to ten derivatives.

The competitive meaning can be defined as follows: ‘to try to surpass each other in some activity’. As we see, it contains the reciprocal component of meaning.

9.4.1 *Competitives with reflexive-reciprocal markers (Bulgarian)*

Bulgarian is probably the only Indo-European language where the reflexive-reciprocal marker forms a large enough group of derivatives (at least 25 verbs) with the competitive meaning. Nearly all the underlying verbs contain the prefix *nad-* meaning ‘surpass, outdo sb in V’ (cf. Yakut *kuot-* ‘to outrun sb’ → *kuot-us-* ‘to compete [in running]’). The competitive meaning is obviously a result of interaction of the prefixal meaning ‘surpass’ and the reciprocal meaning of the clitic *se*. But the meaning of competition is not purely compositional, otherwise the meaning of these derivatives would be ‘to surpass each other in sth’ and not ‘to compete in sth’.

However, the meaning ‘to surpass’ is not entirely ousted by the meaning of competition in the derivatives, therefore some derivatives may sound somewhat unnatural in the aorist of the perfective aspect (due to a kind of revival of the meaning ‘overcome’ of the base verb), as both contestants cannot win in the same event (Penchev, Ch. 13, §10). But sentences denoting uncompleted actions and sentences like ‘They wanted to surpass each other’ may be more natural. Competitives denote both sporting activities and other actions; cf.:

Bulgarian (ibid.)

- (163) a. *A nadbjagva B* ‘A outruns B.’
 → b. *A i B se nadbjagva* ‘A and B compete in running.’] (not ‘A and B outrun each other!’)

Bulgarian (Ivanova 1973: 171–9)

- (164) *Te se nadpluvat* ‘They compete in swimming.’
Te se nadvikvat ‘They compete in shouting.’
Te se nadrabotvat ‘They compete in working.’
Te se nadpivat ‘They compete in drinking.’

Derivatives with the competitive meaning of this type are attested in two more Slavic languages, Serbian (also a South Slavic language), where at least ten such derivatives, also with the prefix *nad-*, are registered in Tolstoy (1970: 274–6), and in Czech where two such

synonymous derivatives with the prefix *před-* are found (Melnikov et al. 1968:586); cf. Serbian *nadlagivati* ‘to overcome in lying (slandering)’ → *nadlagivati se* ‘to compete in lying’ and *bigati* ‘to run’ → *předbigati* ‘to outrun’ → *předbigati se* ‘to race with one another (about children)’.

9.4.2 *Competitives with sociative-reciprocal markers (Karachay-Balkar, Japanese)*

Two languages are considered here.

1. *Karachay-Balkar*. In languages with nonreflexive-reciprocal markers, derivatives with the competitive meaning are registered often enough, which seems rather natural, because this meaning is close to the reciprocal and sociative meanings. But, as mentioned, these derivatives are usually very few in number and relate mostly to verbs of sporting activities; cf. Yakut *kuot-* ‘to outrun sb’ → *kuot-us-* ‘to compete (in running)’. Among numerous Turkic languages, competitives are highly productive only in Karachay-Balkar²⁹ where they can also be derived from verbs denoting actions far removed from sports (occasional derivations are also common).

Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24, §5.3)

- | | | | |
|-------|----------------------------------|---|---|
| (165) | <i>čab-</i> ‘to run’ | → | <i>čab-aš-</i> ‘to compete in running’ |
| | <i>səzgər-</i> ‘to whistle’ | → | <i>səzgər-aš-</i> ‘to compete in whistling’ |
| | <i>art-</i> ‘to peel (potatoes)’ | → | <i>art-aš-</i> ‘to compete in peeling potatoes’ |
| | <i>tig-</i> ‘to sew’ | → | <i>tig-iš-</i> ‘to compete in sewing.’ |

2. *Japanese*. This is another language with a productive competitive meaning of the sociative-reciprocal marker *-a-/-aw-/-at-*. Moreover, in many derivatives it is often the only or preferable meaning. Note that in both Japanese and Karachay-Balkar the sociative meaning is weakly developed. Some Japanese verbs with the reciprocal suffix, encountered in the studies where they are used to illustrate the sociative sense, are sometimes interpreted by the informants as competitive rather than sociative. Thus, in (166) the competitive reading seems to be the most acceptable; the reciprocal reading is marginally acceptable, and the sociative reading ‘The students wrote the letter together’ did not occur to the native speaker.

Japanese (T. Tsunoda, p.c.; cf. also 3.3 above)

- (166) *Gakusei wa tegami o kaki-at-ta.*
 students TOP letter ACC write-REC-PAST
 i. ‘The students *competed* in writing letters.’
 ii. ?‘The students wrote letters (in order to send) *to each other*.’

29. As we see, Bulgarian is the only Indo-European language among those with a reflexive-reciprocal marker which has a competitive meaning, just as Karachay-Balkar is the only Turkic language with a productive class of competitives. Curiously enough, both peoples, according to some opinions, are partially genetically related, being descended from the ancient Turkic Bulgar tribes.

10. Other meanings

I have in mind two idiosyncratic functions which most likely do not belong to the polysemy of reciprocal markers because they are very close to the reciprocal function and may be regarded as an extension of the reciprocal use. These functions are attested on affixes that may be regarded as monosemous for the said reason.

10.1 The reflexive and reciprocal markers as relativization markers (Kabardian)

In Kabardian (Kazenin, Ch. 17, §7), reciprocals and reflexives are derived with the same marker *z-*, with possible positional variants *zə-* and *zə-*. This marker is also used to mark participles employed in the formation of relative constructions, when they occur in the agreement slot of certain types of relativized NPs. Objects, subjects and certain adjuncts can be relativized. For example, *-zə-* is placed in the agreement slot of a *relativized indirect object*:

- (167) a. *sə šə s-Ø-o-plə-ə.*
 I horse 1SG.ABS-3SG.OBL-DYN-look-PRES
 ‘I am looking at a horse.’
 b. *sə-zə-pləa-r* *šə-r.*
 1SG.ABS-REL-look-PART horse-ABS
 ‘The horse [which] I am looking at.’
 cf. c. *tə-zə-pləə-žbə-gə.*
 we-REC-look-ITER-PAST
 ‘We looked at each other.’

See also 6.2.1.1 in Ch. 3, and Rogava & Kerasheva (1966:314–27).

10.2 Response reciprocity (Cashinahua)

Camargo (Ch. 45) claims that in Cashinahua reciprocal constructions may denote not only standard reciprocal situations but also rather unexpected situations with an odd temporal sequence of the subevents. The second reciprocant is unspecified in these constructions. This meaning may be clarified by a comparison of the following examples (see also Ch. 45, ex. (55); these reciprocals are also considered in 9.7 of Ch. 1 in the context of discontinuous constructions):

- (168) a. *paku-n haidu diti-mis-ki.* b. *paku-n Ø diti-mis-ki.*
 P.-ERG H. hit-HAB-ASS P.-ERG 3p hit-HAB-ASS
 ‘Paco hits *Jairo*.’ ‘Paco hits *someone*.’
 c. *paku ~~diti-~~nami-mis.*
 P. hit-REC-HAB
 lit. ‘Paco hits mutually’, which means
 ‘Paco hits someone who (i) has hit him first (ii) will hit him (later).’

In (168c), the (non-ergative) subject is singular, the co-participant is not named (and cannot be added), and the verb has no plural marker, but the construction is perceived as complete formally and semantically. According to the explanation of the informants, Paco hits someone who either does not want to hit him right now but will do so later; or who has already hit him at an earlier time (i.e. in this case the response action is performed by the first participant). This interpretation is not unique to type (168b) constructions; it is also possible as one of the readings if two participants are named by the subject. In this case they may be perceived as a single collective reciprocant opposed to another implied party.

- d. *paku inun ha-dan, diti nami-mis-bu.*
 P. and he-*dan* hit-REC-HAB-PL
 lit. ‘Paco and him, (i) they hit *each other*; (ii) they hit *someone/him* who ...’

11. Meanings not attested among reflexive-reciprocal markers

The two meanings discussed below are related to the semantic component of plurality (‘two or more’) of the reciprocal marker.

11.1 The plural meaning (Kirghiz, Samoan, Sakhalin Ainu, Ecuadorian Quechua dialects)

Most probably, this meaning is genetically related to the sociative but this question requires special study. Encoding of plurality by a reciprocal marker is attested in four languages of our sample.

1. *Kirghiz*. The plural meaning can be optionally expressed by the reciprocal marker *-š-* on 3rd person verb forms in Kirghiz (Nedjalkov, Ch. 28, §9.2). As a matter of fact, the 1st and 2nd persons have distinct markers for the singular and plural, while the 3rd person of both numbers is usually zero-marked, hence the development of this meaning in the reciprocal marker in the 3rd person (unlike the 1st and 2nd p. markers, this suffix is used on converbs as well). The loss of the sociative meaning in Kirghiz may be related to this development. It is not clear whether this use of the reciprocal suffix as a plural marker is new in Kirghiz or inherited from Proto-Turkic. The suffix *-š-* with the plural meaning can be viewed as a homonym of the reciprocal suffix because it has a special slot in the verb form and can be used on reciprocal forms with the reciprocal or assistive meaning. Thus in (169d) the suffix *-š* occurs twice, as a reciprocal and a plural marker. Such usage is very rare, because the context, including the lexical meaning of the predicate, usually points to the reciprocal or 3PL meaning.

Kirghiz (ibid., §9.2)

- | | |
|---|--|
| (169) a. <i>Biz dušman-də at-tə-k.</i>
we enemy-ACC shoot-PAST-1PL
‘We fired at the enemy.’ | b. <i>Biz at-əš-tə-k.</i>
we shoot-REC-PAST-1PL
‘We exchanged fire.’ |
| c. <i>Alar dušman-də at-əš-tə.</i>
they enemy-ACC shoot-3PL-PAST.3
‘They fired at the enemy.’ | d. <i>Alar at-əš-əš-tə.</i>
they shoot-REC-3PL-PAST.3
‘They exchanged fire.’ |

2. *Samoan*. According to Churchward (1951:77), there are three groups of verbs in Samoan differing in the formation of plural: (a) verbs on which the plural number is not marked, (b) verbs with a reduplication of the accented syllable as a plural marker, and (c) verbs with the plural number marked by the reciprocal prefix *fe-*, with or without a suffix *-i*, *-si*, *-ni*, or *-fi*. The suffix *-a'i* has also occurred once on a plural form (170b). The confix *fe-...-a'i* is the main reciprocal marker (170c). Thus there is no clear-cut distinction between the reciprocal and plural usages of the prefix *fe-*, although in general, these usages are formally differentiated by suffixes.

Samoan (Churchward 1951:77, 78)

- (170) a. *inu* 'to drink (SG)' → *fe-inu* 'to drink (PL)'
 'au 'to swim (SG)' → *fe-'au-si* 'to swim (PL)'
 lele 'to fly (SG)' → *fe-lele-i* 'to fly (PL)'
 b. *gagana* 'to speak (SG)' → *fe-gaganav-a'i* 'to speak (PL)'
 cf. c. *ilo* 'to see' → *fe-ilo-a'i* 'to see each other'.

3. *Sakhalin Ainu*. According to Chiri (1973:510), in the Sakhalin dialect of Ainu the reciprocal-causative confix functions as a marker of the plain plural number. In non-Sakhalin Ainu, this confix may serve to express the sociative meaning (cf. case 2 in 12.1.2 below).

Sakhalin Ainu (ibid., p. 510); *-re*, *-te*=CAUS

- (171) a. *mokor* 'to sleep' → *utara u-mokon-te* 'The people slept',
 cf. *mokon-re* 'to cause to sleep'
 b. *ariki* (PL) 'to come (of two or more)' → *u-ariki-re* 'They came',
 cf. *ariki-re* 'to cause to come sb (two or more)'.

4. *Ecuadorian Quechua dialects*. With reference to Muysken (1977:54) and Cerrón Palomino (1987:283), van de Kerke (Ch. 31, §8) asserts that in many Ecuadorian dialects the suffix *-naku* (or an allomorphic form) "can be used as a reciprocal marker, but *-naku* may also have a sociative interpretation: 'together'. It can even be used as a verbal plural marker". As Cole (1982:93) claims, in Imbabura-Quechua, "<...> *-naju* is often used as a kind of emphatic verbal pluralizer".

11.2 Pseudo-reciprocal meaning (Tuvan, Boumaa Fijian, Vietnamese, Chinese, Palauan)

In this case the patient is made subject alongside the agent and thus also topicalized and presented as a kind of agent, without being one. This meaning which stands apart from the other meanings is attested so far in five languages. Generally, the participants of such situations are relatives of different ages or persons of different social status, co-villagers, etc., i.e. whose different semantic roles are obvious to the speaker. This meaning is attested among both polysemous and monosemous affixal reciprocal markers, the latter even, surprisingly, in (two) isolating languages.

1. *Tuvan* (Kuular, Ch. 27). In all the registered instances, the participants are relatives (of different "status", e.g. Tuvan *ava* 'mother' and *ava-škə(-lar)* 'mother and child' in

(172c) below) or otherwise related persons; despite the reciprocal form of the predicate, the action is performed by one of the participants (“mother” in (172c)) while the other (“the baby” in (172c)) is not passive but performs an action (*em-* ‘to suck the breast’) that may be denoted by the non-causative counterpart of the non-reciprocal causative base verb (*em-zir-* ‘to suckle’; cf. the entire derivational chain: *em-zir-ž-* ‘to suckle each other’ ← *em-zir-* ‘to suckle sb’ ← *em-* ‘to suck (the breast)’).

In reality, in (172c) the mother suckles the baby and the baby sucks the breast. But if the speaker’s intention is not to mention the baby as a separate object and to describe the customary situation without stressing either of the participants, he then uses the standard reciprocal construction in the pseudo-reciprocal sense. Here the situation is the same as in (172b), but it is presented in a compressed form.

Tuvan (Kuular, Ch. 27, §5.5.8)

- (172) a. *Bičii urug [emi-in] daka ür em-gen.*
 little child breast-ACC very long.time suck-PERF
 ‘The baby has been sucking [the breast] for a long time.’
- b. *Ava-zi uru-u-n daka ür em-zir-gen.*
 mother-her child-her-ACC very long.time suck-CAUS-PERF
 ‘Mother has suckled the baby for a long time.’
- c. *Ava-škə-lar em-zir-ž-ip olur-gan-nar.*
 mother-COLL-PL suck-CAUS-REC-CONV AUX-PERF-3PL
 ‘Mother has suckled the baby’, lit. ‘Mother and baby suckled each other.’

2. *Boumaa Fijian*. Analogous cases are attested in Boumaa Fijian where they are described as “involvement in an activity” (Dixon 1988: 177–80): “*Vei-* can similarly be used to avoid topicalizing either participant with all types of verbs. Consider *eve(-ta)* ‘carry (baby) on hip or in arms, nurse (baby)’. It is common to hear:”

- (173) *erau vei.-’eve-ti ti’o o Mere vata `ei+na vua-na.*
 3DU COLL-NURSE-TR MDF ART M. together with+ART grandchild-ART
 ‘Mary and her grandchild are involved in an activity of nursing.’ (lit. ‘... are nursing each other?’ – V.N.; I owe the glossing of (173) to R.M.W. Dixon. p.c.; I would prefer to gloss *vei-* as REC, as in (174), rather than as COLL(ective).)

“Here one would infer that it is Mary who is nursing the grandchild (*vua-*) and not *vice versa*, simply because grandchildren are nursed more often than are grandmothers” (Dixon 1988: 180). Compare the standard reciprocal reading:

Pawley (1973: 150)

- (174) *eda sa vei-loma-ni.*
 we INC REC-love-TR
 ‘We love each other.’

3. *Vietnamese, Chinese*. An analogous development of the usage of a reciprocal marker is also attested on markers which can be generally considered as monosemous. I have in mind the reciprocal markers in Vietnamese and Chinese.

Vietnamese (Bystrov & Stankevich, Ch. 47, ex. (35c))

- (175) *mẹ con bế nhau đi dạo.*
 mother child carry REC go walk
 ‘The mother carrying the child in her arms goes for a walk.’
 lit. ‘Mother and child *carrying each other* in their arms go for a walk.’³⁰

Ancient Chinese (Yakhontov, Ch. 48, ex. (52))

- (176) *Yàn quí ... zǐ mǔ xiāng bǔ yě.*
 ‘Swallows and sparrows ... children and mothers *feed each other*’ (It is but natural that it is only mothers that feed their younglings).

4. *Palauan*. L. Josephs (1975:228) suggests the following explanation of the usage of reciprocal markers we are discussing: “... extended function of the reciprocal prefix is to weaken certain commands or suggestions, or make them more polite. In this usage, the reciprocal prefix *ka-/kai* is added directly to the hypothetical forms of verbs. Its presence suggests that the speaker and the person addressed are somehow mutually involved in the decision at hand; often there is a strong sense of the speaker’s concern or sympathy”. This case differs somewhat from the previous one, because this is a situation of dialogue and the speaker here is not a real agent: he offers himself as a co-participant out of empathy. (For other meanings of *ka-/kai* see also (91).)

Josephs (ibid., p. 229)

- (177) a. *Molim a kɛrum!* ‘Take your medicine!’
 b. *Ka-molim a kɛrum* ‘Let *us* take *your* medicine.’ (bold italics mine – V.N.).

5. *A reciprocal marker used as a pronoun (Ancient Chinese)*. This case is in fact a variety of the previous one, as the patient does not appear as object either. (Note that it is a kind of development from more abstract to less abstract.) According to Yakhontov (1965:61–3), the Ancient Chinese reciprocal marker *xiāng* acquired a new function in the 3rd century CE: in dialogue it came to be used to denote both communicants as participants of the action expressed by the predicate: ‘*I* (verb) *you*’ or, somewhat less commonly, ‘*you* (verb) *me*’ (in these cases a kind of converse relations between the 1st and 2nd persons can be discerned). This usage is characteristic of polite speech (Yakhontov, Ch. 48, §12).

- (178) *Gōng yǒu xiāng shā yì.*
 lord have REC kill intention
 ‘Sir, you intend to kill me’, lit. ‘... (and now) we intend to kill each other.’

30. Somewhat similar to this type are constructions considered above in Ch. 1, §10, like Swahili (*fuat-a* ‘to follow sb’ →) *fuat-an-a* ‘to see each other off’ (Ovir 1896:258).

12. A reciprocal marker as part of a complex marker

This section deals with the changes of the reciprocal meaning when the marker is combined with another marker.

12.1 A reciprocal marker in two-component sociative markers

As is shown above, the following cases are attested with respect to the expressions of reciprocity and sociativity.

1. There are languages that have a reciprocal marker (without a sociative meaning) and no sociative marker (e.g. Chukchi reciprocal suffix *-waly*).

2. There are languages that have a reciprocal and a sociative markers (cf. the Fula reciprocal suffixes *-ootir*, *-indir* and sociative *-d*; see Arnott 1970:334–46, 357–60, 361–2; Wolof reciprocal suffix *-ante* and sociative *-andoo*; see Church 1981:253, 254, 289, 292, 298).

3. There are also languages that have a common reciprocal-sociative marker (cf. Yakut *-s*; see (3b) in 1.1.3 above).

4. There are languages that have different markers for reciprocals and sociatives but in certain cases one of the markers can be used instead of the other; this is the case in Khalkha Mongol and Buryat with the suffixes *-lda* and *-lca/-lsa* (see §3.6 above)

5. I have not encountered any cases of a more or less productive reciprocal marker formed with the help of a sociative marker or descended from it (the evolution of the Latin type from *bibo* ‘drink’ – *combibo* ‘drink together’ (sociative) to *fligo* ‘hit, knock together’ – *confligo* ‘collide’ (reciprocal; cf. (207) in Ch. 1, §15.3) is due to the lexical meaning of the base verb). But the opposite cases do occur.

6. There are languages where a sociative marker contains a reciprocal marker. This section is concerned with these languages.

Below, cases of obvious derivation of sociative markers with the help of a reciprocal marker are considered.

In all the five cases considered below the sociative marker is phonologically “heavier” than the reciprocal one, and this clearly points to the derived nature of the sociative marker. In the first four cases, the reciprocal marker is attached to one of the valency-increasing markers (applicative, causative, comitative, or benefactive). In the fifth case the meaning of the non-reciprocal component of a complex marker is not clearly established.

12.1.1 *Sociative as a formally reciprocal derivation from applicative (Ainu)*

This case is attested in Ainu where the reciprocal prefix *u-* can appear in the complex sociative marker *uko-*, where *ko-* is formally identical with the applicative marker (applicative is a transitivizer without a causativizing function and therefore it retains the underlying subject; as a rule, this Ainu form does not mark a comitative or a benefactive meaning). The combination has four principal usages: in the first two cases it functions as *u-ko-*, each component retaining its meaning, while in two more cases it functions as a single

complex *uko-*. The information is from Alpatov et al. (Ch. 42, §§3.1.1.2, 3.7.1.3, examples (66f), (66j)).

1. The base verb in the triplet under (179) can in principle combine with a postpositional complement (i.e. the base verbs are (potentially) two-place intransitives). This complement does not trigger verb agreement, and the reciprocal prefix can occupy the slot of the agreement marker only. The second member of the triplet, i.e. the *ko-* applicative, is transitive and therefore allows reciprocal derivation. With the applicative form, the complement appears as a human direct object (which may alternate with an inanimate object on some applicatives). In the following example a reciprocal is derived from an applicative, i.e. there is no sociative meaning here.

- (179) *apkas* ‘to go’ (vi)
 → *ko-apkas* ‘to go on a visit to sb’ (vt)
 → *u-ko-apkas* ‘to visit each other’ (vi).

2. In this case the sociative meaning results from the comitative meaning of the applicative, i.e. it is a reciprocal of a comitative; thus the meaning of the applicative is retained in the reciprocal form. Such instances are extremely rare in Ainu.

- (180) *rewsi* ‘to stay somewhere overnight’ (vi)
 → *ko-rewsi* ‘to stay the night *with sb*’ (vt)
 → *u-ko-rewsi* ‘to stay the night *together*’, lit. ‘*with each other*’ (vi).³¹

3. There is an applicative form but its meaning is not retained in the derived sociative, i.e. the sociative form is built by adding the complex prefix *uko-*; thus we observe grammaticalization here, as well as in the last case.

- (181) *nepki* ‘to work’ (vi)
 → *uko-nepki* ‘to work together’ (vi)
 cf. *ko-nepki* ‘to work for/instead of sb’ (vt).

4. There is no applicative form and, as in the previous case, the complex prefix *uko-* is used (*-pa* = PL):

- (182) *uko-etorotur-pa* ‘to snore together’
uko-ipe ‘to eat together’
uko-kirirse-pa ‘to scream together.’

5. There is an applicative form but its meaning is not retained in the derived sociative, i.e. the sociative form is built by adding the complex prefix *uko-*; thus we observe grammaticalization here, as well as in the last case.

31. Compare the analogous opposition in a language where one of the regular meanings of the applicative suffix *-el/-il* is the comitative meaning:

- Haya (Dammann 1954: 168)
 (i) *-nyw-el-a* ‘to drink with sb’ → *-nyw-el-an-a* ‘to drink with each other’
-e-il-a ‘to eat with sb’ → *-e-il-an-a* ‘to eat with each other.’

- (181) *nepki* 'to work' (vi)
 → *uko-nepki* 'to work together' (vi)
 cf. *ko-nepki* 'to work for/instead of sb' (vt).

12.1.2 Sociative as a formally reciprocal derivation from causative (Adyghe, Ainu)

1. *Adyghe*. The rationale for the shift in meaning is not quite clear: apart from an increase in the number of the participants, there seems to be no immediate connection between the causative and the sociative meanings. In Adyghe, the attested derivatives mostly denote either manifestation of emotions or actions motivated by emotions. The underlying causatives are derived from verbs with meanings like 'laugh', 'worry', 'shout', 'play'. In other cases the meaning of reciprocal causatives may be standard, i.e. 'to cause each other to do sth'. In this case one can see weak manifestation of causativization: a person showing his emotions kind of induces other people to show theirs. As we know, laughter is contagious.³²

(Rogava & Kerasheva 1966:273)

- (183) a. *Axər Ø-šbχə-gbə-x.*
 they.ABS 3SG/PL-laugh-PAST-3PL
 'They laughed.'
 → b. *Klālə-m ar Ø-ə-gbə-šbχə-gb.*
 boy-ERG s/he.ABS 3SG-3SG-CAUS-laugh-PAST
 'The boy made him laugh.' (Ø-ə- are object and subject markers)
 → c. *Axər Ø-zrə-gbə-šbχə-gbə-x.*
 they.ABS 3SG/PL-REC-CAUS-laugh-PAST-3PL
 'They laughed (started laughing)', lit. 'They made each other laugh.'

2. *Ainu*. A typological parallel is attested in Ainu (see Alpatov et al., Ch. 42, §7), where sociatives are most commonly derived by a prefix composed of the reciprocal and applicative markers (see 12.1.1 above); there is also a second sociative marker, viz. a circumfix composed of the reciprocal prefix *u-* and causative suffix *-re/-te*. Almost all of the attested sociatives in *u-...-re/-te* are derived from intransitive bases (the literal meaning of the derivatives is 'to make each other do sth', as in the previous case, i.e. in (183c)). In addition to the regular sociative meaning 'together', this combination of affixes may also acquire a more expanded reading 'all (together) [do sth] at once' (see Nakagawa 1995:51; I owe this information to A. Bugaeva). Since the prefix *u-* can occupy the object agreement slot, an intransitive verb must be transitivized first, by means of the applicative prefix, as in (179), or by a causative suffix. In the latter case, it seems, the sociative meaning con-

32. The prominent specialist in and native speaker of Adyghe Z. Kerasheva sees in the situation described in (183c) a causative component. In a letter to me (dated 24 March 1991; translation mine – V.N.) she explained this situation as follows: "Two or three (persons) met. One said something funny and made the other(s) laugh. Another added to it or in his turn told a funny story. And they all laughed: they made each other laugh. Both or three of them, or a group were laughing <...> – there is both reciprocity ('each other') and causativity here." Although in this explanation the events are described as a chain, Z. Kerasheva wrote that the adverb *čəzəu-čəzəukIə* 'by turns' could not be added, but the adverb *ščəgəbəx* 'simultaneously' was possible. I am grateful to her for this explanation.

tains an emotive colouring. It may be not accidental that the informant (the late Ito Oda, a 93-year old Ainu, one of the two or three persons who still spoke Ainu; she died in 2001. I owe this information to A. Bugaeva) did not accept some forms with the sociative prefix *uko-*, e.g. *uko-mina* and *uko-kira* with the intended meanings ‘to laugh together’ and ‘to run together’, respectively, parallel to *u-kira-re* and *u-mina-re* in (184) which are more customary (the two latter forms are registered in the dictionaries and occur in texts). In other cases the informant accepts both sociative forms as correct.

Ainu (Alpatov et. al., Ch. 42, §7)

- (184) a. *kira* ‘to run away, flee’ (vi) → *u-kira-re* ‘for all to run away together’ (vi),
 cf. *kira-re* ‘to cause to run away, to chase’ (vt)
 b. *mina* ‘to laugh’ (vi) → *u-mina-re* ‘to laugh together’ (vi),
 cf. *mina-re* ‘to cause to laugh’ (vt).

This form acquired the plural meaning in Sakhalin Ainu (see (171) above).

12.1.3 Sociative as a formally reciprocal derivation from comitative

Two cases of marking of the derivations named in the heading are registered.

1. *Affixes (Adyghe)*. In Adyghe, there are two reciprocal markers, *zə-rə-* for subject-direct object cross-coreference and *zə-* for subject and non-direct object cross-coreference. The comitative meaning, i.e. the addition of a non-direct object with the meaning ‘with’, is marked with the preverb *də-* with locative meanings like ‘into’, ‘towards’, ‘to’, ‘out of’, ‘on’, etc. The sociative form is derived by means of the complex prefix *zə-də-*. This is the principal means of encoding sociativity in Adyghe. In this case we observe a “sum” of the comitative and the reciprocal meanings; cf.:

Adyghe (Rogava & Kerasheva 1966:277)

- (185) a. *Ar* Ø-*bəna-gə*.
 he.ABS 3SG/PL-wrestle-PAST.3
 ‘He wrestled/fought.’
 → b. *Ar* *klalə-m* Ø-*də-bəna-gə*. comitative
 he.ABS boy-OBL 3-COM-wrestle-PAST.3
 ‘He wrestled *with* the boy.’
 → c. *Axər* *zə-də-bəna-gəə-x*. sociative
 they.ABS REC-COM-wrestle-PAST-3PL
 ‘They wrestled *together*.’

Similar forms are attested in one of the Bantu languages where the reciprocal marker is attached to an applicative form with the comitative meaning; cf.:

Haya (Dammann 1954:168)

- (186) a. *-nyw-a* ‘drink’ → *-nyw-el-a* ‘drink with sb’ → *-nyw-el-an-a* ‘drink together’
 b. *-l-a* ‘eat’ → *-l-il-a* ‘eat with sb’ → *-l-il-an-a* ‘eat together’.

2. *A free item + comitative marker* (English, Russian, Ancient Chinese, Vietnamese, Bamana, Basque). This combination is the “sum” of the meanings of both components. It is attested in a large number of languages (cf. English with *each other* and its equivalents

German *miteinander*, Russian *drug s drugom*, Basque *elkar-ekin*). A reciprocal marker co-occurs with a comitative preposition or postposition or comitative affix. Here are examples from a number of languages.

Vietnamese (Bystrov & Stankevich, Ch. 47, ex. (5); *n hau* = REC; the comitative meaning can be encoded by one of two prepositions or their combination: *v ới* ‘with’, *c ùng* ‘together’, ‘in the company of’)

- (187) a. *Lan đ i+ chơi v ới (c ùng / c ùng v ới) An.*
 ‘Lan strolls *with* An.’
 b. *Lan và An đ i + chơi v ới nhau (c ùng nhau / c ùng v ới nhau).*
 ‘Lan and An stroll *together*.’

Bamana (Vydrine, Ch. 46, §§1.2, 6.3; *ɲ ɔŋ* ‘each other’, *f ɛ* ‘with’, *ɲ ɔŋ f ɛ* ‘with each other’; (188) allows three readings)

- (188) *F ɔla-w bé m ɪsɪ-w g ɛn ɲ ɔŋ f ɛ.*
 i. ‘Fulbe, being *together*, drive cows.’
 ii. ‘Fulbe drive cows (keeping them) *together*.’
 iii. ‘Fulbe, being *together*, drive cows *together*.’

Ancient Chinese (Yakhontov, Ch. 48, ex. (59); in Modern Chinese the reciprocal adverb *h ǔxiāng* does not occur with comitative prepositions)

- (189) a. *xiāng* ‘each other’, *y ǔ* ‘with’ → *xiāng y ǔ* ‘with each other’, ‘together’
 b. *xiāng y ǔ y ǒu* ‘take a walk *together*’
xiāng y ǔ huán ‘returned *together*’
xiāng y ǔ l è zh ī ‘All [of them] rejoice in it.’
xiāng y ǔ xiào zh ī ‘All [of them] laugh at it.’

Not infrequently, this means of coding the sociative meaning is attested alongside a “non-derived” sociative adverb, cf. English *with each other – together*, German *miteinander – zusammen*, Russian *drug s drugom – vmeste*, etc. These parallel means may differ semantically to a greater or lesser degree, depending on the language. For instance, in Kemmer’s opinion (1997:236–7), the Basque *elkar-rekin* <each.other-with> and *batera* ‘together’ are used in synonymous constructions with the verb meaning ‘to go’, but the difference between them is that the former implies a closer interaction between the participants, e.g. when talking or performing some other action.

12.1.4 Sociative as a formally reciprocal derivation from benefactive (Maasai)

In this language, the middle form can be built from derived verbs, e.g. benefactives, and this form in the plural “often conveys reflexive or reciprocal action, or contemporary actions” (Tucker & Mpaayei 1955:152). The authors probably have in mind the sociative meaning when speaking of “contemporary actions”; cf.:

Maasai (ibid., p. 153)

- (190) *ki-as-aki-no.*
 we-work-BEN-NEUTER

- i. 'We work *for each other*.'
- ii. 'We work *together*.'

12.1.5 A sociative marker = a reciprocal marker with an added component of unknown origin (Bantu)

This is observed in those Bantu languages where there is a tendency to formally isolate a sociative marker from the reciprocal, by making the sociative (= associative) marker more complex than the latter, cf. Dabida: *-kund-a* 'to love' → *-kund-an-a* 'to love *each other*' and *-sel-a* 'to take a walk' → *-sel-any-a* 'to take a walk *together*' (Rjabova 1989: 111). In contrast to the four cases considered above, where a reciprocal component is added to a non-reciprocal component (e.g. to an applicative marker), here an additional component is more likely to be added to a reciprocal marker (note that the reciprocal suffix *-an* in many Bantu languages can also express sociativity by itself; cf., for instance, (92), (93)). Characteristically, the attached component is in most cases preposed to the reciprocal marker. There is an opinion that this additional component "is probably the remnant of a lost separate derivative for the Associative form of the verb" (Harries 1950: 73–4). The sociative meaning may probably be ascribed to (206b) and (207b), although a different interpretation seems to be preferable. Here are the reciprocal and sociative markers of four Bantu languages (borrowed from Aksenova 1990: 176; Doke 1938: 198–200; Harries 1950: 73–6):

(191)	Language	Reciprocal marker	Sociative marker
	Dabida	<i>-an</i>	<i>-an-y</i>
	Sotho S.	<i>-an</i>	<i>-ah-an</i>
	Lamba	<i>-an</i>	<i>-ak-an/aŋk-an</i>
	Mwera	<i>-an</i>	<i>-eg-an/-aŋg-an</i> ³³

The Lamba suffix *-ak-an/aŋk-an*, like the Mwera suffix *-eg-an/-aŋg-an*, is, in Dammann's opinion (1954: 168), a failed attempt to create a specialized sociative marker. According to Harries (1950: 73–4), "a degenerated form of an older associative ending <...> has almost entirely merged with the ordinary reciprocal"; cf.:

Mwera

- (192) *gon-a* 'to sleep' → *gon-egan-a* 'to sleep together'
lol-a 'to look' → *lol-egan-a* 'to look at each other.'

On the whole, this problem is not clear and there are no reliable data. It should be added that alongside the prevalent suffix *-an*, extended reciprocal markers like *-any*, *-ane*, *-egan*,

33. Note in this connection that in Delaware the formerly reciprocal suffix *-tī* (cf. *nhil-tō-wak* 'they kill each other') can be discerned in the "emphatic or collective plural" suffix *-ahə-tī* (cf. *kəntk-ahtō-wak* 'they (many) dance'). All the cited examples with this suffix are derivatives from intransitives, which is characteristic of sociative derivatives. This is also supported by the fact that "in the northeasternmost of Eastern Algonquian languages it is used as the ordinary AI plural" (in the non-easternmost languages the suffix *-ahə-tī* functions as sociative – V.N.) (Goddard 1979: 43–5). Compare 11.1 above.

-asan, *-ahan*, *-anġan*, are also cited in the catalogue of reciprocal suffixes in various Bantu languages in Guthrie (1970:215), without any mention of their sociative meaning.

12.2 A reciprocal marker in combination with locative preverbs and prepositions (Kabardian, German)

These combinations are considered in Ch. 1 (see 10.2 and case 2b in 12.1.1.2) in connection with other issues. In a number of languages there is a tendency to closely “associate” a reciprocal marker with locative preverbs and/or locative prepositions or postpositions (denoting joining or separating) and thus build complex preverbs and adverbs, respectively. The latter adverbs in their turn may tend to make up complexes with verbs. Semantically, these complexes can be a trivial summing up of the meaning of the components, and sometimes the interaction of two meanings can be very complicated when the joint meaning is not related to the base without a reciprocal marker. Such complexes become independent items and develop meanings more or less related to the reciprocal.

1. *Kabardian* (after Kazenin, Ch. 17, §9). In this language there are numerous locative preverbs. When used on verbs they increase their valency by adding an indirect object. In order to cross-reference the indirect object and subject or the indirect and direct objects, the reciprocal marker *zə-* is used. As a rule, such derivations denote putting an object together with another or separating it from a surface or a mass or a group of objects. One of such derivations is cited in (193c) which is an object-oriented reciprocal (an extensive list of these derivatives is provided in Ch. 1, §13.1.6).

Kabardian (Kazenin, Ch. 17, ex. (98); the preverb *xə-* introduces an IO of location, direction, or source of movement)

- (193) a. *gəvən* ‘to boil sth’
 b. *xə-gəvən* ‘to boil sth (DO) in sth (water, etc.) (IO)’ vb
 c. *zə-xə-gəvən* ‘to boil several things (DO) together.’ spatial reciprocal vt

The preverb *pə-* may also encode (a) a reverse action, like ‘back’, (b) an action in front of sth. Example (194) illustrates the standard use.

Kabardian (Kazenin, Ch. 17, ex. (79), (81))

- (194) a. *tIəsən* ‘to sit down’ (vi)
 b. *pə-tIəsən* ‘to sit down in front of sth’ (IO) (vi)
 c. *zə-pə-tIəsən* ‘to sit down in front of each other.’ spatial reciprocal vi

On some verbs, however, the combination *zə-pə-* functions as a single morpheme with the meaning of intensity, stressing the sense ‘on all sides or on the whole surface of an object’ (sometimes a verb with *zə-pə-* also acquires the suffix *-xəð-*). There may be no corresponding verb without *zə-*.

- (195) a. *ləðšbI-ən* ‘to clean, dust sth’ (DO) (vt)
 b. **pə-ləðšbI-ən*
 c. *zə-pə-ləðšbI-xəð-n* ‘to clean, dust sth (DO) on all sides.’ (cf. (126g)) diversative/intensive

The list of complex preverbs of the latter type is to be found in Ch. 1, §13.1.5.

2. *German* (for details see Wiemer & Nedjalkov, Ch. 10, §5). As is known, there are two main reciprocal devices in German. One of them is the set composed of the reflexive pronoun *sich* for the 3rd p. and personal pronouns *uns* and *euch* for the 1st and 2nd persons. This marker is used in subject-oriented constructions only. The second marker is the reciprocal pronoun *einander* unmarked for person. The first marker is more widely used. In contrast to the reciprocal *sich*, *einander* can be used with prepositions and constitutes complex combinations with them spelt together. These resultant reciprocal adverbs make up tight combinations with verbs, especially with verbs of spatial relations (like *join*, *separate*). They function as free items, of which the following two adverbs have generally deviated from the meaning of the base prepositions, as their meaning is not the sum of the meanings of the preposition and *einander*:

- (196) *auseinander* 'in different directions, separately', lit. 'one from another'
durcheinander 'pell-mell, in a jumble', lit. 'one through another.'

(197) below contains a few "fixed" collocations of these adverbs with verbs. Usually, dictionaries recommended (before the new rules were introduced) spelling them as one word if the meaning is spatial and separately if the meaning is not spatial (cf. examples in Berger et al. 1972:50, 80, 275, 478, 655, 715, 758). Reciprocals of three-place transitives are predominant among them. We find no proper reciprocal meaning connected with actions or relations of persons who act as agents and patients with respect to each other (i.e. type 'to kill/love each other'). Here is a typical derivation: German *Er fügte einen Stein an den anderen* 'He fitted a stone to another' → *Er fügte Steine aneinander* 'He fixed the stones together'. The derivatives cited below are transitive spatial (they are object-oriented reciprocals and as such they are discussed in §§2.2.4, 5.2, and 13 of Ch. 1).

German (see Wiemer & Nedjalkov, Ch. 10, §5)

- | | | | | |
|-------|----|------------------------------|--------------------------------------|-----------------------|
| (197) | a. | <i>etwas aneinanderfügen</i> | 'to fasten together' | spatial reciprocal vt |
| | | <i>aufeinanderpressen</i> | 'to press together' | spatial reciprocal vt |
| | | <i>übereinanderstapeln</i> | 'to pile, heap sth one upon another' | spatial reciprocal vt |
| | b. | <i>auseinanderdrücken</i> | 'to release, unclasp, unclench' | spatial reciprocal vt |
| | | <i>durcheinanderwerfen</i> | 'to scatter sth around.' | spatial reciprocal vt |

12.3 A reciprocal marker + causative marker for the expression of the intensive meaning (Kirghiz, Lamba)

In Kirghiz, the complex *-š-tər-* is a combination of the reciprocal and causative suffixes, and in the derivatives below it functions as a single marker with the meaning of intensive and/or repeated action (Abdiev 1995:97–8). The respective verbs with the reciprocal suffix alone, i.e. (198b) and (199b), are not immediately related semantically to these derivatives, i.e. to (198c) and (199c). As regards (198a) and (199a), they constitute the standard reciprocal opposition with (198b) and (199b), respectively. (In other cases, type (198c) and (199c) derivatives (with meanings like 'to cause sb to look at each other') can be causative counterparts of the respective reciprocal derivatives.) The cognate complex suffix occurs in

some other Turkic languages (e.g. the suffix *-(i)ş-tir* in Turkish (Lewis 1967: 148), *-ş-tur-* in Uyghur (Kibirov 1989: 296)) and it is unproductive in all of them.

Kirghiz (Nedjalkov, Ch. 28, §10.2)

- | | | | | |
|-------|-----|--------------|--------------------|---------------------------------------|
| (198) | a. | <i>kara-</i> | 'to look at sb' | |
| | → | b. | <i>kara-š-</i> | 'to look at <i>each other</i> ' |
| | but | c. | <i>kara-š-tər-</i> | 'to look for sth <i>intensively</i> ' |
| | | | | reciprocal
intensive |
| (199) | a. | <i>sura-</i> | 'to ask, question' | |
| | → | b. | <i>sura-š-</i> | 'to question <i>each other</i> ' |
| | but | c. | <i>sura-š-tər-</i> | 'to question <i>again and again</i> ' |
| | | | | reciprocal
intensive |

Note that the homonymous complex suffix *-štər-* is also used to mark object-oriented reciprocals (see (181), (182) in Ch. 1).

A similar meaning can be observed in the combination of reciprocal and causative markers in one of the Bantu languages: in a grammar of Lamba (Doke 1938: 196ff.) a distinction is drawn between simple and complex reciprocals: in the former case the reciprocants are two persons or groups and in the latter the reciprocants are many persons or groups; e.g.:

- (200) *pama* 'to hit' → a. *pam-an-a* 'to hit *each other*' (of two reciprocants).
 b. *pam-ansjanj-a* 'to hit *each other indiscriminately in a crowd*'.

The suffix *-ansjanj-* on other stems, e.g. on verbs meaning 'to love', 'to hate', is plain reciprocal and does not correspond to its meaning in (200b) which may be a case of lexicalization; anyway, this meaning does not seem to be productive enough.

- (201) a. *temw-a* 'to love' → *temw-ansjanj-a* 'to love each other', 'to live in harmony'
 (ibid., p. 197)
 b. *fitilw-a* 'to hate' → *fitilw-ansjanj-a* 'to hate each other' (ibid.).

Dammann (1954: 167) relates the suffix *-ansjanj-* to the sequence *-an-k-y-an-y-* which he analyses as reciprocal-intransitive-causative-reciprocal-causative (intransitive = stative – V.N.).³⁴

34. Note that in some of the Bantu languages the causative suffix can also have an intensive meaning. Dammann (ibid.) points out that in Kikongo the combination of the causative and reciprocal suffixes has resulted in the iterative meaning. In separate cases (individual development?) the intensive meaning can be added by the reciprocal suffix alone, as, for instance, in Tsonga (see (i.a)) and Nyiha (see (i.b)).

- | | | | | |
|-----|----|---------------------------------------|--|-----------|
| (i) | a. | <i>quoz-a</i> 'to go bad', 'to rot' → | <i>quoz-an-a</i> 'to become rotten <i>throughout</i> ' | intensive |
| | b. | <i>lamb-a</i> 'to run' → | <i>lamb-an-a</i> 'to run <i>fast</i> ' | intensive |

Curiously enough, a complex suffix *-an-y-an-* in Tonga and Ronga resembling the Lamba suffix *-an-s-j-an-j-* in example (i.b) is used in the diminutive meaning (Doke 1938: 195):

- | | | | | |
|------|----|------------------------------|--|------------|
| (ii) | a. | <i>tal-a</i> 'be abundant' → | <i>tal-anyan-a</i> 'be fairly numerous' | diminutive |
| | b. | <i>famb-a</i> 'walk' → | <i>famb-anyan-a</i> 'travel somewhat (a little? – V.N.)' | diminutive |

Note in this respect that reduplication of *-an per se* need not involve the reciprocal meaning, as is the case in derivatives from monosyllabic bases, e.g.:

12.4 A reciprocal marker attached to a stative (detransitivizing) marker: intensive-stative or spatial-resultative (Bantu)

These two meanings are marked on intransitive stems derived from transitive bases by means of a stative marker *-ik/-ek, -ak/...*. Judging by the examples cited in the literature, the latter derives mostly anticausatives (*vunj-a* ‘to break sth’ → *vunj-ik-a* ‘to break’ (vi)) and potential passives from transitives (203a), (204a)); see Aksenova 1990: 174–6).

1. The following examples illustrate the intensive-stative meaning:

Shambala (Roehl 1911: 192)

- | | | | | |
|-------|----|---------------------|-----------------------------|-----------|
| (202) | a. | <i>tail-ik-a</i> | ‘to be known’ | |
| | b. | <i>tail-ik-an-a</i> | ‘to be very well-known’ | intensive |
| (203) | a. | <i>jil-ik-a</i> | ‘to be edible’ | |
| | b. | <i>jil-ik-an-a</i> | ‘to be quite (very) edible’ | intensive |
| (204) | a. | <i>on-ek-a</i> | ‘to be/become visible’ | |
| | b. | <i>on-ek-an-a</i> | ‘to become quite visible’ | intensive |

In some Bantu languages, type (204a) stative forms of some verbs are not used. Instead, forms with the complex suffix are employed, and the intensive meaning is absent, e.g.:

Swahili (Dammann 1954: 169)

- | | | | | |
|-------|----|--------------------|-----------------|-------------------|
| (205) | a. | <i>on-ek-an-a</i> | ‘to be visible’ | potential-passive |
| | b. | <i>jul-ik-an-a</i> | ‘to be known’ | |

The complex suffix *-ik-an/-ek-an* can also have a habitual meaning in Swahili (Meinhof 1928: 53) which is very closely related to the iterative meaning, the latter in turn related to the intensive.

2. The spatial-resultative meaning, in particular joining (206) and separating (208), can be perceived in the examples, although the authors (Doke 1938: 11; Dammann 1954: 166) see the sociative (associative in their terminology) meaning. True, with regard to inactive objects the sociative meaning is akin to spatial, because the sociative meaning presupposes spatial proximity of the participants. In cases with inactive objects a kind of semantic neutralization between the sociative and the spatial reciprocal meanings seems to take place (although in (208b) it is hard to perceive the sociative meaning). The derivatives below are formed from transitives and undergo detransitivization; therefore Dammann (*ibid.*, pp. 166–7) interprets the derivatives as containing two suffixes rather than one joint suffix, the stative suffix being the detransitivizer. Nevertheless, neither Doke nor Dammann cite the possible intermediate forms, i.e. one-place intransitive statives with the suffix *-ak* (with meanings like ‘to be buried’) and/or two-place transitive spatial or object-oriented sociative forms with the suffix *-an* (with meanings like ‘to bury sb and sb together’). As was mentioned above, we observe here a kind of “skipping one deriva-

-
- | | | | | |
|-------|----|-------------------|--|------------|
| (iii) | a. | <i>ba</i> ‘beat’ | → <i>b-an-an-a</i> ‘beat each other’ | reciprocal |
| | b. | <i>zwa</i> ‘hear’ | → <i>zw-an-an-a</i> ‘hear each other’ (<i>ibid.</i>) | reciprocal |

tional step” (see (136)). The final forms in these chains are one-place intransitives but their meaning is more complex than that of the two-place transitive bases. This meaning can be regarded as spatial resultative, because the meaning of joining is absent in the base verbs and it appears in the resultative form. Unfortunately, this exotic case is represented by too few examples.

Lamba (Doke 1938: 198–9)

(206)	a.	<i>sika</i>	‘to bury sb’	
	b.	<i>sik-akan-a</i>	‘to be buried together’	spatial resultative
(207)	a.	<i>penda</i>	‘to count sb’	
	b.	<i>pend-anʒkan-a</i>	‘to be counted together’	spatial resultative
(208)	a.	<i>pūt-a</i>	‘to cover sb/sth’	
	b.	<i>pūt-akan-a</i>	‘to be spread abroad’	spatial resultative

12.5 Combination of a reciprocal suffix with a sociative marker, with the reciprocal meaning retained (Evenki, Buryat)

This case is attested in a few languages.

1. *Evenki*. In this language the sociative marker is used in the reciprocal sense as well, and in some dialects there is a strong tendency to use sociative forms (the suffix *-ldə-*) instead of reciprocals (the suffix *-maat-/-meet-*). Most probably, these dialects have retained the primary meaning of *-ldə-* better than other dialects. These suffixes can also be used jointly, as *-ldə-meet-*. Therefore, the reciprocal meaning can be expressed on the same stem in three ways (cf. also 3.3.5 where this material is considered from a different angle):

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §§4 and 6)

(209)	<i>kik-</i> ‘to bite’	→	<i>kik-meet-</i> ‘to bite each other’	reciprocal
			<i>kik-ldə-</i> (same)	reciprocal
			<i>kik-ldə-meet-</i> (same)	reciprocal

2. *Buryat*. In this language, as well as in its close relative Khalkha-Mongol, the reciprocal and sociative markers are often used in either sense.

Buryat (Nedjalkov et al., Ch. 29, ex. (26d))

(210)	<i>hubaa-</i>	‘to divide/distribute sth among sb, share’	lexical reciprocal
	<i>hubaa-lda-</i>	‘to divide among oneself, take part in sharing sth’	reciprocal
	<i>hubaa-isa-</i>	(same meaning)	reciprocal
	<i>hubaa-lda-isa-</i>	(same meaning)	reciprocal

12.6 A two-component reciprocal marker containing a marker of transitivity and/or causativity (East Futunan, Halkomelem, Herero, Kwanjama, Kalkatungu)

The cause of such paradoxical combinations is not clear (cf. the combination of the reciprocal and causative markers for expressing the sociative meaning in 12.1.2 above). The causative meaning is not felt.

1. *East Futunan* (Moysse-Faurie, Ch. 35, §§3.2, 3.3). In this language, there are two circumfixes with a reciprocal function, *fe-...-(C)aki* and *fe-...-(C)i* where the suffixes are transitivity or causative when used alone:

East Futunan (ibid., ex. (14))

(211) *sōsō* ‘to move (oneself)’ → *sōsō-’aki* ‘to push sb’ causative

Despite the transitivity and causativizing components, derivations with these circumfixes are intransitive:

East Futunan (ibid., ex. (49))

(212) *alofa* ‘to love’ → *fe-alofa-’aki* ‘to love each other’ reciprocal

2. *Halkomelem* (Gerdts 1999: 138, 136, 151; see also (90) above). Although the combinations of affixes in East Futunan look rather odd and idiosyncratic, similar combinations are attested in Halkomelem. In this language a transitive marker *-t-* always precedes not only the reciprocal marker but both reflexive markers and even the passive marker. According to Gerdts, these combinations have been reanalyzed as single suffixes. Thus, reciprocal *-təl* is historically composed of the transitive component *-t-* and reciprocal component *-əl* which is not used separately at present, while *-t-* is. The suffix *-t-* is also a part of the passive and reflexive markers.

3. *Herero*, *Kwanjama* (Dammann 1954: 167). In these languages, the complex suffixes *-as-an-* (Herero) and *-af-an-* (Kwanjama) composed of the causative and reciprocal suffixes (where the components *-as-* and *-af-* have lost their causative meaning) have ousted the old reciprocal suffix *-an*.

4. *Kalkatungu* (Blake 1979: 43). There is a reflexive-reciprocal suffix *-ti*, but it operates on transitive verbs only. From two-place intransitive verbs with a dative or locative object, reciprocals are derived by means of the transitivity suffix *-(y)cama* in combination with *-ti*; cf. *nanti-* ‘to bark at’ → *nanti-kama-ti* ‘to bark at one another’, *luṅa-* ‘to cry for sb’ → *luṅa-ntiti-cama-ti* ‘to cry for one another’ (*-ntiti-* = PL). This may be one of the ways a two-component reciprocal marker develops with a causative or transitivity marker included, as in the previous three cases.

13. Reciprocal marking of kin relationships on verbs (Martuthunira)

Dench (1995: 153; see also Dench 1987: 326–7) claims that alongside the reciprocal and sociative (termed collective by Dench) meanings, the suffix *-marri-/yarri-/...* can be used in the meaning he terms kin group “<...> to emphasize the existence of a particular kin relationship in the clause. Specifically, the suffix indicates that the participants are in the same alternating generation set”; cf. (the derivatives are extracted from clauses; bold type mine – V.N.):

Martuthunira (ibid., p. 154)

- (213) a. *parrungka-marri-* ‘to look at each other’ reciprocal
 b. *karwa-marri-* ‘to get up together’ sociative
 c. *Ngawu, ngayu kangku-layi kartungu.*
 yes 1SG.NOM tak-FUT 2SG.ACC
nhawu-yarri-waa nyinu-malyura-ngu. kin relationship
 see-COLL-PURPS=O brother.in.law-2POSS-ACC
 ‘Okay, I’ll take you to see your brother-in-law.’

This case where kin relations between the participants are marked on the verb is an intermediate link between marking of reciprocal actions and marking of kin relations on nouns, the latter being the subject matter of Nedjalkov (Ch. 7); cf.:

Adyghe (Rogava & Kerasheva 1966:276–7)

- (214) a. *kɔoʃ* ‘brother’ → *zɔ-kɔoʃ* ‘brothers to each other’ (= brothers by the same father)
 cf. b. *Iučlən* ‘to meet sb’ → *zɔ-Iučlən* ‘to meet each other’

14. Lexicalization

There are two formal types of lexicalized reciprocals: (a) verbs formally relatable to non-reciprocal bases, but without a standard semantic relation (cf. Yakut *et-* ‘to say, speak’ → *et-is-* ‘to quarrel’), and (b) *reciproca tantum*, or *deponentia*, which have no non-reciprocal counterpart (cf. Yakut *tubu-s-* ‘to make peace with sb’ ← **tubu-*). In many languages, lexicalization of reciprocals is a common enough phenomenon, and in some, e.g. Chukchi, it is practically non-existent. Given a non-standard, individual semantic shift, the resultant meaning can be either reciprocal or non-reciprocal. However, the two meanings are not always based on the standard reciprocal opposition, e.g. the Tatar reciprocal *sug-əʃ-* (← *sug-* ‘to hit’) has two meanings: regular reciprocal (i) ‘to hit each other’ and lexicalized meaning (ii) ‘to fight’ clearly relatable to (i) (Zinnatullina 1969:196). But the Kirghiz *agar-əʃ-* ‘to forgive the past to each other’ is not semantically relatable to the base *agar-* ‘to glitter, look white’ from which a standard reciprocal cannot be derived at all. Generally, lexicalization does not include the sociative, comitative, assistive and some other meanings as they are a result of regular semantic changes.

Lexicalized items constitute a considerable part of lexical reciprocals. Commonly, lexicalized reciprocals have meanings like ‘to quarrel’, ‘to fight’, ‘to agree’, ‘to meet’, ‘to share’, ‘to compete’, ‘to have sexual intercourse’, etc. (see Ch. 1, case (ii) in §2.3 and also §16). They can be subdivided as follows: (a) semantically reciprocal lexicalizations, falling into predictable and idiosyncratic, and (b) non-reciprocal lexicalizations, denoting either response actions or non-response actions.

1. The meaning of a lexicalized derivative is/remains reciprocal; in this case we observe:

1a. Predictable lexicalizations with an expected transparent associative shift of meaning recurrent across languages; a typical example is the meaning ‘to fight’ of reciprocally marked derivatives from the base meaning ‘to beat, hit, kill’.³⁵ Another typical case is the meaning ‘to quarrel’ of derivatives from bases meaning ‘to say, speak’. Some derivatives have two meanings, a lexicalized and retained standard reciprocal meaning. Compare:

Ainu (Alpatov et al., Ch. 42, §8)

- (215) a. *rayke* ‘to kill’ → *u-rayke* ‘to fight, have a duel’
 b. *yee* ‘to say’ → *u-yee* ‘to quarrel, argue.’

Swahili (Loogman 1965: 141; Ovir 1896: 258; Loogman 1965: 140)

- (216) a. *-pig-a* ‘to strike’ → *-pig-an-a* i. ‘to fight’, ii. ‘to put forth great effort’
 b. *-nen-a* ‘to speak’ → *-nen-an-a* i. ‘to argue’, ii. ‘to talk to each other’
 c. *-sikiz-a* ‘to listen’ → *sikiz-an-a* ‘to agree together.’

Yakut (Kharitonov 1963: 46)

- (217) *et-* ‘to say, talk’ → *et-is-* i. ‘to quarrel, argue’, ii. ‘to say to each other.’

Japanese (Alpatov & Nedjalkov, Ch. 25, §7)

- (218) *i-u* ‘to say, speak, tell’ → *ii-a-u* ‘to dispute with each other.’

1b. Unpredictable lexicalizations which are unique and idiosyncratic; cf.:

Japanese (ibid.)

- (219) *kam-u* ‘to bite’ → *kam-a-u* ‘to be harmonious’
toke-ru ‘to melt, dissolve’ (vi) → *toke-a-u* ‘to be reconciled with each other.’

2. The lexicalized meaning of a derivative is not reciprocal. Two types of derivatives can be distinguished here:

2a. The meaning of the derivative implies a response action (e.g. ‘to enquire’) or is a response action itself (e.g. ‘to persist’), this meaning being close to the reciprocal:

Yakut (Pekarskij 1959: 431, 2360, 2361)

- (220) *bečigennee-* ‘to be stubborn, resist’ → *bečigenne-s-* ‘to persist’
suraa- ‘to inquire’ → *sura-s-* ‘to inquire’;³⁶

35. In general, derivatives from bases with this meaning occupy a special place among reciprocals. Interestingly, in the Australian Gumbaynggir language the verb with this meaning is the only one taking overt reciprocal marking, cf.: *bu(m)-* ‘to hit, kill’ → *bum-iri* ‘to fight’. As the author notes, this base “is probably semantically the verb most likely to be used in a reciprocal sense” (Eades 1979: 314–5). She also notes that “<...> in Yidiny (Dixon 1977: 282), the verb ‘hit’ is the only verb which when reduplicated forms an intransitive reciprocal” (ibid., p. 315).

36. Note in passing that the relationship ‘to inquire’ – ‘to answer’ is similar to the converse meaning of the reciprocal suffix in (2b), namely, *atəlaa-* ‘to sell’ → *atəla-s-* ‘to buy from sb’. This interesting opposition can also be marked by a causative morpheme, cf. Muna *ada* ‘to borrow’ (cf. ‘to sell’ – V.N.) → *-fo-ada* ‘to lend’ (lit. ‘to cause to borrow’; cf. ‘to buy’ – V.N.) (van den Berg 1989: 282). In Ancient Greek, this semantic opposition is encoded by

b. The meaning of the derivative does not imply any response action and is not a response action itself:

Kirghiz (ibid.)

(221) *kir-* ‘to enter’ → *kir-iš-* ‘to begin with.’

Ainu (Alpatov et al., Ch. 42, §8)

(222) *nukar* ‘to see’ → *u-nukar-e* ‘to peep at sb.’

15. Evolution of new meanings (reflexive, autocausative, deaccusative) of sociative-reciprocal markers

Most commonly, these meanings are encoded by reflexive-reciprocal markers, which is quite natural due to their reflexive origin. Nevertheless, in some Turkic languages these meanings are occasionally marked by a sociative-reciprocal marker. I will try to show the connection between the situations denoted by the derivatives cited below and reciprocal situations and the possible path of the evolution of these meanings. Examples:

1. Reflexive

Tuvan (Kuular, Ch. 27, §5.5.4)

(223) *Siler xünnün-*ne* xavan-nar aškaš malgaš-ka bora-ž-r ulus-tur siler.*
 you every.day-INTS pig-PL like dirt-DAT smear-REC-PART people-be 2PL
 ‘You, like pigs, smear yourselves with mud (from the lake).’

2. Autocausative (body move)

Tuvan (ibid., §5.5.5)

(224) *Čalan terek-ke oraa-ž-ə ber-gen.*
 snake tree-DAT coil(vt)-REC-CONV AUX-PERF.3
 ‘The snake has coiled round a tree.’

3. Deaccusative

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §10.2.4)

(225) *Ba-ttan tut-us!*
 rope-ABL hold-REC.IMP.2SG
 ‘Get hold of the rope!’

The common feature of all the three cases is that all base verbs denote contact, which makes it possible to use a detransitivizing reciprocal marker: the derivatives denote spatial contact or interaction between two entities, and this meaning is akin to the meaning of reciprocal spatial contact (cf. object-oriented reciprocal spatial *C mixed A and B* or subject-oriented reciprocal spatial *A and B got mixed*), the difference being the semantic

middle inflection, cf. *δανεϊζω* ‘to lend money at an interest rate’ – *δανεϊζομαι* ‘to borrow money’. Cf. also Tagalog (92f).

status of the participants: in the case of reciprocals they belong to the same semantic class and perform identical double roles, while in (223)–(225) the participants belong to different semantic classes (animate and inanimate, viz. ‘(with) mud’, ‘(round) a tree’, ‘(of) the rope’) and perform different roles, but this difference is outweighed by the meaning of spatial contact or interaction.

16. Concluding remarks

In view of the fact that the aim of the typology of the polysemy of reciprocal constructions is a discussion of the meanings that can be compatible with the reciprocal meaning in the same marker cross-linguistically, in an attempt to find out the typical patterns of polysemy, the following should be stressed.

Polysemy of reciprocal markers is highly complicated and reveals an extraordinary scope of meanings and immense differences between languages in this domain. Note in the first place that, as pointed out above, there are languages with only monosemous reciprocal markers, only polysemous markers and also with both types of markers which may enter into complicated relations (see 1.1.1).

16.1 Three main polysemy patterns and prevalent types of valency change

In the polysemy of reciprocal markers, diverse meanings can be present, but the closest and most frequent meanings concomitant with the reciprocal are, as is established in the literature, reflexive, sociative and iterative. A polysemous reciprocal marker can express one of these meanings alongside the reciprocal (and possibly some other meanings not named here). Accordingly, three main types of polysemy are distinguished here: *reflexive-reciprocal* (with shared anaphoric function), *reciprocal-sociative* (with shared plurality (= more than one) of the participants), and *iterative-reciprocal* (shared plurality of actions performed in reciprocal situations either simultaneously or in succession). The reciprocal meaning generally entails detransitivization (with the exception of two diathesis types, “indirect” and “possessive” of verbal reciprocal markers, and pronominal reciprocal markers as they retain their nominal properties). Each of the three main types of polysemy patterns of reciprocal markers is characterized by the prevalent type of valency change in the non-reciprocal meanings. These types of polysemy are represented in many diverse languages of the world:

1. *The reflexive-reciprocal polysemy* is attested in many Indo-European, Australian, Nilo-Saharan, West-Atlantic, Semitic, Uto-Aztecan and other languages (see Section 2). This type involves detransitivization (cf. the reflexive, autocausive, anticausive, antipassive, deaccusative, potential-passive and other meanings typical of middle markers) or at least valency decrease (cf. impersonal) (see (40)).

2. *The reciprocal-sociative polysemy* is characteristic of Altaic, Tungusic languages, Tagalog, Indonesian, some of the Bantu languages (see Section 3). In this type, valency

retention (as in sociatives) or increase (cf. alternative, competitive, comitative, assistive, causative and other attendant meanings) are common, and the number of the participants mostly increases (cf. (85)).

3. *The iterative-reciprocal polysemy* is characteristic of many Austronesian, in particular Oceanic languages (Section 4). In this type of polysemy, valency retention is predominant (cf. the iterative, durative, habitual, reciprocal and other meanings – they do not obligatorily require non-singular participants; see (111)).

The reflexive-reciprocal polysemy is opposed to the other two types as reflexive-oriented to nonreflexive-oriented (= plurality-oriented), as the latter two patterns share the feature of plurality absent in the first type. Some of the meanings are attested only among nonreflexive-oriented reciprocal markers, viz. pseudo-reciprocal (see 11.2), plural (see 11.1), assistive (see Bari (122d, e), Tuvan (101b, c)), spatial-reciprocal (see Khmer (119h), Evenki (103) and Swahili (93d)).

16.2 Possible etymological relations

From the semantic and etymological viewpoints, the reciprocal meaning relates in a different way to the reflexive, sociative and iterative meanings (they are listed in order of assumed affinity to the reciprocal): a reflexive marker can acquire the reciprocal function, a reciprocal marker can acquire the sociative meaning and an iterative marker can acquire the reciprocal with a greater degree of probability than the other way round.

When acquiring a new function, the markers named can either retain their form (cf. German *sich lieben* ‘to love oneself/each other’) or become a part of a more complex marker. In the latter case, the shared part is likely to be

1. *A reflexive marker* in the case of a reflexive and a reciprocal markers (see, for instance, Yurok (15) above).

2. *A reciprocal marker* in the case of a reciprocal and a sociative markers (see, for instance, Adyghe (22) above).

3. *An iterative marker* in the case of an iterative and a reciprocal markers (cf., for instance, Bilin in case 2a, §1.4.3).

In case 2, the second part of the sociative marker may be such valency-increasing markers as applicative (cf. Ainu in 12.1.1), causative (cf. Adyghe and Ainu in 12.1.2), comitative (cf. Adyghe in 12.1.3) and even benefactive (cf. Maasai in 12.1.4).

16.3 Relations between verbal sociative and reciprocal markers

With respect to the relations between the expressions of sociativity and reciprocity, and also productivity of these meanings (when their expression is the same), at least the following five types can be distinguished:

1. *The sociative marker is different from the reciprocal marker* (or includes it, as noted above); cf. the sociative suffix *-d* and reciprocal suffix *-onndir* in Fula (Koval’ & Gnàlibouli 1997: 161, 167).

2. *The sociative and the reciprocal share a marker*, both meanings being productive; cf. the Tagalog circumfix *mag-...-an*; see 3.2.

3. *The sociative and the reciprocal share a marker*, which is of low productivity in the sociative meaning; cf. the Japanese suffix *-a*; see 3.3.

4. *The sociative and the reciprocal have different markers* but the sociative marker (alone or fused with the reciprocal marker) is sometimes used in the reciprocal sense; cf. the suffixes *-maat* and *-lda* respectively in Evenki; see 3.5.

5. *The sociative and the reciprocal have different markers* (according to grammars), but each of the markers can be used in the other sense, reciprocal or sociative respectively, the choice and interchangeability being not clear; cf. the Buryat reciprocal suffix *-lda* and sociative *-lsa*; see 3.6.

Relations analogous to these five types can also occur in the other two polysemy patterns, i.e. reflexive-reciprocal and iterative-reciprocal. Thus, for instance, the situation in Appalai is similar to case 4, as the prefix *at-* is both reflexive and reciprocal, and the prefix *at-at-* is reciprocal only (see (17) above). Case 5 seems to have existed in Juwaljai where the reciprocal marker *l-ŋili* and reflexive *-iŋili* exchanged functions (see (74) above), which seems to indicate that each of the markers had both meaning.

16.4 Extended main polysemy patterns

As mentioned, each of the three main polysemy patterns may include a number of other attendant meanings. Each of them may be extended by a third meaning out of the three main meanings concomitant with the reciprocal, and thus we obtain three extended types of polysemy, each a combination of the reciprocal meaning with two other main meanings (cf. 1.4.5). They are:

1. *Reflexive-reciprocal-sociative polysemy*; attested in some Australian languages (see Section 5).

2. *Iterative-reciprocal-reflexive polysemy*; the only attested case is the non-productive prefix *mag-* in Tagalog (see Section 6).

3. *Iterative-reciprocal-sociative polysemy*; attested in Oceanic languages (see Section 7).

A combination of all the four meanings, i.e. a marker with the reciprocal-reflexive-sociative-iterative polysemy, is not attested so far.

These extended types, both with and without any additional meanings, are much less common across languages than the above three (non-extended) main types with or without any other additional secondary meanings.

Curiously enough, some of the unproductive markers display rare and even unexpected polysemy patterns. For instance, case 2 is illustrated by the Tagalog prefix *mag-* (about 30 derivatives all in all; see Shkarban & Rachkov, Ch. 22, §3.1) but not by the productive Tagalog sociative-reciprocal marker *mag-...-an* which does not have the reflexive meaning. Case 1 can be illustrated by the unproductive East-Futunan prefix *fe-* (about a dozen derivatives; Moyses-Faurie, Ch. 35, §3.1) but not by the productive marker *fe-...-ʼaki* which has no reflexive meaning (see (124)). In Khmer, the unproductive prefix *prv-* (about 60 derivatives attested in *Dictionnaire* 1962:611) has, among others, meanings like

the reciprocal, iterative, causative and spatial (119). It is not clear whether some of the meanings are relics of productive meanings of the earlier period or an individual evolution caused by the semantic bleaching of the markers in question. On the other hand, a bleached marker may come to express a meaning which is pragmatically the most likely (especially if the base verb allows polysemy of the derivative). For instance, the derivative from a verb meaning ‘to push’ is likely to mean ‘to push each other’ and the derivative of ‘to run’ is likely to be sociative ‘to run together’ (which is natural for productive markers with reciprocal-reflexive polysemy), but the derivative from a verb meaning ‘to scratch’ is more likely to acquire the reflexive meaning ‘to scratch oneself’ rather than the reciprocal ‘to scratch each other’ because pragmatically the former is likely to be more common.

The reflexive-sociative and reflexive-iterative polysemy have occurred among markers which also have a reciprocal meaning, which is natural since these pairs of meanings do not share any common features, while the reciprocal meaning is contiguous to all the other three meanings and thus it is kind of intermediate between them and serves as a semantic bridge between them. As concerns the iterative-sociative polysemy, i.e. a polysemy without the reciprocal meaning, this type of polysemy has been registered more than once (see, for instance, Panare (29)).

16.5 The same additional meanings in the main polysemy patterns

Although generally each of the three main types of markers displays a characteristic set of meanings (simplified charts are shown in (40), (85) and (111)), sometimes the meanings characteristic of one type of polysemous markers appear in another type of markers, e.g. the anticausative, antipassive, potential-passive and passive, and competitive (see Section 9). These meanings may differ in productivity when expressed by the markers with different polysemy. For instance, the anticausative meaning highly characteristic of reflexive-reciprocal markers (e.g. 1400 items in Russian) is unproductive in the non-reflexive reciprocal markers (e.g. not more than 20 in Yakut; being limited to three-place transitives, mostly lexical reciprocals) (see 9.1). An additional (secondary) meaning may be more productive in genetically unrelated languages with different types of polysemy than in closely related languages with the same type of polysemy. For instance, the competitive meaning of the marker with sociative-reciprocal polysemy in Karachay-Balkar is productive (competitives can be formed from all verbs whose meaning allows it – about 40 registered items), while in other Turkic languages the number of competitives does not exceed 5–10 items (e.g. in Kirghiz and Yakut) and they are non-existent in some (e.g. in Azerbaijani). A rather numerous group of derivatives with the competitive meaning (about 25 items) exists in Bulgarian. In other Slavic languages (Serbian and Czech) competitives are minimally attested (see 9.4).

16.6 Extensions of the reciprocal meaning

This may concern both polysemous and monosemous reciprocal markers. These markers, when used in the reciprocal sense, may differ in combinability, syntactic and lexical

contexts across languages. For instance, they may combine with two-place transitives only or with two-place intransitives, or they may have individual restrictions on combinability. And there are even more idiosyncratic cases, such as the following. Note that these meanings stand apart from all those considered in the polysemy patterns, and it is rather hard to explicate any features common to them.

1. *Relativizing function.* In Kabardian (case 1 in 10.1), the reflexive and reciprocal markers are used on participles in the agreement slots of certain types of the relativized noun phrases, i.e. in syntactic structures like ‘The horse I am looking at’ (with the underlying structure ‘I am looking at the horse’).

2. *Pseudo-reciprocity.* This is the use of a reciprocal construction instead of the underlying non-reciprocal one, namely, with the pattern ‘Mother suckles the baby’ – ‘Mother and baby suckle each other’, as in Tuvan, Boumaa Fijian, Vietnamese, Chinese (see 11.2).

3. *Converse-reciprocal meaning.* This is the meaning of derivatives used in clauses like

(a) ‘A and B and C follow each other’, from verbs of joint motion meaning ‘to follow’, ‘precede’, ‘chase’, and the like (see Ch. 1, §10), or

(b) ‘X piled A, B and C one upon another’, from verbs like ‘to heap up’, ‘to pile up’ and the like (cf. (119h)).

The relations between the participants are usually shown as $A - \nu - B - \nu - C$, where B is related to A as C is to B , i.e. one object which lies upon another is under a third one at the same time. As a rule, cases like (a) and (b) are marked by reciprocal markers across languages.

Type (b) is only one of the sets of spatial reciprocals, another set being comprised of reciprocal derivatives with meanings like ‘to join two objects together’ (see (113), (114), (116) in Ch. 1), with symmetrical relations between the objects (in type (b) the relation between the objects is not symmetrical but converse).

4. *Response and anticipatory reciprocity.* In Cashinahua, a reciprocal sentence based on the verb meaning ‘to kill’ may have the following readings: i. ‘X and Y killed each other’ if the subject denotes two reciprocants, but if there is one collective participant and the second one is not named but implied two more readings are possible: ii. ‘X killed Y whose relatives had killed X’s relative in the past’, iii. ‘X killed Y and expects to be killed by Y’s relatives’ (see 10.2).

In connection with the last case, it should be noted that the problem of simultaneity or succession is relevant for the standard reciprocal meaning, though to a lesser degree. Depending mostly on the lexical meaning of the base verb (and, to a lesser degree, on the choice of construction), the reciprocal form can denote either simultaneous or successive subevents. The successive reading is characteristic of verbs with lexical meanings like ‘to visit’, ‘to help’, ‘to borrow’, ‘to accompany’, etc. (cf. (144)–(147) and the relevant text in §10.7 of Ch. 3).

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CHAPTER 6

Reciprocal and polyadic (Remarkable reciprocals in Bantu)*

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1. Introduction

The reciprocal event structure constitutes a significant coding problem for languages: the reciprocity implies *symmetry*, in contrast with the inherent *asymmetry* of event construal in natural languages (Langacker 1990:222; Croft 1994:90). The problem resides so deeply in the nature of grammar that it persists even in artificial meta-languages of linguistics, so that in order to render the reciprocal semantics linguists would resort to a combination of *two* converse propositions (or their equivalent in another meta-language), as roughly represented by the following scheme:

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$$(1) \quad [A \text{ AND } B] V_{+REC} = (A \text{ V } B) \text{ AND } (B \text{ V } A).$$

In contrast with this, many natural languages do encode a reciprocal situation by means of a single clause, or, in other words, as a single event.¹ This means that they succeed in finding a solution for the coding problem posed by the contradiction between reciprocity and asymmetrical event construal.

Basically, this solution is very simple: the reciprocal participants are just treated as a single whole, that is, instead of encoding symmetry, languages encode role identity between the reciprocal participants. In a sense, this is true for any language: if a language has a mono-clausal reciprocal construction, all reciprocal participants can or must be represented by a single constituent (“simple” reciprocal construction in terms of Chapter 1), the relation between these participants being signaled by some overt marker elsewhere in the clause. In some languages, however, the essence of this coding solution is also reflected in the choice of the reciprocal marker, that is, the reciprocal encoding can be viewed as one of the functions of a more abstract grammatical device signifying role identity between separate participants. This phenomenon is interesting, since the reciprocal markers are commonly thought of as expressions signifying co-reference between participants serving different roles in the situation, a notion which reflects only one of the available typological options. The strategy to be discussed in this paper is precisely opposite: what is marked is not that two roles are performed by a same referent, but rather that that two (or more) referents are assigned the same type of participation in the event.

2. Polyadic roles and participant sets: A summary of cross-linguistic evidence

The reciprocal belongs to a wide range of complex event structures that assign the same type of participation in the event to multiple participants. Apart from the reciprocal, this type of event structure subsumes the sociative (collective), the distributive, the converse (chaining), the competitive, etc. This event type will be referred to below as *polyadic*, cf. the following definition:

- (2) *Definition.* Some type of participation in an event constitutes a *polyadic participant role* if it must be shared by minimally two separate participants. An event structure counts as *polyadic* if it involves such a role.

The cross-linguistic relevance of the polyadic event type is manifested by a recurrent marking pattern whereby one morpheme is used to encode a range of semantically very different polyadic structures (Lichtenberk 1985, 1999; Kemmer 1993:98–9). This marking pattern has been attested in a variety of non-related languages (e.g. Bantu, Turkic, and Oceanic) and is extensively exemplified in many chapters of this monograph. A few representative examples are given below:

1. This paper discusses only mono-clausal reciprocal constructions.

Kinyamwezi (Maganga & Shadeberg 1992: 164).

- (3) *chim-ana* ‘to fight with knives’
 -ikal-ana ‘to live together.’

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §§9.2.1.1, 9.2.1.2)

- (4) *tapta-s-* ‘to love each other’
 kös-üs- ‘to fly together.’

Nêlêmwa (Bril, Ch. 34, §§3.1.1.1.1, 8.4.2)

- (5) *pe-yage-i* ‘to help each other’
 pe-hâgee ‘to fish together’; ‘to fish in different localities.’

Tuvan (Kuular, Ch. 27, §5.5.2)

- (6) *toolda-š-* ‘to tell fairytales to each other’, ‘to compete in telling fairytales.’

The polyadic participant role is a manifestation of a more abstract notion of *participant set*, which covers all cases where two or more separate individuals are ascribed the same type of participation in the event, including NP-conjunction (Maslova 1999). However different these phenomena may seem, they are encoded by means of formally identical morphemes in a number of languages. For example, the Yukaghir morpheme *n'e* renders the reciprocal meaning if prefixed to a verb and serves as an NP conjunction marker if suffixed to a noun:

Kolyma Yukaghir (field notes)

- (7) *odu-pe* *kukujerd'i-pe-n'e* *n'e-nuk-telle* *n'e-lejtej-ngi*.
 Yukaghir-PL Even-PL-CONJ REC-find-SS:PFV REC-learn-3PL.INTR
 ‘The Yukaghir and the Even met each other and got to know each other.’

Similar marking patterns are attested in Riau Indonesian (David Gil, p.c.), Thargari and Yinggarda (Dixon 1980: 433), and in Bantu (see 3.2-3.3). Another manifestation of the intrinsic link between the two major types of participant sets is the following implicational universal:

- (8) If a language has a reciprocal construction, it also has NP-coordination.

The cross-linguistic data collected in this volume shows that the simple reciprocal diathesis is a typologically unmarked option, that is, a language has the discontinuous reciprocal construction only if it also has the simple one, but not vice versa. In other words, if a language has a reciprocal construction, it must allow the reciprocal participants to be represented by one constituent (the same generalization apparently applies to other polyadic structures). Yet the only universal strategy of NP-conjunction is the *comitative* marking, whereby the conjoined NPs are not parts of the same constituent (Mithun 1988: 337–9; Stassen 2003). Thus, the comitative strategy could only give rise to a discontinuous reciprocal construction, which seems to be impossible in absence of a simple construction. This implies that the *NP-coordination* is a necessary prerequisite for the development of a

reciprocal construction, and, indeed, there seems to be no language that has a reciprocal construction but no NP-coordination (V.P. Nedjalkov, p.c.).

3. Reciprocal, polyadic and participant set across Bantu

Most Bantu languages instantiate the polyadic strategy of reciprocal marking, i.e. the reciprocal and sociative event types are subsumed under a single verbal category (cf. Dammann (1954) for an extensive exemplification and discussion). The polyadic suffix is rendered in grammars of various Bantu languages as *-an-*, *-na-*, *-ne* or *-ana-* (sometimes, different forms are given in different grammars of one language). The NP-conjunction is signaled by a formally similar adnominal morpheme, *n(a)*, which can serve either as a comitative marker or as a coordinate conjunction.

3.1 Event-structure marking in Bantu: An overview

The Bantu verb has an obligatory subject marker and, in some languages, an object marker. Other obligatorily marked categories are tense/aspect and a verb-final modal marker (“final vowel”) (Wald 1992: 159). The Bantu languages have a rather wide range of verbal suffixes modifying the event structure (so called “verbal extensions”). Most widely attested are passive, causative, anticausative, applicative, and reciprocal/polyadic. Other (less frequent and/or less productive) derivational meanings are reversive, introversive (absolutive), and a set of aspectual and quantificational meanings (e.g., extensive). The markers of event structure can be easily combined within one verb stem, cf.:

Kinande (Hyman 1993:3)

- (9) *-imb-ir-an-isi-bu-a*
 -sing-APPL-REC-CAUS-PASS-FV
 ‘be caused to sing for each other.’

The major valence-changing operations are illustrated by the following examples:

Passive: Swahili (Vitale 1981: 116)

- (10) a. *nyoka a-li-mw-uma Halima.*
 snake 3SG-PAST-3SG-bite H.
 ‘A snake bit Halima.’
 b. *Halima a-li-um-wa na nyoka.*
 H. 3SG-PAST-bite-PASS AG snake
 ‘Halima was bitten by a snake.’

Causative: Swahili (Vitale 1981: 116)

- (11) a. *Halima a-li-ki-pika chakula.*
 H._i 3SG_i-PAST-3SG_j-cook food_j
 ‘Halima cooked the food.’

- b. *Juma a-li-m-pik-isha Halima chakula.*
 J_k 3SG_k-PAST-3SG_i-COOK-CAUS H_i food_j
 ‘Juma caused Halima to cook the food.’

Anticausative: Lamba (Doke 1938:182)

- (12) *Amapili aa-won-eka.*
 mountains 3PL-see-ACAUS
 ‘Mountains have appeared / become visible.’

Anticausative constructions may render stative, inchoative, or potential meaning.

Applicative: Kinyarwanda (Kimenyi 1988:370)

- (13) a. *Umugóre a-kora akazi ku amafaraanga máke.*
 woman 3SG-work work for money few
 ‘The woman does the work for a small amount of money.’
 b. *Umugóre a-kor-era akazi amafaraanga máke.*
 woman 3SG-work-APPL work money few
 ‘The woman does the work for a small amount of money.’

Reciprocal: Swahili (Vitale 1981:147)

- (14) a. *Juma a-na-m-penda Halima.*
 J_i 3SG_i-PRES-3SG_j-love H_j
 ‘Juma loves Halima.’
 b. *Juma na Halima wa-na-pend-ana.*
 J_i COM H_j 3PL_{i+j}-PRES-love-REC
 ‘Juma and Halima love each other.’

Reflexive is signified by a verbal prefix which replaces the object agreement marker, cf.:

Reflexive: Swahili (Vitale 1981:137)

- (15) a. *Ahmed a-na-m-penda Halima.*
 A_i 3SG_i-PRES-3SG_j-love H_j
 ‘Ahmed loves Halima.’
 b. *Ahmed a-na-ji-penda.*
 A_i 3SG_i-PRES-REFL-love
 ‘Ahmed loves himself.’

Thus, in accordance with the general cross-linguistic tendency (Kemmer 1993:100), the polyadic reciprocal-encoding strategy precludes the formal affinity between the reciprocal and reflexive meanings. On the other hand, some Bantu languages have developed (presumably new) reflexive-based reciprocal constructions (see Section 5).

3.2 Distribution of the polyadic meanings

The semantic impact of the regular *-(a)n(a)*-marking is to subsume the underlying simple event under the polyadic event structure. All polyadic constructions in Bantu are

subject-oriented. Presumably, all the reciprocal constructions can be subsumed under the “canonical” reciprocal type, cf. (14) and (16):²

Babungo (Schaub 1985:209–10)

- (16) a. *mè táa báa yé ghô mbisii.*
 I FUT again see you tomorrow
 ‘I shall see you again tomorrow.’
 b. *sì táa báa yé-né mbisii.*
 we.DU FUT again see-REC tomorrow
 ‘We shall see each other again tomorrow.’

Thus, the reciprocal use of the polyadic suffix entails detransitivization (cf. 3.4 for a significant exception). In particular, if a language has object agreement on the verb, the reciprocal interpretation and the object agreement marker are mutually exclusive (Vitale 1981:150), cf. (14a) and (14b). Hence, the reciprocal and sociative meanings are clearly distinguished by the de-transitive effect associated with the former, cf. (17).

KinyaRwanda (Coupez 1985:15)

- (17) a. *-kurèba umugabo* → *kurèb-ana*
 look man look-REC
 ‘to look at a man’ ‘to look at *one another*’
 b. *-guhînga umurimá* → *-guhîng-ana umurimá*
 cultivate field cultivate-soc field
 ‘to cultivate a field’ ‘to cultivate a field *together*.’

Generally, the reciprocal interpretation of *-(a)n(a)-* seems to be preferred over the sociative one. This preference manifests itself in various ways. Cross-linguistically, there are Bantu languages where this suffix can render only the reciprocal meaning. This is the case, e.g. in Venda (Poulos 1990:188–9) and Babungo (Schaub 1985:209–10). In some other languages, the reciprocal meaning seems to be more frequent in texts (cf., e.g. (Shepardson 1986) for Swahili) and/or it is the only possible interpretation in all cases where the reciprocal meaning is compatible with the lexical meaning of the basic verb, that is, the sociative interpretation of the polyadic suffix is available only if the reciprocal one is precluded by the lexical context. Unfortunately, the available data on most Bantu languages is controversial as to whether this tendency is manifested only by the relative frequencies of the alternative interpretations of identical forms, or the meaning of the suffix is pre-determined by the verb stem. For example, for Swahili Shepardson (1986) obviously adopts the former hypothesis, whereas Dammann (1954:164) mentions only few cases

2. It should be noted that the direct object in the Bantu languages is not rigidly opposed to other object types; a sentence may contain two or three bare NPs which appear to be plausible candidates for this syntactic role (cf., for example, Kimenyi 1988:366). Hence, this constraint may be less strong than in languages with a more strict distinction between the direct object and more peripheral syntactic roles. What is essential, however, is that the reciprocal construction always involves the primary participant (subject) and another syntactically prominent (secondary) participant of the underlying role-oriented event, and the latter participant slot is absent from the reciprocal construction.

where one verb form can have either meaning and considers them as exceptions produced by neutralization of the morphological distinction between a sociative verb derived from a simple stem and the corresponding reciprocal derived from the applicative stem, cf.:

Swahili (Dammann 1954:164)

- (18) *furah-i-ana* i. [be.happy-APPL-REC] ‘to be rejoiced by *each other*.’
 ii. [be.happy-0-REC] ‘to be happy *together*.’³

In some Bantu languages, the polyadic suffix can be used as a verbal comitative marker, so that the comitative participant occupies the object slot, cf.:

Nkore-Kiga (Taylor 1985:67)

- (19) *y-a-ija-na embwa.*
 3SG-TP-COME-COM dog
 ‘He came with/brought a dog.’

In Duala (Ittmann 1939:141) the comitative is marked by a suffix which is tonally distinct from the genuine polyadic one, yet this distinction is neutralized in some forms and/or contexts:

Duala (Ittman 1939:140–1)

- (20) *dípà* ‘to beat’ → *dípà-ne* ‘to beat *each other*’
 ‘to beat *with*’
énè ‘to see’ → *énè-ne* ‘to see *each other*’
 ‘to see *with*’
topo ‘to speak’ → *topo-ne* ‘to discuss *each other*’
 ‘to speak *with*, scold’
ipe ‘to cook’ → *ip-ane* ‘to cook with *each other, together*’
 ‘to cook *with/in*.’

Generally, the comitative function of *-(a)n(a)-* appears to be significantly less frequent across the Bantu languages than the reciprocal and sociative functions; this meaning is more commonly encoded by means of the nominal comitative marker (cf. 3.3).

Apart from the regular polyadic marking, the polyadic suffix is commonly present in *lexical reciprocals*:

Tswana (Cole 1955:210)

- (21) *-tšhwana* ‘to resemble, be like each other’
-kôpana ‘to meet, meet one another’
-tlhakana ‘to mix, mix with each other’
-lekana ‘to be equal, be equal to each other.’

Venda (Poulos 1990:188–9)

- (22) *-fan-* ‘to resemble, be like each other’
-lingan- ‘to be equal’

3. The distinction is neutralized because in Swahili vowel-final loan words take an element *-(l)e-/(l)i-* when the reciprocal suffix is attached, and the former is identical in shape to the applicative suffix.

<i>-kuvhangan-</i>	'to collect, gather'
<i>-tangan-</i>	'to meet'
<i>-vangan-</i>	'to become mixed up'
<i>-vhumban-</i>	'to become interlocked, stuck together'
<i>-thalangan-</i>	'to be a distance away from someone.'

The corresponding simple stem may exist, but the meaning of the lexical reciprocal is not semantically predictable:

Swahili (Mjachina 1966)

- (23)
- | | | |
|--------------------------|---|--|
| <i>-sem-a</i> 'to say' | → | <i>sem-ana</i> 'to insult each other' |
| <i>-shik-a</i> 'to grab' | → | <i>-shik-ana</i> 'to be friends' |
| <i>-on-a</i> 'to see' | → | <i>-on-ana</i> 'to see each other, meet' |
| <i>-shind-a</i> 'to win' | → | <i>-shind-ana</i> 'to compete.' |

Fossilized instances of the polyadic suffix seem to exist in virtually all Bantu languages. In some languages, the polyadic marking is fully lexicalized, whereas the reciprocal meaning is expressed by a non-polyadic construction (e.g. in Luvale and Babungo, cf. Section 5).

To sum up, the distribution of various functions of the polyadic suffix across Bantu can be represented by means of the following hierarchy, where these functions are ordered from the most widely-spread down, see

- (24) lexical reciprocal \supset reciprocal \supset sociative \supset comitative.

Thus, the meanings associated with the polyadic suffix in various Bantu languages range from a general set-introducing function to the symmetrical event structure conceived of as an inherent property of a closed class of events.

3.3 NP-conjunction

The Bantu languages have a single NP-conjunction marker, *n(a)*, which functions both as a comitative marker and as a coordinate conjunction. If the conjoined NPs are associated with the subject, the coordination and the comitative are distinguished by the linear position of the NP introduced by *n(a)* and by the verb agreement: the coordinated NPs take the subject (pre-verbal) linear position and control the plural agreement marker; the comitative phrase takes the post-verbal position, the verb agreement being controlled by the pre-verbal NP alone:

Venda (Poulos 1990:403)

- (25)
- a. *Vele na khotsi anga vha khou shuma giratshi-ni.*
V_i COM father_j my 3_{PLi+j} PRES.CONT work garage-LOC
 'Vele and my father are working in the garage.'
- b. *Vele u khou shuma na khotsi anga giratshi-ni.*
V_i 3S_i PRES.CONT work COM father_j my garage-LOC
 'Vele is working in the garage with my father.'

Thus, Bantu can be assumed to instantiate the widely attested development of the NP-coordination on the basis of the comitative (Mithun 1988:337–9).

In contrast with the NP-coordination, the comitative use of the NP-conjunction marker does not necessarily imply the conceptual identity between the roles assigned to the comitative and the primary participant. As a result, the comitative marking can be employed, at least in some Bantu languages, as a sort of role-marker which serves to introduce a participant *without* identifying its role with that of the primary participant; for example, Kimenyi (1988:369) describes the comitative *n(a)* as a marker of *manner* (cf. (26)). A clear distinction between the roles assigned to the primary and the comitative participant is particularly common for the comitative applicative construction, which is marked by the polyadic suffix (see 4.1).

It can be easily observed the NP-conjunction and the polyadic are signified by formally similar morphological items, *-n(a)-* and *-(a)n(a)-* respectively (in fact, depending on the morphological analysis adopted by a grammar, these items can turn out formally identical).⁴ The similarity between these items, hence, the possibility of an etymological relation, is commonly mentioned in grammars of Bantu languages (cf., e.g., Taylor 1985:67). The comitative function constitutes a clear semantic overlap between these morphemes, cf. the following pair of examples:

KinyaRwanda (Kimenyi 1988:369)

- (26) a. *umugóre a-ra-kôr-a akazi n'úmweète.*
 woman 3SG-PRES-DO-FV work COM-enthusiasm
 'The woman is working with enthusiasm.'
- b. *umugóre a-ra-kôr-an-a akazi úmweète.*
 woman 3SG-PRES-do-COM-FV work enthusiasm
 'The woman is working with enthusiasm.'

Such examples suggest that the polyadic suffix and the NP-conjunction marker represent different functions of essentially the same set-introducing device. Generally, these functions are associated with different grammatical contexts: the verbal suffix signals the polyadic event structure, while the adnominal morpheme signals NP-conjunction. The verbal comitative violates this iconic correlation, thereby showing that a morpheme can occur in both grammatical contexts.⁵

4. Schladt (1996) summarizes evidence indicating that the reciprocal (i.e., polyadic) suffix across Bantu has the form *-na* (rather than *-an-*, as suggested by many authors on the basis of the obligatory grammatical status of the final vowel). For him, this point is a crucial prerequisite for establishing a grammaticalization path leading from a free ad-nominal marker to the verbal reciprocal suffix.

5. A piece of the family-internal evidence in favor of this account is given by the fact that some other Bantu morphemes can also be employed as both pre-nominal and verbal (applicative) markers, with a slight formal modification. For example, in KinyaRwanda, the locative prepositions *mu*, *ku* and *i* can be suffixed to the verb in the form *-mo*, *-ko* and *-yo* respectively (Kimenyi 1988:368).

3.4 Syntactic types of the polyadic constructions

The comitative variant of the NP-conjunction is regularly employed to create the discontinuous variant of the polyadic construction, where two participants with the polyadic role take different syntactic positions; sentence (14c) illustrates this option for the reciprocal sub-type (cf. (14b)), sentence (27), for the sociative sub-type.

Swahili (Vitale 1981:147)

- (14) c. *Juma a-na-penda-ana na Halima.*
 J. 3SG.SB-PRES-love-REC CONJ H.
 ‘Juma and Halima love each other’, lit. ‘Juma loves each other with Halima.’

KinyaRwanda

- (27) *umubyeyi a-O-kor-ana n-umwaana we.*
 parent 3SG-PRES-work-SOC CONJ-child her
 ‘The mother is working with the child (who is also working).’

In particular, the comitative marker is employed to introduce the secondary participant of lexical reciprocals:

Venda (Poulos 1990:440)

- (28) a. *murathu wanga u fana na inwi.*
 brother my 3SG look.like CONJ you
 ‘My brother looks like you.’
 b. *Vele o malana na khaladzi anga.*
 Vele 3SG be.married CONJ sister my
 ‘Vele is married to my sister.’

The existence of the discontinuous polyadic option in Bantu can be viewed as an implication of the general properties of the NP-conjunction, i.e. of the very fact that a single marker is able to create both the coordinate NP structure (hence, the “simple” construction) and the comitative (hence, “discontinuous”) construction, cf. absolutely parallel pairs of examples in (25) and (29).

Venda (Poulos 1990:189)

- (29) a. *musidzana na mutukana vha khou rw-an-a.*
 girl CONJ boy 3PL PRES.CONT hit-REC-FV
 ‘The girl and the boy are hitting each other.’
 b. *musidzana u khou rw-an-a na mutukana.*
 girl 3SG PRES.CONT hit-REC-FV CONJ boy
 lit. ‘The girl is hitting each other with the boy.’

A less trivial phenomenon is the existence of *transitive* polyadic constructions, whereby one polyadic participants takes the object position. In the reciprocal construction, the identity of the roles assigned to the reciprocal participants is indicated by the plural subject agreement on the verb (like in the simple reciprocal construction, cf. (30a) and (30b)):

Tonga (Collins 1962:74)

- (30) a. *bana ba-la-yand-ana.*
 children 3PL-PRES-LOVE-REC
 ‘The children love each other.’
 b. *Joni ba-la-yand-ana amukaintu wakwe.*
 J. 3PL-PRES-LOVE-REC wife his
 ‘John and his wife love each other’, lit. ‘John mutually loves his wife.’

The sociative variant of the transitive polyadic construction is represented by the comitative applicative (see (19)).

Thus, the *(a)n(a)*-marked constructions in Bantu exhibit the following three-way contrast:

- (31) Syntactic types of *(a)n(a)*-marked constructions
1. Simple construction.
 2. Discontinuous construction with a secondary participant represented by a comitative NP.
 3. Discontinuous constructions with a secondary participant represented by a bare NP.

The Bantu languages appear to draw the major semantic borderline between the former two types on the one hand, and the transitive type on the other, rather than between simple and discontinuous constructions.

4. Interaction of the polyadic with other event structure categories

4.1 Transitivity

Generally, there is no correlation between the transitivity and the concept of participant set: the integration of a participant set into the event structure can involve adding a valence slot (comitative), reducing a participant slot (reciprocal) or leaving the valence pattern intact (sociative). As a result, if the polyadic marker is eventually employed as a valence-changing device, it can, in principle, acquire both valence-increasing and valence-decreasing function. Precisely this situation is attested in Bantu:

In some Bantu languages the *(a)n(a)*-marking can be used as a non-reciprocal de-transitivizer, although this phenomenon is very rare and highly lexically constrained. Both agent-suppressing and patient-suppressing instances are attested. For example, in Babungo, the reciprocal suffix *-ne* (cf. (16)) can render the *anticausative* (32) meaning:

Babungo (Schaub 1985:209–10)

- (32) a. *mè ngà' shúufwè.*
 I open.PFV door
 ‘I opened the door.’
 b. *shúufwè ngà'-nè.*
 door open-ACAUS.PFV
 ‘The door opened.’

KinyaRwanda has a relatively rare *introversive* suffix (i.e., a patient-suppressing detransitivizer), which is identical in form with the reciprocal one, cf. *-érek-* ‘to show sb sth’ → *-érek-an-* [-show-INTRV-] ‘to show (sth)’ (Coupez 1985:19). The suffix sometimes implies a habitual meaning.⁶ Notice that the formally identical suffix, in the same language, can create the comitative applicative construction (cf. (26b)). In other words, one suffix is applied to suppress and to add the direct object. A similar situation is found in Dula, where the comitative suffix (see (20)) also functions as the anticausative marker, e.g., *énè-ne* ‘to become visible, appear’ vs. ‘to see with’: if a verb containing this suffix is used intransitively, only the anticausative interpretation is possible (Ittmann 1939:141).

4.2 Applicative

If the polyadic suffix is immediately preceded by an applicative one, the resulting meaning is most frequently rendered as reciprocity in the sense ‘for one another’, i.e. the reciprocal relation is established between the primary participant and the benefactive participant introduced by means of the applicative suffix. The effect can be described as mutual resolving of ambiguity: on the one hand, the applicative suffix can assign the direct object function to a benefactive, locative, or causal participant, whereas the polyadic “selects” the meaning appropriate for the reciprocal relation, cf. the following examples from Kinande: *-imb-* ‘sing’ → *-imb-ir-* ‘to sing to/for (person); at (place); for (reason)’ → *-imb-ir-an-* ‘to sing for each other’ (Hyman 1993:8). On the other hand, the applicative suffix determines the reciprocal (rather than the sociative) interpretation of the polyadic.

In an apparent contradiction with this interpretation, some Bantu languages have a compound *sociative* marker analyzable as a frozen combination of the applicative and the polyadic. For example, in Haya the simple reciprocal marker is non-productive; it is replaced by two compound markers: a sociative marker *-elan(a)/-ilan(a)* (e.g., *nyw-elana* ‘to drink together (with each other)’, *l-ilana* ‘to eat together (with each other)’) and a reciprocal marker *-angan(a)* (cf. *bon-angana* ‘to see each other’). The former is analyzed as a frozen [APPLICATIVE + POLYADIC] combination, the latter, as [EXTENSIVE + POLYADIC] combination (Dammann 1954:165, 168–9). However, this contradiction is illusive; in fact, the reciprocal differs from the sociative in that its polyadic role represents a combination of two roles of the underlying event. If a combination of the applicative and the polyadic is free, the underlying event is thought of as the one signified by the applicative stem, hence the reciprocal reading of the polyadic suffix. Once such a combination is frozen, the underlying event is signified by the simple (intransitive) stem, hence its sociative reading.

6. Coupez (1985:19) describes this suffix as homonymous to the polyadic one. A piece of evidence in favor of this interpretation is given by the fact that the suffixes can be combined within one verb form, cf. *-érek-an-an* [-show-INTRV-SOC-] ‘to show together’. Yet the reciprocal suffix itself can be doubled in some other languages, cf. the following example from Xhosa: *-buz-an-él-an-* [-ask-REC-APPL-REC-] ‘to ask exclusively for one another’ (Hyman 1993:11). Be it as it may, this formal overlap seems worth mentioning in the context of this paper.

4.3 Anticausative

A combination [ANTICAUSATIVE + POLYADIC] can produce two quite different semantic outputs. The first option does not involve any deviations from the polyadic semantics and can thus be considered predictable: the polyadic is interpreted as the “patient-oriented” sociative, cf. Swahili *-somesh-* ‘to teach’ → *-somesh-ek(a)* ‘to get taught’ → *-someshek-an(a)* ‘to get taught together’. This situation is illustrated in (33) for Tswana (the anticausative suffix is *-êg(a)*, the anticausative+reciprocal complex form is *-agan(a)*, by assimilation from **-êg-an(a)*).

Tswana (Cole 1955:211)

- (33) a. *-mena* ‘to fold’
 → *-men-êga* ‘to become folded’
 → *-men-ag-ana* ‘to become folded together’
 b. *-roka* ‘to sew’
 → *-rok-êga* ‘to become sewn’
 → *-rok-ag-ana* ‘to become sewn together’
 c. *-pitla* ‘to crush, squeeze’
 → *-pitl-êga* ‘to become crushed’
 → *-pitl-ag-ana* ‘to become crushed together’
 d. *-bopa* ‘to mould’
 → *-bop-êga* ‘to become moulded’
 → *-bop-ag-ana* ‘to become moulded or fused together.’

The resulting verbs are intransitive (like the corresponding anticausative forms) and denote that several inactive participants are associated in a joint state (getting into a joint state), whereby the active initiator of this state is eliminated from the case frame. The latter can then be introduced again by means of the causative suffix, but remains outside the scope of the polyadic marker, cf. *-men-ag-an-ya* ‘to fold together’, *-rok-ag-an-ya* ‘to sew together’, *-pitl-ag-an-ya* ‘to crush together’. Given that the primary participant is eliminated by the anticausative, the patient-oriented sociative is the only semantically predictable output of the combination.

However, in some cases the polyadic suffix apparently simply loses its meaning in the context of the anticausative suffix. Swahili seems to give the most striking example of this effect: the [ANTICAUSATIVE + POLYADIC] combination tends to have just the anticausative meaning, cf. *-on-ik-an(a)* ‘to be visible’ (*on-a* ‘to see’, *on-ik(a)* ‘to be visible’), *-pat-ik-an(a)* ‘to be obtainable’ (*-pat(a)* ‘to get, obtain’, *pat-ik(a)* ‘to be obtainable’), etc. According to Dammann (1954:169), there is no semantic distinction between simple anticausative forms and the corresponding anticausative polyadic forms; he mentions, however, that the latter might have had an additional habitual meaning (1954:170). On the other hand, the complex forms seem to replace the simple anticausative forms, at least for some verbs. The latter observation is supported by the results of text counts in (Shepardson 1986), which show that the [ANTICAUSATIVE + POLYADIC] combination occurs much more frequently than the anticausative suffix alone.

In some other Bantu languages, there is a clearer semantic distinction between the anticausative suffix and the [ANTICAUSATIVE + POLYADIC] combination. For example, in Shambala this distinction seems to be associated with the intensification of property, cf.: *tail-ik(a)* ‘to be known, knowable’ vs. *tail-ik-an(a)* ‘to be well-known, widely known’, *jil-ik(a)* ‘to be eatable’ vs. *jil-ik-an(a)* ‘to be good to eat’, *on-ek(a)* ‘to be or become visible’ vs. *on-ek-an(a)* ‘to become well visible’ (Dammann 1954: 169). That is, the polyadic suffix marks a higher degree of the property denoted by the anticausative verb. It seems that this phenomenon can be viewed as a rather predictable result of the combination of a polyadic event structure and a single-entity primary participant. If a polyadic predicate is applied to a single entity, the latter is construed as a whole consisting of some parts (due to the idea of participant set inherent in the polyadic semantics). The resulting meaning would then be, roughly: ‘each part of this whole has this property’. Now, an assertion like ‘Each part of X is (becomes) visible’ is clearly “stronger” than just ‘X is (becomes) visible’ (inasmuch as that the latter can mean ‘Some parts of X are (become) visible’ as well). That is, the polyadic predicate denotes a higher degree of the property than the non-polyadic one. This tentative explanation can presumably account for the “loss” of the polyadic meaning (as in Swahili) as well: if a language provides two constructional options to express the meaning like ‘X has/gets a property P’, one of which implies that each part of X has/gets this property, and the other is vague with respect to whether “the whole X” or only some part of it has this property, it seems highly probable that the first option would be used more frequently.

4.4 Quantification of situations

The interaction between the polyadic and quantification of situations (cf. Lichtenberk 1999; Kemmer 1997) plays a rather marginal role in the Bantu languages. Generally, the simple polyadic marking *-(a)n(a)-* appears to imply that the event is conceived as a single whole; the complex internal structure of reciprocal events is reflected only in the compound suffixes that resolve the ambiguity of the polyadic semantics. The resulting reciprocal suffixes can be associated with the multiplicity of sub-events.

For example, in Kikongo the compound reciprocal marker *(-asan(a))* used to have an additional *iterative* meaning (a series of separable sub-events), in contrast with the non-iterative simple marker (a single event); this distinction is now neutralized, and the simple marker is losing its productivity in favor of the phonologically “heavier” one (Dammann 1954: 165–6). Luba-Kasai has only a complex reciprocal marker, *-ángán(á)*, which can have either the reciprocal meaning (e.g. *-kwata* ‘to take, catch’ → *-kwat-ángáná* ‘to catch, grasp each other’, *-mona* ‘see’ → *-mon-ángáná* ‘to see each other, visit each other’), or the *extensive* meaning, cf. *-dima* ‘to cultivate’ → *-dím-ángáná* ‘to cultivate always, everywhere’ (Burssens 1946: 74).

On the other hand, some compound suffixes containing the polyadic morph appear to have *only* a quantificational meaning. For example, Luba-Kasai has still another compound suffix, *-akan(a)*, which never expresses the reciprocal meaning and is described in (Burssens 1946: 76) as *extensive* (intensive); its use is illustrated by the following examples:

-énd-ákáná ‘aller de côte et d’autre, se promener’, *-tamb-ákáná* ‘passer et repasser, aller et venir’.⁷

5. Reciprocal without polyadic

Some Bantu languages have reflexive-based reciprocal constructions. The reflexive-based reciprocals appear to occur in those languages where the polyadic marking is highly lexically constrained (see 3.2).

In Luvale, for example, the compound reciprocal and sociative suffixes can be attached only to a few verb stems:

Luvale (Horton 1949: 102–3)

- (34) a. *-íw-asana* ‘to consult, agree’; lit. ‘hear each other’
-séþ-asana ‘to cross one another (as sticks)’
-hùng-asana ‘to annul one another (as counter-accusations).’
 b. *-pâl-akana* ‘to press or squeeze together’
-xind-akana ‘to press, squeeze, crowd’
-ly-ángana ‘to eat together, i.e., at each other’s place.’

The regular means of expressing the reciprocal meaning is the reflexive prefix:

Luvale (Horton 1949: 117)

- (35) a. *Vali na-ku-li-veta.*
 they FUT-3PL-REFL-beat
 ‘They are beating one another.’
 b. *Vyuma vi-na-li-fwane.*
 things 3PL-PERF-REFL-resemble
 ‘The things resemble each other.’

The reflexive prefix can be combined with the old reciprocal suffix *-asana*, cf. *-li-iw-asana* ‘to come to an agreement with one another’, *-li-sèl-asana* ‘to pass by one another’ (Horton 1949: 103). Both simple and discontinuous reciprocal constructions with *li-* are attested:

Luvale (Horton 1949: 117)

- (36) a. *Na-va-li-pangila vyama.*
 FUT-3PL-REFL-divide things
 ‘They will divide things among themselves.’
 b. *Mwa-ka-li-pangila vikumba na-masepa jenyi.*
 3SG-FUT-REFL-divide goods COM-friends his
 ‘He will divide goods with his friends.’⁸

7. On the basis of these examples, the meaning of the suffix could be more precisely described as *alternative* (motion in different directions).

8. The verb *divide* is certainly somewhat suspicious, as far as the reciprocal meaning is concerned. Unfortunately, however, the examples provided by Horton give no better possibility to illustrate this distinction.

Another formal type of a reflexive-based reciprocal construction is attested in Babungo (Schaub 1985:113), where the polyadic suffix is also highly lexicalized. The reciprocal meaning is regularly expressed by means of a reduplicated pronoun which refers to the whole group of reciprocal participants. This pronoun phrase is added at the end of the sentence (i.e., it occupies the position which is characteristic of adverbial). The non-subject constituent involved into the reciprocal relation is represented by a pronoun co-referent with the subject (i.e., identical with that within the final pronominal phrase), sometimes accompanied by the word ‘body’ (common for the Babungo reflexive constructions as well):

Babungo (Schaub 1985:113)

(37) *Làmbí nè Ndúlá gântè yínwáa vëng, vëng vëng.*
L. and N. help.PFV body their they they
‘Lambi and Ndula helped each other.’

(38) *vìng bíng nú bwee tí vìng, vìng vìng.*
you.PL agree thing bad to you.PL you.PL you.PL
‘Confess your sins to each other.’

(39) *yia túngmè ngò’sèe máa yíngwáa yíia, yia yia.*
we.EXCL shoot-PFV stones at bodies our.EXCL we.EXCL we.EXCL
‘We shot stones at each other.’

The underlying idea is to indicate the coreference of the (group of) participants in a non-primary role to that in the primary role (exactly as in the reflexive construction). However, the final pronominal phrase distinguishes the reciprocal construction from the reflexive one. It seems worth noting that (in contrast with the polyadic reciprocals), the new reflexive-based reciprocal constructions are not restricted to the “canonical” type (cf. sentences (36), (39)), i.e. these reciprocal constructions apparently cover a wider range of imaginable reciprocal situations.

6. Conclusion

The possible functions of the $(a)n(a)$ - ~ $n(a)$ - marking in Bantu are summarized in the following scheme:

(40) Reciprocal \supset Sociative \supset V-comitative \supset N-comitative \supset NP-coordination,

where “V-comitative” and “N-comitative” denote verbal and nominal instances of the comitative marking, “ \supset ” is intended to reflect the degree of integration of the participant set into the event structure. Each pair of neighboring functions on this scale represents a clearly semantically motivated and typologically recurrent marking pattern and can be safely assumed to be expressed by the same morpheme (if not synchronically, then diachronically), see 3.2–3.3. What is interesting about the Bantu languages is that one morpheme is employed in *every* context which requires integration of a participant set into the clause structure.

Interestingly, the central part of scale (40) (i.e. the verbal comitative and, to a lesser degree, the sociative) represents the least frequent functions of the $(a)n(a)$ - \sim $n(a)$ - marking across the Bantu languages (see 3.2), i.e. the central part of the semantic network associated with participant sets seems to be most easily lost in the course of diachronic evolution. This hypothesis is supported by typological evidence: as mentioned in Section 2, some languages exhibit the marking pattern that subsumes only the reciprocal meaning and the NP-conjunction, i.e. the “central” functions which would provide the semantic motivation of this marking pattern are missing at the synchronic level. This suggests that the semantic interpretation of such a general set-introducing device tends to be determined by the grammatical context: the verbal instances favor the interpretations associated with a higher degree of integration of the participant set into the event structure. As a result, the verbal instances of the set-introducing marker tend to be interpreted as polyadic, and, ultimately, as reciprocal.

Schladt (1996) suggests that the Bantu reciprocal results from grammaticalization of the comitative preposition. However, if such a development did take place, it could hardly be interpreted as grammaticalization. From the semantic point of view, it is a precisely opposite process: the NP-conjunction, that is, a clearly grammatical item evolves into a very semantically specific marker of event structure.⁹ Accordingly, the hypothesized development imposes strong lexical constraints on the verb stem, in contrast to what should happen in the course of genuine grammaticalization. As it seems, the Bantu data reveals a phenomenon essentially different from grammaticalization: a grammatical item is recruited by a language to solve the coding problem posed by some specific meaning, in this case, the reciprocal event structure.

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9. Interestingly, Voeltz (1977:66) suggests that this morpheme has been *detached* from the verb and attached to the NP and is ultimately grammaticalized as the only conjunction.

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Reciprocal derivation involving non-verbals

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1. Introduction

So far, I have discussed reciprocal markers on verbs, of the type as in (1a). As it happens, some reciprocal markers in some of the languages, can occur on words of other classes, while expressing a reciprocal or some contiguous meanings; cf. Ainu (Alpatov et al., Ch. 42, ex. (126), (128f)):

- (1) a. *nukar* ‘to see’ → *u-nukar* ‘to see *each other*’
 b. *irwak* ‘brother’ → *u-irwak* ‘*both* brothers’
 c. *arke* ‘half, part’ → *u-arke* ‘half *for each*.’

Note that non-verbal bases can combine with both polysemous (e.g. Tagalog *mag-*, Nélémwa *pe-*) and monosemous reciprocal markers (e.g. the Chukchi suffix *-wəly-*, Ainu prefix *u-*, Kolyma Yukaghir *n’e-*). There are markers used reciprocally in non-verbal derivation only. These cases are of interest if semantically analogous derivatives are formed by reciprocal markers as well, when used in both intra-verbal and non-verbal reciprocal derivation. One of similar cases (though belonging outside the limits of the subject-matter of Chapter 7 is considered below to illustrate what I mean; see (2d) and (36), (35)). In general, the use of reciprocal markers in derivation involving non-verbs is less widespread cross-linguistically than verbal reciprocal derivation proper. Some derivations are highly restricted lexically. Nevertheless, it may be interesting to try and find out how an original function may be adapted for other, usually less productive functions (cf. ex. (1a) with (1b) and (1c)).

It is rather difficult to give a semantic definition for non-verbal reciprocals. Below, the reader will find practically all the cases attested so far across languages and their tentative semantic classification. The overall picture of non-verbal reciprocal derivation is quite complex and variegated, but some general tendencies can be traced. The semantic range of these derivatives, and as often as not of their bases, coincides mostly with that of *lexical reciprocals*, i.e. words (that may function as predicates) containing the reciprocal component in their lexical meaning and with the arguments related reciprocally. For instance, if John is Peter’s brother, Peter is naturally John’s brother, and if John argues with Peter it means that Peter argues with John at the same time. Lexical reciprocals, both verbal and non-verbal, fall into three main lexical groups:

1. Reciprocals denoting *spatial* actions or states, most commonly verbs of joining and separating, e.g. ‘to come/draw together’, ‘to collide’, ‘to get pasted together’, ‘to come/tear apart’, ‘next to’, ‘a heap’,¹ etc.

2. Reciprocals denoting *equality* or *non-equality*, e.g. ‘to compare’, ‘to differentiate’, ‘the same’, ‘similar’, ‘alike’, ‘different’, etc.

3. Reciprocals denoting *social relations*, e.g. ‘friend’, ‘to be friends’, ‘to marry’, ‘to fight’, etc.

Semantically close to reciprocal relations are converse relations (i.e. relations when one of the paired members presupposes another member with a certain meaning), such as ‘parents – children’, ‘aunt – nephew’, ‘husband – wife’, ‘elder brother – younger brother’, ‘in front of – behind’, ‘at the top – below’, ‘far away – nearby’, ‘to follow – to precede’, etc. (On lexical reciprocals see Ch. 1, §16).

1.1 Four main types of reciprocal markers encountered on non-verbal bases

Below, both derivatives with intraverbal reciprocal markers and those with other markers used in the reciprocal sense are considered. Four types of logical relations are possible between intraverbal and non-intraverbal reciprocal markers; they may be shown graphically as follows (the intraverbal markers are signified as X and non-intraverbal markers as Y):

(2)	Intraverbal		Non-intraverbal
a.	X	=	Y
b.	X	⊃	Y
c.	X	⊂	Y
d.	X	≠	Y

The following is meant to explain these relations.

(2a) The same reciprocal marker is used both for intraverbal and non-intraverbal derivation (cf. Adyghe *zə-ləəkʲlon* ‘to visit each other’ and *ə-kəoʃ* ‘his-brother’ → *zə-kəoʃ* ‘brothers to each other (= brothers having the same father)’; ‘cf. also (1a) and (1b, c) above). In my material this is the most common type.

(2b) The intraverbal marker can partially coincide with the non-intraverbal marker, being a part of it (cf. Yakut *tarbaa-* ‘to scratch sb’ → *tarba-s-* ‘to scratch each other’ and *küres* ‘competition’ → *küres-te-s-* ‘to compete’; Ainu *e* ‘to eat, devour’ → *u-e* ‘to devour each other’ and *ona* ‘father’ → *u-ona-kor* ‘to be related as father and son’).

(2c) The non-intraverbal marker can be a part of an intraverbal reciprocal marker (cf. Tagalog *ibig* ‘love’ [→ *ibig-an* ‘mutual love’] → *mag-ibig-an* ‘to love each other’). This is an exotic case, and so far it is attested in Tagalog only. Note that the prefix *mag-* can also derive reciprocals from a limited number of non-derived verbs, mostly lexical (quasi-) reciprocals (cf.: *s-um-unod* ‘to follow sb’ → *mag-sunod* ‘to follow one after another’).

1. The noun phrase ‘heap’ is a spatial lexical reciprocal because it denotes a result of collecting (or joining, gathering from various directions) of homogeneous objects in the same place.

(2d) The markers in question are entirely different (cf. Indonesian *me-mandang* ‘to look at sb’ → *ber-pandang-an* = *pandang-me-mandang* = *saling me-mandang* ‘to look at each other’ and *ayah* ‘father’ → *se-ayah* ‘to have the same father’). This is usually observed on derivatives denoting similarity with respect to the feature denoted by the base. Non-intraverbal markers may reveal phonetic similarity with the intraverbal marker, which may show their genetic relatedness, but they are not segmentable in contrast to the Yakut *-te-s* above); cf. the Even suffix *-lta/-lte* marking reciprocal adverbs and the intraverbal suffix *-lda/-lde* (see (53) below).

Case (2b) needs some amplification. An additional component of an intraverbal marker may be of different types.

- It may be an affix that derives verbs from words of other classes, especially nouns; so far, this case is attested in the Turkic languages; the Yakut suffix *-la-s/-ta-s/...* contains the verbalizing suffix with numerous positional variants *-laa/-taa/-daa/-dee/-la-/-da- /...*; cf. *xaartā* ‘cards’ → *xaartā-laa-* ‘to play cards’, *aadārās* ‘address’ → *aadārās-taa-* ‘to address sth to sb’, *aat* ‘name’ → *aat-taa-* ‘to name’. The complex suffix *-la-s/-ta-s/...* derives verbs which have no respective forms without *-s-*, this complex being perceived as a single item. Thus, for instance, there is an opposition *tuspa* ‘difference’ → *tuspa-la-s-* ‘to differ’, but **tuspa-la-*. From some transitives in *-laa/-taa*, reciprocals can be derived in a regular way, each component expressing its own meaning (cf. *aadārās-taa-* ‘to address sth to sb’ → *aadārās-ta-s-* ‘to address sth to each other’).
- It may be a possessive marker, as in the Ainu derivative *u-ona-kor* cited in (2b) above (see also §4.3). Since a reciprocal situation presupposes at least two participants, reciprocal nouns of some languages can either contain an obligatory marker of possessivity or be used in the plural number (see (4d) above). In some languages, the reciprocal marker takes the position of a possessive marker; cf. Adyghe *ə-kəoš* ‘his-brother’ → *zə-kəoš* ‘brothers to each other’.
- It may be either an ancient plural marker or of recent origin, or a combination of both. This plural marker can be attached not only to derivatives with the meaning of collective plurality (cf. Tundra Yukaghir *-jil’-pe* where the suffix *-jil’* is an ancient plural marker and *-pe* is a recent one; see (21) below; the current South Sierra Miwok suffix *-HmetiH-* in (22)), but also to derivatives with the meaning of duality (cf. the Southern Paiute suffix *-ŋwī* in (6) and (14); the Tuvan suffix *-lar* in (12)).

1.2 Three main types of semantic relations in derivational pairs

The relations between the meaning of a (non-derived) base and that of the (quasi-)reciprocal derivative can be of the following three types:

- The reciprocal meaning of the derivative is inherited from the base word (lexeme); cf. (3a) below.
- The reciprocal meaning of the derivative is added by the derivational marker; cf. (3b).
- The reciprocal meaning of the derivative is inherited from the base word (lexeme), but the marker in question adds a new meaning related to the reciprocal; cf. (3c):

- (3) a. Kirghiz *araz* ‘quarrel’ → *araz-daš-* ‘to quarrel’
 b. Kirghiz *n’uur* ‘face’ → *n’uur-daš-* ‘to stand face to face’
 c. Tagalog *pinsan* ‘cousin’ → *mag-pinsan* ‘two cousins.’

Note that mostly lexical reciprocals or converses function as derivational bases, for instance, noun phrases like ‘two cousins’, ‘two brothers’, ‘two feet’, ‘mother and child’, etc., but not noun phrases meaning ‘two soldiers’, ‘two butchers’, ‘soldier and child’.

Some of the semantic oppositions discussed here are unique, being registered in one language only. For instance, the opposition ‘foot/feet’ → ‘both feet’ is attested in Ainu only (see 3.1.3), ‘left’ → ‘left-handed’ in Kammu (see 3.1.4), ‘one’ → ‘one each’ in Mundari (4.7.1), ‘three’ → ‘two times three’ (= ‘six’) in Southern Paiute (4.7.2), ‘love’ → ‘mutual love’ in Tagalog (4.6), ‘they’ → ‘they mutually’ in Chukchi (3.2.2), etc. This may be due to the limited number of languages investigated and possibly to the inadequacy of available publications. Note that some of the meanings, e.g. (‘brother’ →) ‘both brothers’, (‘brother’ →) ‘all the brothers to each other’, (‘mother’ →) ‘mother and child’, are attested in more than one languages. But in all the oppositions listed here the meaning is either reciprocal or related to it in one way or another. The available data show extreme complexity and variety of the latter meanings adjacent to reciprocity. Establishing the uses of a marker in the meanings that do not seem to be logically related to its main meaning is of special typological interest.

Semantic relations between the derivative and the base are not always transparent, and, besides, they may be lexicalized to a greater or lesser degree.

1.3 Five main derivational types

With respect to the word classes the base and the derivative with a reciprocal marker belong to, derivational pairs can be subdivided, in the first place, into numerically unequal groups: *verbal-nominal* and *adverbial* groups.

The *verbal-nominal* group comprises pairs with the bases and/or derivatives that are nouns and/or verbs. They may be related in four possible ways listed here in the diminishing order of productivity:

- (4) a. *Verb* → *Verb* (see Section 2 below); e.g. Chukchi:
lɪu- ‘to see’ → *lɪu-waly-* ‘to see each other’
 b. *Noun* → *Noun* (see Section 3); e.g. Southern Paiute:
t̪iyiv^w-i- ‘friend’ → *na-ri’χiv^w-i-ηwi* ‘two friends’
 c. *Noun* → *Verb* (see Section 4); e.g. Muna:
sabhangka ‘friend’ → *-po-sabhangka* ‘to be friends’
 d. *Verb* → *Noun* (see Section 5); e.g. Bamana:
sìgí ‘to live’ → i. *à sìgi-ɲɔ̀gɔ̀n`* ‘his neighbour’
 ii. *sìgi-ɲɔ̀gɔ̀n-w* ‘neighbours.’

In cases (4b) and (4c) the term *noun* is used as a kind of a cover term: sometimes, numerals and adjectives occur here instead of a noun proper.

In the *adverbial* group the bases may vary: reciprocal adverbs may be derived from prepositions, postpositions, adverbs and auxiliary nouns with locative meanings. This type of derivatives expresses mostly spatial meanings and may include as many as 10 to 20 items; cf.:

- (4) e. Adverb, postposition, etc. → adverb (Section 6); e.g. Nivkh:
laya ‘next to sth/sb’ → *u-laya* ‘next to each other.’

2. Derivational pairs “Verb → Verb”

This type of derivation is discussed in Chapters 1, 3 and 5. In (5) below, intraverbal derivation in 28 languages is illustrated. A number of genetically related languages display similar derivations with both verbal and non-verbal bases (Adyghe and Abaza; Kirghiz, Tuvan and Yakut of the Turkic family). Therefore we may assume that in the material subjected to analysis 24 idiomatic types of derivation are registered. In these 28 languages the reciprocal markers illustrated below are also attested on non-verbal derivatives, which are considered in Sections 3–6. Prior to these, examples of reciprocal verbs with the same marker are cited, the languages being arranged in alphabetical order, to enable the reader to compare the use of the same markers on non-verbal derivatives. The meanings of the bases are obvious from the translations.

- (5) Abaza *ai-čvažvara* ‘to speak with each other’
 Abkhaz *ai-šbtra* ‘to follow each other’
 Adyghe *zə-ləəklon* ‘to visit each other’
 Ainu *u-e* ‘to devour each other’
 Bamana *ɲɔɡɔn bɔɡɔ* ‘to beat each other’
 Chukchi *llu-waly-* ‘to see each other’
 East Futunan *fe-tamate-’aki* ‘to kill each other’
 Even *baka-mat-* ‘to find each other’
baka-lda- ‘to meet’
 Evenki *iče-meet-* ‘to see each other’
 Fijian *vei-loma-ni* ‘to love each other’
 German *sich/einander lieben* ‘to love each other’
 Indonesian *ber-pandang-an* ‘to look at each other’
 Kammu *t̄r-pók* ‘to bite each other’
 Kirghiz *körsöt-üş-* ‘to show sth to each other’
 Kolyma Yukaghir *n’e-juö-* ‘to see each other’
 Khalkha-Mongol *ala-lda-* ‘to kill each other’
 Mono *na’na-’waqa* ‘to talk with each other’
 Muna *-po-lobhi* ‘to hit each other’ (of two participants)
 Mundari *da-pa-l-* ‘to hit each other’ (-*pa-* = infix)
 Nêlêmwa *pe-boima* ‘to kiss each other’
 Nivkh *u-y-* ‘to kill each other’
 Southern Paiute *na-γwi’pa-* ‘to hit each other’
 Southern Sjerra Mywok *ʔelɲe-mhi-* ‘to leave each other’
 Tagalog *mag-yakap* ‘to embrace each other’

Tigak	<i>e-vis</i> ‘to fight with each other’
Tlingit	<i>wùtc hàs wùdzit’in</i> ‘they tell the truth to each other’
Tundra Yukaghir	<i>n’iŋ-aināni</i> ‘to fire at each other’
Tuvan	<i>aalda-š-</i> ‘to visit each other’
Wàrrungu	<i>paja-wa-</i> ‘to bite each other’
Yakut	<i>tarba-s-</i> ‘to scratch each other.’

With three exceptions, the reciprocal markers in (5) are affixes (suffixes, prefixes, infixes and circumfixes). The Bamana marker *ɲɔɡɔn* and Tlingit *wùtc* (which changes into *wùt* in nouns) are the only reciprocal pronouns in the list. They are used to derive reciprocal nouns from verbs, these nouns being compounds. The third exception is the German pronoun *einander* which tends to turn into locative preverbs in combination with prepositions.

3. Derivational pairs “Noun → Noun”

The following meanings are registered in this derivational type.

3.1 Duality

The derivative denotes two persons, usually relatives, or inanimate objects in reciprocal or converse relations. This concerns *natural pairs* of objects which are connected by certain relations denotatively. Thus, *one* word contains the meaning of *two* words. The word ‘stranger’ is included here as a kind of antonym of ‘relative’. I include here also instances when one of the participants is a group of relatives. Sapir (1930:110) notes: “The idea of reciprocity leads naturally to that of duality of terms involving mutual relationship”. He refers to the formations considered below as “dual reciprocals”. Even if duality is not explicated, two participants are usually meant.

Number ‘two’ turns out to be intimately related with reciprocity. This can be shown, among others, by the following

- In Muna, the reciprocal prefix *po-* is used only for situations with two participants (though the verb agreement marker has the plural form). If a situation with more than two participants is described the base must be reduplicated (van den Berg 1989:206; see also Ch. 1, §6).
- In Awtuw, the reciprocal prefix is always accompanied by the marker of the dual number even if the number of participants exceeds two; at the same time, the verb contains a plural marker, though in non-reciprocal constructions the dual and plural markers do not co-occur in the same form (Feldman 1986:67; see also Ch. 3, §6.3.2.4).
- In Vedic, the (unproductive) reciprocal preverb *vi* is descended from the adverb *dvīs* ‘twice’ (L. Kulikov, p.c.).

3.1.1 Type 'brother' → 'two brothers'

Illustrations follow:

Southern Paiute (Sapir 1930: 109–10; *-ŋwī* = PL)

- (6) a. *tiyiv^wi* 'friend' → *na-ri'χiv^wi-ŋwī* 'two friends'
pavi 'elder brother' → *na-va'vi-ŋwī* 'two brothers'
qimantsi 'stranger' → *na-yī'mantsi-ŋwī* 'two who are strangers to each other.'

Although these formations contain the plural suffix, the plural number on them is marked by reduplicating *na*-:

- b. *na-va'vi-ŋwī* 'two brothers' → *na-na'-vavi-ŋwī* 'three or more brothers.'

Ainu (Alpatov et al., Ch. 42, §11.2)

- (7) a. *anun* 'stranger' → *u-anun* 'mutual strangers.'

In the following adjacent case, two derivational processes take place at the same time: reciprocal prefixation and compounding of two nouns which may be regarded as converses. Morphologically, this type is different from the previous ones but it is entered here due to the shared feature of one word being used instead of two.²

- b. *tus* 'mistress', *mat* 'wife' → *u-tus-mat* 'mistress and wife.'

In Tagalog, the reciprocal prefix *mag-* forms derivatives of this type from unmarked lexical reciprocals (see (8a)) and also from derived reciprocal nouns with the prefix *ka-* (see (8b)) considered in 3.3 below.

Tagalog (Shkarban & Rachkov, Ch. 22, §§3.3.2, 5.2.1; *-um-* = active voice marker)

- (8) a. *kapit-bahay* 'neighbour' → *mag-kapit-bahay* 'two neighbours'
pinsan 'cousin' → *mag-pinsan* 'two cousins'
ka-patid 'brother/sister' → *mag-ka-patid* 'two brothers/sisters,
brother and sister'
b. *ka-klase* 'classmate' → *mag-ka-klase* 'two classmates'
ka-pangalan 'namesake' → *mag-ka-pangalan* 'two namesakes'
ka-sing-taas 'one of equal height with sb' → *mag-ka-sing-taas* 'two of equal height.'

3.1.2 Type 'aunt' → 'aunt and nephew'

The nouns in such pairs denote persons, mostly relatives in converse relations. There are over 20 such reciprocals in Tagalog. Characteristically, in Tagalog, "... these forms derive from the names of socially more important or superior members" (Shkarban & Rachkov, Ch. 22, §3.3.2). In the other languages, e.g. in Ainu, this is not observed (see (37)); in Tagalog, the only exception is *anak* 'child' → *mag-anak* 'family'.

2. The pair 'mistress and wife' is not of course a purely converse pair but the word 'mistress' is often enough associated with and opposed to 'wife'.

Tagalog (ibid.)

- (9) *ina* ‘mother’ → *mag-ina* ‘mother and child’
ama ‘father’ → *mag-ama* ‘father and child’
ale ‘aunt’ → *mag-ale* ‘aunt and nephew’
ginoo ‘master’ → *mag-ginoo* ‘master and servant’
asawa ‘spouse’ → *mag-asawa* ‘a married couple’, i.e. ‘husband and wife.’

Fijian (Milner 1972: 163, 113; Dixon 1988: 176–7)

- (10) *tina* ‘mother’ → *vei-tina-ni* ‘mother and her child’
wati ‘spouse’ → *vei-wati-ni* ‘married couple’
tama ‘father’ → *vei-tama-ni* ‘father(s) and child(ren).’

Dixon (1988: 175) characterizes the Fijian prefix *vei-* as collective and he considers derivatives of the type cited in (10) as collective, as well as the following derivatives with the meaning of plurality, including distributivity:

- (11) *'oro* ‘village’ → *vei-'oro* ‘every village’
tamata ‘person’ → *vei-tamata* ‘everybody’
'aa ‘thing’ → *vei-'aa* ‘many things, everything’
kau ‘tree’ → *vei-kau* ‘forest’, etc. (see also (36b)).

In this connection, it may be useful to mention the hypothesis (for another hypothesis see the text and note beneath (31b)) that the reciprocal suffix of the Turkic languages is descended from the Common Turkic suffix of (collective) plurality *-š (cf. Sevortjan 1962: 138; Serebrennikov 1974: 10–1). An argument in favour of this hypothesis is the use of -š in oppositions of the type cited in (12); cf.:

Tuvan (Isxakov & Pal'mbakh 1961: 171; *-lar* = PL, *-kə* may also function as a marker of relative adjectives)

- (12) *ava* ‘mother’ → *ava-š-kə-lar* ‘mother and her child(ren)’
ugba ‘elder sister’ → *ugba-š-kə-lar* ‘sisters’ (the elder and younger sisters).

Tigak (Beaumont 1979: 93–4)

- (13) *tama* ‘father’ → *rek e-tama* ‘they are father and son.’

Southern Paiute (Sapir 1930: 109–10)

- (14) *moa(tsi)* ‘father’ → *na'-ŋ'w'tst-ŋwī* ‘father and son’
pia- ‘mother’ → *na-vi'a-ŋwī* ‘mother and daughter.’

Mono (Langacker 1976: 11)

- (15) *peti* ‘daughter’ → *na'na-peti* ‘parent and daughter.’

In connection with the data presented in 3.1, it may be useful to mention the following. In Udehe, there is a comitative postposition *mule* which “indicates that the two participants are related by a close (family) association and consitute a natural pair: a husband and wife, a mother and son, and so on” (Nikolaeva, Ch. 23, §3.5.2). This postposition is also used

in reciprocal constructions to denote the reciprocal participants if they are relatives. The suffix *-mule* which is naturally related to this postposition derives “plural” forms from a limited list of lexical reciprocals which can also take the common plural and case markers:

- (16) *xa:-* ‘sibling’ → *xa:-mule-ziga* ‘brothers’,

where *-ziga* is a plural marker, e.g. *-mule-* is not a plain plural marker but something more. This usage can be compared with the use of a plural marker alongside a reciprocal marker with the meaning ‘two’ (cf. Southern Paiute *na-...ŋwī* in (6a, b) and Southern Sierra Miwok *-mhi-HmetiH* in (22), Tundra Yukaghir *n’iŋ...-jil’-pe* in (21)). The nouns taking the suffix *-mule-* have meanings like ‘elder brother’, ‘friend’, ‘comrade’. This suffix refers to an inanimate unity in the derivative *tie-mule* ‘pair’. Compare also 3.1.3 where the word meaning ‘pair’ contains a reciprocal marker.

3.1.3 Type ‘foot’ → ‘both feet’

In Ainu, the reciprocal prefix *u-* occurs on names of *paired* body parts, the derivatives acquiring the meaning ‘both’, and also on the word with the meaning ‘pair’; cf. *u-mure* ‘pair’ (it is probably not accidental that the only numeral which contains the vowel /u/ is *tu* ‘two’). Six such forms are registered; e.g.:

Ainu (Alpatov et al., Ch. 42, §10)

- (17) *kema* ‘foot’, ‘feet’ → *u-kema* ‘both feet’
tap ‘shoulder’ → *u-tap* ‘both shoulders’
sik ‘eye’ → *u-sik* ‘both eyes’
tek ‘hand’ → *u-tek* ‘both hands.’

3.1.4 Type ‘left’ → ‘left-handed’

In Kammu, the reciprocal prefix *tř-* occurs on two adjectives and adds the meaning shown in (18); though unique, the use of this suffix here seems to be due to the fact that the derived adjectives apply to paired objects: the left hand presupposes the right hand and *vice versa*, which amounts to a converse relation. The derivatives retain this relation.

Kammu (Svantesson 1983: 113, 112)

- (18) *wěř-* ‘left’ → *tř-wěř* ‘left-handed’
hám ‘right’ → *tř-hám* ‘right-handed.’

3.2 Collective plurality

These derivatives have meanings like ‘(all) relatives, neighbours (and the like) between themselves, in relation to each other’.

3.2.1 Type ‘brother’ → ‘all the brothers [to each other]’

A noun, often in the plural form, may denote a group of people (usually relatives) as opposed to another group.

The reciprocal prefix *zə-* in Adyghe indicating coreference with a non-direct object is also used on nouns which can express mutual relationship between persons, i.e. on

two-place nouns like ‘brother’, ‘sister’, ‘person of the same age’, ‘neighbour’, ‘comrade’, etc. rather than on personal nouns like ‘worker’, ‘student’, ‘passerby’, etc.; e.g.:

Adyghe (Rogava & Kerasheva 1966:274, 276–7).

- (19) *kəoš* ‘brother’ → *zə-kəoš* ‘brothers to each other’
šəpxəu ‘sister’ → *zə-šəpxəu* ‘sisters between themselves’
gəunəgəu ‘neighbour’ → *zə-gəunəgəu* ‘neighbours of each other’
nəluasə ‘acquaintance’ → *zə-nəluasə* ‘acquaintances between themselves’
ləgəu ‘person of the same age’ → *zə-ləgəu* ‘persons of the same age between themselves.’

Tlingit (Boas 1917:65–6; *wùtc* → *wùc-* when used attributively)

- (20) *wùc-kik’yán* ‘brothers between themselves, to each other.’

Tundra Yukaghir (Maslova, Ch. 44, §6.2; *n’iŋ-/n’i* = REC; *-jil’-* = ancient PL marker; *-pe-* = regular PL marker)

- (21) *aka* ‘elder brother’ → *n’iŋ-aka-jil’-pe* ‘all elder brothers together’
n’uge ‘cousin’ → *n’i-n’uge-jil’-pe* ‘(all) cousins’
eki ‘elder sister’ → *n’i-n’uge-jil’-pe* ‘(all) elder sisters.’

Southern Sierra Miwok (Broadbent 1964:109–10, 74; *-HmetiH-* = PL)

- (22) a. *pace-* ‘relative, kinsman’ → *pace-mhi-HmetiH-* ‘relatives to each other’
 b. *ta.ciH-* ‘older brother’ → *ta.ciH-mhi-HmetiH* ‘brothers to each other.’

On the use of the suffix *-mhi-* in cases like (22a), Broadbent (ibid.) writes: “It is not common, but it is probably productive. Its meaning is reciprocal, ‘to each other’ ”.

3.2.2 Derivatives from [*pro*]nouns; type ‘they’ → ‘they mutually’

This rare phenomenon is registered in Chukchi and it is included here with reselections. The reciprocal marker seems to stress spatial proximity and joint actions of the participants.

Chukchi (Nedjalkov, Ch. 40, §3.5; the suffix *-e* = INSTR)

- (23) *ətri* ‘they’ → *ə-ək-wəly-e* (*ačyəta*) <they-LOC-REC-INSTR (next to)> ‘with each other (next to)’ (situation: the reciprocants-fighters approach the enemy shoulder to shoulder in an attack)
uwik ‘body’ → *činit uwik-wəly-ək* <oneself body-REC-LOC> ‘with their own bodies’ (situation: the reciprocants try to warm up by pressing to each other).

3.3 Type ‘class’ → ‘person of the same class’

This group corresponds semantically to the verbal derivatives in 4.2. In both groups, in contrast to most other groups, the bases need not be lexical reciprocals. Incidentally, in both languages cited below the derivatives are formed by means of non-intraverbal markers.

Tagalog (Shkarban & Rachkov, Ch. 22, §5.2.1; *sing-* ‘equal in sth’)

- (24) *klase* ‘class’ → *ka-klase* ‘classmate’
pangalan ‘name’ → *ka-pangalan* ‘namesake’
sing-taas ‘equal height’ → *ka-sing-taas* ‘one of equal height with sb.’

In Kirghiz, there are about 100 nominal derivatives with the suffix *-laš/-taš/-daš/...* (= Jakut *-las/-tas/...*), the same one that derives verbal reciprocals from nouns (see case 2b in 1.1 and (29)). Sometimes, the relationship between the base and the derivative is based on metaphor. These derivatives fall into lexical groups denoting persons sharing a spiritual or physical feature, of the same age, also class membership, kinship, blood relations, personal relations or common origin, partnership in an activity, or persons or things in spatial proximity, while the bases may vary in meaning.

Kirghiz (Nedjalkov, Ch. 28, §12.3)

- (25) *aj* ‘moon’ → *aj-la-š* ‘women in the same month of pregnancy’
ata ‘father’ → *ata-la-š* ‘born of the same father’
boj ‘height’ → *boj-lo-š* ‘(persons) of the same height, age’
suu ‘water, river’ → *suu-la-š* ‘(settlement) situated on the same river’
bikir ‘thought’ → *bikir-de-š* ‘like-minded person’
ešik ‘door’ → *ešik-te-š* ‘next door neighbour’
klass ‘class’ → *klass-ta-š* ‘class-mate’
žol ‘road, way’ → *žol-do-š* ‘fellow-traveller, comrade’
bötölkö ‘bottle’ → *bötölkö-le-š* ‘boon-companion’
zaman ‘time, epoch’ → *zaman-da-š* ‘contemporary.’

4. Derivational pairs “Noun → Verb”

4.1 Plain verbalization and related cases; type ‘friend’ → ‘to be friends with’

The base nouns are mostly lexical reciprocals (instances with a predictable slight shift of meaning are also included here). They typically denote the following:

- reciprocal relations (like ‘peace’, ‘agreement’) or actions (like ‘game’, ‘quarrel’, ‘exchange’, ‘struggle’, ‘talk’), or
- participants of reciprocal situations (like ‘friend’, ‘fellow-traveller’, ‘neighbour’, ‘family’, ‘collaborator’, ‘relative’).

Most of the derivatives are two-place (at least semantically) intransitives. Lexical reciprocals are also two-place, as a rule (although this is sometimes hard to see); cf. *peace between A and B* → *A made peace with B*; *A is B’s friend* → *A and B became friends*.

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §13)

- (26) *turen* ‘word’, ‘language’ → *turet-meet-* ‘to talk with each other.’

Khalkha Mongol (Nedjalkov et al., Ch. 29, §13)

- (27) *xuuwy* ‘advice’ → *xuuwya-lda-* ‘to come to an agreement’
nüür- ‘face’ → *nüüre-lde-* ‘to meet in confrontation.’

Warrungu (Tsunoda, Ch. 32, §3 and 8.2)

- (28) *kuku* ‘speech’ → *kuku-wa-* ‘to argue, quarrel with each other.’

As just noted (see case 2b in 1.1), the Yakut suffix *-la-s-/-le-s-/-te-s-/. . .* does not derive common reciprocal verbs, the regular reciprocal marker being the suffix *-s-* (see Yakut in (5)).

Yakut (Nedjalkov & Nedjalkov, Ch. 26, §§12.2.1–12.2.3)

- (29) *tuspa* ‘difference’ → *tuspa-la-s-* ‘to differ, be distinct from sb/sth’
atas ‘friend’ → *atas-ta-s-* ‘to become/make friends’
il ‘peace, concord’ → *il-le-s-* ‘to make peace with sb’
küres ‘competition’ → *küres-te-s-* ‘to compete with sb’
ajax ‘relatives, kinsfolk’ → *ajax-ta-s-* ‘to become relatives’
djukaax ‘neighbour’ → *djukaax-ta-s-* ‘to share a room/house’
ös ‘enmity’ → *ös-tö-s-* ‘to quarrel, to be at war.’

The following Yakut derivatives with the meaning of assistance or resistance do not express reciprocity proper: they denote actions performed in response to or implying another action.

- (30) *utarə* ‘opposite, against’ → *utarə-la-s-* ‘to contradict, counteract’
kömö ‘help, assistance’ → *kömö-lö-s-* ‘to help, assist sb.’

Plain verbalization is also attested in Muna:

Muna (van den Berg 1989: 56, 314–5)

- (31) a. *sabhangka* ‘friend’ → *-po-sabhangka* ‘to be friends with’
bhai ‘companion’ → *-po-bhai* ‘to accompany sb’
kantawu ‘heap’ → *-po-kantawu* ‘to be gathered together.’

The prefix *po-* is also attested as an unproductive marker of deverbal nouns, *nomina actionis* among them; cf.:

- b. *wura* ‘to see’ → *po-wura* ‘vision, view, sight’
fetingke ‘to feel’ → *po-fetingke* ‘hearing’
tandai ‘to remember’ → *po-tandai* ‘memory’ (van den Berg 1989: 316).

This fact is worth mentioning because reciprocal markers in a number of languages, e.g. Turkic, are used in similar derivations. There is an opinion that the material coincidence of the suffix *-š* of deverbal *nomina actionis* and reciprocals in the Turkic languages is not accidental and reveals their common origin; cf.:

- (32) Uzbek a. *ur-* ‘to hit’ → *ur-iš* ‘to hit each other’
b. *kir-* ‘to enter’ → *kir-iš* ‘entering.’

- (33) Kirghiz
- | | | | |
|----|--------------------------|---|---|
| a. | <i>körsöt-</i> ‘to show’ | → | <i>körsöt-üš-</i> ‘to show to each other’ |
| b. | <i>körsöt-</i> ‘to show’ | → | <i>körsöt-üš</i> ‘showing, a show’ |
| c. | <i>kara-</i> ‘to see’ | → | <i>kara-š-</i> ‘look at each other’ |
| d. | <i>kara-</i> ‘to see’ | → | <i>kara-š</i> ‘sight.’ |

It should be noted that *nomina actionis* display common features with collective nouns in that they are not usually used in the plural number either. The genetic proximity between the reciprocal suffix and that of nouns of action in Turkic languages was pointed out by Radloff (1897: 57–8) (see also Clauson 1967: 6–7). The reciprocal use of the marker of nouns of action can be tentatively explained as follows: in these nouns the object valency is weakened, and as a result the agent expression connected semantically with a noun of action can be interpreted as both agent and patient (an approximate illustration: *I love her* – *I am in love with her* – *We are in love* i. ‘We are in love with someone else’, also ii. ‘We love each other’; cf. also: **We mutually love*, but *our mutual love*). Compare in this connection the possible reciprocal interpretation of the phrases *the shooting of the soldiers* and *the touching of the knees*; see Uhlenbeck (1967: 271).

4.2 Derivatives of similarity and identity; type ‘year’ → ‘to be of the same year’

These derivatives denote similarity or identity with respect to the feature named by the base.

Nêlêmwa (Bril, Ch, 34, §9.1; *-n* = 3SG.POSS for human possessor, *-t* for inanimate or collective inanimate possessor)

- (34) *ka* ‘year’ → *pe-kau-n* ‘to be of the same year’
thala-t ‘side, flank, width’ → *pe-rala-t* ‘to be the same width.’

East Futunan (Moyses-Faurie, Ch. 35, §3.3.4)

- (35) *taka* ‘shoe (also ‘to walk’)’ → *fe-taka-’aki* ‘to take the same size in shoes’
’uluga ‘pillow (also ‘to rest one’s head on a pillow’)’ → *fe-’uluga-’aki* ‘to share the same pillow.’

Example (35) requires a justification, because the base words function both as nouns and verbs; as Moyses-Faurie explains (ibid.), “These derivatives are often semantically closer to the nominal than to the verbal sense of the base term.”

The reciprocal marker *se-* in (36) does not coincide with any of the Indonesian in-traverbal reciprocal markers mentioned in case 2d in 1.1:

Indonesian (Ogloblin & Nedjalkov, Ch. 33, §11)

- (36) *nasib* ‘fate’ → *se-nasib* ‘to have the same fate’
sekolah ‘school’ → *se-sekolah* ‘to go to the same school’
pendapat ‘opinion’ → *se-pendapat* ‘to be of the same opinion.’

A similar semantic group of derivatives is attested among derived nouns (see 3.3). When the latter are used predicatively, both groups practically coincide formally and syntactically.

4.3 Derivatives denoting converse relations between relatives; type ‘mother’ → ‘to be related as mother and child’

So far, I have encountered derivatives of this type in Ainu only. There are about 15 such derivatives in Ainu. Besides the reciprocal prefix *u-*, the derivatives also contain the verb *kor* ‘to have’. Omission of the reciprocal prefix results in the ungrammaticality of the remaining part; cf. **ona-kor* with the intended meaning ‘to have a father’. This meaning can be rendered not by means of incorporating *ona-kor* but by means of a free collocation *ona kor* ‘to have a father’. These two differ in that some prefixed agreement markers are preposed to verbal formations with incorporation and in free collocations they are placed on the verb.

Ainu (Alpatov et al., Ch. 42, §11; *-i-* = POSS; cf. *sut* ‘grandmother’ → *suc-i* ‘the grandmother of sb’)

- (37) *ona* ‘father’ → *u-ona-kor* lit. ‘to have a father-child relationship’
po ‘son, child’ → *u-po-kor* ‘to have a son-parent relationship’
sa ‘older sister’ → *u-sa-kor* ‘to have an older sister – younger sister or older sister – younger brother relationship’
matapa ‘younger sister (for an older brother)’ → *u-matapa-kor* ‘to have a younger sister – older brother relationship’
ak ‘younger brother’ → *u-ak-i-kor* ‘to have a younger brother – older brother or younger brother – older sister relationship’
irwak ‘brothers and sisters’ → *u-irwak-i-kor* ‘to have, be brothers/sisters, brothers and sisters.’

The last pair in (37) shows a tendency of Ainu kinship terms to acquire the reciprocal marker. As a matter of fact, the term *irwak* itself contains a reciprocal marker as it is descended from *ir-u-ak* where *-ak* means ‘younger brother’ which itself has a derivative with the reciprocal marker *u-ak-i-kor* (see above), and *ir-* is a bound noun stem meaning ‘brothers and sisters’; it has also been preserved with the reciprocal marker as *u-ir* ‘to be brothers and/or sisters’.

A similar group is also to be found among derived nouns in a greater number of languages (see 3.1.2).

4.4 Spatial reciprocals; type ‘face’ → ‘to stand face to face’

Here belong verbs derived from various parts of speech (nouns in (38a, c), adverbs in (38b)) denoting spatial contact, all kinds of motion or position relative to each other or changing position of parts of a whole (38a), and also chaotic movements (38c). In (38a, c), the marker is the same as in (29).

Yakut (Nedjalkov & Nedjalkov, 26, §12)

- (38) a. *atax* ‘leg/foot’ → *atax-ta-s-* ‘to lie together with heels touching’
eŋer ‘side, edge’ → *eŋer-de-s-* ‘to live next to [each other]’
n’uur ‘face’ → *n’uur-da-s-* ‘to stand face to face’
xar-ə ‘ice-blocking’ → *xar-ta-la-s-* ‘to pile up (of ice blocks) one upon another’

- b. *aksa* ‘nearby, close (to)’ → *aksa-la-s-* ‘to be next to each other’
ürüö-taraa ‘to and fro’ → *ürüö-te-s-* ‘to gather/crowd together’
serge- ‘next to, near’ → *serge-s-te-s-* ‘line up, walk next to each other’
- c. *üömex* ‘disorderly crowd/flock’ → *üömex-te-s-* ‘to flock/crowd/mill together’
üörük ‘matted hair’ → *üörük-te-s-* ‘to become matted/entangled’
ïama ‘young fish’ → *ïama-la-s-* ‘to swarm/teem with.’

The meaning of the last derivative in the list reflects the fact that young fish generally move in flocks in various directions, to and fro.

4.5 Derivatives related to the bases in an individual idiomatic way; type ‘shoulder’ → ‘to marry’

The following varieties can be distinguished: the meaning of the base may be employed metaphorically or the base names an object that is relevant in the reciprocal situation. The connection with the base by association can be traced here. Derivatives (39c) and (40c) also have a similarity with group (13b). On the whole, the boundaries between this and the previous types are vague and often subjective.

Evenki (Nedjalkov & Nedjalkov, Ch. 38, §13)

- (39) a. (verbal derivatives with suffixes *-meet* and *-ldə* see in (5); the latter suffix is employed as sociative and reciprocal)
 b. *mire* ‘shoulder’ → *mire-meet-* ‘to marry’
 c. *dəl* ‘head’ → *dəl-maat-* ‘to wrestle setting heads against each other’
ŋaale ‘arm’ → *ŋaale-ldə-* ‘to wrestle holding each other by the arms.’

Kirghiz (Nedjalkov, Ch. 28, §12.2)

- (40) a. *kubala-* ‘to chase’ → *kubala-š-* ‘to chase each other’
 b. *kez* ‘occasion’ → *kez-de-š-* ‘to come across’
 c. *mojun* ‘neck’ → *mojun-de-š-* ‘to embrace each other by the neck.’

4.6 A reciprocal marker in its regular meaning; type ‘love’ → ‘mutual love’

In Tagalog, the principal class of reciprocal verbs is derived by means of the prefix *mag-* from reciprocal nouns (*nomina actionis* in meaning) which in their turn are derived from non-reciprocal nouns, occasionally from lexical reciprocals (41c).

Tagalog (Shkarban & Rachkov, Ch. 22, ex. (79), (80), (92))

- (41) a. *ibig* ‘love’ → *ibig-an* ‘mutual love’ [→ *mag-ibig-an* ‘to love each other’]
 b. *patay* ‘killing’ → *patay-an* ‘killing each other’ [→ *mag-patay-an* ‘kill each other’]
 c. *alit* ‘quarrel’ → *alit-an* ‘mutual quarrel’ [→ *mag-alit-an* ‘quarrel with each other’].

The highly polysemous suffix *-an* may also denote the sociative meaning (41d) and a number of other meanings in some of which the semantic component of plurality may be perceived (41e):

- d. *ális* ‘departure’ → *ális-an* ‘departure of several persons together’
 e. *bahay* ‘house’ → *bahay-an* ‘position of a number of houses’
saging ‘banana’ → *saging-an* ‘banana grove.’

The derivational chain in (41a) is probably unique if we regard it as the only one possible. However, another path of derivation, namely, omission of the prefix, seems to be possible:

- f. *um-ibig* ‘to love’ → *mag-ibig-an* ‘to love each other’ → *ibig-an* ‘mutual love.’

Here the noun of action is formed by omission of the prefix *mag-*, and the reciprocal verb by means of the confix *mag...-an* (the formation of verbal reciprocals by means of circumfixes is very common in Malay-Polynesian languages; cf. (10) and (35)). More widespread cross-linguistically is derivation of *nomina actionis* from reciprocal verbs by means of a special marker; cf.:

- Yakut (-s/-h- = REC, -h- in intervocalic position; -əə = marker of *nomina actionis*)
 (42) *uura-* ‘to kiss sb’ → *uura-s-* ‘to kiss each other’ → *uura-h-əə* ‘mutual kissing.’

4.7 A reciprocal marker on numerals

This case seems to be extremely rare: so far it has been attested in two languages, each manifesting a different usage of the marker.

4.7.1 *The distributive meaning on numerals; type ‘two’ → ‘two each’*

In Mundari (Osada, Ch. 37), there is a reciprocal infix *-p-/pa-/po/...* which has no other meanings when used on verbs. Of special interest is the ancient use of this infix on five numerals, while a productive parallel means on all numerals is the reduplication of the first syllable (see the right-hand column).

- Mundari (Osada, Ch. 37, ex. (14))
- (43) *bar-ia* ‘two’ → *ba-pa-r-ia* ‘two each’ – *ba-ba-r-ia* ‘two each’
miad ‘one’ → *mi-pi-ad* ‘one each’ – *mi-mi-ad* ‘one each’
moNe-a ‘five’ → *mo-po-Ne-a* ‘five each’ – *mo-mo-Ne-a* ‘five each.’

There seems to exist a reciprocal marker used in a similar way in other, viz. in most of the Turkic languages, where the marker of distributive numerals is *-ar/-er* after final consonants and *-š-ar/-š-er* after vowels (Tenishev 1988:193–5). The component *-ar/-er* is traced back to the marker of collective plurality. Thus the component *-š-* can be genetically related to the reciprocal marker; cf. Turkish *iki* ‘two’ → *iki-šer* ‘in twos’, Tatar *žide* ‘seven’ → *žide-šär* ‘in sevens’, *dürt* ‘four’ → *dürt-šär* ‘in fours’.

4.7.2 *A reciprocal marker as a multiplier by two; type ‘three’ → ‘two times three’*

This type shows semantic connection with the meaning of duality considered in 3.1.

- Southern Paiute (Langacker 1976:14, 53)
- (44) *pai* ‘three’ → *na-vai* ‘six’ (= ‘two times three’).

Langacker (ibid., 53, footnote 7) agrees with E. Hamp that this latter usage is connected with the reciprocal:

Eric Hamp has observed that the use of *na-* in numerals is almost directly parallel semantically to its use in kinship terms. In both cases, two entities treated as being equivalent (parent and daughter; three and three) additively and exhaustively define a set. The set thus implies reciprocity for its defining members.

4.8 Derivatives with a pleonastic or fossilized marker

Nominal *lexical reciprocals* occur in some languages optionally or obligatorily with a reciprocal marker. Typical reciprocal meanings of such nouns are ‘friend’, ‘neighbour’, ‘brother’, etc.

1. *With a pleonastic reciprocal marker.* In this case the base is a lexical reciprocal or denotes a relative in converse relations with other relatives. The reciprocal marker may be optional or fossilized.

Ainu (Alpatov et al., Ch. 42, §11.2)

(45) *tokoj* ‘friend’ → *u-tokoj* (same).

2. *With a fossilized reciprocal marker*

Abaza (Tabulova 1976:193)

(46) a. *ai-gva* ‘friend’
ai-cala ‘daughter-in-law’
ai-clba ‘the youngest’

Abkhaz (G. Hewitt, p.c.)

b. *ai-a.hW.sha* ‘sister’
ai-a.sca ‘brother’

5. Derivational pairs “Verb → Noun”

This type of derivation is attested in one language only, namely, Bamana. These derivatives are formed with the reciprocal adverb *ɲɔgɔn* which functions here as a suffix. The derivatives are relative nouns used either in the plural (see (ii) in (47b)) or with a possessive attribute (see (47a) and (47b.i)). The suffix *-ɲɔgɔn* regularly functions as a word-forming suffix when added to (intransitive) verbal stems or combinations “direct object + (transitive) verbal stem”. The meaning of the derivative is “[somebody’s (explicit marking is necessary)] companion/partner in the activity in question”, or, necessarily with the plural marker, “[group of] companions in the activity in question”. These derivatives are compound nouns, which is explicated by the fact that they take the plural suffix *-w*. There seem to be no restrictions on this type of derivation, except semantic compatibility:

Bamana (Vydrine, Ch. 46, §10.1)

- (47) a. *kà bòlí* ‘to run’ → *í bòlí-ɲǝ̀gɲ* ‘your companion in escape’
 b. *sígí* ‘to live’ → i. *à sígí-ɲǝ̀gɲ* ‘his neighbour’
 ii. *sígí-ɲǝ̀gɲ-w* ‘neighbours.’

6. Derivational pairs “Adverb, postposition, etc. → Adverb”

The underlying bases are locative adverbs, postpositions, prepositions and auxiliary locative nouns. They mostly enter into pairs with converse relations, like ‘next to’ – ‘far’, ‘in front of’ – ‘behind’, ‘above’ – ‘below’, ‘top’ – ‘bottom’, etc. (cf. Ch. 1, §10). This type seems to be more common cross-linguistically than those discussed in Sections 3–4, though lexically more restricted than the verbal-nominal group (see 1.3). It can be subdivided into three groups.

6.1 Reciprocal adverbs

6.1.1 *With standard reciprocal markers*

In this case the regular reciprocal marker is used and the derivative is used as an adverb. In Ainu, there are about 40 reciprocal adverbs some of which are strongly lexicalized and removed from the spatial meaning.

Ainu (Alpatov et al., Ch. 42, §12)

- (48) *enka* ‘upper part, above’ → *u-enka* ‘one above another’
ka ‘top of sth’ → *u-ka* ‘one on top of another’
sam ‘place in proximity, near’ → *u-sam* ‘next to each other’
piskan ‘place around, in the area of’ → *u-piskan* ‘here and there.’

Kolyma Yukaghir (Maslova, Ch. 44, §4.1, §6.4)

- (49) *arqa* ‘near’ → *n’e-arqa* ‘near each other’
molho ‘among, between’ → *n’e-molho-n* ‘among ourselves/yourselves/...’
jela: ‘after, behind’ → *n’e-jela:* ‘one after another.’

Chukchi (Nedjalkov, Ch. 40, §§3.5 and 4.5; *-e* = ADV)

- (50) *čimče* ‘near’ → *čimče-wəly-e* ‘near each other.’

Mundari (Osada, Ch. 37, §9.1; *-re-* = ‘in’; *aRi* = ‘edge’)

- (51) *aRi-japa?-re-* ‘near the edge’ → *ja-pa-pa?-re-* ‘near each other.’

6.1.2 *With non-standard reciprocal markers*

The use of a reciprocal marker can be combined with additional marking or other changes. Thus, in Nivkh, the standard marking of reciprocal adverbs (52a) may combine with optional (52b) or obligatory (52c) reduplication.

Nivkh (Otaina & Nedjalkov, Ch. 41, §3.4; *v-* = REC before vowels)

- (52) a. *-laya* ‘next to’ → *u-laya* ‘next to each other’
 b. *-laqv* ‘around sth’ → *u-laqv[-laqv]* ‘around each other’
 c. *-ənk* ‘in front of’ → *v-inkə-v-inkə* ‘preceding each other’, ‘(in) single file’
-əri ‘behind sth’ → *v-əri-v-əri* ‘following each other’, ‘(in) single file.’

In Even, locative auxiliary nouns can function as common adverbs and postpositions when used with case endings and/or possessive markers. Reciprocal adverbs are formed by means of the non-standard marker *-lta/-lte* specialized for derivation of reciprocal adverbs (it is likely to be genetically related to the standard sociative/reciprocal suffix *-lda/-lde*); cf.:

Even (Malchukov, Ch. 39, §9.2.1; *-n* = 3SG.POSS)

- (53) *hergi* ‘bottom’ (noun)
hergi-le <bottom-LOC> ‘underneath’ (adverb)
hergi-n <bottom-its> ‘underneath’ (postposition)
uu hergi-le-n <house bottom-LOC-its> ‘under the house’ (postposition)
hergi-lte ‘one under another’ (spatial reciprocal pronoun)

So far, the Even suffix *-lta/-lte* and its Evenki cognate *-lta/-lte/-lto* are the only attested reciprocal markers which do not coincide with the intraverbal reciprocal markers; cf. Even (where *-du* = DAT; *-n* = POSS): *oldon-du-n* ‘at the side next to sb/sth’ → *oldini-lta* ‘one upon another’, *žüle-du-n* ‘in front of sb/sth’ → *žüle-lte* ‘one after another’ (Nedjalkov & Nedjalkov, Ch. 38, §6.2 and 12).

6.2 Reciprocal adverbs-preverbs (see also Ch. 5, §12.2)

A reciprocal marker can be attached to prepositions to form indivisible entities – adverbs and adverbs-preverbs. The latter term reflects their intermediate character. Semantically, adverbs-preverbs may serve as parts of complex two-component verbal formations. Positionally, they may be more or less fixed, either in postposition or preposition to the verb, or either, depending on the construction used. The spatial meaning of an adverb-preverb may undergo changes so that its meaning does not equal that of both components.

This type of adverbs-preverbs is represented in German. A certain semantic affinity of these formations with verbs is achieved, both combined into a kind of complex verbs with spatial meanings. It is not accidental that (though it is rather conventional) they are spelt as one with verbs when the latter are used, e.g., as infinitives or participles. In this case attachment of a preposition to the *reciprocal pronoun* takes place rather than the attachment of the reciprocal marker to the preposition. For instance, *auf etwas* ‘on sth’ – *aufeinander-* ‘on each other’, *über etwas* ‘above sth’ – *übereinander-* ‘above each other’; they behave like separable prefixes *auf*, *ein*, *über*, etc., i.e. adverbs-preverbs may be distanced from the verb; cf. *Er stapelt etwas übereinander* ‘He piles something on top of one another’ and (54a):

German (Wiemer & Nedjalkov, Ch. 10, §5.5)

- (54) a. *etwas über etwas stapeln* 'to pile sth on sth'
 → *etwas übereinanderstapeln* 'to pile sth on top of one another'
 b. *etwas in etwas schieben* 'to push sth into sth'
 → *etwas ineinanderschieben* 'to push sth into one another.'

Some of these formations undergo lexicalization and the verbs combined with them have no semantic correlates without *einander*; cf. both forms in (55a) and also in (55b) where the verbs without *einander* do not correspond semantically to the derivatives in a standard way; note that the form *durcheinander* practically never had a reciprocal meaning, though its meaning is expressed by reciprocal markers in some other languages.

- (55) a. *aus etwas herausfallen* 'to fall out of sth'
 – *auseinanderfallen* 'to fall to pieces'
 b. *durch etwas laufen* 'to run through sth'
 – *durcheinanderlaufen* 'to run in different directions (without aim).'

6.3 Reciprocal complex preverbs (see Ch. 5, §12.2)

Semantically, the Kabardian derivatives in the examples below are close to the previous case, though they are formally different, as they involve preverbs rather than adverbs, i.e. items that are used within verbs and never occur separately. Note, however, that preverbs have mostly developed from adverbs. Strictly speaking, these derivatives should not be considered in this section as it is concerned with reciprocal adverbs, but they are mentioned as a typologically possible endpoint of the development of reciprocal adverbs.

With most bases both the locative preverb and the reciprocal prefix may preserve their own meanings. Thus, in (57c) the prefix of proper reciprocals *zə-* (56) preserves its meaning in combination with the preverb *-te-* (denoting an action on some surface).

Kabardian (Apazhev 1957:45, 114, 115, 122, 338; see also Ch.1, §13.1.5 and Kazenin, Ch. 17, §9)

- (56) *guoun* 'to shout to sb' → *zə-zguoun* 'to shout to each other.'
 (57) a. *dzən* 'to put, throw sth'
 → b. *te-dzən* 'to throw sth on top'
 → c. *zə-te-dzən* 'to throw sth one upon another.'

In (58) the same combination *zə-te-* is not the sum of the components semantically: in this case it has an intensive meaning and denotes a plurality of participants.

- (58) *məxən* 'to faint' → *zə-te-məxən* 'to faint (of many).'

Here are two more examples with the preverbs *-ščIə-* typically denoting an action inside some space or under something (cf. *ščIə-šxəklən* 'to eat the lower part of sth, from beneath'), and *xə-* often denoting an action within some mass (cf. *xə-šxəklən* 'to eat out (the inside)'): they are fused with the reciprocal prefix and lose these meanings, thus becoming complex preverbs, with the semantic component of plurality representing the reciprocal meaning.

- (59) a. *ščəščən* ‘to neigh’ → *zə-ščIə-ščəščən* ‘to neigh (of many horses)’
 b. *šxən* ‘to eat’ → *zə-xə-šxəkIən* ‘to eat together with sb.’

The derivational chain in (57) corresponds to German (54) in that in both cases there is a non-reciprocal base related to the reciprocal in a standard way. As regards (58) and (59), where the reciprocal marker *zə-* and the preverbs *-te-*, *-ščIə-* and *-xə-* are fused into an indivisible complex, there are naturally no correlates without *zə-* in the same way as there is no semantically relatable correlate without *einander* in (55a) and (55b).

7. Concluding remarks

7.1 Morphological types

The four morphological types of reciprocal derivatives involving non-verbal bases (see §§3, 4, 5 and 6) display three types of markers each:

- (a) the same markers as in intraverbal derivation (see, e.g., (1), (4c, d), (8a), (10));
- (b) markers including the reciprocal marker used in intraverbal derivation (see *da-s-/la-s/...* in (3), (25), (29), (38), (40a, b)); *u-...-kor* in (37), *-š-kə-* in (12) and *n’iη-...-jil’-* in (21));
- (c) special markers (see *se* in (36), *ka-* in (24) and *-lta/-lte/-lto* in (53)).

7.2 Productivity

Intraverbal derivation, when productive, generally does not exhibit any significant restrictions except some lexical-semantic and pragmatic ones. On the other hand, the derivations considered in this section are never as productive; they are lexically restricted to a considerable degree in some of their meanings (e.g. ‘both’, ‘all together’). The bases of most derivatives are lexical reciprocals denoting reciprocal actions like *quarrel*, *speech*, reciprocal relations like *peace*, *agreement*, participants of reciprocal actions or relations, like *friend*, *companion* (see, for instance, 4.1). Among the latter, the kinship terms (like *spouse*, *brother*) are especially common (see, for instance, 3.1.2). In contrast, derivatives denoting similarity and identity are not restricted to lexical reciprocals and converses as bases (see 3.3 and 4.2).

7.3 Converse bases

A special place in derivation involving non-verbals belongs to converse bases. They are varied lexically, e.g. *father – child*, *younger brother – elder brother*, *top – bottom*, *near – far*, etc. One base word may enter into more than one converse pair, e.g. ‘younger brother’ – ‘elder brother’ and ‘younger brother’ – ‘elder sister’. Derivatives of such words include the meaning of both members of a converse pair, like ‘father and child’ (see 3.1.2). Some bases denote paired entities differing in their position relative to each other: *right hand – left*

hand, right foot – left foot. Their reciprocal form means ‘both hands, feet’ (see 3.1.3), or the reciprocal form of the members of the converse opposition ‘right’ – ‘left’ is used with regard to the left or right hand in order to characterize a person (see ‘left-handed’ – ‘right-handed’ in 3.1.4). In this respect a characteristic feature is the use of the reciprocal marker on the word *u-mure* ‘pair’ in Ainu (see 3.1.3) and a specialized plural marker for kinship terms on the word *tie-mule* ‘pair’ in Udehe (see 3.1.2 beneath (16)).

7.4 Duality

One of the main characteristics of the derivatives in question is that they normally express non-singular, especially dual or paired objects. In most cases the derivatives involve the names of relatives singled out among other relatives. Three types of meanings can be distinguished here:

1. ‘brother’ – ‘two brothers’, ‘foot’ – ‘both feet’, as in (6b), (8), (17);
- 2a. ‘mother’ – ‘mother and daughter’, as in (9), (10), (12)–(14);
- 2b. ‘mother’ – ‘mother and daughter’ and ‘daughter’ – ‘daughter and mother’, as in (37);
3. ‘brother’ – ‘all the brothers together’/‘brothers to each other’/‘brothers between themselves’, as in (19), (21), (22).

Note that in cases 2a and 2b the base form names a relative of higher status, as in 2a, or this feature is irrelevant, as in 2b. I have not encountered any languages where all the base words name relatives of lower status, although such a case cannot be ruled out.

7.5 The meaning of similarity

The meaning of similarity or identity with respect to the feature named by the base word (type ‘father’ – ‘born of the same father’, ‘class’ – ‘classmate’) is attested in five languages of my corpus. Characteristically, only in two of them is this meaning expressed by the same marker as in standard reciprocal verbs derived from verbs (see (34) and (35)). In two languages specialized markers are used (see (36) and (24)), and in one language a marker is used which contains the standard reciprocal marker (see (25)). The marking differences probably reflect a lesser degree of semantic proximity between this type of derivatives and standard reciprocals like ‘to see each other’.

7.6 Reciprocal adverbs

Derived reciprocal adverbs usually have spatial meanings (needless to say, some may acquire non-spatial meanings, due to metaphoric change or for some other reason). This is illustrated by derivatives with standard reciprocal markers in (48)–(52), (54)–(55). The second morphological type of reciprocal markers containing a standard reciprocal marker, e.g. Yakut *-das-...*, derives spatial reciprocals, but they are not adverbs but verbs (see 4.4). And lastly, the third morphological type of markers, distinct from standard recipro-

cal markers and used to derive reciprocal adverbs, is registered in two genetically related languages, Even and Evenki: it is the suffix *-lte/...* (see (57) above). Thus, the main device for marking reciprocal adverbs is a standard reciprocal marker.

As we are concerned here with spatial reciprocal relations, it may be appropriate to note that the spatial meaning is widely represented among standard reciprocal verbs, i.e. derivatives from verbal bases, cross-linguistically (see Ch. 1, §2.2.4, two subsections (b) in §12.1.1.2 and also 1.13 and 1.15.5 of Ch. 1). In some languages spatial reciprocal adverbs show a tendency to merge with verbs and form complex entities with them (cf. 6.2).

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Authorized translation from Russian by Emma Geniušienė

CHAPTER 8

Questionnaire on reciprocals

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1. Introductory notes

1.1 General

The questionnaire on the typology of reciprocals is combined here with a digest of Chapters 1, 3, 5 and 7 (which naturally leads to a number of repetitions), to save the researcher from the trouble of searching for the relevant information in the text. This questionnaire is meant to facilitate a detailed description of the morphological, syntactic and semantic properties and polysemy of reciprocal markers of individual languages in comparable terms.

The earlier drafts of this questionnaire have been considerably revised after all the chapters of the present collective monograph were completed. Therefore, the papers on individual languages do not entirely conform to this questionnaire.

To facilitate its independent use without a preliminary study of Chapters 1, 3, 5, and 7, some basic definitions and main assumptions are repeated here and examples are supplied,

the references to the chapters listed being made in order to assist the reader in finding the details. To repeat, the questionnaire contains questions, which are framed, and also promptings that suggest typologically possible cases. It also recommends an outline and order of description of reciprocal constructions in an individual language.

This chapter is certainly too long for a questionnaire, but the core of the questionnaire is really comprised of the framed questions, and the reader is free to use only this essential part of this chapter.

The sequence of presentation of the material shown below is not obligatory, and a different order of description may be used, if the material requires it, and some section(s) may be omitted if the issue is irrelevant for the language or if there is no material. Needless to say, the questionnaire does not outrule discussion of other relevant problems if the researcher of a particular language is lucky enough to find some new phenomena not reflected here.

1.2 Definitions of terms

Markers which allow to replace two sentences with inverted arguments like (1a') and (1a'') by one sentence (1b) carrying the same semantic content as that of the first two are termed *reciprocal markers*. They may be of two main types: *verbal*, mostly morphological (affixes, reduplication, compounds, inflection, etc.) or clitic, and/or *pronominal* (more generally, *syntactic*: pronouns and adverbs) (see Section 4 below). If reciprocalization involves unmarked changes in the syntactic sentence structure only (e.g. deletion of the direct object, as in (2b)) the relevant changes are provisionally classified as verbal markers (because deletion of the direct object in most cases takes place when explicit verbal marking is used).

- (1) a'. *Marie küßte Paul* + a''. *Paul küßte Marie* = b. *Marie und Paul küßten sich*.
[= themselves, each other]
- (2) a'. *Mary kissed Paul* + a''. *Paul kissed Mary* = b. *Mary and Paul kissed [each other]*.

Besides these two main types of reciprocal markers, a language may use “unexpected” expressions of reciprocity (e.g. German poetic *die Liebenden* lit. ‘the loving (PL)’, ‘the lovers’ or ‘those in love’). A language may possess both verbal and pronominal reciprocal markers; moreover, it may possess more than one of each type.

Situations described by sentences like (1b) and (2b) are *reciprocal situations*. They consist of two *subevents* otherwise expressed by (1a', a'') and (2a', a'') respectively. The subevents may be *simultaneous* or *sequential*.

Two types of reciprocals, *verbal* (with a verbal marker; cf. *sich küssen*) and *pronominal* (with a pronominal marker; cf. *to kiss each other*) are distinguished according to the type of the marker. Of course, there can be intermediate types, due to the tendency of pronominal reciprocals, especially reflexive, to evolve into verbal; of course, this does not mean that any pronominal marker will eventually change into verbal.

If a verb can form two sentences with inverted arguments and these two sentences have the same meaning and can be replaced by one sentence with the same verb and both

arguments in the subject position, such verbs are termed *lexical reciprocals*; they describe situations representing one event where the subevents cannot as a rule be singled out; cf.:

- (3) a'. *Mary argues with Paul* = a". *Paul argues with Mary*
 = b. *Mary and Paul argue [with each other].*

Depending on the subject or object position of the antecedent of the reciprocal marker, two types of reciprocal constructions are distinguished, subject-oriented (see (1b) and (3b) above) and object-oriented. The latter may be of two main subtypes, *embedded*, often causative (see (4a) below where the antecedent of the reciprocal marker is *ihnen* and (5a) where the antecedent is *sie*) and *non-embedded* (as a rule, lexical reciprocals; see (4a)):

- (4) a. *Er erlaubte ihnen nicht sich zu küssen.* 'He did not allow them to kiss.'
 (5) a. *Er stellte sie einander vor.* 'He introduced them to each other.'

Reciprocal markers may be *monosemous* or *polysemous*. Verbal reciprocal markers are often polysemous, and pronominal ones are mostly monosemous. Thus, the pronominal marker in (2b) cannot denote anything but reciprocity, whereas the verbal marker in (1b) can have either the reciprocal ('each other') or the reflexive ('themselves') meaning.

Reciprocals with the meaning of type (1b) and (2b), i.e. those on which the reciprocal meaning is expressed by a special marker and which enter into a standard semantic opposition with a non-reciprocal underlying verbal base, are termed *grammatical*, in contrast to lexical reciprocals.

The arguments in (1b) and (2b) of the same semantic class (human in this case), standing in the same relation to each other and expressed by the subject, are termed *reciprocal arguments* or *reciprocants*, for brevity. In a prototypical reciprocal situation, there are two reciprocants: for convenience, they may be referred to as the first and the second, or *co-reciprocants* (*Marie und Paul* in (1b) and *Mary and Paul* in (2b) respectively). Each is assigned two semantic roles, being both an agent and a patient of the same reciprocal situation: namely, the agent in one of the subevents and patient in the other. In type (1b) and (2b) reciprocal constructions, the subject position can be filled only by a plural noun phrase (e.g. 'The boys', 'They'), at least semantically (e.g. 'People', 'The group') or conjoined singular nouns, as in the examples cited. Reciprocal constructions with the singular subject and an object are a secondary development and not always possible: they are termed *discontinuous*, while constructions with a plural subject denoting both reciprocants are termed *simple* (see §6 below).

In the *simple* reciprocal construction, the valency decreases, and in the *discontinuous* construction it is retained, though the object lowers its syntactic status. Compare Swahili (Vitale 1981: 145, 150–1; see also Maslova, Ch. 6, §3.4):

- (6) a. *Juma na Halima wa-na-pend-an-a.*
 J. and H. 3PL.SB-PRES-love-REC-a
 'Juma and Halima love each other.'
 b. *Juma a-na-penda-an-a na Halima.*
 J. 3SG.SB-PRES-love-REC-a with H.
 'Juma and Halima love each other', lit. 'Juma loves each other with Halima.'

Both grammatical and lexical reciprocals (though not each one) may be used in the discontinuous as well in the simple construction. They differ, however, with respect to the type of construction, simple or discontinuous, which should be considered basic for each class of reciprocals. There are reasons for considering the simple construction to be basic for grammatical reciprocals and the discontinuous for lexical reciprocals.

In the case of some non-reciprocal meanings of polysemous derivatives with the reciprocal marker, the valency is either preserved (cf. the sociative meaning) or even increases (cf. the comitative and the assistive meanings). Cf. Tuvan (Kuular, Ch. 27, ex. (99)):

- | | | | | |
|--------|----------------|----------------------------------|------------------------|------------|
| (7) a. | <i>üpte-</i> | ‘to rob sb’ | two-place transitive | |
| b. | <i>üpte-š-</i> | i. ‘to rob <i>each other</i> ’ | one-place intransitive | reciprocal |
| | | ii. ‘to rob sb <i>together</i> ’ | two-place transitive | sociative |
| | | iii. ‘to rob sb <i>with sb</i> ’ | three-place transitive | comitative |
| | | iv. ‘to <i>help sb</i> rob sb’ | three-place transitive | assistive |

The derivative with the reciprocal meaning in (7b) is identifiable as intransitive in comparison with the other three meanings: the latter retain the direct object of the base structure. Moreover, the sociative sentence retains the valency structure of the base sentence. The comitative and the assistive meanings, being both three-place, differ in the form of the non-direct objects: the object marked by the postposition *-bile* ‘with’ (spelled as part of the noun, e.g. *ača-zə-bile* ‘with his father’) is comitative whereas the dative marking (e.g. *ača-zə-n-ga* ‘to his father’) indicates the assistive meaning. If the non-direct object is deleted the only help comes from the context.

If a language possesses two or more reciprocal markers, each should be described separately, and their description should be followed by a comparison of these types of reciprocals semantically, stylistically, from the viewpoint of productivity and frequency and other distinctions if they are registered. The issue of interchangeability of different types of reciprocals should also be considered.

For instance, here is an illustration of stylistic differences: in German (1b) the reflexive/reciprocal *sich* can be replaced by the monosemous reciprocal pronoun *einander*. But the marker *sich* is prevalent in oral speech and it is more neutral *stylistically*, while *einander* is more suitable in written texts, being more literary (cf. Berger et al. 1972:544: “...fast immer gehoben, bei einigen Verben sogar gespreizt”).

- (8) *Marie und Paul küßten einander.* ‘Mary and Paul kissed each other.’

Usually, constructions with verbal reciprocals derived from two-place transitives are intransitive (i.e. intransitivization of transitive verbs takes place). They are termed here “canonical” (see (1b) above; though the term “intransitive” can be an alternative). In languages with ergative constructions the latter change into absolutive; compare Chukchi:

- (9) a. *Eqel̄-e atlay-ən penrə-nen.*
 enemy-INST father-ABS attack-AOR.3SG+3SG
 ‘The enemy attacked father.’
- b. *Eqel̄-ən ənkl̄am atlay-ən penrə-wəly-ə-γ̄lat.*
 enemy-ABS and father-ABS attack-REC-AOR.3PL
 ‘The enemy and father attacked each other.’

The *diathesis type* of a reciprocal construction is established relative to the constituent reciprocalized with the subject. In the “canonical” type, the direct object undergoes reciprocalization with the subject. There are two more basic diathesis types: “indirect”, when a non-direct object of a three-place verb is reciprocalized, and “possessive”, when an attribute of an object is subjected to reciprocalization with the subject, the object retaining its status. Thus, transitivity is retained in constructions termed here “indirect” and “possessive” (see below Section 5). Transitivity is also retained in the case of some non-reciprocal meanings of derivatives with a reciprocal marker; cf. the Karanga sociative in (10c) (Marconnès 1931:195):

- (10) a. *Ti no chek-a nyama.*
 we no cut-IND meat
 ‘We shall cut meat.’
- b. *Ti no chek-an-a.* reciprocal (intransitive)
 we no cut-REC-IND
 ‘We shall cut each other.’
- c. *Ti no chek-an-a nyama.* sociative (transitive)
 we no cut-REC-IND meat
 ‘We shall cut meat together.’

Unless otherwise indicated, the subsequent text concerns verbal reciprocals.

The sequence of the sections below is in fact the recommended order of description of reciprocals of an individual language.

If there are more than one means of marking reciprocity in a language, each should be described separately, and so should the simultaneous use of two markers.

2. Overview and database

An article on reciprocals should open with a brief overview (one or two pages long) summarizing the characteristics of reciprocals in the language under analysis. The following features should be briefly listed and illustrated: reciprocal markers, diathesis types of reciprocal constructions illustrated by examples, polysemy, productivity.

It is advisable to provide brief information about the people speaking the language in question, their place of habitation and areally close languages. This information should precede the overview.

In this section, the sources of the data (dictionaries, grammars, fiction, colloquial speech, information from native speakers, etc.) should be named. The approximate number of reciprocals registered and/or considered in the paper should be pointed out.

3. Grammatical notes

Minimal grammatical information (2 to 6 pages) on the structure of the language should be provided prior to the analysis of reciprocals as a grammatical background, in order to facilitate the reader's understanding of the material.

Most of the examples in the articles, especially sentential, should be glossed.

1. General characteristics. Emphasis should be made on the following points if they are relevant for the description of the reciprocals: morphophonology, sentence structure (nominative, ergative, etc.); neutral WO, word classes, case marking, personal pronouns, possessivity, tense/aspect system (in particular, on the grammatical means of expressing iterativity, durativity and semelfactivity, if there are any, and on their co-occurrence with reciprocals), agreement, non-finite verb forms (converbs, participles, infinitives), etc.

2. Means of marking reciprocity. This section should provide additional information on the examples cited in the overview: the reciprocal marker used and its type and structure, existence of other synonymous markers, their "weight" and order of preference, etc. (for details see Section 4 below).

3. Valency-changing means. Other valency-affecting categories, such as reflexive, passive, applicative, causative, etc. attested in the language should be listed and the place of reciprocals among them established. As a rule, the core of these categories does not exceed the following list: (a) valency-decreasing categories, e.g. reflexive, passive, reciprocal, resultative, antipassive; (b) valency-increasing categories may include causative, applicative (applicative-comitative, applicative-assistive, applicative-benefactive, etc.), and (c) valency-retaining categories may be sociative (it is mentioned here due to the semantic proximity to reciprocals, though it does not increase valency; however, it increases the number of the participants).

It may be useful to mention whether the grammars of the language under analysis regard reciprocals as a grammatical (form-changing) or derivational category of the verb.

4. Co-occurrence of valency-changing means. If there is anything of interest concerning combinability of valency-changing means it should be briefly pointed out.

Possibility of the derivation of verbal reciprocal forms from semantic reflexives, causatives and other categories just listed should also be mentioned, as well as their derivation from reciprocals.

In some languages, reciprocal derivation may be based on two-place (explicit or implicit semantic) derivatives with reflexive or autocausative meanings; cf. Karachay-Balkar (11) and Tuvan (12) respectively:

- | | | | |
|------|--|----------------------------|---------------|
| (11) | <i>maxta-</i> | 'to praise sb' | |
| | → <i>maxta-n-</i> | 'to praise oneself, boast' | reflexive |
| | → <i>maxta-n-əš-</i> | 'to boast to each other' | |
| | (there is no reciprocal * <i>maxta-š-</i> with the intended meaning 'to praise each other'). | | |
| (12) | <i>čöle-</i> | 'to lean sth onto sth' | |
| | → <i>čöle-n-</i> | 'to lean on sth' | autocausative |
| | → <i>čöle-n-əš-</i> | 'to lean on each other.' | |

5. *Synonymy of non-reciprocal markers and non-reciprocal meanings of polysemous markers.* A common enough case is the anticausative meaning shared by reciprocal and non-reciprocal markers; it usually shows the “ripe” age of the marker, its being in the stage of the semantic erosion of the main function and general desemantization. A good illustration are the following Karachay-Balkar examples (borrowed from KB. 220-1) where the forms of an intransitive verb with the reciprocal, reflexive and both suffixes are synonymous (see (13b, c, d)), and so are their causative derivatives with the meaning ‘to join sth’ (see (13b’, c’, d’)).

- (13) a. *džalya-* ‘to join/combine/couple’ (vt) (e.g. *uč-lar-n džalya-* ‘to join the ends of sth’)
 b. *džalya-š-* ‘to join/combine’ (vi) → b’. *džalya-š-dər-* (vt)
 c. *džalya-n-* ‘to join/combine’ (vi) → c’. *džalya-n-dər-* (vt)
 d. *džalya-n-əš-* ‘to join/combine’ (vi) → d’. *džalya-n-əš-dər-* (vt).

Henceforth, most of the subsections open with a question (questions) followed by examples and or explanations.

4. Means of encoding reciprocity

1. In what way(s) can the reciprocal meaning be expressed in the language under consideration? Is there one marker, or more than one?
2. What are the status and properties of the marker(s)?
3. Are these means in complementary or some other kind of distribution? (E.g., in Abaza there are at least eight, productive and unproductive, ways of marking reciprocals which are in complementary distribution, only three of them being productive).
4. Are there any affixes, particles or words that co-occur with reciprocals regularly, or often? What may be the cause of their co-occurrence?
5. Does the main reciprocal marker have any other meanings that entail detransitivization of a transitive base stem/verb?
6. Do the reciprocal markers differ with respect to the number of reciprocants?

The main types of markers are considered in the subsections that follow. As is shown below, one language may employ different reciprocal markers which may be used simultaneously.

The primary subdivision distinguishes three main types: syntactic marking, morphological marking and clitics. Withing the first two types, subtypes from A to F are distinguished. The third type is not further subdivided and thus it represents type G alone.

4.1 Syntactic marking

There are at least two basic sybtypes of syntactic marking.

Subtype A (grammaticalized) doubling of the clause or verb phrase with a concomitant inversion of the arguments (cf. (1a’) + (1a’’)). Cf. Modern Chinese (He 1990: 124–32):

- (14) a. *Tāmen zǒngshì nǐ bāng-zhù.*
 they always you.SG help-help
 ‘They always help you.’
- b. *Tāmen zǒngshì nǐ bāng-zhù wǒ, wǒ bāng-zhù nǐ.*
 they always you.SG help-help I I help-help you.SG
 ‘They always help each other’; lit. ‘They always you help me, I help you.’

Subtype B. This subtype might be more precisely termed *lexico-syntactic*. As the prevalent device is reciprocal pronouns, it is convenient to term this subtype *pronominal*:

1. **Reciprocal pronouns**, like English *each other* (see translations in (14b), (15i), (16b), (17b), etc.) or personal pronouns when used as coreferent with the subject; cf. the To’aba’ita example (Lichtenberk, Ch. 36, §5):

- (15) *Keero’a keko thathamī keero’a...*
 3DU 3DU.SEQ like 3DU
 i. ‘The two of them liked *each other* ...’
 ii. ‘The two of them liked *themselves* ...’
 ii. ‘The two of them liked *them* ...’

2. **Reciprocal adverbs**, like Malayalam *tammil* ‘among them’ (Jayaseelan 2000:119) and Chinese *hùxiāng* ‘mutually’. In contrast to reciprocal pronouns, reciprocal adverbs are usually not case-inflected and do not combine with adpositions. In isolating languages the status of these two – reciprocal pronoun or adverb – is often problematic. Compare the following Modern Chinese (Hoa et al., Ch.43, §3.2.1.2) example with a two-place intransitive taking a prepositional object:

- (16) a. *Wǒ xiàng tā dào-qiàn-le.*
 I to he apologize-PERF
 ‘I apologized to him.’
- b. *Tāmen hùxiāng dào-qiàn-le.*
 they mutually apologize-PERF
 ‘They apologized to each other.’

3. **Reciprocal specifiers** – words and phrases like Russian *vzaimno* ‘mutually’, German *gegenseitig* and its English counterpart *mutually* as well as phrases like German *unter sich*, English *among/between themselves* (considered below in Section 9) cannot as a rule be used to encode reciprocity on their own. They may co-occur with grammatical or lexical reciprocals, either for emphasis, or for disambiguation if the reciprocal marker is polysemous. However, some of them may encode reciprocity by themselves when used in the position of an attribute; cf. German:

- (17) a. *Sie liebten sich.* i. ‘They loved *themselves*’, ii. ‘They loved *each other*.’
 b. *Sie liebten sich gegenseitig* ii. ‘They loved *each other mutually*.’
 c. **Sie liebten gegenseitig* lit. ‘They loved *mutually*.’
 but: d. *gegenseitige Liebe* ‘*mutual love*.’

The rules of selectivity are sometimes rather complicated; cf. (17b) and [?]*Sie trafen sich gegenseitig* in the meaning ‘They met mutually’.

Reciprocal specifiers sometimes have a tendency to be used as the only reciprocal markers in colloquial speech; for instance, in Russian (18) the regular reciprocal marker (pronoun in this case) is omitted:

- (18) *My dolžny vzaimno proščat' [drug drugu] nedostatki.*
 we must mutually forgive each other shortcomings
 'We must mutually forgive shortcomings [of each other].'

4.2 Morphological marking

It is commonly termed *verbal marking*. There are five main subtypes.

Subtype C: periphrastic constructions, e.g. active participle + auxiliary verb; cf. Bantawa (Ebert 1994: 54):

- (19) *dhat-pa tí-mi-a-nin.*
 beat-ACT.PART 2-DO-PAST-2PL
 'you beat each other', lit. 'you made fighter.'

Subtype D: compounds with recurrent components (see Ch. 3, §5). The Modern Chinese examples below contain the verbs *jiāo* 'to intersect/cross', 'to join', and *duì* 'to be opposite (to) each other'. These verbs, like a number of other verbs, can function as recurrent components either pleonastically on lexical reciprocals (see (20a)) or as reciprocal markers (see (20b)) (Hoa et al., Ch. 49, §7).

- (20) a. *hǎo* 'to be friends' → *jiāo-hǎo* (same)
 bǐ 'to compare sth with sth' → *duì-bǐ* (same)
 b. *bài* 'to bow to sb' → *jiāo-bài* 'to bow to each other'
 liú 'to flow' → *jiāo-liú* 'to flow together (into one place)'
 kàn 'to look' → *duì-kàn* 'to exchange glances'
 mà 'to scold' → *duì-mà* 'to scold each other.'

Subtype E: affixes, i.e. prefixes, suffixes, circumfixes and postfixes (like Russian *-sja/-s'*); see (6), (7b), (9b), (10b), etc.

Subtype F: root reduplication, mostly combined with affixation (see Ch. 3, §7); cf. Indonesian (Ogloblin & Nedjalkov, Ch. 33, §4.5.1):

- (21) *mem-bunuh* 'to kill sb' → *bunuh-mem-bunuh* 'to kill each other.'

4.3 Clitics and clitic-like markers

Subtype G: the devices listed in the heading comprise one subtype (see (1b)). It covers reflexive (clitic or clitic-like) pronouns, like French *se*, German *sich*. See (1b), (17a).

Functionally, they do not differ from affixes, being intermediate between markers of *subtypes B* and *E*. Sometimes, there is no clear-cut distinction between syntactic reciprocals and those marked with clitic pronouns (see Ch. 3, §8).

4.4 Reciprocal markers on other than the predicate constituents

Constructions that enter into standard semantic relations, as in (1) and (2) above, can be derived not only by means of a reciprocal marker on the predicate, as in most cases, but also in two other ways, by attaching a reciprocal marker to the direct object or to a locative adverbial. These two cases deserve brief consideration.

4.4.1 *A reciprocal marker in the position of a possessive attribute of the direct object*

This case is close semantically to the “possessive” diathesis type (see 5.3.1 below). Both reciprocal pronouns (cf. *They love each other’s children*; see also (59)), affixes (see (22)) and, which is a specific feature of this type, purely possessive markers on their own, without an obligatory reciprocal marker, can be used here (see (23) below). Here are the latter two cases.

1. In Nivkh, the common reciprocal marker *u-* is attached to the direct object (which, as a rule, is in fixed pre-position to the predicate and makes up a single phonetic word with it) in a construction semantically analogous to the “possessive” diathesis type (Otaina & Nedjalkov, Ch. 41, §3.2.4; *-γ-* ‘to kill sb’ → *u-γ-* ‘to kill each other’):

- (22) a. ... *mat’kalk i-dəmk zap-r ler-d’.*
 kiddy his-hand take.hand-CONV.3SG play-FIN
 ‘... the child; plays holding his_i, j hand.’
 b. *mat’kalk-xu u-dəmk rəmk zap-t ler-d’-yu.*
 kiddy-PL REC-hand hand take.hand-CONV.3PL play-FIN-PL
 ‘Children play holding each other by the hand.’

2. In To’aba’ita, the possessive affix (marked for person and number) on the direct object co-referential with the subject may denote possessive reciprocity. Basically, the possessive marker allows the same three interpretations as the personal pronoun in example (15) from this language, and (23) may also be read as ‘They kissed them on the cheeks.’ Therefore both these markers, the possessive suffix and the personal pronoun, can be disambiguated by the use of the main reciprocal marker prefix *kwai-* illustrated in (27). For obvious reasons, a reflexive interpretation is not available here; cf. Lichtenberk, Ch. 36, §5, ex. (32).

- (23) *Kero musu-a babali-daro’a.*
 3DU.FACT kiss-3.OBJ cheek-3DU.POSS
 ‘The two of them kissed each other on the cheek.’
 lit. ‘The two of them kissed their cheeks.’

In Even, there is a special marker attached to the direct object of a “possessive” diathesis (see (31)).

4.4.2 *A reciprocal marker on the locative postposition of an adverbial phrase*

In this case the marker derives spatial reciprocal adverbs mostly from postpositions, locative nouns, etc., which imply converse and reciprocal situations (e.g., *if you are opposite me*

I am opposite you, etc.). Such words may take case markers (e.g. LOC *-in* in (24); see also 16.4.3 below). An example from Nivkh (Otaina & Nedjalkov, Ch. 41, ex. (52)):

- (24) a. *if pʼ-ətək řara-in hur tʼiv-dʼ.*
 he REFL-father opposite-LOC there sit.down-FIN
 ‘He sat down opposite his father.’
- b. *if ətək-xe u-tʼara-in hur tʼiv-dʼ-γu.*
 he father-COM.DU REC-opposite-LOC there sit.down-FIN-PL
 ‘He and [his] father sat down opposite each other.’

4.5 Non-reciprocal and reciprocal markers with a tendency to co-occur always or frequently

Here we find various cases. For instance, in Bolivian Quechua subject-oriented constructions the reciprocal marker *-na* is always combined with the reflexive *-ku* indicating co-reference with the subject (cf. *maylla-na-ku* ‘to wash each other’ < *maylla-* ‘to wash sb’; cf. *maylla-ku* ‘to wash oneself’); in object-oriented constructions with the causative marker *-chi* the reflexive suffix is not used (van de Kerke, Ch. 31, §5.1; ex. (56)); cf.:

- (25) *mama-y wawa-s-ta maylla-na-chi-n.*
 mother-1SG child-PL-ACC wash-REC-CAUS-3SG
 ‘My mother makes the children wash each other.’

A few more cases: In West Greenlandic Eskimo, the iterative suffix *-sar/-rar* may accompany the reflexive-reciprocal pronoun *imminnut* for actualization of the reciprocal meaning (Fortescue 1984: 166). In Udehe, the reciprocal suffix *-masi* is very often preceded by the imperfective affix *-si-* which can also have the meaning ‘many (objects or subjects)’ or ‘many times’; cf. *zima-masi-* = *zima-si-masi-* ‘to visit each other’ (Nikolaeva, Ch. 23, §3.4). In Buryat, the suffix *-sa/-se/...* with an unclear meaning, seldom used separately, sometimes precedes the reciprocal suffix *-lda/lde*; e.g.: *xatxa-* ‘to stab sb’ → *xatxa-lda-* ‘to stab each other’ = *xatxa-sa-lda-* (same) (*xatxa-sa-* is not registered). Here is one more instance attested in Adyghe where the suffix *-žbə-* with the main meaning ‘back’ often accompanies the reflexive-reciprocal prefix *zə-*: *dəIə-n* ‘to help’ → *zə-dəIə-žbə-n* ‘to help each other’. On simultaneous use of verbal and pronominal markers see Section 12 below.

4.6 Reciprocal markers dependent on the number of the reciprocants

Here is one of three types of reciprocal pairs of this type illustrated by Muna examples (van den Berg 1989:206; *po-* = REC for DU; *po-* and reduplication of the root for more than two; *do-* = 3PL (sic!), *-mo* = PFV).

- (26) a. *do-po-foguru* ‘they teach each other’ (of two only)
 b. *do-po-logo-logo-mo* ‘they competed with each other’ (of more than two).

5. Diathesis types of verbal reciprocal constructions

7. What types of diathesis do reciprocals form? Point out specially if there are transitive reciprocal constructions in the language under study.
8. Do the diatheses of the attested reciprocals correspond to the accessibility hierarchy shown in (36) below?
9. Are there any other types or subtypes of the four major types (“canonical”, “indirect”, “possessive”, “adverbial”) of diathesis?
10. Are there any two-diathesis (= multiple diathesis) reciprocals?
11. Do the different diathesis types employ the same or different reciprocal markers?
12. Are there any deviations from the standard “indirect” and “possessive” diathesis types?

5.1 Explanation

In this section, *subject-oriented* reciprocals are to be considered (on *object-oriented* reciprocals see 13.3 below). The diathesis type of a subject-oriented reciprocal construction is determined by the sentence constituent *reciprocalized* with the *subject* and, as a result, omitted (if a verbal marker is used) or replaced by a pronoun (which naturally retains the same syntactic status). The label of the type of diathesis is also extended to refer to the respective reciprocal verb. Therefore, there are “canonical” reciprocal constructions and “canonical” reciprocals, etc. If we apply the feature of the syntactic status of the reciprocalized sentence constituent twice, we obtain four types of reciprocal constructions: “canonical”, “indirect”, “possessive” and “adverbial”. The characteristics given below do not take into account marginal cases.

The first feature is reciprocalization of an argument or a non-argument and it yields the following subclassification.

1. Constructions involving argument reciprocalization. The valency diminishes by one.

The second feature is reciprocalization of the single object or one of two object arguments distinguishing two subtypes:

1a. “Canonical” (intransitive; derived from two-place transitives (27) and two-place intransitives (28)).

1b. “Indirect” (transitive; derived from three-place transitives); see (29).

2. Constructions involving non-argument reciprocalization. By definition, the valency does not decrease, though the number of (optional) constituents may decrease.

According to the reciprocalized sentence constituent, two types are distinguished:

2a. “Possessive”, when a possessive attribute of the direct object is reciprocalized (the construction is transitive, like “indirect” constructions); see (30) and (31).

2b. “Adverbial”, if an adverbial constituent is reciprocalized; the construction may be either transitive or intransitive, depending on the valency of the base verb; see (32) and (33).

Illustrations and some comments follow.

5.2 Diatheses with argument coreferentiality

5.2.1 “Canonical” reciprocals. Intransitive diathesis

The following should be noted.

1a. Derived from two-place transitives. There are languages where only this diathesis type is possible, e.g. in Greenlandic Eskimo (Fortescue, Ch. 19, §§7.1.2, 7.1.3), To’aba’ita, etc. Here is an example from To’aba’ita (Lichtenberk, Ch. 36, ex. (3), (23)):

- (27) a. *Roo wela kera kwa’e nau.* two-place transitive base verb
 two child 3PL.FACT hit 1SG
 ‘The two children hit me.’
 b. *Roo wela kera kwai-kwa’e-i.* one-place intransitive reciprocal
 two child 3PL.FACT REC-hit-REC
 ‘The two children hit each other.’

1b. Derived from two-place intransitives. The “canonical” type can also be derived from two-place intransitives. An example from Itelmen (Volodin, Ch.43, §§3.1 and 3.3):

- (28) a. *k-pens-knen kəmm-anke.* two-place intransitive base verb
 3-rush-3 I-ALL
 ‘He/They rushed to me.’
 b. *Qnaŋ k-lo-pens-knen.* one-place intransitive reciprocal
 at.once 3-REC-rush-3
 ‘At once they rushed to each other.’

Intransitivity shared by both transitive-based and intransitive-based reciprocal derivatives distinguishes them from transitive “indirect” (see Ch. 1, §12.1.2) and “possessive” (Ch. 1, §12.2.1) reciprocals. Therefore these first two subtypes of derivatives are considered as “canonical”, though in some languages they may differ in marking (see Ch. 1, §9.4), and intransitive-based reciprocals may show the same marking as “indirect” reciprocals. And in some languages, there may also be constraints on the reciprocalization of constituents other than direct objects.

5.2.2 “Indirect” reciprocals. Transitive diathesis

This type is non-existent in Tundra Yukaghir (Maslova, Ch. 44, §8.2) which has both subtypes of the “canonical” diathesis of reciprocals. In Udehe, only this diathesis type and the previous two subtypes of the “canonical” diathesis are possible. Here is an example (Nikolaeva, Ch. 23, §3.1.2)

- (29) a. *Ei a:nta nuan-dule-ni lepeška-we titi:-ni.* three-place vt
 this woman he-LOC-3SG flat.cake-ACC take.away-3SG
 ‘This woman takes a flat cake away from him.’
 b. *Lepeska-we titi-masi:-ti.* two-place vt
 flat.cake-ACC take.away-REC-3PL
 ‘They take the flat cake away from each other.’

5.3 Reciprocals with non-argument coreferentiality (the valency of the base is retained)

5.3.1 “Possessive” reciprocals. Transitive diathesis

In Yakut, this and all the previous diathesis types are possible. Here is a Yakut example (Nedjalkov & Nedjalkov, Ch. 26, ex. (78); in (b) reduplication iconically signals two objects; possessivity 3PL is marked by the suffix *-leri/-teri* only).

- (30) a. [*Bukatəər at-a atən bukatəər at-2-n*] *tüü-tü-n, et-i-n,*
 athlete horse-his other athlete horse-his-ACC hair-his-ACC flesh-his-ACC
tirii-ti-n baraa-ta-Ø. two-place transitive base
 skin-his-ACC destroy-PAST-3SG
 ‘[The athlete’s horse] destroyed the hair, flesh and skin [of the other athlete’s horse].’
- b. ... *tüü tüü-leri-n, et et-teri-n, tirii tirii-leri-n*
 hair hair-their-ACC flesh flesh-their-ACC skin skin-their-ACC
bara-s-pət-tara. two-place transitive reciprocal
 destroy-REC-NR.PAST-3PL
 ‘[The horses of the athletes] destroyed each other’s hair, flesh and skin.’

These “possessive” reciprocals may have peculiarities in the additional marking on the direct object, by means of the suffix *-takan/-tak* ‘each other’s’ (attested in the Oxotsk dialect of Even, also used to derive reciprocal pronouns in this dialect; Malchukov, Ch. 39, §5). In To’aba’ita, this diathesis type can be marked by a possessive suffix on the object only, without any marking on the predicate (see (23) above). An example from Even:

- (31) a. *Bej hooni-wa-n irič haa-ži-m?*
 man strength-ACC-his how know-FUT-1PL
 ‘How can we try the man’s strength?’
- b. *Honi-l beji-l, hooni-tak-mar irič haa-mat-či-p?*
 strong-PL man-PL strength-tak-REFL.PL how know-REC-FUT-1PL
 ‘Strong men, how can we try each other’s strength?’

In some languages, e.g. in Mundari (Osada, Ch. 37, §3.1.3), this kind of constructions is formed if only the direct object of the base construction denotes an inalienable possession.

5.3.2 “Adverbial” reciprocals

Verbal reciprocals of this diathesis type are not attested in my corpus, unless we count isolated instances when a transitive reciprocal construction is interpreted as reciprocal-benefactive, e.g. Even with the meaning ‘They built houses for each other’. If the base verb contains a benefactive marker, the corresponding reciprocal should be interpreted as “indirect”. Therefore all the examples below contain a pronominal reciprocal marker.

In the following Chinese example, the base construction contains a one-place intransitive predicate and the non-subject constituent denotes a human referent not determined by the lexical meaning of the verb, but related to the subject referent by the expression of the emotion named. (32a) and (32b) differ to a certain degree in that (32b) “would imply that the participants intentionally shed tears to each other” (F. Li, p.c.):

- (32) a. *Tā duì wǒ diào-zhe yǎnlèi.*
 s/he to I shed-DUR tear
 ‘He is shedding tears before/in front of me.’
 b. *Tāmen hùxiāng diào-zhe yǎnlèi.*
 they mutually shed-DUR tear
 ‘They are shedding tears in front of/in the presence of each other.’

In this type of constructions, spatial adverbials are frequent, though it is not always easy to distinguish between locative adverbials and locative objects (some verbs of motion with locative objects, e.g. ‘to throw oneself upon sth/sb’, ‘to approach sth/sb’ usually form verbal “canonical” reciprocals). However, reciprocal pronouns (such as *meen meen-duk-ur* ‘from each other’ in Even sentence (33b)) can be supplemented – pleonastically – by the reciprocal suffix on the predicate (Malchukov, Ch. 39, (3)).

- (33) a. *Hurken nöö-duk-i tut-te-n.*
 youth.NOM brother-ABL-REFL run-NFUT-3SG
 ‘The youth runs from his (younger) brother.’
 b. *Aknil meen meen-duk-ur tut-te.*
 brothers.NOM each other-ABL-REFL.POSS.PL run-NFUT.3PL
 ‘The brothers run from each other.’

5.4 Multiple-diathesis reciprocals

This term is used to refer to reciprocal forms which can be used in constructions of two diathesis types, depending on the syntactic context: “canonical” and “indirect” (if the base is a three-place transitive) or “canonical” and “possessive” (if the base is a two-place transitive). Here are two Yakut multi-diathesis reciprocals derived from *əət-* ‘to send sb to sb’ and *bil-* ‘to know sb’:

- (34) *Kiniler [oyo-loru-n] əət-əs-ti-ler.*
 they child-3PL.REFL.POSS-ACC send-REC-PAST-3PL
 i. ‘They sent *each other* [to someone].’ “canonical” (if the bracketed object is omitted)
 ii. ‘They sent their children *to each other*.’ “indirect” (if the object is explicit)
- (35) *Kiniler [oyo-loru-n] bil-s-el-ler.*
 they child-3PL.REFL.POSS.-ACC know-REC-PRES-3PL
 i. ‘They know *each other*.’ “canonical” (if the bracketed object is omitted)
 ii. ‘They know *each other’s* children.’ “possessive” (if the bracketed object is explicit)

5.5 Lexical range of diathesis types. Restrictions on forming verbal reciprocals

It is natural that among the diathesis types the most numerous are “canonical” reciprocals derived from two-place transitives. Next in the lexical range are “canonical” reciprocals derived from two-place intransitives. And lastly, “indirect” reciprocals of three-place transitives follow. This is determined by the relative number of respective base verbs in a language. As for “adverbial” reciprocals, the use of such verbal reciprocals seems to be rather limited, with the exception of some groups of verbs.

The “canonical” type of reciprocals being the most common cross-linguistically, a language may lack some other diathesis type(s).

The tentative implicational hierarchy of the diathesis types proposed here is:

- (36) “canonical” > “indirect” > “possessive” > “adverbial”.

The illustrations of these four types are given below in the same order.

The Chinese pronominal marker *hùxiāng* cited in (16) forms all the diathesis types of reciprocals.

The Even reciprocal suffix *-mat-* derives the first three diathesis types but not “adverbial” reciprocals (which is shown in (33) where the reciprocal pronoun is used).

The Udehe suffix *-masi* derives “indirect” and “canonical”, but not “possessive” and “adverbial” reciprocals (cf. (29) above).

The Itelmen prefix *lo-* derives “canonical” reciprocals from two-place intransitives (see (28)) and two-place transitives, but no “indirect”, “possessive” and “adverbial” reciprocals. And lastly, the To’aba’ita prefix *kwai-* (sometimes in combination with the suffix *-i-* which is not used in any other way) is used to form “canonical” reciprocals from two-place transitives exclusively (see (27)).

Thus, the higher the syntactic status of the sentence constituent, the higher its chance of reciprocalization: direct object < indirect object < possessive attribute < adverbial.

Verbal reciprocals are mostly intransitive, the base verb being either transitive or, less commonly, two-place intransitive. However, in my list of languages, there are two languages in which the number of registered intransitive-based reciprocals exceeds that of transitive-based reciprocals, namely, Itelmen (where the reciprocal prefix *lo-/lu-* is registered on about 25 transitive-based and about 45 intransitive-based reciprocals; Volodin, Ch. 43, §§3.2–3.6) and Kusaiean where, according to Lee (1975:201–3), the reciprocal circumfix *a-...-i* is “usually used with intransitive verbs but some transitive verbs [...] can be used with this” circumfix. Curiously enough, among transitive verbs meaning ‘to see’, ‘to hear’, ‘to love’, ‘to remember’ are cited, and among intransitives there are verbs meaning ‘to hit’, ‘to kick’, ‘to wash’. The state of affairs in these two languages is possibly connected with the ratio of transitives and intransitives rather than with the peculiarities of the reciprocal markers.

Intransitivity shared by both transitive-based and intransitive-based reciprocal derivatives distinguishes them from transitive “indirect” (Ch. 1, §12.1.2) and “possessive” (Ch. 1, §12.2.1) reciprocals. Therefore the first two types of derivatives are listed as “canonical”, though in some languages they may differ in marking (see Ch. 1, §9.4) and intransitive-based reciprocals may show the same marking as “indirect” reciprocals. And in some languages, there may also be constraints on the reciprocalization of constituents other than direct objects.

The regularities noted above need further investigation in order to find more supplementing data which may help to clarify some issues.

5.6 Deviations from the standard case

Since cross-linguistically the main (and sometimes the only) diathesis type is “canonical” which is intransitive, transitive, i.e. “indirect” and “possessive” diathesis types in some of those languages reveal some properties of intransitive constructions, probably due to the indirect influence of the prevalent type. The following cases are registered across languages.

1. A reciprocal verb has a marker of intransitive verbs instead of that of transitives; e.g. in Mundari in “indirect” and “possessive” reciprocal constructions the transitive marker *-ʔ-* on the predicate is replaced by the intransitive marker *-n-*, as on “canonical” reciprocals (see Osada, Ch. 37, ex. (16)). A rather similar case is observed in Kolyma Yukaghir where “indirect” reciprocals can be inflected both like transitives and intransitives (Maslova, Ch. 44, §3.2).

2. The reciprocal verb forms an absolutive construction instead of the ergative, as in Cashinahua where the subject of “indirect” reciprocal constructions lacks the ergative case marker – suffix *-n* (Camargo, Ch. 45, §1.2). In Warrungu, the subject of “indirect” and “possessive” reciprocals is not ergative but nominative, despite the fact that the direct object can be retained (Tsunoda, Ch. 32, §§1.2, 4.2, 4.3).

3. The reciprocal marker may be attached to the direct object rather than to the verb in semantically “possessive” reciprocal constructions. Two varieties are registered:

3a. The direct object retains its position, as is the case in Nivkh; cf. *u-dəmk rəmk zap-t* <REC-hand hand hold-CONV> ‘holding each other by the hand’ in example (22) above;

3b. The direct object of the base construction is incorporated in the verb; cf. Alpatov et al., Ch. 42 on Ainu, §3.1.3. Example (37b) is a semantic counterpart of Even (31b):

- (37) a. *E-kiror-o* *ku-nukar.* → b. *esi-u-kiror-nukar.*
 your-strength-POSS 1SG-test/see YOU.PL-REC-strength-test
 ‘I test your strength.’ ‘You compete in strength.’

In Ainu, there are no regular “possessive” reciprocals. In Kolyma Yukaghir, there are regular “possessive” reciprocals. Therefore it is surprising that several reciprocals with an incorporated direct object appear in this language (Maslova, Ch. 44, §3.3.2); cf.:

- (38) ... *n'e-pōme-aŋs'i-jejl'i.*
 REC-lice-look.for-1PL-INTR
 ‘... we are looking for each other’s lice.’

6. Simple and discontinuous reciprocal constructions. Semantics of reciprocants

13. Are reciprocal verbs of the language under investigation used only in the simple or in the discontinuous construction as well?

Simple constructions are those in which both reciprocants are expressed by the subject. Discontinuous constructions are those in which the second reciprocant is a non-subject. This distinction divides languages into two groups. In some languages, verbal reciprocals

can be used in simple constructions only (Kabardian, French, To'aba'ita, etc.; see examples (1b) and (27b)), and in other languages, they can occur in discontinuous constructions as well (in Turkic languages, Evenki, Swahili, Quechua, Mongolian, etc.; see examples (6b), (39b), (45a)). Languages with the discontinuous construction and no simple reciprocal construction are hardly possible.

14. What are the syntactic relations between the reciprocants in a complex subject: coordinative (*Peter and John*) or comitative (*Peter with John*) or either? Does the relevant marker differ from the respective marker(s) in non-reciprocal constructions?

A language may employ both types of markers: a special marker for each type of syntactic relations. For instance, Evenki has comitative marking of the type *eni hunat-nun-mi* 'Mother with her daughter' (see (39a, b)) and a purely coordinative particle *-da* 'and', e.g. *eni [-da] hunan-in-da* 'mother[-and] daughter-her-and'.

15. If the language has homophonous coordinative and comitative markers, is their coordinative or comitative meaning determined by their position between the reciprocants (coordinative) or after the second (comitative)?

Coordinative/comitative markers are widespread cross-linguistically in general, and not only in reciprocal constructions. Their use in reciprocal constructions is attested in many languages, e.g. in Tuvan, Quechua, Fula, Swahili, etc. For a Swahili example see (6).

16. What are the means of marking the second reciprocant in the non-subject position in discontinuous constructions: a comitative preposition or postposition, or a comitative case, etc.? Can these same markers be used as linkers when both reciprocants are named by the subject (in the simple construction)?

17. Is the comitative marker used only with animate nouns or also, for instance, in sentences like *He came with a spade*?

18. Does the reciprocal predicate of discontinuous constructions agree with the subject alone if the language has subject agreement markers? Note that if the subject is singular the predicate is singular as well.

This is registered in quite a number of languages, e.g. in Evenki, as is shown in example (39) (Nedjalkov & Nedjalkov, Ch. 38, §3.1.5; see also Ch. 1, §1.7.3):

- (39) a. *Eni hunat-nun-mi n'ukani-maat-čere-Ø.* simple construction
 mother daughter-with-her kiss-REC-PRES-3PL
 'Mother and her daughter [lit. 'with her daughter'] are kissing each other.'
- b. *Eni hunat-nun-mi n'ukani-maat-čere-n.* discontinuous construction
 mother daughter-with-her kiss-REC-PRES-3SG
 (same translation as in (a))
 lit. 'Mother with her daughter is kissing each other.'

Both nouns in (39a) comprise a complex subject group and the predicate agreement is plural, therefore it is a simple construction. In (39b) the first singular noun is the subject

and the second is an object, since the agreement is in the singular, and thus the construction is discontinuous (in the genetically closely related Udehe language, the agreement in similar cases is always plural). If the first reciprocant is plural both interpretations are possible (39c). There is some slight pragmatic difference in the distribution of prominence and no semantic difference between the constructions.

- c. *Nuḡartən hunat-nun-mer n'ukani-maat-čere-Ø.*
 they daughter-with/and-their kiss-REC-PRES-3PL
 i. 'They *and* their daughter are kissing each other.' simple 'interpretation'
 ii. (same as (i)), lit. 'They *with* their daughter are kissing each other.' discontinuous

In isolating languages where subject agreement is non-existent, the problem of establishing the simple or discontinuous status of a reciprocal construction may be more complicated. In these cases the use of some criteria may help; for instance, insertion of an adverb between the reciprocants transforms an assumed simple construction into discontinuous rather than serves as a diagnostic criterion for the discontinuous construction.

19. Are there any selective restrictions on the use of reciprocals in the discontinuous construction? If only a limited number of reciprocals can be used in the discontinuous construction, are they lexicalized reciprocals?

In languages, e.g. in Indonesian, where simple reciprocal constructions, as a rule, are alone possible, discontinuous constructions may be allowed with lexicalized reciprocals (see Ogloblin & Nedjalkov, Ch. 33, §7.2). In German, where most of the reciprocals are used in simple constructions only, there are about 20 reciprocals which allow discontinuous usage, including *sich umarmen* 'to embrace each other', *sich necken* 'to tease each other', *sich dutzen* 'to say 'thou' to each other' (E. König, p.c.); the best known exception is (40b).

- (40) a. *Marie und Paul begrüßten sich.* → a'. **Marie begrüßte sich mit Paul.*
 b. *Marie und Paul schlugen sich.* → b'. *Marie schlägt sich mit Paul.*

20. Can the subject of a simple reciprocal construction be a collective noun (e.g., 'people', 'family', 'crowd', 'group', 'army', 'pair', 'class', etc.)?

Collective nouns are not allowed, for instance, in Greenlandic Eskimo (see Fortescue, Ch. 19, §9). If the answer is positive, the class of collective nouns that can occur in the subject position should be described. In languages where the use of collective nouns is possible, restrictions may be imposed by the lexical meaning of a reciprocal (cf. **Die Gruppe begrüßte sich* lit. 'The group greeted each other.'; E. König, p.c.).

21. Are there any reciprocals with inanimate reciprocants?
 22. Are there any reciprocal constructions without a subject (= antecedent of the reciprocal marker)? Hereby I mean a type in which the subject is not expressed formally (i.e. is not overt).

An instance of this may be the following Vietnamese example where the reading is indefinite-personal: indefinite human agents are implied: it is people who are in the street (Bystrov & Stankevich, Ch. 47, §3.3):

- (41) *Ngoài đường đánh nhau.*
 outside street hit REC
 ‘There is fighting out there in the street.’

23. Can or must the reciprocal in the discontinuous construction be marked by a verbal affix if the language has an applicative affix (or affixes) one of whose meanings is comitative (see (42 b), (43 c), (44 b))?

Such cases are attested in Tagalog and Maasai. The Tagalog applicative marker *maki-* which often carries the comitative meaning and the Maasai applicative marker *-re* are used on both non-reciprocals and reciprocals, indicating in the latter case a discontinuous construction. Examples from Tagalog (Shkarban & Rachkov, Ch. 22, 1.2, examples (218), (221), (229)) and Maasai (Tucker & Mpaayei 1955: 134–40, 157; *k-* = 1PL, *a-* = 1SG) respectively:

- (42) a. *um-inom* ‘to drink’
 b. *maki-inom* ‘to drink with sb’ applicative of an unmarked verb
- (43) a. *t-um-ulong* ‘to help’
 b. *mag-tulong-an* ‘to help each other’
 c. *maki-pag-tulong-an* ‘to cooperate with sb’ applicative of reciprocal
 [= ‘to help sb who is also helping in his turn’]
- (44) a. *k-iḡor-a* ‘we look at each other’
 b. *a-iḡor-a-re* ‘I look at him (while he looks at me)’. applicative of reciprocal

24. Is the semantic “completeness” of the sentence retained if the second reciprocal, taking the non-subject position, is omitted (the first one being in the singular)?

Generally, in the discontinuous reciprocal construction, object omission is not allowed if the (explicit or pro-drop) subject is singular; see (45c). Subject omission, on the contrary, is allowed (see (45b)); cf. Tuvan (K. Kuular, p.c.):

- (45) a. *Ava-m ača-zə-bile kuspakta-ž-əp tur.*
 mother-my father-3.POSS-with embrace-REC-CONV AUX.3
 ‘My mother is embracing with her father.’
- b. ... *ača-zə-bile kuspakta-ž-əp tur.*
 father-3.POSS-with embrace-REC-CONV AUX.3
 ‘[S/he/they] is/are embracing with his/her/their father.’
- c. **Ava-m kuspakta-ž-əp tur.*
 mother-my embrace-REC-CONV AUX
 ‘My mother is embracing [with whom?]

Note that analogous comitative and assistive constructions with the omitted second participant are grammatical. For instance, in sentences like *Peter makes hay [with someone]*

and *Peter helps [someone] to make hay* the bracketed noun phrases may be omitted, while being implied by the meaning of the predicate.

Incidentally, an attempt to use a reciprocal verb with a singular subject and without the second participant may serve as a diagnostic test for establishing some non-reciprocal meanings of the marker on certain bases. Note that in Yakut, most of the non-reciprocal meanings of the reciprocal suffix allow the singular subject even without an explicit object.

7. Productivity and restrictions on derivation of reciprocals

25. Do the reciprocals form a relatively open or closed set in the language under investigation?
26. What is the approximate number of reciprocals in your language?

7.1 Introductory notes

The following should be noted. Firstly, the restrictions listed below are secondary with regard to restrictions on the formation of diathesis types. Secondly, when a reciprocal form is not possible at all or if it has no reciprocal meaning, a pronominal reciprocal is used to express the required meaning, provided it exists in the language.

Possible provisional answers for languages with a large enough number of verbs (variation within a wide range is possible, partly depending on the number of verbs in the lexicon, by which I mean that if their overall number does not exceed a hundred, e.g. in an underinvestigated language, the figures may be in an entirely different range):

1. Their number is limited and they form a closed set not exceeding 10–60 items, as in Russian and Karachay-Balkar.

27. If the number of reciprocals is limited, can the limits on their number be accounted for by semantic factors?

2. Their number does not exceed 80–200 items, as, for instance, in Latvian and Lithuanian.

3. Their number reaches as many as 300 or more, which means there are very few restrictions on their formation. Here belong, for instance, Yakut, German.

28. Please point out the restrictions on reciprocals registered in the language. Can they be explained? Are there any semantic groups of verbs which do not participate in reciprocal derivation?

With regard to restrictions, the following three possibilities should be kept in mind.

7.2 Trivial restrictions

This concerns, firstly, one-place intransitive verbs, e.g. *to die, to go, to croak* (of frogs), etc. (exceptions are possible in some languages, e.g. in Yakut, reciprocals like ‘to croak to each other’ = ‘to exchange croaks’ are registered). Secondly, this concerns two-place transitives with the subject and object of different semantic classes, e.g. one human and the other inanimate, i.e. verbs like *to build a house, create, write*, etc. (though in this case benefactive reciprocals with the meaning ‘to build houses for each other’ are possible in some languages, e.g. in Yakut).

7.3 Semi-trivial restrictions

In the following cases there are no semantic obstacles of this kind, and thus the reasons are of a different nature.

1. The reciprocal meaning may be blocked by another, pragmatically more significant meaning of the polysemous marker. For instance, the Tuvan reciprocal form of the verb *či-* ‘to eat’ has a metaphorically lexicalized meaning ‘to compete’. For the expression of the standard reciprocal meaning the reciprocal pronoun is added to the derivative. Compare (Kuular, Ch. 27, §3.3):

- (46) a. *či-* ‘to eat’ → *či-š-* i. ‘to compete’, ii. *‘to eat each other.’
 b. *Ol ajmak-tar bot-bot-tar-a-n či-ž-ip ka-ap-kan.*
 this tribe-PL each-other-PL-POSS-ACC eat-REC-CONV AUX-ASP-PAST
 ‘These tribes ate one another.’

Similarly, the reciprocal form of the Kirghiz verb *bajla-* ‘to tie’ does not acquire the expected meaning ‘to tie each other’; instead, *bajla-š-* has the meanings: i. ‘to help tie (e.g. horses)’, ii. ‘to tie together with sb (e.g. horses)’, iii. ‘to bet’. To express reciprocity, the monosemous pronominal marker is used instead of the verbal; cf. *birin biri bajla-* ‘to tie each other, tie each other to sth’.

2. Certain syntactic and/or morphological peculiarities of verbs may prevent reciprocal derivation. Verbal reciprocals cannot be derived from certain syntactic classes of verbs. For instance, in German, verbal reciprocals do not derive from verbs taking a prepositional object, such as *auf jemanden warten* ‘to wait for sb’ (cf. **auf sich warten* ‘to wait for each other’); instead, pronominal reciprocals are commonly used. In many languages, reciprocals do not derive from one-place intransitive bases and/or complex verbs (e.g., Kirghiz *žek kör-* <hatred see> ‘to hate’, Japanese *tobi-kakaru* <jump-hang> ‘to attack’).

3. Restrictions on derivation of verbal reciprocals from lexical reciprocals are possible. They are quite natural because of the inherent reciprocal meaning of the latter, which seems to make the reciprocal marking redundant. For instance, most of the Japanese lexical reciprocals do not take the reciprocal marker (see example (74c) with the verb *kekonsu-ru* ‘to marry sb’ below). But if such derivations happen they are sometimes idiosyncratic.

7.4 Non-trivial (proper) restrictions

These are restrictions which are often idiosyncratic and hard to explicate; for instance, a reciprocal may derive from one synonym and not from another.

In Tuvan, verbal reciprocals are highly productive. As examples of rare restrictions, the following bases which do not yield verbal reciprocals (these bases sound queer to native speakers when combined with the reciprocal marker) can be cited: *sagəndər-* ‘to remind sb (ACC) of sth’, *des-* ‘to avoid sth/sb (ABL)’ (and its synonyms *ojla-* and *durgunna-*), *čalən-* ‘to implore sb (DAT)’, *eereš-* ‘to implore sb (ACC)’, *idege-* ‘to rely on/trust sb (ABL)’, *ijle-* ‘to miss sb very much’. Semantically, these verbs allow reciprocal use (which is shown by the fact that the synonyms *čokta-* ‘to miss’ and *büzüre-* ‘to trust’ do take the reciprocal suffix). In these cases the reciprocal pronoun alone or in combination with a verbal reciprocal is used (Kuular, Ch. 27, §3.3):

- (47) a. *Olar ürgülčü akə-m-dan dez-er tur-gan.*
 they always elder.brother-my-ABL avoid-PART AUX-PAST.3
 ‘They always avoided my elder brother.’
- b. *Olar ürgülčü bot-bot-tar-ə-n-dan dez-er tur-gan.*
 they always each-other-n-ABL avoid-PART AUX-PAST.3
 ‘They always avoided each other.’

8. Simultaneity and succession of actions within a reciprocal situation

29. Do verbal reciprocals fall into groups according to the temporal relation between the subevents?

The following groups seem to cover the main types of relevant reciprocals with respect to the internal temporal structure of the reciprocal situation, viz. succession or simultaneity of the subevents, i.e. the action(s) of each particular reciprocant.

1. Reciprocals with meanings like *to visit each other*, *to talk to each other*, the lexical meaning of the bases determining sequentiality of the subevents (and exchange of the roles) due to the very nature of these actions.

2. Reciprocals denoting simultaneous motion of reciprocants represented as a chain of successive subevents: *to chase each other*, *to follow each other*, *to precede each other*, presupposing exchange of the roles – of the chaser (follower) and the chased (followed) (which does not necessarily take place in reality, as these verbs may denote motion without exchange of positions relative to each other).

3. Reciprocals with meanings like *to kill each other*, *to exploit each other*, generally denoting situations with more than two participants and an unpaired distribution of the roles, different from that in the previous two cases.

4. Reciprocals with meanings like *to wake each other* (in a situation who wakes first becomes the agent and the second reciprocant need not do the same, but s/he may do it on another occasion).

5. Reciprocals denoting simultaneous (only) subactions of both reciprocants: they are either momentaneous (like *to bump into each other*, *to meet each other*) or stative (like *to love each other*, *hate each other*).

6. Reciprocals neutral in respect of the temporal relation of the subevents (like *to hit each other*, *to teach each other*, *to eye each other*, *to curse each other*, *to shoot at each other*), which does not outrule their partial overlap.

30. Does the lexical range of the above listed groups depend only or mostly on the lexical meaning of the base verb or on some other factors as well?

31. Do reciprocals or certain groups of them collocate with adverbials denoting simultaneity or sequentiality, like ‘simultaneously’, ‘at the same time’, ‘at two o’clock (sharp)’, ‘in turn’, ‘by turns’, ‘at one stroke’, ‘one after another’, ‘one by one’, etc.?

Here is a suitable Yakut example (S. 484):

- (48) *Xardarə-taarə təl bərax-s-al-lar.*
 by.turns word fling-REC-PRES-3PL
 lit. ‘By turns they are flinging words at each other.’

Simultaneity may be understood not only as momentous, i.e. the subevents need not take place at the same brief moment: it can extend over a long enough period of time, the subevents being perceived as parts of a single situation taking a longer time (but this seems to be irrelevant for empirical data).

A special place belongs to the combinability of reciprocals with adverbials like *together* implying simultaneity. In most cases such combinations are ungrammatical and sound contradictory opposing both interacting reciprocants to another reciprocal(s) not implied by the reciprocal meaning of the derivative. But they may occur in some languages, most likely with the meaning not only of simultaneity (as is claimed by A. Malchukov for the Even suffix cluster *-lda-mat-* <SOC-REC->; see Ch. 39, §2.5.1), but also with some other nuances. Besides, in closely related Evenki, there are instances of joint use of reciprocal *-mat-* and sociative *-lda*, which can be explained by the fact that *-lda-* is descended from the reciprocal(-sociative) marker and even at present is sometimes used in the reciprocal meaning and thus we deal in Evenki with an archaic pleonastic use of both markers. In Tariana, the sequence *-siwa-kaka-* <SOC-REC-> is “used to emphasize that every one of the participants is, or was involved in a reciprocal action” (Aikhenvald, Ch. 30, §4.4).

And lastly, one may expect, though with a small degree of possibility, to encounter reciprocally marked derivatives whose meaning may allow all the three main possible interpretations. For instance, the Cashinahua derivative *tsaka-namI-* can be used in sentences with the following meanings: i. ‘X and Y killed each other’ (used as a joke), ii. ‘X and Y killed in response some people who had done harm to their relatives’, iii. ‘X and Y killed some people whose relatives would kill X and Y in revenge’ (Camargo, Ch. 45, §3.2).

9. Reciprocal specifiers; two types: i. 'mutually', ii. 'among oneselves'

32. Are there words with the reciprocal meaning, termed here reciprocal specifiers, which are used as a rule with grammatical and/or lexical reciprocals? If there are, to which of the types named in the heading do they belong?

Reciprocal specifiers are words or word groups which are reciprocal in meaning but cannot, as a rule, mark reciprocity by themselves. Two types can be distinguished, specifiers with a meaning like 'mutually' (cf. Polish *nawzajem/wzajemnie*, Tuvan *udur-dedir*, Vietnamese *lan*, etc.) and those with a meaning like 'among between our/your/themselves' (cf. Lithuanian *tarp savęs, tarpusavyje/ savo tarpe*, Tuvan *arazānda*, Even *meer dooli*, Russian *meždu soboj* 'between selves', etc.). The first type can be provisionally termed adverbial and the second, pronominal specifiers.

The adverbial type serves to emphasize the reciprocal meaning of the verb (hence their usage with monosemous reciprocal pronouns, in some languages; cf. Russian *Oni vzaimno uvazhali drug druga* lit. 'They mutually respected each other') or to disambiguate a reciprocal form with a polysemous marker (see example (17) above).

Specifiers of the pronominal type serve to stress that the reciprocal situation is limited to the subject referents exclusively; these specifiers emphasize reciprocity to a certain degree.

33. Do verbal reciprocals display selectional restrictions in combinability with either of the types of the specifiers in question, or with different items of these types, if there are several of each type?

In this domain there can be very subtle differences that are hard to explain. For instance, in Vietnamese (Bystrov & Stankevich, Ch. 47, 2.7; *nhau* = 'each other') the phrase *giúp đỡ lẫn nhau* 'to help each other mutually' is perfectly acceptable, but the phrase *yêu lẫn nhau* 'to love each other mutually' is not.

34. Do reciprocal specifiers ever occur with non-reciprocals instead of the regular reciprocal marker? If they do, is this usage evaluated as standard or occasional?

For instance, in Russian example (18) above, the reciprocal pronoun is felt to be missing. Genetically related languages may differ in the use of such specifiers. Compare: in Even, *meer dooli* 'among themselves' is used with verbal reciprocals exclusively (Malchukov, Ch. 39, §6), while in Udehe (Nikolaeva, Ch. 23, §4) *mene dolo* with the same meaning is used not only with verbal reciprocals but also as the only marker of reciprocity with non-reciprocal verbs. In this respect an interesting fact is that in some dialects of the Khakas language the adverb *udur-tödär* 'mutually, each other' can be used as the only marker of reciprocity (A. Letuchiy, p.c.). Characteristically, in other dialects of Khakas, as well as in the closely related Tuvan languages, the cognate adverb *udur-dedir* is used only as a specifier.

35. Are there instances of the use of the specifiers with emotive base verbs (e.g. ‘to respect’, ‘to love’, ‘to be disposed’, ‘to forgive’, and the like) instead of the regular reciprocal marker?

36. Can a reciprocal pronoun which can be used in a reciprocal construction as the only reciprocal marker (in the direct object position) also appear together with a verbal reciprocal in “canonical” constructions as a kind of reciprocal specifier?

Such usage is characteristic of Turkic languages; see (46b), (65), (66).

37. Are there any reciprocal pronouns closer to reciprocal specifiers than those mentioned in the preceding question, namely, such pronouns that cannot take the direct object position and can only be used independently in certain cases, e.g. in reciprocalization of prepositional constituents?

Examples of such usage can be found in Romance languages; cf. French (Guentchéva & Rivière, Ch. 12, §1.2), where the reciprocal pronoun co-occurs with verbal reciprocals (49c). Thus, it resolves the possible polysemy of construction (49b).

- (49) a. *Pierre a blessé Jean.*
 ‘Pierre hurt Jean.’
- b. *Pierre et Jean se sont blessés.*
 i. ‘Pierre and Jean got hurt.’ anticausative
 ii. ‘Pierre and Jean hurt themselves.’ reflexive proper
 iii. ‘Pierre and Jean hurt each other.’ reciprocal
- c. *Pierre et Jean se sont blessés l’un l’autre.*
 ‘Pierre and Jean hurt each other.’
- d. **Pierre et Jean sont blessés l’un l’autre.*
 (same intended meaning).

This pronoun cannot take the direct object position (49d); it can be used alone (without a verbal reciprocal marker) only for reciprocalization of a prepositional object (50b): in such cases the verbal reciprocal marker cannot be used alone (50c) or with the pronoun (50d) (cf. Guentchéva & Rivière, Ch. 12, §7.2.2):

- (50) a. *Jean compte sur Marie.*
 ‘Jean counts on Mary.’
- b. *Ils comptent l’un sur l’autre.*
 ‘They count on each other.’
- c. **Ils se comptent.*
 (same intended meaning).
- d. **Ils se comptent l’un sur l’autre.*
 (same intended meaning).

38. Do reciprocals, all or some of them, collocate with adverbials (e.g. adverbials meaning ‘between/among themselves’) which delimit the number of the participants of a reciprocal situation? If they do, what could the explanation be?

10. Polysemy of reciprocal markers

10.1 Three main types of polysemy

39. Is the main reciprocal marker monosemous or polysemous?

If a reciprocal marker is polysemous its reciprocal use should be considered first and its non-reciprocal usages discussed next in a separate section. The subsequent questions of this section concern polysemous markers only.

As regards the meanings most closely related to the reciprocal, the three most important are: reflexive (shared feature – expression of anaphoric relations), sociative (shared feature – multiplicity of participants) and iterative (shared feature – multiplicity of actions). It is convenient to term the three meanings in question, i.e. reflexive, sociative and iterative, as the *main* concomitant meanings of reciprocal markers. In accordance with this, three main types of polysemy are: reflexive-reciprocal, reciprocal-sociative and iterative-reciprocal. The other concomitant meanings can be named *secondary* (whatever their productivity).

Note that markers with reflexive-reciprocal polysemy are in fact reflexive markers, and their polysemy has been better investigated typologically than that of the other two types of markers (for details see Ch. 5, §2).

Illustrations of the three types of polysemy:

Sumbwa (Capus 1898:64; *-i-* = REFL)

- (51) *-šim-a* ‘to love’ → *-i-šim-a* i. ‘to love oneself’, ii. ‘to love each other’
-gay-a ‘to hate’ → *-i-gay-a* i. ‘to hate oneself’, ii. ‘to hate each other.’

Karanga (Marconnès 1931:195; *-an* = REC)

- (52) *-chek-a* ‘to cut sb/sth’ → *-chek-an-a* i. ‘to cut each other’, ii. ‘to cut sth together.’

Chinese (Liu 1999:124, 126; *-lái-...-qù* ‘-come-...-go’ = REC)

- (53) *dǎ* ‘to hit’ → *dǎ-lái-dǎ-qù* i. ‘to fight several times’, ii. ‘to beat each other.’

40. Which of the three basic types of polysemy does the polysemous reciprocal marker display?

10.2 Conditions of actualization of the main meanings

41. Is the polysemy realized in the same derivative (with the same base, as in (51)–(53); see also (1b)) or is it in complementary distribution relative to the bases, some of the derivatives being only reciprocal in meaning and others only reflexive, or sociative, or iterative, as is the case in Lithuanian and Russian relative to the reciprocal and reflexive meanings?

Compare Lithuanian:

- (54) a. *prausti* 'to wash sb' → *prausti-s* 'to wash oneself' reflexive only
 b. *apkabinti* 'to embrace sb' → *ap-si-kabinti* 'to embrace each other' reciprocal only

There is also complementary distribution of a different kind which is not as rigid as that shown in (54): it concerns the distribution of non-reciprocal and reciprocal meanings under certain syntactic conditions. The following may be helpful.

1. SG or PL subject. For instance, if the subject is singular the meaning can be reflexive only, while with the plural subject the preferable or the only possible interpretation is reciprocal. In some Australian languages in the case of the plural subject the reciprocal meaning alone is possible.

Less rigidly this tendency manifests itself in German where about 75 per cent of derivatives with *sich* are interpreted by native speakers mostly as reciprocal in meaning when used with a plural subject (their meanings: 'to greet each other', 'to tease each other', 'to support each other', 'to chase each other', etc.), only 10 per cent are mostly reflexive in meaning (e.g. 'to clean oneself', 'to wash oneself', 'to hurt oneself', etc.), and about 15 per cent are interpreted as reciprocal or reflexive with more or less the same frequency, depending on the context (e.g. 'to respect oneself/each other', 'to ruin oneself/each other', 'to underestimate oneself/each other', etc.).

2. Intransitive or transitive base verb. In constructions with a reciprocal-sociative or iterative-reciprocal marker derived from one-place intransitive bases, the interpretation is usually sociative or iterative respectively, depending on the type of the marker, while in constructions derived from two-place transitives both reciprocal and non-reciprocal interpretation is possible, the reciprocal being most likely. In some languages a reciprocal marker is used to derive sociatives from intransitives only.

42. If the polysemy of a reciprocal marker (with broad enough polysemy) does not contain any of these three non-reciprocal meanings is it possible to trace (one of) these meanings in fossilized derivatives with this marker?

Each of the three types of polysemy contains a number of secondary meanings determined to some extent by the primary meaning and valency-affecting functions of the marker.

43. Is it possible to establish the frequency of the main and secondary meanings in a dictionary (if it exists) and/or in texts?

44. Are there only subject-oriented sociatives (type *They laughed together*) or also object-oriented sociatives (type *She washed the pants and shirt together*) if the marker used in the language is reciprocal-sociative?

Note that translations like 'They came together' are ambiguous: they are sociative in the meaning of joint collective *identical* action performed at the same time *in a group*, and spatial-reciprocal in the sense 'to come *from different directions to one point*', close to 'to meet', 'to gather (together)'. When it is sociative, the situation can be explained as 'X came + Y came + Z came (at the same time)'. In the second case this explanation does not apply,

as the spatial component (an adverbial of place) must be added in the definition. Thus, the ambiguity of ‘They came together’ is determined by the polysemy of the adverb *together*: i. ‘collective action’, ii. ‘spatial joining’ (gathering together into a group, heap, etc.).

10.3 Other types of polysemy

45. What other meanings does the reciprocal marker display?

Here is a provisional list of some meanings concomitant with each of the three types of polysemy (the data on the languages of the second and third types of polysemy of reciprocal markers is much more scarce than on those with the reflexive-reciprocal polysemy):

1. *The reflexive-reciprocal type*: autocausative (*to lift sth* → *to lift oneself*), reflexive-benefactive (‘to wash sth for oneself’), reflexive-possessive (*to shave oneself* = ‘to shave one’s beard’), antipassive (‘to frighten’ → ‘to be frightful’), anticausative (*etwas öffnen* → *sich öffnen*), potential (‘to break sth’ → ‘to be breakable’), passive, etc. For details see Nedjalkov (Ch. 5, §3).

2. *The reciprocal-sociative type*: comitative (‘to work with sb’), assistive (‘to help sb work’), multiplicity (‘to work (of many)’), competitive, anticausative, etc. For details see Ch. 5, §3.

3. *The iterative-reciprocal type*: durative, dispersive, distributive, reciprocal, etc. For details see Ch. 5, §4.

There are meanings that occur in two of the types of polysemy in question. Such coincidences are probably determined by the intransitivizing function of all the three types of markers; thus, “canonical” reciprocals, being intransitive, are the main source for development of polysemy). But the productivity of these meanings tends to differ significantly. Thus, for instance, the Turkic reciprocal-sociative marker *-š/-s* (these languages have two more intransitivizing suffixes, reflexive and passive) usually derives no more than 20–30 anticausatives, while in many Indo-European languages the reflexive-reciprocal marker may derive hundreds of anticausatives (e.g. 800 in Lithuanian, 1400 in Russian); see (13b, c, d), (49b.i), (76b’, b’), (80b).

11. *Nomina actionis*

46. Can reciprocal constructions be nominalized?

47. If they can, are there any restrictions? Are there verbal and pronominal nominalizations?

48. In what way are the reciprocants expressed in a nominalization?

49. Are there any differences between nominalization of reciprocals and non-reciprocals?

50. Can a reciprocal nominalization [= a nominalized reciprocal] occupy the position of the direct object?

Here is a Yakut example where the reciprocants in the nominalized reciprocal are indicated by the possessive suffix *-larə-*:

- (55) *uonna kiniler aan bastaanηə uura-h-əə-larə-n uura-s-t-əlar.* (U. 22)
 and they very first kiss-REC-NR-their.ACC kiss-REC-PAST-3PL
 ‘... and they kissed for the first time.’
 lit. ‘... and they kissed-each-other their very first mutual-kiss.’

12. Pronominal reciprocals and their relationship with verbal reciprocals

12.1 Pronominal reciprocals

The term *pronominal reciprocals* is applied as a cover term to verbs on which reciprocity is expressed not only by reciprocal pronouns proper, but by any devices that behave like nominals and, in general, other words and word combinations which can take the direct object position and thus prevent the use of another non-pronominal direct object. This justifies the cover term “pronominal marker” even in the case of adverbs. Incidentally, in isolating languages, specialists sometimes hesitate in identifying reciprocal markers as pronouns or adverbs. Other terms that could be used instead of pronominal markers, are syntactic or, more precisely, lexico-syntactic markers.

This requires some specifications. In some languages possessing antipassive constructions, the use of a reciprocal pronoun in Chukchi and reflexive-reciprocal pronoun in Eskimo requires simultaneous intransitivization by means of antipassive devices (for Chukchi see (61) and (64) below).

Note that in some languages pronominal reciprocal markers can be rather numerous. For instance, in Malayalam there are ten syntactic reciprocal markers, five of them pronouns and five adverbs. Word combinations functioning as pronominal markers can be quite exotic. For instance, in Sinhala, along with other reciprocal pronouns (e.g. reflexive-reciprocal *tamat-taman*) there are formations based on reduplicated numerals denoting the number of the participants, like ‘two two’, ‘three three’, etc. (Gair & Karunatillake 2000:723).

- (56) *Siri-yi Gunapalaə-yi Sunil-uyi tundenaa-Tə+tundenaa-Ø aadareyi.*
 S.-and G.-and S.-and three.ANIM-DAT+three.ANIM-NOM love.PRED
 ‘Siri, Gunapala and Sunil love each other.’ (lit. ‘... love three-to-three’)

51. Do the reciprocal pronouns combine with prepositions, or postpositions? Are they inflected? What is the status of the syntactic reciprocal marker? Is it a pronoun, a noun, an adverb, a single word or a word group, etc.? What properties does it display?

52. What is the morphological structure of pronominal reciprocal markers? For instance, are they differentiated for person/non-person?

53. If there are several reciprocal pronouns, can any differences in the usage, style, preferability with some bases be distinguished?

For instance, in the following example the first pronoun seems to be preferable to the other:

(57) *They love each other / one another.*

54. Are personal pronouns used as reciprocal markers? If they are, in what person(s)? Can they also express the reflexive meaning?

For an example of such usage see To'aba'ita (15) above).

55. Can a reciprocal marker of pronominal type, like English *each other*, take the subject position with the main or subordinate predicate (58) or be a part of the subject noun phrase, for instance, with a distributive or intensifying meaning as in (60)?

(58) *Miss C and I are going to find out what each other are like.* (Jespersen 1924:224)

The only possible interpretation of (58) is 'Miss C is going to find out what I am like and I am going to find out what Miss C is like'. *Each other* is the formal subject of the subordinate predicate, its antecedent being the subject of the main clause.

56. Does the pronominal reciprocal marker occur in the attributive position? If it does, and if it is generally inflected for case (and/or person), what case form does it take: nominative, genitive, etc.?

This concerns the use of the reciprocal pronoun in constructions like *They killed each other's horses*, *They love each other's children*. Compare Khalkha-Mongol (59a) and Karachay-Balkar (59b) (the pronoun in the attributive function is not marked for person and case):

- (59) a. *Xoyor xeree biye biy-iin-xee xar-iig gaixa-na.* (L. 593)
 two raven each other-GEN-REFL.POSS black-ACC amaze-PRES
 'Two ravens are amazed at each other's blackness' (proverb).
 b. *Ala biri biri xali-n səna-y-dəla.* (KB. 584)
 they each other character-ACC size.up-PRES-3PL
 lit. 'They size up each other's character.'

57. Can the reciprocal pronoun possess the distributive function when used as subject in the nominative case or as part of the subject group?

For instance, in Tuvan, when it follows the subject, the nominative case of the reciprocal pronoun has the distributive meaning 'each on their own, by themselves' (Kuular, Ch. 27, §4.1.1.1):

- (60) *Olar bot-bot-tar-ə bot-bot-tar-ə-n kamgala-ar.*
 they self-self-PL-3.POSS self-self-PL-3.POSS-ACC defend-NPAST
 'Each defends the other'; lit. 'They themselves /each of them defend each other.'

58. Can the reciprocal pronoun be related to several coordinated predicates without the verbal reciprocal marker?

59. Does the reciprocal pronoun function as a direct object or does it involve intransitivization by means of antipassivization?

The latter is observed in Chukchi, where one of the reciprocal markers is the reciprocal pronoun which has three personal forms: *mur-γǎçyu* (1st person), *tur-γǎçyu* (2nd person) and *ǝ-γǎçyu* (3rd person); cf. ((61) = (9)):

- (61) a. *Eqell-e atlay-ǝn penrǝ-nen.*
 enemy-INST father-ABS attack-AOR.3SG+3SG
 ‘The enemy attacked father.’
 b. *Eqell-ǝn ǝnkɫam atlay-ǝn ǝγǎçyu penrǝ-tko-γɫat.*
 enemy-ABS and father-ABS each.other.3 attack-REC-AOR.3PL
 ‘The enemy and father attacked each other.’

12.2 Three types of languages with respect to the reciprocal marker(s) employed

These types are:

- languages employing pronominal reciprocals only, e.g. Malayalam, Basque, English, Finnish, Georgian, Lezghian, etc.;
- languages employing verbal reciprocals only, e.g. Bara, Yukaghir, Quechua, Ainu, Mundari, Amele, etc.;
- languages employing both devices named, e.g. German, Polish, Chukchi, Mongolic, Japanese, etc.

60. Which of the three main types of languages does the language under investigation belong to?

61. In what way are the pronominal and verbal markers used in languages of type (c)?

Possible cases:

1. They can be used only separately, without another marker, as in German, Lithuanian, Polish, etc.; cf. German:

- (62) a. *Sie lieben ihn.* ‘They love him.’
 → b. *Sie lieben sich* (seit langem) ‘They love each other (since long ago).’
 c. *Sie lieben einander.* (same translation).
 d. **Sie lieben sich einander.* (same intended meaning).

2. They can be used either separately or simultaneously, as in Chukchi, Japanese, Buryat, Yakut, Tuvan, etc.; Yakut examples *ölör-* ‘to kill’ → *ölör-üs-* ‘to kill each other’, *beye-beye-leri-n ölör-* (same translation) → *beye-beye-leri-n ölör-üs-* (same translation); see also examples (64)–(67).

12.3 Interchangeability and co-occurrence of pronominal and verbal reciprocal markers

62. In what relation are verbal and pronominal reciprocals: (a) in complementary distribution, (b) in overlapping distribution, (c) in free combination of both types?

Case (a) is not attested so far. Case (b) can be exemplified by the data of German, where both markers can be employed on verbs governing non-prepositional objects (see (62a, b) above), whereas only pronouns can be employed instead of a prepositional object (see (63a) and (63b)). The reciprocal meaning cannot be expressed by a reflexive pronoun with a preposition: thus (63c) makes no sense. Reciprocal pronouns are often more flexible than verbal markers.

- (63) a. *Sie warten auf ihn.* 'They are waiting for him.'
 b. *Sie warten aufeinander.* 'They are waiting for each other.'
 c. **Sie warten auf sich.* (same intended meaning).

Constructions like (63c) are grammatical if the meaning is reflexive; cf. *zu sich kommen* 'to come round, regain one's senses'.

Here is an example of case (c) from Chukchi. The distinctions between the forms are hard to explain (-*wəly-* = REC; -*tko-* = antipassive marker in this case); cf. (64a) and (64b):

- (64) a. ... *penrə-nen* '... attacked-he.him.'
 b. ... *penrə-tko-γʔat* '... they attacked (someone).'
 c. ... *əryəčyu penrə-tko-γʔat* '... they attacked each other.'
 d. ... *penrə-wəly-ə-γʔat* (same translation).
 e. ... *əryəčyu penrə-wəly-ə-γʔat* (same translation), see also (62).

63. What is the purpose of the simultaneous use of two reciprocal markers, e.g. pronominal and verbal?

Possible reasons:

- a. The pronominal marker is added to a verbal reciprocal to avoid ambiguity if the verbal marker is polysemous;
- b. It may be added in order to emphasize the reciprocal meaning;
- c. It may be used pleonastically.

Cases b and c are hard to distinguish. As for case a, it can be illustrated by Tuvan (65) where the omission of the reciprocal pronoun may result in the sociative meaning of the predicate (see translation (ii)) (Kuular, Ch. 27, §4.1.2).

- (65) *A bile B bot-bot-tar-ə-n-če xilümzür-ž-üp-ken.*
 A and B each-other-N-ALL smile-REC-ASP-PERF.3
 i. 'A and B smiled *at each other*.' (with the reciprocal pronoun)
 ii. 'A and B smiled *together*.' (without the reciprocal pronoun)

Sometimes, the simultaneous use of both markers may add slight nuances of meaning. For instance, Tuvan (66) sounds "milder" without the pronoun.

- (66) *Daržaa bile Arakčaa bot-bot-tar-ə-n makta-ž-əp tur-gan-nar.*
 D. and A. each-other-ACC praise-REC-CONV AUX-PAST-3PL
 ‘Darzha and Arakcha praised each other.’

64. Are the markers interchangeable generally or on certain verb bases? If they are, what other changes are involved?

Possible cases:

1. They may be interchangeable, but the reciprocal pronoun may sound unnatural, the verbal reciprocal being frequent in speech and therefore the accepted norm, as in the following Tuvan example:

- (67) a. *kuspakta-š-* ‘to embrace each other’
 b. *bot-bot-tar-ən kuspakta-* ‘(same meaning).’

2. If a verbal reciprocal is lexicalized the difference in meaning may be prominent; cf. Tuvan:

- (68) a. *Olar bil-č-ir.* ‘They understand each other.’ (= ‘They are like-minded’, etc.)
 b. *Olar bot-bot-tar-ən bil-ir.* ‘They know each other.’ (i.e. ‘sth/all about each other’).

13. Lexical reciprocals

13.1 Introductory notes

Lexical reciprocals are inherently reciprocal in meaning, reciprocity being part of their lexical meaning, and they have no non-reciprocal underlying bases. Some of lexical reciprocals, especially in simple constructions, may have a reciprocal marker. It is the problem of the use of reciprocal markers with lexical reciprocal verbs that should be specially discussed in this section.

In this respect, languages may differ significantly. For instance, Japanese lexical reciprocals, with the exception of a small group, are incompatible with the reciprocal suffix (cf. (74c)). Generally, marked and non-marked lexical reciprocals may interrelate and overlap in the most idiosyncratic way. The examples below are meant as illustrations and they do not necessarily serve to characterize the lexical reciprocals of the languages.

65. Are there any lexical reciprocals in the language under study?

Like grammatical reciprocals, lexical reciprocals have two obligatory symmetrically related semantic arguments (reciprocants). Lexical reciprocals can be used in a pair of semantically (though not pragmatically) identical constructions like (69a’) and (69a’”), with the opposite order of the reciprocants, and as a rule they lack any non-reciprocal verbal counterparts, in contrast to grammatical reciprocals. Sentences like (69a’, a’”) may serve as a diagnostic test for establishing prototypical lexical reciprocals (the diagnostic test for establishing grammatical reciprocals is given in (1)). When used in the simple con-

struction, some lexical reciprocals either remain (obligatorily) unmarked, while others are obligatorily marked reciprocally, thus falling into two types; compare (69) and (70) (see 13.2 below).

- (69) a'. *Mary is arguing with Paul.* = a". *Paul is arguing with Mary.*
 = b'. *Paul and Mary are arguing.* ≠/≠ b". *Paul and Mary are arguing with each other.*
 c. *Paul and Mary are arguing with John.*

If verbs like 'to argue' are used in type (69a') and (69a'') constructions, the latter are identical in meaning with each other, and also with (69b'), because the meaning of the verb presupposes arguments of the same semantic class. In contrast to verbs like 'to argue', those like 'to stick to sth' (vi), i.e. verbs of locative semantics, do not presuppose denotational identity of the arguments. Therefore (70a') may be semantically identical with (70a''), both of them discontinuous, only if A and B belong to the same semantic class of objects, e.g. two sheets of paper, two postal stamps, etc., but not to different classes, e.g. a stamp and a wall. In the former instance the Indonesian predicate *me-lekat*, like its English counterpart, is a lexical reciprocal. As for the simple construction in (70b'), the predicate must necessarily contain the common reciprocal marker: thus a lexical reciprocal is marked additionally, as in (1). Compare Indonesian (A. Ogloblin, p.c.; *ber-...-an* = REC; *me-* = ACT):

- (70) a'. *A me-lekat pada B.* ≠/≠ a". *B me-lekat pada A.*
 'A stuck to B.' 'B stuck to A.'
 b'. *A dan B ber-lekat-an.*
 'A and B stuck together.'

66. Do lexical reciprocals form any distinct lexical groups? If they do, do they fall into the lexical types listed below? Are there any other lexical types?

In many languages, lexical reciprocals tend to be of three main lexical groups (some verbs may enter into two or more groups if used metaphorically):

- verbs denoting spatial relations of proximity, mostly joining and separating, e.g. *to join, to gather, to border on, to separate, to mix, to divide, to combine, to concentrate, to fasten together, to be not far, to be close, etc.*; cf. (70);
- verbs denoting (dis)similarity, e.g. *to coincide, to contrast with, to resemble, to distinguish, to be similar, to be different, to be alike, to compare, to liken, to imitate, to correspond, to fit, to identify, etc.*;
- verbs of social relations, e.g. *to argue, to agree upon, to fight, to marry, to compete, to rival, to be/get acquainted, etc.*; cf. (69) above.

In this section only verbs and their derivatives are discussed. But there are numerous non-verbal reciprocals: names of reciprocal situations (*war, peace, argument, etc.*), names of the participants of reciprocal relations (*brother, enemy, friend, etc.*), converse reciprocals (*woman, nephew, etc.*), which may also be reciprocal derivatives. On reciprocal markers

on non-verbal bases see Section 16 below. For a detailed analysis of lexical reciprocals see Knjazev, Ch. 2.

67. Are there subject-oriented and/or object-oriented lexical reciprocals in the language under analysis? If there are, describe them separately.

In subject-oriented constructions, the reciprocants are denoted either by the plural subject in simple reciprocal constructions (see (69b'–b", c)) or by the subject and non-subject, mostly a non-direct object in discontinuous reciprocal constructions (see (69a'–a")). In contrast to discontinuous constructions, a simple construction like (69b') may be ambiguous: it is either identical in meaning to (69a'–a"), or it may be understood as elliptical with an omitted comitative argument, as (69c). To resolve ambiguity, the reciprocal marker, usually a pronoun, may be used, as in (69b").

In object-oriented constructions, the reciprocants are denoted either by a plural object in simple reciprocal constructions (see (71b'–b")) or by the direct and non-direct object in discontinuous constructions (see (71a'–a")). In the latter case the object referents may be (i) of different semantic classes or (ii) of the same semantic class; cf. 'to tether a horse to the tree' – 'to tether a horse to another horse' respectively. In case (i), in contrast to case (ii), the predicate does not function as a lexical reciprocal. In the case of a plural object, its referents are necessarily of the same semantic class; cf. 'to tie two horses together', 'to tie small and big (things) together'. Such verbs have two meanings: (a) that of *attaching* one thing to another and (b) that of *joining* two things together. In case (a) the verb is syntactically three-place, in case (b) the verb is two-place. And in both cases the verb is semantically three-place (with object-referents denoting plural things or substance. Here is an example of an object-oriented lexical reciprocal from Yakut (N. Artemyev, p.c.):

- (71) a'. *Kini maŋan kuru qara kur-ga baaj-d-a.*
 s/he white belt black belt-DAT tie-PAST-3SG
 'He tied the white belt to the black belt.' (three-place)
- = a". *Kini kara kuru maŋan kur-ga baaj-d-a.*
 s/he black belt white belt-DAT tie-PAST-3SG
 'He tied the black belt to the white belt.' (three-place)
- = b'. *Kini maŋan kuru ikki qara kuru baaj-d-a.*
 s/he white belt and black belt tie-PAST-3SG
 'He tied the white belt and the black belt.' (two-place)
- = b". *Kini ikki kuru [beje-beje-leri-ger] baaj-d-a.*
 s/he two belt each.other-POSS.3PL-DAT tie-PAST-3SG
 'He tied two belts [to each other] together.' (two-place)

13.2 Subject-oriented lexical reciprocals

68. Which of the following morphological types of subject-oriented lexical reciprocals are attested in the language?

These types are established according to the possibility of their use with or without the reciprocal marker in discontinuous and/or simple constructions. The overall picture may be as follows. The main cases of the use of reciprocal markers on lexical reciprocals in simple and discontinuous constructions (the dash denotes absence of a reciprocal marker, the plus signifies its presence, and parenthesized plus denotes its optionality):

(72)		Discontinuous	Simple
	i.	–	+
	ii.	–	–
	iii.	(+)	(+)
	iv.	+	+
	v.	+	–

Note that the last case, viz. the use of a reciprocal marker in discontinuous but not simple constructions, is not attested and can hardly be expected.

i. In this case, lexical reciprocals require the reciprocal marker in the simple construction and cannot have it in the discontinuous. This type is quite similar formally to the “canonical” diathesis type of grammatical reciprocals (cf. (1) above), except that sentences (a’) and (a’’) and (b) are semantically identical. An example from Nivkh:

- (73) a'. *ōla p'-əmək ηali-d'.*
 child REFL-mother resemble-FIN
 ‘The child resembles his mother.’
- = a'': *əmək p'-ōla ηali-d'.*
 mother REFL-child resemble-FIN
 ‘Mother resembles her her child.’
- = b. *ōla p'-əmək-xe u-ηali-d'-yu /*ηali-d'-yu.*
 child REFL-mother-COM.DU REC-resemble-FIN-PL /resemble-FIN-PL
 ‘The child and his mother resemble each other.’

ii. These lexical reciprocals cannot take the reciprocal marker either in discontinuous or simple constructions. An example from Japanese (Alpatov & Nedjalkov, Ch. 25, §11; *wa* = TOP, *to* = ‘with’ in (a, a’), ‘and’ in (b, c), *-ta* = Past, *-at-* = REC):

- (74) a. *Taroo wa Akiko to kekkonsi-ta.* ‘Taro married Akiko.’
 = a'. *Akiko wa Taroo to kekkonsi-ta.* ‘Akiko married Taro.’
 = b. *Taroo to Akiko wa kekkonsi-ta.* i. ‘Taro and Akiko got married [to each other].’
 ii. ‘Taro and Akiko each got married to someone else.’
 c. **Taroo to Akiko wa kekkonsi-at-ta.* (same intended meanings as i. in (b)).

iii. Lexical reciprocals take the reciprocal marker optionally both in discontinuous and simple constructions. An example from Khalkha (Tuvshintogs, p.c.):

- (75) a'. *Dordžo Bataa-tai xagra[-lda]-w.*
 D. B.-COM argue-REC-PAST
 ‘Dorji argued with Bat.’
- = a'': *Bata Dordž-toi xagra[-lda]-w.*
 B. D.-COM argue-REC-PAST
 ‘Bat argued with Dorji.’

- = b. *Dordžo Bata xoyor xagra[-lda]-w.*
 D. B. two argue-REC-PAST
 ‘Dorji and Bat argued [with each other].’

The following lexical reciprocals are also of this type: Japanese *kooronsu/koorunsi-a-u* ‘to argue’ and Chinese *zhēng-lùn/ hùxiāng zhēng-lùn* ‘to argue’.

iv. Lexical reciprocals always contain the reciprocal marker in either type of constructions: this pertains to all those lexical reciprocals which are at the same time anticausatives, lexicalized reciprocals or *reciproca tantum*. Discontinuous constructions seem to be much less frequent than simple. Some anticausatives can hardly be used in the discontinuous construction. Here are the relevant examples respectively:

iv.a. *Anticausatives*

Tuvan:

- (76) a. *Ol spirt-ti sug-bile xolu-p tur.* (T. 481)
 he alcohol-ACC water-with mix-CONV AUX.PRES.3
 ‘He is mixing alcohol with water.’
 → b’. *Spirt sug-bile xolu-ž-a ber-gen.*
 alcohol water-with mix-REC-CONV AUX-PERF.3
 ‘Alcohol has mixed with water.’
 = b’’. *Sug spirt-bile xolu-ž-a ber-gen.*
 water alcohol-with mix-REC-CONV AUX-PERF.3
 ‘Water has mixed with alcohol.’

iv.b. *Lexicalized reciprocals* (for details see Section 14 below)

- (77) a. Ainu *yee* ‘to say’ – *u-yee* ‘to quarrel, argue’ (Alpatov et al., Ch. 42, §8)
 b. Swahili *-nen-a* ‘to speak’ – *-nen-an-a* ‘to argue’, also ‘to talk to each other’ (Loogman 1965:140).

iv.c. *Reciproca tantum* (for details see Section 15 below)

- (78) a. Japanese *tonaria-u* ‘to be next {to each other}’ (Matsuda 1978:1832)
 b. Tuvan *tuluš-* ‘to fight, struggle’ (T. 423).

69. What is the proportion [approximately] of lexical reciprocals taking the reciprocal marker in simple constructions?

13.3 Object-oriented lexical reciprocals

70. Which of the following morphological types of object-oriented lexical reciprocals are attested in the language?

The relevant morphological groups are parallel to the groups of subject-oriented reciprocals, and thus yield the same classification as (72) commented on further on. As type (v) in (72) is not attested among subject-oriented lexical reciprocals it is unlikely to be found among object-oriented lexical reciprocals.

In prototypical cases, the three-place base transitive turns into a two-place transitive.

i. In this case lexical reciprocals take the reciprocal marker in the simple construction and cannot have it in the discontinuous. In the Kabardian example below the object-referents of the reciprocal constructions are in converse relation to each other:

- (79) a. *mə čərbəš-ər mo čərbəš-əm te-ləxbən.*
 this brick-ABS that brick-OBL PRV-put
 ‘to put this brick on that brick.’
 b. *čərbəš-xə-r zə-te-ləxbən.*
 brick-PL-ABS REC-PRV-put
 ‘to put bricks one upon another.’

Reciprocally marked object-oriented derivatives may be rather numerous (cf. about 230 units in Kabardian, though some of them do not have underlying counterparts at all or with a standard semantic relationship; see Ch. 1; also 13.1 above).

A reciprocal marker can also be used in simple constructions not as the only element but also in combination with a causative marker: the latter may be used to derive a causative from an anticausative or it may be integrated into a complex affix attached immediately to the underlying three- or two-place base verb. In both cases the base transitive and the final derivative may be very close in meaning, as, for instance, the Tuvan *holu-* ‘to mix sth with sth’ → *holu-š-* ‘to get mixed’ → *holu-š-tur-* ‘to mix sth with sth’ (cf. (76)). Here is an analogous Kirghiz example, and another example illustrating the use of a reanalyzed complex reciprocal-causative affix:

- (80) a. *ula-* ‘to join sth to sth’, ‘to join the ends of sth and sth’
 → b. *ula-š-* ‘to join sth/sb’ anticausative
 → c. *ula-š-tər-* ‘to tie sth and sth together’ causative of anticausative
 (81) a. *bajla-* ‘to tie something to something’ three-place
 b. no anticausative
 → c. *bajla-š-tər-* ‘to tie (e.g. horses) together’ two-place
 (cf. d. *bajla-š-* ‘to help sb to tie something’).

ii. Lexical reciprocals cannot take a reciprocal marker at all either in discontinuous or simple constructions (see Yakut example (71) above).

iii. Lexical reciprocals take the reciprocal marker optionally both in discontinuous and simple constructions. An example from Buryat (Cheremisov 180):

- (82) *dabxasa-* i. ‘to put one upon another’, ii. ‘to accumulate in layers, double up’
 → *dabxasa-[lda-]* i. ‘to put one upon the other’, ii. ‘to put (many things) one upon another.’

iv. Lexical reciprocals contain the reciprocal marker in all constructions: this pertains to all lexicalized reciprocals and *reciproca tantum*. Discontinuous constructions seem to be much less frequent than simple. Here is an example of a reciprocal *tantum* (Southern Paiute, Sapir 1930: 106, 108, 109; *na-* = REFL/REC > *nan-* before *ts*, *tc*; *-tsin’na* is a “stem not used alone”):

- (83) *nan-tsm’na* ‘to join, cause to be joined together’
 cf. *kwip’a-* ‘to hit’ → *na-ywi’pa-* ‘to beat each other.’

14. Lexicalized reciprocals

71. Are there any derivatives with the reciprocal marker related in a non-standard way to the underlying base and possessing nevertheless the reciprocal meaning?

The typical meanings of these lexicalized reciprocals are: 'to argue', 'to fight', 'to compete', 'to meet', 'to come to an agreement', and other meanings which are often enough expressed by lexical reciprocals proper. For instance, the typical meanings of lexicalized reciprocals registered in Buryat are 'to compete', 'to fight', 'to wrestle', 'to argue', 'to meet', 'to unite', 'to jostle (in a crowd)', 'to copulate', 'to quarrel', 'to come to an agreement', 'to be at law with sb', 'to be enemies', and the like. These lists show that the meanings of these reciprocals generally coincide with the semantic range of non-derived lexical reciprocals.

The relations between the base verb and the lexicalized derivative may vary considerably. The following principal cases can be pointed out (cf. Alpatov & Nedjalkov, Ch. 25 on Japanese, §7). The illustrations are Japanese.

i. The derivative may be polysemous and have a lexicalized reciprocal meaning alongside the preserved standard reciprocal meaning; e.g.:

- (84) a. *os-u* 'to push sb' → *osi-a-u* i. 'to push each other', ii. 'to throng'
 b. *nagur-u* 'to hit sb' → *naguri-a-u* i. 'to hit each other', ii. 'to fight.'

ii. The derived meaning preserves a part of the base meaning or coincides with it; e.g.:

- (85) a. *i-u* 'to say, speak, tell' → *ii-a-u* 'to dispute with each other'
 b. *har-u* i. 'to spread, strain', ii. 'to rival' → *hari-a-u* 'to rival, compete.'

iii. The derived meaning may be idiosyncratic; e.g.:

- (86) a. *cam-u* 'to bite' → *cami-a-u* 'to be harmonious'
 b. *yar-u* 'to do sth' → *yari-a-u* 'to quarrel.'

72. Are there any lexicalized derivatives whose reciprocal meaning is marginal?

Marginal reciprocal meanings are those which to a greater or lesser degree imply a prior or response action. Compare the following Yakut derivative which denotes reaction of disagreement to a prior statement:

- (87) *kirietee-* i. 'to cut with a blunt knife' → *kiriete-s-* 'to contradict' (P. 1105)
 ii. 'to reproach'

73. Are lexicalized derivatives always reciprocal or can they lose the reciprocal meaning?

Here is an example from Yakut where the lexicalized meaning (e.g. (88ii)) is not reciprocal:

- (88) *əl-* 'to take, seize sth' → *əl-səs-* i. 'to seize each other' (S. 525)
 ii. 'to start, rush (doing sth).'

15. *Reciproca tantum*

74. Are there in the language words which are lexical reciprocals in meaning, and which contain a component of the root identical with the reciprocal marker, but have no respective underlying base?

Needless to say, attribution of some verbs to the class of *reciproca tantum* is not always self-evident. A part of the root may accidentally coincide with a reciprocal affix. In this case this verb should be attributed to lexical reciprocals proper. The origin of *reciproca tantum* is mostly the same: first a reciprocal marker is pleonastically attached to a lexical reciprocal, and some time later the base verb goes out of use.

Among *reciproca tantum*, as well as among lexicalized reciprocals, there are formations which cannot be regarded as reciprocals proper but as peripheral ones. Their characteristic meanings are those of response actions (e.g. 'to die' > 'to condole') or actions implying a response action (e.g. 'to inquire' > 'to answer').

Here are, for instance, the typical meanings of Japanese *reciproca tantum* (see Alpatov & Nedjalkov, Ch. 25, §8), mostly (a) spatial, (b) reciprocals of social relations and (c) of similarity/dissimilarity, and others:

- | | | | |
|------|----|------------------|---|
| (89) | a. | <i>tonaria-u</i> | 'to be next to each other' (Matsuda 1978:1832) |
| | | <i>na-u</i> | 'to twine', 'to twist sth together' (Matsuda 1978:1201) |
| | b. | <i>araga-u</i> | arch. 'to dispute', 'contend with', 'resist' (Brinkley 1896:35) |
| | | <i>isaka-u</i> | arch. 'to quarrel, dispute' (Brinkley 1896:45) |
| | | <i>semegia-u</i> | 'to struggle' |
| | | <i>kana-u</i> | 'to match', 'to be equal', 'to rival' (Matsuda 1978:702) |
| | | <i>tekita-u</i> | 'to be hostile' (Brinkley 1896:1459) |
| | | <i>ukuna-u</i> | 'to ask', 'to inquire' (Brinkley 1896:1555) |
| | | <i>tomura-u</i> | 'to mourn', 'to condole' (Matsuda 1978:1831) |
| | | <i>tika-u</i> | 'to give an oath' (Brinkley 1896:116) |
| | c. | <i>maga-u</i> | 'to be similar to' |
| | | <i>tiga-u</i> | 'to be different' (Brinkley 1896:111) |
| | | <i>nara-u</i> | 'to imitate' (Matsuda 1978:1192) |
| | d. | <i>mika-u</i> | arch. 'to change one favorite for another' (Brinkley 1896:921). |

Compare the following verbs from Karachay-Balkar tentatively regarded here as *reciproca tantum* (collected from Gochijaeva & Sujunchev 1989):

- | | | |
|------|---------------|--|
| (90) | <i>eriš-</i> | 'to compete, be rivals' |
| | <i>keŋeš-</i> | 'to exchange opinions' |
| | <i>küreš-</i> | 'to struggle, wrestle' |
| | <i>öčeš-</i> | i. 'to argue', ii. 'to bet', iii. 'to compete' |
| | <i>üleš-</i> | 'to divide, share' |
| | <i>qatəš-</i> | 'to get mixed' |
| | <i>awuš-</i> | 'to alternate' |
| | <i>eš-</i> | 'to plait, weave, roll together' |
| | <i>söleš-</i> | 'to talk, speak' |
| | <i>qarəš-</i> | 'to resist' |

16. Reciprocal markers on non-verbal bases and/or non-verbal derivatives

This domain is discussed in Nedjalkov (Ch. 7).

16.1 Introductory notes

Reciprocal derivation from non-verbal bases, or, rather, the use of reciprocal markers on non-verbal bases, (which may result in reciprocal verbs as well as non-verbs, such as nouns, adjectives, etc.) is attested in many, though not all languages of the world possessing verbal and pronominal reciprocal markers. Overall, reciprocal derivation from non-verbal bases is extremely diverse semantically and some semantic types may be language-specific, though there happen semantic parallels across languages. These derivatives often display interesting associative relations with deverbal reciprocals. As a part of the domain of reciprocity, though often on its periphery and neglected, they also deserve attention.

Unfortunately, the data available are extremely limited as this is a poorly investigated domain. There is a chance they have not been noticed in many languages and remain unknown yet. But even now the variety of the types discovered is fascinating.

On the other hand, there is another marginal domain related to the one discussed: reciprocal derivation of non-verbs from verb bases. It may be useful at this point to look at the three following domains together: derivation of non-verbs from verbs and of verbs and non-verbs from non-verbs alongside the dominating derivation of reciprocal verbs from verb bases.

The following should also be noted with respect to reciprocal markers on non-verbal bases.

1. The range of meanings of the derivatives named in the heading, and not infrequently of the underlying bases, as a rule, does not exceed the limits of lexical meanings characteristic of lexical reciprocals.

2. Bordering on reciprocity are the meanings of converse relations, such as *parents – children*, *aunt – nephew*, *husband – wife*, *elder brother – younger brother*, *brother – sister*, *in front of – behind*, *in the back of*, *far – near*, *to follow – to precede*, etc. Converse relations display a marked similarity to reciprocal relations, because one member of a converse pair also obligatorily implies the existence of the other member.

16.2 Five main derivational pairs

If we take into account the affiliation of the underlying bases and the derivatives with a reciprocal marker to the the word classes as a classifying feature, we obtain five main derivational types. (91) contains the list of the five main derivational pairs with reciprocal markers and their illustrations. Type (91a) is outside the subject-matter of this section, but it is added to give a complete overview of the possible types.

The Ainu illustrations show that in cases (b), (c) and (e) the same marker is used as in (91a). For (91d) a parallel Bamana example with a reciprocal marker for verbs is *màfile* ‘to look’ → *ɲɔgɔn màfile* ‘to look at each other’.

- | | | | | | | |
|------|----|---------------------|---|---------------|--------|---|
| (91) | a. | <i>Verb</i> | → | <i>Verb</i> | Ainu | <i>nukar</i> ‘to see’ → <i>u-nukar</i> ‘to see each other’ |
| | b. | <i>Noun</i> | → | <i>Noun</i> | Ainu | <i>irwak</i> ‘brother’ → <i>u-irwak</i> ‘both brothers’ |
| | c. | <i>Noun</i> | → | <i>Verb</i> | Ainu | <i>ona</i> ‘father’ → <i>u-ona-kor</i> ‘to be related as
father and child’ |
| | d. | <i>Verb</i> | → | <i>Noun</i> | Bamana | <i>sigí</i> ‘to live’ → <i>à sigi-ɲɔgɔn</i> ‘his neighbour’ |
| | e. | <i>Postposition</i> | → | <i>Adverb</i> | Ainu | <i>sam</i> ‘the place close to sth/sb’ → <i>u-sam</i> ‘close
to each other.’ |

For the sake of convenience, the term ‘noun’ in (91b, c) is used broadly to include adjectives and numerals, which are much more rare in this domain. Similarly, the term ‘postposition’ is also applied in the broad sense to prepositions, adverbs, and locative nouns.

75. Does the reciprocal marker combine with non-verbal bases: nouns, adjectives, numerals, adverbs, prepositions, postpositions, locative nouns?
76. If the answer is positive, which of the types, not counting the first one, occur in your language?

A special place belongs to reciprocals derived from postpositions, prepositions and auxiliary locative nouns on which the reciprocal meaning is as clear-cut as in (91a). This may be due to the reciprocal adverbs implying a kind of mutual proximity of some entities or their motion towards each other, i.e. the meanings similar to those of reciprocal verbs of position or motion.

16.3 Four main morphological types of reciprocal markers

I have in mind the markers that combine with non-verbal bases.

77. Which types of reciprocal markers listed in (92) are employed in the language under investigation?

- (92) a. The same marker is used for (91b, c, d, e) as for (91a).
 b. A complex marker used for the derivation from nouns, includes the reciprocal marker used for the derivation of reciprocal verbs of the (91a) type. For instance, in Yakut (92b.i), the verb is derived by means of the complex suffix *-te-s*, the corresponding form without *-s* being ungrammatical; in other instances both *-te* and *-s* can function independently, as is shown in (92b.ii).
- (92b) i. *kürex* ‘competition’ → (**kürex-tee-*) → *kürex-te-s* ‘to compete’
 ii. *aadərəs* ‘address’ → *aadərəs-taa-* ‘address sth to sb’ → *aadərəs-ta-s-* ‘to address sth to each other.’

The derivative in (91c) is also of this type although the meaning of the non-reciprocal component is possessive.

- c. A marker used for the derivation of reciprocal nouns coincides with a part of the marker used for derivation of reciprocal verbs. There are no “pure” examples of this case. But if one assumes that verbal reciprocals in Tagalog are formed by means of the circumfix *mag-...-an*, as is shown in (92c.ii), and not by means of the prefix *mag-* from the reciprocal noun *ibig-an* ‘mutual love’, so this can be tentatively regarded as an illustration for this logical possibility concerning reciprocal markers:
- (92c) i. *ibig* ‘love’ → *ibig-an* ‘mutual love’
 ii. *um-ibig* ‘to love’ → *mag-ibig-an* ‘to love each other’ (*um-* = ACT)

Note that the prefix *mag-* can derive about 30 reciprocals of the (92c.iii) type.

- iii. *y-um-akap* ‘to embrace sb’ → *mag-yakap* ‘to embrace each other.’
- d. A marker used for the derivation from non-verbal bases does not contain any components of the marker used for the derivation of reciprocal verbs. Here I have in mind only those derivatives whose meanings are similar to the meanings of derivatives formed by means of the three former types of markers. The Indonesian derivative with the prefix *se-* in (92’d.ii) (Ogloblin & Nedjalkov, Ch. 33, (60), (173)) has a meaning similar to that of the Nêlêmwa derivative in (92d.ii) (taken from Brill, Ch. 34, (21), (114)).
- (92d) i. *khua* ‘to bite’ → *xla pe-xua-xla*
 they REC-bite-3PL
 ‘They are biting each other.’
- ii. *bala-xla* ‘their partner’ → *pe-bala-xla*
 partner-3PL REC-partner-3PL
 ‘They are partners / in the same team.’

Compare:

- (92’d) i. *ber-pandang-an* ‘to see at each other’
 ii. *nasib* ‘fate’ → *se-nasib* ‘to have the same fate.’

Nêlêmwa is so far the only language where this semantic group with a marker of type (91a) is registered. In other languages special markers are used, as in Indonesian.

78. Which of the following semantic groups are represented in the language?
 79. Are there any other semantic groups attested in the language?

16.4 Semantic groups within derivational pairs

This concerns derivational pairs listed in (91), namely (91b, c, d). Derivational pair (91d) consists only of one semantic group (see 16.4.2). Needless to say the derivational pairs of the (91a) type are outside the scope of this section.

16.4.1 Derivational pairs with nominal bases

Among these pairs there are two subgroups, viz. with nominal and verbal derivatives. The latter derivatives seem to be less frequent across languages than the previous one.

16.4.1.1 *Derivational pairs 'Noun → Noun'* The main derivational meanings are:

1. Duality: naming two participants, usually relatives in converse relations, by means of a single noun phrase; e.g.:

1a. 'brother → two brothers'

1b. 'mother → mother and child'

1c. 'hand → both hands'.

2. Collective plurality: 'sister → (all) sisters between themselves (to each other)'.

3. Affinity or relatedness with respect to the feature named by the base, e.g. 'father → person who has the same father'; 'river → (a settlement) situated on the banks of the same river'; 'class → classmate'.

4. The reciprocal meaning: 'love → 'mutual love'.

5. The distributive meaning: 'two → in/by twos'.

16.4.1.2 *Derivational pairs 'Noun → Verb'* The main derivational subtypes and meanings are:

1. Plain verbalization: 'a friend → to be friends', 'difference → to differ', 'relatives → to become relatives'.

2. Similarity or relatedness with respect to the feature named by the noun: 'a year → to be born in the same year'.

3. Denoting a converse pair by the name of one participant of the pair: 'child → to be related as parent and child'.

There also happen derivatives with a non-reciprocal meaning, usually one metaphorically related to that of the base; cf. Buryat *seeže-* 'breast', fig. 'heart' → *seeže-lde-* 'to memorize' (Cheremisov 1973:126).

16.4.2 *Derivational pairs 'Verb → Noun'*

The derivative denotes the partner in the activity denoted by the base verb; e.g.: 'to drink beer → boon companion'. So far, this type is attested in one language only, viz. Bamana; see (91d).

16.4.3 *Derivational pairs 'Postposition/... → Adverb'*

Derived adverbs are used with verbs of motion (of the subject or object) and in combination with them denote either (a) joining or *proximity* of two or more entities or (b) separating of a whole into two or more parts or entities. The adverbs themselves denote mostly spatial position or acquiring some spatial position by those entities relative to each other. In reciprocal construction (93b), the number of arguments diminishes in contrast to non-reciprocal (93a); at least the reciprocal construction is syntactically simpler. Needless to say, reciprocal adverbs may develop some non-spatial meanings.

There are two main morphological types of reciprocal adverbs: (a) with the reciprocal marker attached to the base with the spatial meaning, as in Nivkh example (93), or (b) with a spatial preposition attached to the reciprocal pronoun, as in German example (94).

- (93) a. *if atək řara-in hur-t'iv-d'.*
 he father opposite-LOC there-sit.DOWN-FIN
 'He sat down opposite his father.'
- b. *if atək-xe u-t'ara-in hur-t'iv-d'-yu.*
 he father-COM.DU REC-opposite-LOC there-sit.DOWN-FIN-PL
 'He and [his] father sat down opposite each other.'

German reciprocal adverbs seem to show a tendency towards functioning as preverbs in certain syntactic structures:

- (94) a. *Sie hat neue Waren auf die alten gestapelt.*
 'She has heaped new goods onto the old ones.'
- b. *Sie hat neue und alte Waren aufeinandergestapelt.*
 'She has heaped new and old goods onto one another.'

Some reciprocal adverbs have a meaning which is not the sum of the meanings of their components, and they lack base constructions with the respective preposition, as in (94). Instances are the reciprocal adverbs *durcheinander* (*durch* 'through') adding, roughly speaking, the sense of disorder as a result of the action named by the base verb (*alles durcheinanderbringen* 'to turn everything upside down'), and the reciprocal adverb *auseinander* lit 'out of each other' denoting the meaning 'in different directions, in pieces', as an antonym of *zusammen* 'together' (*auseinanderfallen* 'to fall to pieces')

Outside this morphological type, there is a case semantically analogous to it. I mean the cases when a spatial meaning is denoted by a preverb which then takes a reciprocal marker; cf. Kabardian (root alternation $\partial \sim \text{ə}$ is determined by intransitivity/transitivity):

- (95) a. *dən* 'to sew' (vi)
 → b. *kIɛrə-dən* 'to sew sth onto sth'
 → c. *zə-kIɛrə-dən* 'to sew two pieces together.'

In this type, as well as in the German reciprocal adverb *durcheinander* just cited, there are combinations of the reciprocal marker with preverbs whose meaning does not follow immediately from that of the components, i.e. a derivative without the reciprocal marker is either not semantically related to the derivative with the reciprocal marker or it is non-existent; thus a complex preverb comes to function as an independent semantic item; cf.:

- (96) a. *gɔə-sxɔən* 'to burn sth' → *zə-te-gɔə-sxɔən* 'to burn everything'
 b. *čətɔən* 'to tear into parts' → *zə-xə-čətɔən* 'to tear violently into small parts'

In (96) the preverb *te-* denotes an action on the surface of a thing, and the preverb *xə-* denotes being inside something. The meaning of these preverbs is lost in that of the complex preverbs.

17. Etymology of reciprocal markers and their structure

80. Are there any data on the origin of the verbal reciprocal marker(s) and the tendencies of its (their) semantic evolution?

81. What lexical items have the syntactic reciprocal marker or its components developed from? The possible situations: if a reciprocal marker is composed of one component it may coincide with the reflexive marker or it may have developed from nouns meaning 'friend', 'relative', 'body', etc.; if a reciprocal marker is composed of two components, it may be a reduplicated reflexive pronoun or its components may be various combinations or repetition of words like 'one', 'another', 'each', 'person'.

82. Is the position of the syntactic reciprocal marker(s) (pronoun or adverb) fixed or free relative to the verb? Is insertion of any (limited number of) words allowed between the verb and the syntactic marker(s) with fixed position?

83. Are there any non-reciprocal markers to which the reciprocal marker may be related formally and/or semantically?

84. In what other complex markers is the reanalyzed reciprocal marker used?

85. In what way is the reciprocal pronoun composed of two (or more) components characterized relative to the following possible properties: (a) fixed or non-fixed position of the components relative to each other; (b) possibility of case-marking; (c) combinability with prepositions and/or postpositions; (d) the position of the case marker after the first or the second component; (e) placing of the preposition before the first or second component?

Attachment

List of typical derived reciprocal sentences

The list of verbs below is suggested as a guide for the translation of reciprocal constructions by a bilingual native informant (needless to say, ideally, the author should be a native speaker of the language). These reciprocal constructions should be given in opposition with their underlying base constructions (in the list below they are implied by the reciprocal constructions; e.g.: *He protected her* (+ *She protected him*) – *They protected each other*). Of course, original constructions with reciprocals obtained from running texts, from natural contexts, are much more valuable and reliable than reciprocal constructions obtained via another language, even if they are checked by other informants. But, since reciprocals are extremely rare in running texts, collecting a sufficient corpus may take too much time, therefore resorting to translating a list of suggested constructions may be useful at least at the initial stage or research. The shortcomings of the “translation method” may be compensated for by the quantity of the material that can be obtained.

Investigation of the polysemy of reciprocal constructions needs other lists of constructions and a different procedure.

A. One group comprises verbs of *physical action* upon a human object that may result in a change of the state of the latter (note that among verbs of physical action those of violent hostile actions may be prevalent).

Hostile, unpleasant, etc. actions/ attitudes

<i>They accused each other</i>	<i>They angered each other</i>
<i>They attacked each other</i>	<i>They avoided each other</i>
<i>They beat each other</i>	<i>They betrayed each other</i>
<i>They bit each other</i>	<i>They bumped into each other</i>
<i>They butted each other</i>	<i>They cheated each other</i>
<i>They chopped each other</i>	<i>They complained of each other</i>
<i>They compromised each other</i>	<i>They condemned each other</i>
<i>They contradicted each other</i>	<i>They crowded each other</i>
<i>They criticized each other</i>	<i>They cudgelled each other</i>
<i>They cursed each other</i>	<i>They damned each other</i>
<i>They deceived each other</i>	<i>They deprived each other of sth</i>
<i>They despised each other</i>	<i>They destroyed each other</i>
<i>They disappointed each other</i>	<i>They disturbed each other</i>
<i>They elbowed each other</i>	<i>They exposed each other</i>
<i>They exterminated each other</i>	<i>They fired at each other</i>
<i>They followed each other</i>	<i>They fooled each other</i>
<i>They grappled with each other</i>	<i>They hated each other</i>
<i>They hindered each other</i>	<i>They hit each other</i>
<i>They humiliated each other</i>	<i>They hunted each other</i>
<i>They hurt each other</i>	<i>They ignored each other</i>
<i>They insulted each other</i>	<i>They kicked each other</i>
<i>They knocked each other down</i>	<i>They lashed each other</i>
<i>They let each other down</i>	<i>They maimed each other</i>
<i>They objected to each other</i>	<i>They offended each other</i>
<i>They oppressed each other</i>	<i>They pained each other</i>
<i>They pecked each other</i>	<i>They persecuted each other</i>
<i>They pierced each other</i>	<i>They pinched each other</i>
<i>They poisoned each other</i>	<i>They pressed each other</i>
<i>They pricked each other</i>	<i>They pushed/shoved each other</i>
<i>They reproached each other</i>	<i>They revolted against each other</i>
<i>They robbed each other</i>	<i>They shunned each other</i>
<i>They slashed each other</i>	<i>They sold each other</i>
<i>They spit at each other</i>	<i>They stabbed each other</i>
<i>They ridiculed each other</i>	<i>They ruined each other</i>
<i>They scolded each other</i>	<i>They scratched each other</i>
<i>They slandered each other</i>	<i>They slapped each other</i>
<i>They squeezed each other</i>	<i>They strangled each other</i>
<i>They tore each other to pieces</i>	<i>They teased each other</i>
<i>They threatened each other</i>	<i>They teased each other</i>
<i>They tired each other</i>	<i>They tormented each other</i>
<i>They tortured each other</i>	<i>They tripped each other</i>
<i>They victimized each other</i>	<i>They whipped each other</i>
<i>They wounded each other</i>	

Pleasant actions/attitudes

<i>They admired each other</i>	<i>They bowed to each other</i>
<i>They caressed each other</i>	<i>They cheered up each other</i>
<i>They defended each other</i>	<i>They embraced each other</i>
<i>They flattered each other</i>	<i>They freed each other</i>
<i>They guarded each other</i>	<i>They kissed each other</i>
<i>They looked for each other</i>	<i>They overestimated each other</i>
<i>They praised each other</i>	<i>They protected each other</i>
<i>They relied on each other</i>	<i>They rescued each other</i>
<i>They respected each other</i>	<i>They supported each other</i>
<i>They saved each other</i>	<i>They stroked each other</i>
<i>They took care of each other</i>	

Neutral, at least non-hostile (mostly physical), actions

<i>They bandaged each other</i>	<i>They raised each other</i>
<i>They clasped each other</i>	<i>They replaced each other</i>
<i>They clutched each other</i>	<i>They rubbed each other with dirt</i>
<i>They combed each other</i>	<i>They shook each other</i>
<i>They covered each other with rugs</i>	<i>They sluiced each other with water</i>
<i>They dirtied each other</i>	<i>They smeared each other</i>
<i>They dressed each other</i>	<i>They soaped each other</i>
<i>They drive each other (in a car)</i>	<i>They sprinkled each other</i>
<i>They dried each other</i>	<i>They stand up for each other</i>
<i>They fed each other</i>	<i>They tickled each other</i>
<i>They hid each other</i>	<i>They tied each other to a tree</i>
<i>They held each other</i>	<i>They took each other by the hand</i>
<i>They held fast onto each other</i>	<i>They took each other out</i>
<i>They licked each other</i>	<i>They touched each other</i>
<i>They lifted each other</i>	<i>They tugged each other</i>
<i>They lost each other</i>	<i>They undressed each other</i>
<i>They massaged each other</i>	<i>They untied each other</i>
<i>They missed each other</i>	<i>They waited for each other</i>
<i>They painted each other</i>	<i>They warmed each other</i>
<i>They pressed each other to the wall</i>	<i>They washed each other</i>
<i>They provoked each other</i>	<i>They watched each other</i>
<i>They pulled each other</i>	<i>They winked at each other</i>

B. Verbs denoting all kinds of relations between humans that do not necessarily involve physical action, and also verbs of speech:

Human relations

<i>They depended on each other</i>	<i>They entertained each other</i>
<i>They inspired each other</i>	<i>They saved each other from sb/sth</i>
<i>They named each other</i>	<i>They hurried each other</i>
<i>They amused each other</i>	<i>They tamed each other</i>
<i>They ensured each other about it</i>	<i>They taught each other</i>
<i>They smiled at each other</i>	<i>They tested each other</i>
<i>They excused each other</i>	<i>They were displeased with each other</i>
<i>They forgave each other</i>	<i>They looked askance at each other</i>

They saved each other
They woke each other
They tried to outstrip each other

They equalled each other in strength
They checked each other

Verbs of speech

They asked each other about sth
They called each other
They called each other names
They congratulated each other
They greeted each other
They interrupted each other
They inquired each other about sth
They invited each other
They looked each other over

They mentioned each other
They murmured to each other
They praised each other
They quoted each other
They shouted each other down (= outvoiced)
They talked each other into it
They thanked each other
They warned each other
They whispered to each other

Successive actions (by turns)

They persecuted each other
They followed each other
They chased each other
They pursued each other
They preceded each other

They succeeded each other
They overcame each other
They overpowered each other
They outdrank each other

C. Verbs denoting feelings or their manifestation, approval or disapproval, mental activities or sense perception form a distinct lexical group; verbs denoting causation of feelings.

Emotions, attitudes and their manifestation

They pitied each other
They loved each other
They cherished each other
They fell in love with each other
They were scared/afraid of each other
They were shy of each other
They were ashamed of each other
They envied each other
They suspected each other

They admired each other
They idealized each other
They valued each other
They preferred each other to X
They interested each other
They were angry with each other
They pestered each other
They seized each other

Causation of feelings

They worry each other
They excite each other
They shocked each other
They annoyed each other
They comfort each other
They embarrass each other
They quieted each other
They pacified each other
They persuaded each other to go there
They inspired each other
They provoked each other

They scared each other
They made each other laugh
They amazed each other
They seduced/tempted each other
They made each other drunk
They charmed each other
They forced each other to do sth
They obliged each other to do sth
They urged each other on
They encouraged each other
They upset each other

Mental activities, states, attitudes

<i>They compared each other with X</i>	<i>They appraised each other</i>
<i>They remember each other</i>	<i>They believe each other</i>
<i>They forgot each other</i>	<i>They forgot of each other</i>

Verbs of motion

<i>They approached each other</i>	<i>They lead each other in the dark</i>
<i>They catch each other</i>	<i>They leaned against each other</i>
<i>They catch up with each other</i>	<i>They left each other</i>
<i>They chase each other</i>	<i>They penetrated into each other</i>
<i>They let each other go past</i>	<i>They ran into each other</i>
<i>They went to meet each other</i>	<i>They ran after each other</i>
<i>They hunted each other</i>	<i>They rushed at/after each other</i>
<i>They moved from each other</i>	<i>They visit each other</i>

Verbs of sense perception

<i>They met each other</i>	<i>They smelt each other</i>
<i>They heard each other</i>	<i>They sniffed at each other</i>
<i>They felt each other</i>	<i>They stared at each other</i>
<i>They found each other</i>	<i>They sniff at each other</i>
<i>They noticed each other</i>	<i>They recognized each other</i>
<i>They saw each other</i>	

“Indirect” reciprocals (derived from three-place transitives)

<i>They admitted their mistakes to each other</i>	<i>They passed the bread to each other</i>
<i>They asked each other about their families</i>	<i>They promised sth to each other</i>
<i>They boasted of their children to each other</i>	<i>They read books to each other</i>
<i>They borrowed money from each other</i>	<i>They saved money for each other</i>
<i>They bought gifts for each other</i>	<i>They sent books to each other</i>
<i>They brought gifts for each other</i>	<i>They shared food with each other</i>
<i>They carried things for each other</i>	<i>They shift work on each other</i>
<i>They demanded the truth from each other</i>	<i>They showed their findings to each other</i>
<i>They dispatched sth to each other</i>	<i>They set the dogs on each other</i>
<i>They exchange sth with each other</i>	<i>They sold things to each other</i>
<i>They expressed their feelings to each other</i>	<i>They stole goats from each other</i>
<i>They found wives for each other</i>	<i>They told tales to each other</i>
<i>They gave things/their names to each other</i>	<i>They threw stones at each other</i>
<i>They hid their cattle from each other</i>	<i>They took money from each other</i>
<i>They informed each other about it</i>	<i>They took the clothes (away) from each other</i>
<i>They introduce sb to each other</i>	<i>They turned their heads to each other</i>
<i>They offered gifts to each other</i>	<i>They wrote letters to each other</i>

“Possessive” reciprocals

<i>They answered each other’s questions</i>	<i>They patted each other on the shoulder</i>
<i>They braided each other’s hair</i>	<i>They pressed each other’s hands</i>
<i>They cleaned each other’s shoes</i>	<i>They pushed each other on the breast</i>
<i>They cut each other’s hair</i>	<i>They put on each other’s shoes</i>
<i>They drank to each others’ health</i>	<i>They rubbed each other’s backs</i>
<i>They forgave each other’s mistakes</i>	<i>They shook each other’s hands</i>

They grasped each other by the hand
They hate each other's guts
They kill each other's horses
They kissed each other's hands
 [= each other on the hand]
They kissed each other on the cheek
They love each other's children
They know each other's children
They hate each other's children
They see each other's wounds
They have shed each other's blood

They sized up each other's characters
They spilled each others' blood
They stroked each other's bodies
They stroked each other's hair

They tell stories about each other
They understood each other's thoughts
They do not understand each other's language
They are watching for each other's faults
They water each other's horses
They wring/twist each other's hands

“Adverbial” reciprocals

They fumed before each other
They cleaned shoes for each other

They cook for each other
They run from each other

Lexical reciprocals

Subject-oriented

The two rivers flow together here
Water and alcohol mix together
They approached each other (come together)
They stuck to each other
They had intercourse (with each other)
They bargained with each other
They collided (with each other)

They parted (from each other)
They quarrelled (with each other)
They squabbled (with each other)
They argued (with each other)
They played with each other
They communicated with each other

Object-oriented

He tied the white horse to the black horse – He tied the horses together
He exchanged a book for a fishing-rod
He connected the ends of the wire together
He brought John and Mary together

He divided the loaf into portions
They exchanged handshakes

Reciprocals derived from supposedly two-place intransitives (prepositional, postpositional objects
 = non-direct objects, case-marked as non-direct object)

They counseled with each other
They nodded to each other
They pounced on each other
They toasted each other
They whistled to each other
They pressed to each other
They rubbed against each other
They shouted to each other
They chattered with each other
They spat at each other
The ducks are quacking to each other
The wolves growl at each other
The cows moo to each other
The horses neigh to each other
They became afraid/scared of each other

They glanced at each other
They pounced on each other
They associated with each other
They faced each other
They pestered each other
They snuggled up to each other
They were tied to each other
They fell upon each other
They smiled at each other
They confided in each other
They huddled to each other
They turned to each other
They resented each other
They leaned upon each other
They spoke to each other

<i>They revenged on each other</i>	<i>They swore at each other</i>
<i>They visited each other</i>	<i>They got offended with each other</i>
<i>They bored each other</i>	<i>They whistled to each other</i>
<i>They loathed each other</i>	<i>They whispered to each other</i>
<i>They apologized to each other</i>	<i>They talked to each other</i>
<i>They annoyed each other</i>	<i>They complained to each other</i>
<i>They trusted each other</i>	<i>They winked to each other</i>
<i>They longed for each other</i>	<i>They chattered to each other</i>
<i>They sympathized with each other</i>	<i>They were disappointed with each other</i>
<i>They thought about each other</i>	<i>They became upset by each other's behaviour</i>
<i>They waited for each other</i>	<i>They lived in harmony with each other</i>
<i>They obeyed each other</i>	<i>They hindered each other</i>
<i>They resisted each other</i>	<i>They called to each other</i>
<i>They lied to each other</i>	<i>They were ashamed of each other</i>
<i>They harmed each other</i>	<i>They were shy of each other</i>
<i>They appealed to each other</i>	<i>They relied on each other</i>
<i>They tried to please each other</i>	<i>They helped each other</i>
<i>They jumped on each other</i>	<i>They approached each other</i>
<i>They ran after each other</i>	<i>They believed each other</i>
<i>They bumped into each other</i>	<i>They envied each other</i>
<i>They shouted at each other</i>	<i>They parted from each other</i>
<i>They were sulky with each other</i>	
<i>They were angry with each other</i>	
<i>They resembled each other</i>	

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Some typologically relevant properties of reciprocal markers and arrangement of the subsequent chapters

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This overview chapter is intended to show the reader the way the chapters on reciprocals of individual languages are organized and grouped together according to the types of the polysemy of the reciprocal markers employed. The similarities and differences are emphasized in order to serve as guidelines in the comparison of languages. In fact, this chapter is a kind of amplified Table of Contents of the subsequent parts of the monograph, nearly all the material being naturally extracted from those and previous chapters. The presentation is inevitably simplified and fragmentary. It is meant as a typological background for and an introduction to a detailed analysis of reciprocals in the subsequent chapters on individual languages.

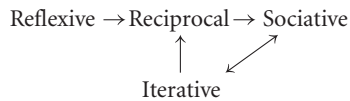
1. Three main types and three extended types of prototypical polysemy of reciprocal markers

As shown in Nedjalkov (Ch. 5, §1.4), three meanings are used alongside the reciprocal meaning as the basis for establishing the types of polysemy of reciprocal markers: reflexive, sociative, and iterative, because they are most closely related to the reciprocal, though to a varying degree, among all those meanings that can be expressed by the same markers cross-linguistically.

This makes it possible to distinguish three *main* types of polysemy of reciprocal markers with two of the meanings and three *extended* types of polysemy with an added third meaning, these six types being regarded here as *prototypical*:

- reflexive-reciprocal, reciprocal-sociative, iterative-reciprocal;
- reflexive-reciprocal-sociative, iterative-reciprocal-sociative, iterative-reciprocal-reflexive.

The relations between the four meanings are shown by the following schema (presented and discussed in §1.4.4 of Ch. 5) where the arrows indicate the most likely direction of semantic evolution; the bilateral arrow shows a particular semantic affinity of the sociative and the iterative meanings. Due to this affinity, the reciprocal-sociative and the iterative-reciprocal types of polysemy are in a way opposed to the reflexive-reciprocal polysemy.



Contrasted to polysemous reciprocal markers are monosemous reciprocal markers. In this monograph languages with all the types of polysemy of reciprocal markers, except iterative-reciprocal (see Section 4 below), and with monosemous markers are represented. In addition, languages with markers with non-prototypical (not containing the non-reciprocal meanings listed) polysemy are included in the monograph.

The subsequent chapters of Parts II to VII contain descriptions of reciprocals and related categories in individual languages. They are grouped according to the type of polysemy of the main reciprocal marker(s).

The prototypical sets of polysemy named above are a result of a trivial calculus based on a combination of the reciprocal meaning first with one and then with two basic non-reciprocal meanings. Other meanings which are often expressed by reciprocal markers, e.g. anticausative, autocasative, competitive, passive, and a number of others, are not used as the classifying meanings (though they may be more productive in type frequency than the main meanings) because it would enormously increase the number of types and make the classification unfeasible. These secondary meanings are dealt with within the range of the prototypical sets of polysemy; they may recur in two or more prototypical types of polysemy. For instance, the anticausative meaning occurs both in the reflexive-reciprocal and reciprocal-sociative polysemy, though in the latter type it is much less productive, as these anticausatives derive mostly from three-place transitives of joining.

The six prototypical types of polysemy serve as guidelines in the domain of the polysemy of various reciprocal markers. The distribution of languages according to these types of polysemy of reciprocal markers is not always a simple task, due to a number of factors. For instance, a language may have two or more reciprocal markers differing in the type of polysemy, and even dialects of the same language may differ in this respect. Another factor is that one type of polysemy, e.g. reflexive-reciprocal, may merge into another, e.g. reciprocal-sociative, and *vice versa*.

In languages with two or more reciprocal markers the problem of establishing the “main” marker according to whose polysemy the language should be classified may arise. As a rule, if a language possesses two markers it is classified according to the more polysemous one which is regarded in this case as the main one. It follows that if there is a monosemous and a polysemous marker, the polysemous marker is chosen as the classifying one. As a rule, if a language possesses a verbal and a pronominal reciprocal markers the verbal marker is usually more polysemous and therefore it is given priority though it may be restricted in productivity. But generally the rules are not rigid, and sometimes classifying a language may be to a certain degree arbitrary. As is known, pronominal markers, being “younger” and thus generally more etymologically transparent than the verbal ones, are mostly monosemous.

In this chapter, reciprocal markers of each language are briefly characterized with respect to the typologically relevant features.

2. Reflexive-reciprocal polysemy (Part II)

This type of polysemy characteristic of markers with the primary reflexive meaning is represented in a number of languages described in 12 chapters. Seven of the languages are of the Indo-European stock. The other languages are Kabardian and Adyghe, West Greenlandic Eskimo, North Arawak languages and Djaru.

As is usually noted, if one and the same derivation can have both a reflexive and a reciprocal meanings, it is usually reflexive if the subject is singular and it is always or mostly reciprocal if the subject is plural or dual.

The common feature of the six present-day Indo-European languages (Chapters 10–15) is expression of reciprocity by verbal reflexive markers which have acquired a broad range of meanings also attested in other languages, though in different combinations and with a different productivity. For instance, in Russian the most productive function of the reflexive-reciprocal marker is passive (about 4,000 passive forms of imperfective transitive verbs registered in dictionaries), and it is entirely absent in Lithuanian. In Bulgarian, in contrast to all the other Indo-European languages described in this monograph, the reflexive-reciprocal clitic, in interaction with the prefix *nad-* denoting overcoming (which determines the meaning of competition) derives a group of verbs (about 25 items) with the competitive meaning; cf. *Te go nadpivat* ‘They overdrink him’ → *Te se nadpivat* ‘They compete in drinking’ and not proper reciprocal ‘They overdrink each other’. However, when the reciprocal verb is used in the aorist of the perfective aspect, instead of the competitive meaning the latter meaning comes to the fore, but it sounds illogical, because two participants cannot overcome each other at the same time.

The type frequency of a meaning of reciprocal markers may differ significantly across languages. For instance, in Russian, Lithuanian and German, the approximate number of reciprocals is about 40, 160 and (no less than) 480 respectively. There may be a correlation between the frequency of different meanings; for instance, reverse productivity between the reciprocal and anticausative meanings in these languages, cf. the given numbers with the number of anticausatives: 1400, 800 and 400 respectively.

All these Indo-European languages also employ monosemous reciprocal markers with the status of pronouns whose usage may differ in various ways across these languages.

In German (Wiemer & Nedjalkov, Ch. 10) and Polish (Wiemer, Ch. 11), in contrast to French (Guentchéva & Rivière, Ch. 12) and Bulgarian (Penchev, Ch. 13), substitution of a pronominal reciprocal marker for a verbal one is often possible and simultaneous use of both markers is not allowed. A specific feature of German is reciprocal adverbs consisting of prepositions and pronominal reciprocal marker. The adverbs with spatial meanings may function as preverbs, in which case they may form object-oriented reciprocal constructions denoting mostly joining; cf. *etwas an etwas fügen* ‘to fasten sth to sth’ → *etwas aneinanderfügen* ‘to fasten together’ (Ch. 10, §3.12.2). A specific feature of Polish is the existence of two reciprocal markers, *się* and *siebie*, each with reflexive-reciprocal polysemy; cf.: *Przyjaciele bronili się/siebie długo* i. ‘The friends defended *themselves* for a long time’, ii. ‘The friends defended *each other* for a long time’.

In Lithuanian (Geniušienė, Ch. 14) and Russian (Knjazev, Ch. 15), verbal reciprocals form closed sets, which means that no new reciprocals are derived. For instance, in Lithuanian verbal reciprocals do not derive from verbs like *įtarti* ‘to suspect’, *stebėti* ‘to watch’, *gerbti* ‘to respect’, etc. In these two languages the reciprocal and the reflexive meanings are in complementary distribution, their lexical range being different. This is to say that there are practically no derivatives that can be interpreted either as reciprocal or reflexive depending on the context and other factors, while in the former four languages the overlap is considerable (a case of such an overlap is the Polish example above).

In contrast to German and French, the verbal reflexive-reciprocal markers in Polish, Bulgarian, Lithuanian and Russian are the same for all three persons.

It seemed reasonable to include Vedic (Kulikov, Ch. 16) in the class of languages with reflexive-reciprocal polysemy. In this language verbs with middle inflexion practically lost the reciprocal and the reflexive meanings (there are only indirect traces of the reflexive meaning, e.g. the autocausative (closest to the reflexive) derivative (*bhr* ‘bring’ →) *bhárate* ‘moves’ (< *‘brings oneself’)). The middle form which had previously had a reflexive-reciprocal polysemy suffered the same fate as, for instance, the reflexive clitic in a number of Scandinavian languages. The reciprocal meaning in early Vedic was commonly expressed by the preverb (= semi-free morpheme) *ví* added to forms with middle inflexion, and by the adverb *mithás* ‘mutually’. About 20 reciprocals with the preverb *ví* are attested (most of them denoting hostile activities and communication); cf.: *dviṣ* ‘hate’ → *ví-dviṣ-ate* ‘they hate each other’. This is a manifestation of the tendency in a number of Indo-European languages to use some verbal prefixes for marking the reciprocal meaning (cf. Latin *lido* ‘to hit’ → *col-lido* i. ‘to hit against each other’, ii. ‘to bring sth together’; Ancient Greek *ἐράω* ‘to love’ → *ἀντ-εράω* ‘to love each other’; see Zaliznjak & Shmelev, Ch. 4) which however did not develop into full-fledged reciprocal markers.

In each of the genetically closely related Kabardian (Kazenin, Ch. 17) and Adyghe languages (Letuchiy, Ch. 18), the verbal marker *z-* occupies different slots in the verb structure depending on its reflexive or reciprocal function (on transitive verbs an extended reciprocal form *zərə-* is used); Adyghe examples: *txbaklən* ‘to wash’ (vt) → *zə-txbaklən* ‘to wash oneself’ and *bəun* ‘to kiss sb’ (vi) → *zə-bəun* ‘to kiss each other’ (vowel alternation in the prefix obeys general rules for agreement markers). Combinations of verbal reciprocals with reciprocal pronouns are possible, though rare. Unlike other languages with reflexive-reciprocal markers, Kabardian and Adyghe possess sociatives which are in fact reciprocals derived from comitative verbs; cf. *šxən* ‘to eat’ → *də-šxən* ‘to eat with sb’ (comitative) → *zə-də-šxən* ‘to eat together’ (sociative). In both languages, there are numerous inseparable complex preverbs consisting of the reciprocal prefix *zə-* and a locative preverb; cf. Kabardian where the complex *zəte-* has an intensifying meaning: *gəsxəbən* ‘to burn sth’ → *zəte-gəsxəbən* ‘to burn everything’ (when used on its own, the preverb *te-* denotes that the action expressed by the verb is performed on the surface of an object). In Kabardian, there are spatial reciprocals, especially with the meaning of joining, which are semantically similar to German reciprocal adverbs mentioned above, they denote mostly joining and separating and form object-oriented constructions; cf. Kabardian *gəpšəbələn* ‘to stick sth’ → *kləra-gəpšəbələn* ‘to stick sth to sth’ → *zə-kləra-gəpšəbələn* ‘to stick sth and sth together’

(Nedjalkov, Ch. 1, §1.13.1). The reflexive-reciprocal marker takes part in relativization, occupying the agreement slot of the relativized argument. The prefix *z-* is also used as a common plural marker on nouns - lexical reciprocals, cf. Adyghe *ləgʷu* ‘person of the same age’ → *zə-ləgʷu* ‘persons of the same age’.

In West Greenlandic Eskimo (Fortescue, Ch. 19), the main reciprocal marker is a reflexive-reciprocal pronoun *immin-nut* ‘themselves/each other(3PL)’ marked for person and case; cf. *immin-nut assuari-pput* <self-ALL.PL blame-IND.3PL> ‘(they) blamed each other/ themselves’. Ambiguity may be resolved by the iterative suffix *-sar/-tar* pointing to the reciprocal reading. This pronoun cannot occupy the direct object position and its usage involves a change of the ergative construction into absolutive with substitution of subject agreement for subject-object agreement (a similar situation is observed in Chukchi when a monosemous reciprocal pronoun is used; see Section 8 below). The reciprocal meaning can also be expressed by this latter operation without any special marking; cf.: *kunip-paa* ‘kissed-he.him’ → *kunip-put* ‘kissed-they’.

There is also a number of verbal reciprocals with the suffix *-ut(i)/-up/-ap/...* derived, as a rule, from transitive bases. This suffix also marks transitive applicatives with meanings like ‘for’, ‘with’, ‘with respect to’, etc. Intransitivization of applicative forms usually results in the reciprocal meaning; cf. (a) *tigu-aa* ‘he took it’ → (b) *tigg-up-aa* ‘he took it (along) with sth else’ (applicative) and *tigg-up-put* ‘they took hold of each other’ (reciprocal). Sometimes, stage (b), i.e. derivation of an applicative, may be absent, and both suffixation and intransitivization occur simultaneously; cf.: *malirsu-paa* ‘he pursued him’ → *malirsu-up-put* ‘(they) pursued one another’. This type of reciprocal derivation is unproductive and highly lexicalized. The language has preserved not only the reciprocal but also the sociative meaning on some intransitive bases; e.g. *kavvi-su-up-put* ‘they drank coffee together’ (*-sur/-su-* ‘to drink’). A number of cases are registered when the suffix *-ut(i)* is used to mark subject- and object-oriented reciprocals of joining (see 7.2.3); cf.: *nuiu(rar)-* ‘to string (beads, etc.)’ → *allunaasat (immin-nut) nuiu-up-pai* ‘She braided the strings together’, *allunaasat immin-nut nuiu-up-put* ‘The strings were braided together’.

West Greenlandic Eskimo possesses more than 400 derivational suffixes. Therefore it is not surprising that there are a number of reciprocal and “near-reciprocal” suffixes of limited productivity among them, e.g., the suffix *qatigiC-* (Ch. 19, §3.2.2) which has a reciprocal and a sociative functions and also refers to symmetric states (cf. *taki-* = ‘to be long’ → *taki-qqatigiip-put* ‘they are equally long’). There are suffixes denoting “natural converse relationships”, e.g. the suffix *-giiC-/riiC-*; cf. *qaliq* ‘thing on top’ → *qali-riip-put* ‘they lie one on top of the other’; *irniq* ‘son’ → *irni-riip-put* ‘they are father and son’. There are three competitive affixes of limited productivity, it is interesting to note that all of them contain the suffix *-ut(i)* (ibid., 3.2.4); cf. *ajunngin-niqqisa-ap-put* <be.good-compete.at-3PL.IND> ‘They competed at being best’.

Incidentally, in Siberian Eskimo verbal reciprocals with the suffix *-uta* are the main type. In West Greenlandic Eskimo, the verbal marker with reciprocal-sociative polysemy has been replaced by the pronominal marker *immin-nut* with reflexive-reciprocal polysemy.

And lastly, reflexive-reciprocal polysemy is observed in some North Arawak languages with verbal reciprocals only (Aikhenvald, Ch. 20) and in Djaru with pronominal reciprocals only (Tsunoda, Ch. 21).

In the three North Arawak languages sharing a common origin, the reflexive-reciprocal suffixes are *-na* in Warekena, *-tini* in Bare, and *-kawa* in Baniwa of Içana. Although etymologically different, they are very similar typologically. These suffixes are also used to mark agentless passives. Besides, the Bare suffix *-tini* may express coreferentiality of the subject of an embedded predicate with that of the matrix predicate (an analogy with the relativizing function of the Adyghe and Kabardian prefix *z-* just mentioned?).

In Djaru, an inflected reflexive-reciprocal pronoun *-nyunu* is used; cf. *nga-li-nyunu* <CARRIER-1DU.INC.SB-REFL/REC> ‘we-ourselves/each.other’. Some, though not all native speakers use constructions with this pronoun which can be interpreted as sociative (Tsunoda, Ch. 21, §8).

3. Reciprocal-sociative polysemy (Part III)

This type of polysemy of reciprocal markers is investigated here in nine languages of six genetically distinct families: Tagalog, Udehe, Japanese; Karachay-Balkar, Yakut and Tuvan, (all three of the Turkic language family); closely related Khalkha Mongol and Buryat, and finally Bolivian Quechua. In five of these languages the sociative meaning appears on intransitive bases and/or it is of low productivity.

In Tagalog (Shkarban & Rachkov, Ch. 22), the polysemy of the productive reciprocal marker *mag-...-an* is mostly restricted to the basic reciprocal and sociative functions (see *mag-sulat-an* below). The prefix *mag-* (the initial component of the circumfix *mag-...-an*) occurs on about 30 derivations with the reciprocal meaning (e.g. *t-um-ulong* ‘to help’ → *mag-tulong* ‘to help each other’) and about 15 derivations with other than reciprocal meanings (see Section 7 below). The polysemy of this marker subsumes the dual meaning on nominals (cf. *ka-klase* ‘class-mate’ → *mag-ka-klase* ‘two class-mates’). Though unproductive on verbs, this prefix is more polysemous than the circumfix. This kind of relationship between the polysemy of reciprocal circumfixes and their initial components is also characteristic of some other languages of the same area; cf. *fe-...-’aki* and *fe-* in East Futunan (Moyses-Faurie, Ch. 35; see §5 below) and *ber-...-an* and *ber-* in Indonesian (Ogloblin & Nedjalkov, Ch. 33, §3.2.3), both with iterative-reciprocal-sociative polysemy.

In the paper on Tagalog, morphological reciprocals are regarded as a result of two-step derivation of verbal reciprocals from reciprocal nouns. If we accepted this viewpoint we would have to admit that this is a typologically unique operation: *s-um-alat* ‘to write’ → *sulat-an* i. ‘writing to each other’, ii. ‘writing collectively’ → *mag-sulat-an* i. ‘to write to each other, correspond’, ii. ‘to write collectively’. For a number of reasons it may be justified, though with reservations, to disregard the intermediate derivation and to treat *mag-...-an* as a circumfix.

In Tagalog, a special circumfix is used for object-oriented spatial reciprocals which is different from the reciprocal *mag...-an*. It changes three-place verbs into two-place; cf. *i-dikit* ‘to stick sth onto sth’ → *pag-dikit-in* ‘to stick sth together’.

A peculiarity of Tagalog is the use of the additional comitative prefix *maki-* not only on non-reciprocal verbs (in constructions like ‘to work with sb’) but also in reciprocal constructions with one of the reciprocants in non-subject position (like German *Paul schlägt sich mit Karl* ‘Paul fights with Carl’).

In the northern dialect of Udehe (Nikolaeva, Ch. 23), in contrast to other Tungusic languages considered in this monograph (Evenki (Nedjalkov & Nedjalkov, Ch. 38) and Even (Malchukov, Ch. 39), which possess monosemous reciprocal suffixes only (*-maat* and *-mat* respectively), the reciprocal suffix *-masi* is used, though rarely, in the sociative meaning. In the southern dialect of Udehe, there is a special sociative marker, viz. *-niŋa* (cf. *taŋi-niŋa-si:-ti* <read-SOC-IPF-3PL> ‘they read together’), different from the sociative markers in Evenki and Even (*-ldə* and *-lda* respectively).

A typologically interesting feature of the Udehe reciprocal suffix is that it is often preceded by the aspectual suffix *-si* (cf. *teti-si-* ‘to dress many children’ or ‘to dress one child many times’): e.g. *bile[-si]-masi* ‘to help each other’. On sociative derivatives, this suffix follows the sociative suffix, as a rule; e.g. *te-niŋa-si-* ‘to sit together’. (Note in this respect the bilateral arrow in the schema in Section 1. It is not unlikely that the component *-si* in the reciprocal marker *-masi* is also related to this aspectual marker.) To reciprocalize adjuncts, Udehe uses reduplication of prepositions, rarely of nouns, adverbs and adjectives; cf. *dä* ‘next to’ → *dä:dä:* ‘next to one another’.

In Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24), the reciprocal meaning of the verbal marker *-š* is unproductive, being preserved in no less than 60 derivations denoting mostly hostile actions. There are, for instance, no verbal reciprocals derived from verbs *maxta-* ‘to praise’, *suj-* ‘to love’, *ajt-* ‘to say’. But these and some other verbs may be used with the reciprocal suffix in this meaning if the reciprocal pronoun *biri biri-n* ‘each other’ is added. However, native speakers understand many derivatives like *maxta-š* ‘to praise each other’ on hearing them, but do not use them any longer. The latter two factors point to some traces of former productivity of this suffix in Karachay-Balkar.

The sociative meaning of the suffix *-š* is attested in 140 derivatives mostly formed from intransitives (however, sociatives do not derive from some intransitives, e.g. from *džaša-* ‘to live’ and *termil-* ‘to suffer’). As a rule, the sociative meaning in Karachay-Balkar is rather bleached and may acquire some additional semantic nuances depending on context. Therefore it is often hard to render the exact meaning of such a verb in a text and the sociative sense may be lost in translation, as is the case with sociatives derived from the verbs *mušulda-* ‘to snore’, *qaltəra-* ‘to tremble’, *salən-* ‘to hang down (e.g. about apples)’, *dziltinde-* ‘to sparkle’.

In many languages there occurs a limited number (from three to ten) of reciprocally marked competitive verbs denoting sporting events, like ‘to compete in wrestling’, ‘to compete in running’, ‘to compete in jumping’. And only in rare languages the competitive meaning occurs on verbs denoting non-sporting events. So far, this is attested only in two languages, Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24, §5.3) and Japanese (Al-

patov & Nedjalkov, Ch. 25, §5.2); cf. Karachay-Balkar *saw-* ‘to milk’ → *saw-š-* ‘to compete in milking’; Japanese *nom-u* ‘to drink’ → *sake o nomi-a-u* ‘to compete in drinking sake’.

In Japanese, the sociative meaning of the reciprocal marker *-a/-aw/-at* is distinguished and illustrated in the literature but it is of restricted productivity (there are, for instance, no sociatives of the verbs *sin-u* ‘to die’ and *tob-u* ‘to fly’). In this language, as well as in Udehe, the reciprocal suffix is attested in the alternative meaning (‘by/in turns’). The verb *a-u* ‘to meet, to fit’ (allomorphs *aw-/at-*) that served as the source of the reciprocal suffix, was used for some time in the nominalized form *a-i* (*-i* = suffix of nominalization) in compounds with the reciprocal meaning and it practically became a prefix. It is entirely unproductive in present-day Japanese and is preserved only in a small group of archaic derivations which are sometimes synonymous correlates of regular reciprocals; cf. *koros-u* ‘to kill’ → *korosi-a-u* ‘to kill each other’ and *ai-koros-u* (same); *kanasar-u* ‘to put sth upon sth’ → *kanasari-a-u* ‘to be piled on top of one another’, *ai-kanasar-u* (same). If this phenomenon had developed further, *ai-* might have become the only verbal prefix in Japanese (cf. parallels in Nivkh where the reciprocal marker *v-/u/-o-* is the only prefix, and in Mundari where the reciprocal marker *-pa-/...* is the only infix).

In the four of the five languages dealt with in the subsequent chapters of Part III, i.e. Yakut (Nedjalkov & Nedjalkov, Ch. 26) and Tuvan (Kuular, Ch. 27) (both are Turkic languages possessing cognate reciprocal suffixes *-s/-š-*), and Khalkha Mongol and Buryat (Nedjalkov et al., Ch. 29), reciprocal markers have three more main meanings, sociative, comitative, and assistive. Compare Tuvan: *sigen kes-iš-* <hay mow-REC> i. ‘to make hay together’ (sociative), ii. ‘to make hay with someone else’ (comitative), iii. ‘to help someone make hay’ (assistive), and iv. ‘to make hay together helping each other’ (sociative-reciprocal-assistive). Another example is the following sentence from a Buryat fairytale: “*Šexee-mni tahala-ls-aag üge-laa*” <ear-my cut-SOC/REC-CONV AUX-MOD> ‘Help me to cut off my ears’. As for Kirghiz (Nedjalkov, Ch. 28), the sociative meaning has become virtually unproductive, being retained in folklore texts: instead, the reciprocal suffix is used optionally as a marker of the 3rd person plural, which is probably the cause of the loss of the sociative function. It should be stressed that a specific feature of the reciprocal markers of these five languages is the assistive meaning.

The differences between these languages are also observed in the range of non-reciprocal meanings of the reciprocal markers. These meanings vary, though their relatedness to the reciprocal meaning is mostly retained, cf. the Yakut converse derivative (*atəəlaa* ‘to sell sth to sb’ → *atəəla-s-* ‘to buy sth from sb’), and Tuvan imitative derivative (*emčile-* ‘to work as a doctor’ → *emčile-š-* ‘to play doctors’).

A complicated situation is observed in Buryat and Khalkha Mongol (Nedjalkov et al., Ch. 29). These languages, being close relatives, do not practically differ in the domain of reciprocals and sociatives (here, Buryat examples are used for illustration). It is usually claimed that there is a reciprocal suffix *-lda/-lde/...* in both languages and sociative *-lca/-lce/...* (Khalkha) and *-lsa/-lse/...* (Buryat). Besides, the complex suffix *-ca-lda/...* in Khalkha and *-sa-lda/...* in Buryat is used to a limited degree, mostly on verbs denoting hostile actions. It is also claimed that *-lda* on the one hand and *-lca* and *-lsa* on the other can be used in the meaning of each other. Their overlap is observed as early as in the writ-

ten sources of the 13th century. As it happens, in the genetically related Monguor language the suffix *-lde* is preserved as the only marker in both meanings, and Dagur has preserved only the suffix *-lči*, also in both meanings. With respect to the expression of reciprocity, three sets can be distinguished in either language: (a) verbs which seem to be used with either suffix interchangeably, like *gete-* ‘to stare at sb’ → *gete-lde-/gete-lse-* ‘to stare at each other’; (b) verbs used with *-lda* as a reciprocal marker, as a rule, e.g. *xööre-* ‘to speak’ → *xööre-lde-* ‘to converse, speak with each other’; (c) verbs taking *-lsa*, as a rule, e.g. *tani-* ‘to recognize’ → *tani-lsa-* ‘to get acquainted with each other’. Both suffixes, when used in the sociative meaning, seem to differ in the lexical range of stems they combine with. On the one hand, the suffix *-lda* combines mostly with intransitive bases, with both animate and inanimate subjects (cf. *yalagaša-* ‘to twinkle (of stars)’ → *yalagaša-lda-* ‘to twinkle (of many stars)’; *hurhira-* ‘to snore’ → *hurhira-lda-* ‘to snore (of many)’). The component ‘of many’ is used in dictionaries to explain the meaning of such derivatives; as a rule, two or four participants are implied; in fact, this meaning seems to refer to the plural participant as a group. On the other hand, the suffix *-lsa* occurs often enough on both transitive and intransitive verbs usually taking human subjects. It is remarkable that the subject mostly names only one of the reciprocants (single or collective) and the second reciprocant is either denoted by an object or implied (cf. *Ši (nam-tai) yaba-lsa!* <you.sg I-COM go-SOC> ‘Come together (with me)!’). The two suffixes differ in the range of non-reciprocal meanings; for instance, the anticausative and autocausative meanings are expressed by *-lda* only (cf. *xolyo-* ‘to mix sth’ → *xolyo-ldo-* ‘to get mixed’, *šaxa-* ‘to press sth’ → *šaxa-lda-* ‘to squeeze oneself into sth’), while the assistive meaning is expressed by *-lsa* almost exclusively, and the same derivatives may have the sociative meaning (e.g. *zöö-* ‘to carry’ → *zöö-lse-* ‘to help carry’, ‘to carry together’, ‘to carry with sb’). The reciprocal pronoun *beye beye* ‘each other’ occurs both with reciprocal verbs in *-lda* and *-lsa* (cf. *beye beye-d-ee durla-lsa-* ‘to love each other’, where *-d-ee* = DAT-REFL.POSS) and, more commonly, with verbs without these suffixes.

In some of the Altaic languages there is a tendency to mark (mostly) two-place transitives (they are three-place semantically) with reciprocal-causative suffixes: a causative suffix is added to an anticausative verb with a reciprocal suffix used in the anticausative function; thus marked three-place object-oriented reciprocals are formed denoting joining of two or more objects. In this case three-member chains are observed: the initial verb and the final derivative of a triad may be very close in meaning; cf. Buryat: *xolbo-* ‘to tie/join sth together’ → *xolbo-ldo-* ‘to be tied/joined’ (anticausative) → *xolbo-ld-uul-* ‘to tie/join sth together’ (causative of anticausative). The two suffixes may be reanalysed into a single morpheme and attached immediately to a transitive verb which has no related anticausative with a reciprocal marker; e.g.: Kirghiz *bayla-* ‘to tie sth to sth’ → *bayla-š-tər-* ‘to tie sth together’. In Japanese, this tendency has acquired a specific expression corresponding to the examples cited semantically but not formally. Causatives do not derive from reciprocals in Japanese, but there are compounds with the verb *aw-ase-ru* ‘to join ...’ composed of the verb *a-u* ‘to meet’ (which, as just mentioned, served as a source of the reciprocal suffix) and the causative suffix *-ase*; cf.: *nu-u* ‘to sew sth’ → *nui-aw-ase-ru* ‘to sew two things together’.

In Tariana (Aikhenvald, Ch. 30), two markers with different types of prototypical polysemy are registered. One is a reflexive-reciprocal suffix *-kaka* (not used by the younger generation), i.e. the type characteristic of other North Arawak languages (see Aikhenvald, Ch. 20). Another device, a serial verb construction containing the verb *-siwa* ‘to be together’, has the reciprocal-sociative type of polysemy, and both markers can be used simultaneously. The latter device with reciprocal-sociative polysemy is becoming prevalent under the influence of the areally close though genetically unrelated Tucano languages.

The Bolivian Quechua marker *-naku* (van de Kerke, Ch. 31) also displays the sociative-reciprocal type of polysemy, although the second component *-ku* of this marker has a reflexive meaning when used singly or with a causative suffix. When combined with the causative suffix, the reciprocal suffix loses *-ku*, because this component does not express coreferentiality with the subject in this case; cf.: *maylla-* ‘to wash sb’ → *maylla-ku-* ‘to wash oneself’, *maylla-na-ku-* ‘to wash each other’ → *maylla-na-chi-* ‘to cause sb to wash each other’.

4. Iterative-reciprocal polysemy

This type of polysemy is not registered among the main reciprocal markers in the languages investigated so far. In Modern Chinese (Hoa et al., Ch. 49), where the main reciprocal marker is the pronominal adverb *hùxiāng*, a marker with iterative-reciprocal polysemy has been registered fairly recently, as an extremely rare reciprocal device (197 occurrences in a corpus of 3.5 million words): it is a compound derivative containing reduplication of a lexical verb and the antonymous auxiliary verbs *lái* ‘come’ and *qù* ‘go’ denoting repeated motion in opposite directions (Liu 2000: 124–32). The reciprocal usage of this marker is not mentioned in Chinese grammars, probably because it is rare, the iterative meaning being the main one. In the examples cited in Liu (2000) it occurs with monosyllabic verbs only. (This formation is one of three types of reciprocals with reduplicated or double auxiliary components; see Hoa et al., Ch. 49, §9.2.) The following example allows an iterative interpretation as the most natural one, and also a reciprocal interpretation depending on the subsequent context: *Lǎoshī-men mà-lái-mà-qù* ... <teacher-PL scold-come-scold-go> i. ‘Teachers kept scolding ...’, ii. ‘Teachers berated each other ...’ (ibid.). Some specialists in Chinese, however, refute the reciprocal reading of this type of formations (S. Yakhontov, p.c.). This type of polysemy is also characteristic of one of the reciprocal markers in Hua (see Nedjalkov, Ch. 5, §3.4.2). Note that this type of polysemy is covered by the extended “iterative-reciprocal-sociative” type of polysemy of reciprocal markers (Part V; Section 6 below).

5. Reflexive-reciprocal-sociative polysemy (Part IV)

This type of polysemy is attested in the Australian language Warrungu (Tsunoda, Ch. 32). In the literature, it is also registered in a number of other Australian languages, e.g. Ritharngu, Mayali (Ch. 5, §3.5.1). It is also represented by a small number of derivations in East Futunan with an unproductive reciprocal prefix *fe-* (used when only two participants are involved; cf. *fe-tuli* ‘to chase each other’, *fe-kapu* ‘to run together’, *fe-vaku* ‘to scratch oneself’), while the productive circumfix *fe-...-’aki* has a different type of polysemy, viz. iterative-reciprocal-sociative, including a number of other meanings (Part V; see Moysse-Faurie, Ch. 35, §3.1).

6. Iterative-reciprocal-sociative polysemy (Part V)

This type of polysemy of reciprocal markers is attested in the Malayo-Polynesian languages: Indonesian, Nêlêmwa, and East-Futunan (Ogloblin & Nedjalkov, Ch. 33; Bril, Ch. 34, and Moysse-Faurie, Ch. 35 respectively). In the latter two languages there is no reciprocal pronoun. In Indonesian, there is an auxiliary word *saling* which can be regarded as a reciprocal pronoun with some reservations.

The main East Futunan reciprocal marker is the circumfix *fe-...-’aki*. Its polysemy can be illustrated by the following derivations: *fe-tapa-’aki* ‘to flash again and again’, *fe-alofa-’aki* ‘to love each other’, *fe-koti-’aki* ‘to cut sth (with scissors) together’. It has a number of other meanings as well (Ch. 35, §3.3). In East Futunan, there is also a special sociative marker *fe-...-(C)i* which is attested in the reciprocal meaning on one derivative (Ch. 35, §3.2).

In Nêlêmwa, the reciprocal marker *pe-*, in certain cases used in combination with the suffix *-i*, may be prefixed to any lexical item, verbal or nominal. Examples of its polysemy on verbs: *pe-thalic* ‘to stumble (over and over again)’, *pe-cabwa-i* ‘to pinch each other’, *pe-shaya* ‘to work together (to work fast)’ (the sociative meaning is combined with the intensive; the intensive interpretation is even more common). The reciprocal prefix also derives object-oriented reciprocals; cf. *pe-na* <REC-put> ‘to pile sth up’. Among denominal reciprocals a productive class are derivations denoting identity; cf.: *ida-t* ‘its line’ → *pe-ida-t* ‘to be on the same line’, *ka* ‘year’ → *pe-kau-n* ‘to be of the same age’ (*-t* and *-n* are possessive determinators).

In Indonesian (Ch. 33), the overall picture of reciprocal derivation is highly complicated: there are two competing productive verbal means of reciprocal derivation (circumfix *ber-...-an*, as in *me-mandang* ‘to look at’ → *ber-pandang-an* ‘to look at each other’, and prereduplication, as in *pandang-me-mandang* (same translation)), four unproductive verbal devices, and the auxiliary *saling* ‘mutually’ with an ambiguous status, which freely combines with non-reciprocal verbs (cf. *saling me-mandang* ‘to look at each other’) and with all types of verbal reciprocals. The highly polysemous prefix *ber-*, which is the first component of the circumfix, is highly productive, especially in denominal reciprocal derivation (cf. *kawan* ‘friend’ → *ber-kawan* ‘to be friends’) and also in derivation of

intransitives with a variety of meanings, e.g. reflexive (*men-cukur* ‘to shave sb’ → *ber-cukur* ‘to shave oneself’), resultative (*me-nyetrika* ‘to iron’ → *ber-cetrika* ‘to be ironed’), absolutive (*me-nanam* ‘to plant (rice)’ → *ber-tanam* ‘to be engaged in rice-growing’), anticausative (*men-campur* ‘to mix’ → *ber-campur* ‘to get mixed’), and reciprocal (*men-cium* ‘to kiss’ → *ber-cium-[an]*), etc. The circumfix *ber-...-an* has a complicated iterative meaning closely connected sometimes with the meaning of joint action of several agents, with additional semantic components, cf.: *terbang* ‘to fly’ → *be-terbang-an* ‘to fly in all directions, repeatedly, etc.’ The sociative meaning in its polysemy can be distinguished with reservations: it is a part of the more general meaning of great “quantity” of an action, and it occurs on intransitive bases only; e.g.: *patah-* ‘to break’ (vi) → *ber-patah-an* ‘to break (of several things)’.

7. Iterative-reciprocal-reflexive polysemy

Out of the three extended types of prototypical polysemy this type (the third in the list, see Section 1) seems to be the least common cross-linguistically, very much like the main iterative-reciprocal type of polysemy, also the last among the three main types (Section 4 above). So far, it is not attested in any language for the main or productive reciprocal marker. In this monograph, it is represented by one case, viz. the Tagalog highly polysemous prefix *mag-* (cf. *mag-sulat* ‘to write much and often’, *mag-yakap* ‘to embrace each other’, *mag-ahit* ‘to shave oneself’). This prefix is not the main reciprocal marker in Tagalog, it is unproductive and, as mentioned above, occurs on about 45 derivations only with a variety of meanings including those by which their polysemy is defined; cf. the converse meaning *b-um-ili* ‘to buy’ → *mag-bili* ‘to sell’ (Nedjalkov, Ch. 5, §6). Note that the main reciprocal marker *mag-...-an* displays the reciprocal-sociative polysemy, and it is productive. The reflexive meaning of the prefix *mag-* is hardly a remnant of its earlier productivity: it is more likely a result of individual semantic evolution (for details see Shkarban & Rachkov, Ch. 22 on Tagalog).

8. Non-prototypical polysemy (Part VI)

The term *non-prototypical polysemy* is provisionally applied to the types of polysemy comprising the reciprocal and a number of other meanings excepting reflexive, sociative, and iterative. In this monograph, such types of the polysemy of reciprocal markers are described in two unrelated languages, To’aba’ita (Lichtenberk, Ch. 36) and Mundari (Osada, Ch. 37). In To’aba’ita, the verbal reciprocal marker *kwai-* (sometimes in combination with the suffix *-i*) also has a reciprocal-antipassive polysemy subsuming two more meanings; cf.: *kwa’e* ‘to hit’ → *kwai-kwa’e-i* ‘to hit each other’ and *fa’ama’u* ‘to frighten’ → *kwai-fa’ama’u-i* ‘frightening’. There are four more devices used to express the recipro-

cal meaning: personal pronouns, a possessive marker on the direct object, and reciprocal adverbs *kwailiu*, *olili*.

In Mundari, the infix *-pa-/...* is reciprocal on verbs, while on adjectives it expresses “intensity” (a high degree of the quality), and on some numerals it acquires a distributive meaning (as a relic). Compare: *ad* ‘to miss’ → *a-pa-d* ‘to miss each other’; ‘*marang* ‘big’ → *ma-pa-rang* ‘very big’; *bar-ia* ‘two’ → *ba-pa-r-ia* ‘two each’.

Across world languages, reciprocal markers with reciprocal-anticausative, reciprocal-resultative polysemy are also registered (see Ch. 5, §8). Such combinations of meanings may be due to a number of factors, in the first place, probably due to the loss of possible “intermediate” meanings in the process of ageing. This may be the case in Mundari, where the ageing of the marker can be deduced from the fact that the reciprocal infix *-pa-/...* was used in Proto-Munda together with a reciprocal prefix. Another reason may be etymological: such kinds of polysemy may be due to the source meaning of the marker. And finally, the reason may be a fragmentary description of reciprocals in the grammars of individual languages.

9. Monosemous reciprocal markers (Part VII)

Languages with monosemous main reciprocal marker(s) are the most numerous in our list. One might expect that these markers are rather similar, especially semantically. Nevertheless, they display interesting variation in some respects. Some of the languages possess both a verbal and a pronominal reciprocal markers (Evenki and Even, Chukchi, Nivkh), some a verbal marker only (Ainu, Yukaghir, and Cashinahua), or mostly or only a pronominal one (Bamana, Vietnamese, Ancient and Modern Chinese).

In the first two (closely related) languages with monosemous reciprocal suffixal markers, viz. Evenki (*-maat*) and Even (*-mat*) (Nedjalkov & Nedjalkov, Ch. 38; and Malchukov, Ch. 39), there are also special sociative markers (cf. Evenki *ηene-* ‘to go’ → *ηene-ldə-* ‘to go together’). These sociative markers express reciprocity on a limited number of verbs and in these cases they can even co-occur with a reciprocal marker, always in pre-position to it; cf. Evenki: *iče-* ‘to see’ → *iče-meet-* ‘to see each other’, *iče-ldə-* (same), *iče-ldə-meet-* (same). This is mostly likely due to the fact that the reciprocal marker is of relatively recent origin (though, as noted above, in Udehe the cognate marker *-masi* occurs in the sociative meaning as well), while the sociative marker *-ldə* used to be the principal marker of both reciprocity and sociativity and was later ousted in the reciprocal function by the suffix *-meet* (note in this connection that the Evenki and Even sociative suffix *-ldə/...* is related to the Mongolian reciprocal suffix *-lda/...*). Both languages preserve relic object-oriented constructions of joining with the sociative marker: there are about 10 such derivatives in Evenki and only one (*uj-* ‘to tie sth to sth’ → *uj-lde-* ‘to tie several things together’) is registered in Even. In comparison with the genetically closely related Evenki, the set of pronominal reciprocal markers in Even is both more elaborate and more specialized (Ch. 39, §4.2.2).

Another language with a monosemous reciprocal suffix *-wəly* and a monosemous reciprocal pronoun *əryəčy* is Chukchi (Nedjalkov, Ch. 40); cf.: *penrə-nen* ‘attacked-he.him’ (vt) → *penrə-wəly-ə-γʔat* ‘they attacked each other’ (vi). The reciprocal pronoun cannot occupy the direct object position and when used as the only marker of reciprocity it requires antipassivization of the underlying construction; cf. antipassive *penrə-tko-γʔat* ‘they attacked [sb]’ and reciprocal *əryəčy penrə-tko-γʔat* ‘they attacked each other’. The suffix *-wəly* freely co-occurs with the pronoun *əryəčy*. Both the suffix and the pronoun are of relatively recent origin. An indication of this is the fact that there is only one lexicalized verbal reciprocal, *lʔu-wəly-* ‘to meet’, ‘to see each other’. Moreover, the reciprocal pronoun is unknown in some Chukchi dialects and has no counterpart in the genetically closely related Koryak language. There is one more reciprocal marker in Chukchi, a polysemous suffix *-čit/-čet* of low productivity. Among reciprocals with this suffix there are numerous lexicalizations, which indicates its “older” age. Its reciprocal use on transitive verbs requires simultaneous antipassivization (e.g.: *rəttelə-nen* lit. ‘pushed-he.him’ → *rəttelə-tko-čet-γlat* ‘(they) jostled each other’), while reciprocalization of two-place intransitives and labile verbs (in particular those derived by means of direct object incorporation; see the next example) does not require it, e.g.: *mənə-ml-u-čit-ə-rkən!* <IMP.1PL-louse-get-REC-ə-IMP> ‘Let us look for lice on each other (by turns)!’ Among derivations with the reciprocal meaning verbs denoting hostile actions are prevalent. Among the other meanings of this suffix, the competitive (e.g. competition in sports and games) and iterative should be noted; cf. *piŋku-* ‘to jump’ → *piŋku-čit-* i. ‘to jump repeatedly’, ii. ‘to compete in jumping’; *atčə-* ‘to hide’ → *atčə-čet-* ‘to play hide-and-seek’. There are attested instances of co-occurrence of *čit-* and *-wəly*.

In Nivkh (Otaina & Nedjalkov, Ch. 41), the marker of reciprocity is a prefix *v-/u-/o-*, it is unproductive and occurs on about 45 verbs which have been preserved under certain morphological conditions. In reciprocal constructions with a direct object, both the prefix *v-/u-/o-* and the reciprocal pronoun *p’-ŋafq-ŋafq* are attached to the direct object; cf. *i-γ-* ‘to kill him/her’ → *u-γ-* ‘to kill each other’ and *i-dəmk zap-t...* <his/her-hand hold-CONV> ‘holding his hand...’ → *u-dəmk rəmk zap-t...* ‘holding each other’s hands...’ (Ch. 41, §3.2.4). There is a small group of reciprocals derived from lexical reciprocals denoting equality; cf.: *ŋəkə-d’* ‘sth is equal in length to sth’ (*-d’* = FIN) (vt) → *u-ŋəkə-d’-γu* ‘they are equal in length (to each other)’ (*-γu* = PL) (vi).

In Ainu (Alpatov et al., Ch. 42), the reciprocal marker is the prefix *u-*, and there is no reciprocal pronoun. The prefix can derive not only subject-oriented reciprocals (cf. *e* ‘to eat sth/sb’ → *u-e* ‘to devour each other’) but also object-oriented reciprocals of joining, of the kind illustrated above by German and Kabardian examples (cf. *kotukka* ‘to stick sth to sth’ → *u-kotukka* ‘to stick sth to each other’). The prefix *u-* is sometimes erroneously claimed to have a sociative meaning as well. In fact, Ainu only preserves a small number of relic derivations in which sociativity may be discerned. But usually this meaning is productively expressed by the marker *u-ko-* which is (historically) a combination of the reciprocal and the applicative prefixes. In fact, a considerable number of reciprocals are derived from applicatives, e.g. *hepenpenu* ‘to nod’ (vi) → *ko-hepenpenu* ‘to nod to sb’ (applicative vt) → *u-ko-hepenpenu* ‘to nod to each other’ (reciprocal of applicative;

vi). The combination *u-ko-* is a single derivational prefix when it functions as a sociative marker, and does not denote reciprocals derived from applicatives. This is supported by the fact that the derived sociatives with this marker either have no respective applicatives or they are not related to the latter semantically, because applicatives, with the exception of two or three formations, do not have a comitative meaning; cf.: *horippa* ‘to dance’ → *uko-horippa* ‘to dance together’ and *ko-horippa* ‘to dance for sb’, but not ‘to dance with sb’. Another sociative marker is a circumfix *u-...-re* composed of the reciprocal prefix and causative suffix, e.g.: *mina* ‘to laugh’ → *u-mina-re* ‘to laugh together’ (cf. *mina-re* ‘to cause to laugh’, **u-mina*). There is a number of derivations on which the reciprocal prefix is attached to an incorporated noun, e.g. *u-tek-ama* <REC-hand-hold> ‘to hold (each other’s) hands’. In this pattern, the bound verb *pakte* is also used, where in combination with the prefix *u-* it acquires the meaning ‘compete’, e.g.: *u-terke-pakte* <REC-jump-compete> ‘to compete in long-jumping’. The reciprocal prefix forms a number of denominal derivations, like *kema* ‘foot’ → *u-kema* ‘both feet’, *ka* ‘top of sth’ → *u-ka* ‘one on top of another’ (Ch. 42).

Itelmen (Volodin, Ch. 43) is usually considered to be genetically related to Chukchi, but the reciprocal markers of these languages are entirely different. The reciprocal marker in Itelmen is a prefix *lu-/lo-*, while in Chukchi it is a suffix *-wəly*. A specific feature of Itelmen reciprocals is that most of them are derived from one- and two-place intransitives; cf. respectively: *tyxo-ka-s* ‘to stand’ → *lo-tyxo-ka-s* ‘to stand in front of each other’, *kel-ka-s* ‘to shout’ → *lo-kel-ka-s* ‘to shout to each other’.

It is easy to see the phonetic similarity of the reciprocal prefixes *v-/u-/o-* in Nivkh, *u-* in Ainu and *lu-/lo-* in Itelmen. It is not unlikely that this is the sequence of the areal proximity of these languages in the past.

Kolyma Yukaghir (Maslova, Ch. 44) has a prefixal reciprocal marker *n’e-* (which is most likely genetically related to the comitative preposition *n’e*) and no pronominal reciprocal marker. A peculiarity of reciprocal constructions derived from two-place intransitives is that they almost obligatorily contain a syntactic reciprocal formation derived from a postpositional stem; cf.: *n’-al’-in n’e-uldo-* <REC-TO-DAT REC-be.tied> ‘to be tied together’. In Kolyma Yukaghir there are also a few of derivations on which the reciprocal prefix is attached to the incorporated noun, e.g.: *n’e-pöme-aŋs’i-* <REC-louse-search> ‘to look for each other’s lice’.

In Cashinahua (Camargo, Ch. 45), there are three verbal reciprocal markers with unclear distinctions, suffixes *-namĩ*, *-nan* and *-nanan*, and there is no pronominal marker; there is a small number of derivatives with the following combinations of the reciprocal suffixes *-namĩ-nanan-*, *-nanan-namĩ*, and *-nan-namĩ*. It is assumed that in Cashinahua reciprocal constructions can denote not only standard reciprocal situations with simultaneous or immediately subsequent subevents (*A and B hit each other*) but also rather odd situations with the subevents that may be far apart in time and involve other persons as a second co-participant who cannot be named (the meaning of these constructions is *A and B hit someone who has hit them, or their relatives, earlier*, or *A and B hit someone who, personally or his relatives, will take the revenge later*).

In Cashinahua, there is a highly productive and polysemous distributive suffix *-akiaki* one of whose meanings is reciprocal (cf. *macin-akiaki* ‘to pile up one of the top of the other’). It also has a number of meanings which are often expressed by reciprocal markers (*išcu-akiaki* i. ‘to jump one after another’, ii. ‘to jump here and there’ (if the subject is singular)). This suffix can also form derivatives from reciprocals (cf. *mia-nami-akiaki* ‘to touch each other by turns’).

In each of the three isolating languages, Bamana (Vydrine, Ch. 46), Vietnamese (Bystrov & Stankevich, Ch. 47), and Ancient Chinese (Yakhontov, Ch. 48), reciprocity is expressed by a pronominal marker and their use in different types of constructions is generally similar. Although the reciprocal markers of these languages are monosemous, they sometimes acquire an extended reciprocal meaning. For instance, in Vietnamese, there are sets of reciprocal verbs denoting situations in which only the first participant performs the action named, while the second participant manifests some activity (or is moved by the other participant) without performing the same action: *Mẹ con bế nhau đi dạo*. <mother child carry.in.arms REC go walk> ‘The mother carrying the child in her arms goes for a walk’; lit. ‘Mother and child carrying each other in their arms go for a walk.’ In a way, the reciprocal action is metaphorically extended to the coparticipant.

In these languages, the sociative meaning is expressed by reciprocal markers in combination with comitative markers: preposition *với* ‘with’ in Vietnamese (*nhau* ‘each other’ → *với nhau* ‘together’) and postpositions *fě* ‘with’ in Bamana (*jógn* ‘each other’ → *jógn fě* ‘together’, lit. ‘with each other’; note that this is the only way of expressing the meaning ‘together’) and *yǔ* ‘with’ in Ancient Chinese (*xiāng* ‘each other, mutually’ → *xiāng yǔ* ‘together’). In Modern Chinese (Hoa et al., Ch. 49), the main reciprocal marker is the adverb *hūxiāng* ‘mutually, each other’. It does not combine with prepositions, therefore sociativity cannot be expressed in the same way as in Ancient Chinese. In Modern Chinese, the meaning ‘together’ is denoted by the adverb *yītóng* and its synonyms.

The Modern Chinese adverb *hūxiāng* is composed of the components *hū* and *xiāng*, each having been used at an earlier period separately in the reciprocal meaning. At present, these components are preserved in frozen verb compounds (were retained in a limited though large enough number of compounds (about 130 entities) and disappeared as free items). Sometimes, the sequence *xiānghū* occurs instead of *hūxiāng*. In accordance with the common rhythmic tendency, *hūxiāng* combines with disyllabic verbs only. Less frequently than *hūxiāng*, a number of other words, the adverb *bìci* ‘mutually’ among them, are also used to express reciprocity.

The means of expressing reciprocity in Modern Chinese are much more varied than in the three other languages. The main rivals of *hūxiāng* are reciprocals with reduplicated or double auxiliary components. One of such devices is cited in Section 4 above. Probably the most idiosyncratic device among these rivalling means is the use of the personal pronouns *nǐ* ‘you.sg’ and *wǒ* ‘I’ repeated in reversed order, as *nǐ V wǒ*, *wǒ V nǐ*; cf.: *Tāmen nǐ kàn wǒ*, *wǒ kàn nǐ*. . . ‘They looked at one another. . .’; lit. ‘They you looked at me, I looked at you’.

Hopefully, this brief survey will help the reader to find his/her way in the subsequent parts of this collective monograph and look for what may be of special interest to him/her.

PART II

**Reflexive-reciprocal polysemy
of reciprocal markers**

A. Verbal and pronominal reciprocal markers

CHAPTER 10

Reciprocal and reflexive constructions in German

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“Pack schlägt sich, Pack verträgt sich.”

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1. Introduction

1.1 German

German belongs to the continental Germanic languages. It is spoken by about 90 million native speakers (Eisenberg 1994:349). It has some considerable dialectal variation, especially on the axis from North to South. Mutual comprehensibility between dialect speakers from opposite poles of the German language area may be impeded or even excluded, mostly because of phonetic divergences, less so because of syntactic variance. The standard variety (“Hochdeutsch”) is closer to the Northern varieties.

Just for comparison, here are the other modern Germanic languages and their numbers of native speakers: Afrikaans (6 million), Danish (5 million), Dutch (20 million), English (300 million), Faroese (43,000), Frisian (10,000), Icelandic (260,000), Norwegian (4,3 million), Swedish (8 million).

1.2 Overview

In German there are two main and regular means of expressing reciprocity.

1. The highly polysemous reflexive pronoun *sich* (RM; marked for person; see (1c, d, e)), which productively combines with transitive verbs by taking the position of a direct (ACC) or an indirect (DAT) object and with intransitive verbs by taking the position of an oblique (DAT) object. It can almost never take the place of a prepositional object in the reciprocal sense (see 4.6); e.g.:

- (1) a. *Sie liebten ihn* (ACC).
 ‘They loved him.’
- b. *Sie liebten sich*.
 they love.PAST.3PL RM.ACC
 i. ‘They loved *each other*.’
 ii. ‘They loved *themselves* (= each him/herself).’

Polysemy can be reduced or suppressed by contextual elements, e.g.:

- c. *Sie lieben sich schon seit Jahren.* ‘They have loved each other for years.’
- d. *Wir lieben uns schon seit Jahren.* ‘We have loved each other for years.’
- e. *Ihr liebt euch schon seit Jahren.* ‘You have loved each other for years.’

In this case the reciprocal interpretation becomes a much more probable one.

An intervening reflexive reading can be precluded by the addition of the adverb *gegenseitig* (see 4.6), which can occur only together with the reflexive pronoun.

2. The reciprocal pronoun *einander* (ACC and DAT) ‘each other’ which has two usages.

2a. The pronoun *einander* is used instead of the reflexive pronoun and takes the same position as the latter (but can furthermore be employed with prepositions (see (2d)). It is used primarily in high (written) style, for the colloquial language it is rather atypical, though it sometimes occurs. This pronoun and *sich* exclude one another in the same argument position (though this combination does occur in informal speech); e.g.:

- (2) a. *Sie lieben einander.*
‘They love each other.’
- b. **Sie lieben sich einander.*
(same intended meaning).
- c. *Sie warteten auf ihn.*
they wait.PAST.3PL on him
‘They waited for him.’
- d. *Sie warteten aufeinander.*
‘They waited for each other.’
- e. **Sie warteten auf sich.*
(same intended meaning).

2b. Complex forms “preposition + *einander*” (see 5.5), which are in complementary distribution with the prepositionless *einander* and *sich*.

Besides these two regular markers, there are at least three minor or lexically restricted markers of reciprocity. These are:

3. Analytical constructions of the *einer den anderen* (lit. ‘one the other’) type (see Section 6);

4. Complex verb prefixation (see 5.5): combinations of a preposition and *einander* do not collocate with the verbs which occur with the separate form *einander* (see 5.3–4), and, contrary to the latter, these combinations are employed with object-oriented lexical reciprocals (see 8.2);

5. Some prefixes (*zusammen-*, *gemeinsam-* (see 7.2–3); *entgegen-*, *gegenüber-* (see 7.1), each collocating with a specific lexical group of verbs.

Werner Abraham (p.c.) claims that in colloquial German only *sich* or *sich gegenseitig* are used. *Einander* is not among the possibilities in the vernacular. Furthermore, there holds a priority hierarchy with respect to the use of *sich* (more generally, RM in all persons and numbers) and *sich gegenseitig*: *sich* > *sich gegenseitig*, which means that a speaker of colloquial German will use *sich* (RM) unless *sich* can be misunderstood also, or exclusively, as purely reflexive. In this case, *sich* (or RM, more generally) + *gegenseitig* is used.

1.3 Scope of this chapter

The reflexive pronoun *sich* does not by itself signal reciprocity. In most cases reciprocity can be inferred only from an inflected verb in the plural. It is this standard relation and the question of when and with which explicit reciprocity markers such predicates can collocate that will dominate the first part of the paper (Sections 4 and 5). We shall not touch specially upon phraseological entities comprising such verbs. The relationship of verbs collocating with *sich* to verbs inherently bearing a reciprocal meaning, which show quite idiosyncratic behaviour, will be considered separately (Sections 8 and 9). Since reflexive vs. reciprocal (or other) meanings are, as a rule, to a large extent inferred from the meaning of the verb interacting with the context (or previous knowledge), reciprocal relationships form a subject for more thorough studies within the field of lexical semantics. This contribution can give but a more or less systematic overview of expressing reciprocity in German; it does by no means substitute for more detailed lexicological investigations.

1.4 Database

As primary database for heuristic purposes we have used the list of “reciprocal verbs“ in Mater (1969:31–3). This list comprises 352 verbal items that can (but need not!) be used with the pronoun *sich* in a reciprocal reading, including some lexicalized reciprocal verbs and *reciproca tantum* (see 4.1.1). 18 of these verbs have to be subtracted for various reasons.¹ Since Mater’s list can by no means be considered exhaustive, we have also tested the native speaker’s knowledge of the first author against the Duden (see Drosdowski et al. 1976–81, 6 volumes) and, in some cases, the “Wörterbuch der deutschen Gegenwartssprache“ (WdG, 6 volumes, diverse editions). It was not very difficult to find approximately 200 more verbs which can be used with *sich* and then convey – under certain conditions – a reciprocal meaning either exclusively (e.g. *sich abstimmen* ‘to adapt (oneselves) to each other’) or as one reading among others (e.g. *sich beruhigen* ‘to calm (oneselves, each other) down’). The total number of systematically investigated reflexive verbs (with at least a possible reciprocal meaning) is 545. Although the actual number of reflexive verbs with a possible reciprocal meaning has to be estimated as considerably larger (for reasons which are given in 2.3, 5.5 and 7.1–2), an additional account of other possible verbs not included in the number of 545 would, most probably, not have any serious impact on conclusions drawn from the statistical picture discussed below.

1. Some verbs may be regarded as local (phonetic) variants of one another (e.g. *bussen*, *bussekn* ‘to kiss’) or differ only in orthography (*-f-* instead of *-ph-*). In four cases verbs which are used with *sich* only in idiomatic contexts happened to be listed (*geraten*, *sincken*, *trachten*, *zollen*).

2. Grammatical notes

2.1 Syntactic peculiarities of German

There are four syntactic cases (nominative, genitive, dative, accusative), both on nouns and adjectives. But most usually the case (along with number and gender) of a noun is indicated by an accompanying article. Adjective inflexion is of two kinds, depending on the absence vs. presence of the definite article within the noun phrase. German is of a mixed SVO/SOV type, since in declarative main clauses SVO is the rule, while in subordinate clauses SOV holds. Subject inversion (VS) is grammaticalized in questions and for any sentence with an initial non-subject NP, an adverbial or a subordinate clause which then directly precedes the inflected part of the predicate in the main clause.

Furthermore, in German one has to distinguish between fixed and detachable prefixes (the latter are now usually called particles, though, in our opinion, both diachronically and synchronically, this term is less satisfactory; cf. Nedjalkov 1961a: 3–15): if a prefixed verb takes its main stress on the stem morpheme the prefix always remains where it is in the infinitival form (see (3)). If, however, the word stress is located on the prefix itself it is separated from the stem either totally, moving to the end of the clause, as in (4b), or by the morpheme *-ge-* used for participial forms (the so-called Partizip II):

- (3) a. (**sich**) *überlegen* (INF) ‘to think, deliberate.’
 b. *Hans überlegte **sich** die Sache noch einmal.* ‘Hans re-thought the matter altogether.’
 c. *Hans hat **sich** die Sache noch einmal überlegt.* (the same, or: ‘has re-thought’).
- (4) a. *ab*legen (INF) ‘to take off’
 b. *Peter legte seinen Mantel **ab**.*²
 Peter lay.PAST his coat.ACC off
 ‘Peter took off his coat.’
 c. *Peter hat seinen Mantel **abgelegt**.*
 (the same, or: ‘has taken off’).

(Stress here is indicated by bold characters.)

2.2 Polysemous pronouns and the place of clitics

2.2.1 Relation of *sich* to personal pronouns

The morpheme *sich* can be used as a reflexivity marker only with regard to a 3rd person subject. It does not differentiate accusative vs. dative (2nd vs. 3rd argument respectively).³ In the 1st and 2nd person it alternates with *mich* (ACC)/*mir* (DAT), and

2. If a prefix is transferred to the very end of the clause and the sentence is uttered with neutral phrasal intonation the prefix as a rule behaves like a clitic.

3. We shall use the term ‘argument’ to refer to syntactic or semantic valencies of a given verb, while the notion ‘participant’ will be reserved for “the referential entities involved in the event”, in accordance with Kemmer (1993: 7f.) (cf. also Geniušienė 1983 and 1987: passim).

Table 1. Personal pronouns⁴

	a. Non-reflexive			b. Reflexive		c. Reciprocal			
	NOM	ACC	DAT	ACC	DAT	unspecific		specific	
						ACC	DAT	ACC	DAT
SG 1	<i>ich</i>	<i>mich</i>	<i>mir</i>	<i>mich</i>	<i>mir</i>	–	–	–	–
2	<i>du</i>	<i>dich</i>	<i>dir</i>	<i>dich</i>	<i>dir</i>	–	–	–	–
3.M/F	<i>er/sie</i>	<i>ihn/sie</i>	<i>ihm/ihr</i>	<i>sich</i>	<i>sich</i>	–	–	–	–
PL 1	<i>wir</i>	<i>uns</i>	<i>uns</i>	<i>uns</i>	<i>uns</i>	<i>uns</i>	<i>uns</i>	<i>einander</i>	<i>einander</i>
2	<i>ihr</i>	<i>euch</i>	<i>euch</i>	<i>euch</i>	<i>euch</i>	<i>euch</i>	<i>euch</i>	<i>einander</i>	<i>einander</i>
3	<i>sie</i>	<i>sie</i>	<i>ihnen</i>	<i>sich</i>	<i>sich</i>	<i>sich</i>	<i>sich</i>	<i>einander</i>	<i>einander</i>

dich (ACC)/*dir* (DAT) in the singular and with *uns* (ACC/DAT), *euch* (ACC/DAT) in the plural, constituting with them a single “reflexivity paradigm” (see (b) in Table 1 and (1c–e) above) (Engel 1988:663f.). In this respect, *sich* behaves like the English *him/her...-self/selves*. But, contrary to English, in German this alternation holds for both reflexive and reciprocal readings.

From the point of view of its prosodic features, the RM *sich* (and the other members of the paradigm) basically behaves like a clitic, though there is no morphological opposition of clitic vs. non-clitic (stressed) forms, and *sich* has by no means become a part of the verbal inflection (like the Swedish *s*-suffix). It cannot be used in sentence initial position unless as a topicalized benefactive or reflexive proper (but not as a reciprocal; see (52) in 4.6; cf. Engel 1988:664). If stress is needed *sich* usually is accompanied by *selbst* ‘self’ for reflexivity or, under some circumstances (see (67c) in 5.3.2), by *einander* ‘each other’ for reciprocity, respectively. Mere *sich* in stressed focus position sounds very strange:

- (5) a. *Sie haben nicht die anderen kritisiert, sondern [?]sich.*
 ‘They criticized not the others, but themselves.’

But even if the identifying *selbst* accompanies *sich* the sentence remains potentially ambiguous (reflexive or reciprocal?):

- b. *Sie haben nicht die anderen kritisiert, sondern sich selbst.*
 (the same as in (5a), but with a stressed identifying reflexive).

It is only with *einander* or *einer den anderen* that ambiguity can be excluded:

- c. *Sie haben nicht die anderen kritisiert, sondern einander.*
 = d. *Sie haben nicht die anderen kritisiert, sondern einer den anderen.*
 ‘They criticized not the others, but one another.’

4. Note that this paradigm holds for simple constructions only, not for discontinuous ones.

2.2.2 German reflexive and reciprocal pronouns in their typological relation to other Germanic languages

With respect to the place of reciprocals in a morphosyntactic typology of the Germanic languages, German apparently represents the most archaic case since it is the only language in this family that has retained the reflexive pronoun as one of two principal means of marking reciprocity (see 1.2). In English, Dutch and West Frisian⁵ reciprocity cannot be marked by the equivalent of Gothic *sik* ‘self’; instead, the unambiguous markers *each other*, *elkaar/mekaar*, *inoar/elkoar* respectively are used (if at all).⁶ In the North Germanic languages the distribution is not so very clear-cut: the free morpheme *sig*, *seg* cannot be used to mark reciprocity (Geniušienė 1987:244), whereas the clitic *-s* (in Icelandic, Faroese and Nynorsk *-st*), which has become a genuine verbal postfix and can also function as a marker of synthetic passive (like Russian *-sja/-s’*), occurs only in a very small group of verbs that can be used to denote reciprocal events (e.g. Swedish *mötas* ‘to meet’; cf. Braunmüller 1982:248, 1991:48, 93, 162; Haugen 1987:172). To indicate “canonical” reciprocity (see 4.2.1), Scandinavian languages employ unambiguous reciprocal pronouns (Swed. *varandra*, Nor. *hverandre* etc.; cf. Andersson 1994:308; Askedal 1994:251f.), while Icelandic still possesses an analytic construction with insertable prepositions (*hver* PREP *annan*; cf. Thráinsson 1994:172f.; compare Section 6).

From a functional point of view, the polysemy of the German RM *sich* is much more reminiscent of the range of diathesis types which are expressed by its cognates in French (see Guentchéva & Rivière, Ch. 12, §4), on the one hand, and in the West Slavonic languages (see Wiemer, Ch. 11 on Polish, §§4 and 5), on the other.

2.2.3 Possessive pronouns

In German no distinction between reflexive and non-reflexive possessive pronouns is made. Thus, an utterance like (6) becomes potentially ambiguous:

- (6) *Hans_k gab Peter_l sein_{k/l} Buch.*
 ‘Hans_k gave Peter_l his_{k/l} (his own or Peter’s?) book.’

The 1st and 2nd person possessive pronouns agree with their head noun in case, gender and number. For the 3rd person singular, the choice of a possessive pronoun depends on the gender of the antecedent noun (or its equivalent). In a default situation (i.e. if no further referents are involved) the following coreference relations hold:

- (7) a. *Er_k gab ihr_l sein_k (POSS) Buch.* ‘He gave her his book.’
 b. *Er_k gab ihr_l ihr_l (POSS) Buch.* ‘He gave her her book.’
 (8) a. *Sie_k gab ihm_l ihr_k (POSS) Buch.* ‘She gave him her book.’
 b. *Sie_k gab ihm_l sein_l (POSS) Buch.* ‘She gave him his book.’

5. For East and North Frisian dialects the situation may be different. E.g., in Saterland Frisian the reflexive *sik* behaves similarly to German *sich* (e.g., *wie sjo uus* ‘we see each other’), and it can also be encountered in combination with the reciprocal *enunner* (e.g., *jo roupe sik enunner* ‘they shout at each other’); see 1.2 (cf. Fort 1980:197).

6. Cf. Braunmüller (1982:148), Hoekstra & Tiersma (1994:516). We are indebted to Bram ten Cate and Germen J. de Haan for some specifying information on this subject.

Table 2. Possessive pronouns

	SG		PL	
	M/N	F	M/N	F
1.	<i>mein</i>	<i>meine</i>	<i>unser</i>	<i>unsere</i>
2.	<i>dein</i>	<i>deine</i>	<i>euer</i>	<i>eure</i>
3.a.	<i>sein*</i>	<i>seine*</i>	<i>ihr</i>	<i>ihre</i>
b.	<i>ihr*</i>	<i>ihre*</i>		

(* Dependent on the gender of the antecedent.)

The paradigms of possessive pronouns (without case distinctions) are given in Table 2.

2.3 Typological characteristics of German word formation

German is a clear case of satellite-framed language (Talmy 1985:102ff.). This is crucial for the evaluation of stable vs. productive items in the lexicon and of the grammatical as well as normative status of a particular language's morphemes. We are aware of the problems connected with defining the status of free morphemes (particles) vs. bound morphemes (prefixes) in German, but we do not wish to dwell on this complicated issue. For both, we loosely employ the cover term 'prefix'. This term allows to relate these verbal components to the semantically similar verbal components of other languages. It should be noted that detachable components are preposed to the verbal root at least as often as they are postposed (see, for instance, Nedjalkov 1961a: 3–15). Some complex morphemes which bear a reciprocal (or some related) meaning combine productively with simplex verbs. Such are *einander-*, *entgegen-*, *gegenüber-* and *zusammen-* (see 5.5, 7.1–2). With *-einander-*, various local prepositions may be added, which results in verbs such as *auf|einander|stapeln* 'to put onto one another', *in|einander|schieben* 'to insert into one another', *entgegen|gehen* 'to go towards each other' or *gegenüber|platzieren* 'to place opposite to one another'. Most of such verbs can collocate with *sich*, but they convey a reciprocal meaning even without it.

2.4 Definition of 'reciprocal verb'

We shall use this term to refer to verb lexemes with the reflexive pronoun *sich* which denote a reciprocal relationship exclusively or as one of its meanings, regardless of what their derivational history may be. If any particular meaning of this term is intended we shall indicate this explicitly.

3. Polysemy of *sich* (non-reciprocal functions)

If a verb takes a reflexive pronoun its valency decreases. In German, reflexivization of causative verbs results, as a rule, in autocausatives or anticausatives.⁷ In German auto- and anticausatives are the two most basic diathesis changes (besides the reflexive proper).

3.1 Subject-oriented meanings

The following meanings are distinguished.

1. *Reflexive proper*. See the second possible interpretation of example (1b) in 1.2.

2. *Reflexive-possessive or reflexive-benefactive meaning*. Existing “partitive object” reflexives can be considered derivatives from benefactive reflexives; cf.:

- (9) a. *Erich schnäuzte sich* (DAT) *die Nase*. ‘Erik_i blew his_i nose.’
 → b. *Erich schnäuzte sich* (ACC). (the same).

This diathesis type is almost non-existent in German. Most reflexive verbs that may concretize a body part or grooming relationship are either reflexives proper (e.g. *waschen* → *sich* (ACC) *waschen* ‘to wash (vt/vi)’) or “indirect” reflexives (e.g. *putzen* → *sich* (DAT) *das Gefieder putzen* ‘to clean one’s plumage’) or the base verbs do not have a reflexive derivative (e.g. *die Stirn runzeln* → ∅ ‘to wrinkle one’s forehead’).

Benefactives, on the contrary, are very common (on the relation between possessivity and benefactivity see 4.4–5).

3. *Reciprocal meaning*. See the first interpretation of example (1b) in 1.2.

4. *Autocausatives*. These are derived quite regularly by means of the reflexive pronoun from both two-place and three-place verbs of moving an inanimate object and denote movement of an agentive subject; cf. an example with a two-place predicate:

- (10) a. *Er richtete den Stuhl auf*. ‘He picked up the chair.’
 → b. *Er richtete sich auf*. ‘He picked himself up.’

With plural subjects, conflicting readings with the reciprocal meaning occur systematically:

- c. *Sie richteten sich auf*.
 i. ‘They picked *each other* up.’
 ii. ‘They picked *themselves* up.’

5. *Deaccusatives*. See the following example:

- (11) a. *Der Junge fürchtet den Hund*. ‘The boy fears the dog.’
 → b. *Der Junge fürchtet sich vor dem Hund*. ‘The boy is afraid of the dog.’

7. For lack of space we wish to refer the reader to Geniušienė (1987: 86ff., 98ff., 257ff. and Ch. 14, Section 3, of this volume). – It goes without saying that the auto- vs. anticausative character of the derived diathesis often depends on the denotational nature of the arguments.

Deaccusatives are an extremely rare type of recessive diathesis in German, which is no more productive. We have been able to find only a few lexicalized cases like *annehmen* +ACC ‘to accept, take’ → *sich annehmen* +GEN ‘to take care of’ or *verschlucken* +ACC ‘to swallow’ → *sich verschlucken an* +DAT ‘to choke (on sth)’. A few other (non-deaccusative) verbs requiring a genitive or a prepositional object belong to *reflexiva tantum* and sound archaic: *sich erbarmen* ‘to take pity (on sb)’, *sich erwehren* ‘to defend oneself (against sb)’ (cf. Kwapisz 1974:24, 1978:80).

6. *Unattested recessive diatheses.* The pronoun *sich* is not used as a marker of absolutive (a kind of “antipassive”) or reflexive-causative relations.⁸ For the expression of reflexive-causatives an analytic construction with the neutral causative verb *lassen* ‘to let’ is used (cf. Nedjalkov 1976; see Section 9).

3.2 Object-oriented meanings

The following types of formally reflexive verbs are object-oriented.

1. *Anticausatives.* Genuine anticausatives (with the causative sense “subtracted” in the derivative) in German can be illustrated by the following example (cf. also Stötzel 1970:159f.; Haspelmath 1987:18, 1993):

- (12) a. *Beide haben ihr Leben verändert.* ‘Both have changed their lives.’
 → b. *Das Leben der beiden hat sich verändert.* ‘The life of both has changed.’

As often as not, both members of a semantic causative opposition remain unmarked (cf. Nedjalkov & Sil’nickij 1973[1969]:20–1; Wagner 1977: 59f.); e.g.:

- (13) a. *Norbert zerbrach den Stock.* (causative) ‘Norbert broke the stick.’
 b. *Der Stock zerbrach.* (non-causative) ‘The stick broke.’

2. *Converse relations.* This case is represented by the following example:

- (14) a. *Das Wasser spiegelt den Baum [wider].* ‘The water reflects the tree.’
 → b. *Der Baum spiegelt sich im Wasser [wider].* ‘The tree is reflected in the water.’

The RM as a marker of converse relations is another extremely rare case in German. The only other instances we have been able to find are *schmücken* ‘to adorn, decorate’ → *sich schmücken*, *verhängen* ‘to cover’ → *sich verhängen* ‘to be/get covered’ and *bedecken* ‘to cover’ → *sich bedecken* (both about clouds). All other converses are of the suppletive type.

3. *Passive-like meanings.* In German, no productive rules of reflexive passivization obtain (as, for instance, in Russian). But one may encounter reflexive forms of both transitive and intransitive verbs which convey a “modal” passive meaning (cf. Schulz & Griesbach 1967:130f.; Wandruszka 1969:451ff.; Engel 1988:461); e.g.:

- (15) a. *Der neue Roman liest sich (*durch Albert) mühelos.*
 ‘The new novel reads without difficulty (*by Albert).’

8. This clearly distinguishes German from Slavonic languages and Lithuanian (cf. Geniušienė 1983:140ff., 1987:249ff.).

- b. *In diesem Saal tanzt es sich (*von uns) gut.*
 'It is good to dance in this hall'; lit. 'It dances itself well in this hall (*by us).'

This diathesis type is lexically quite restricted (Wagner 1977: 118f.; Abraham 1995: 545ff.),⁹ although one can encounter some predicates formed productively on this pattern in colloquial speech. These are, however, restricted to intransitives (cf. *Mit dieser Maus klickt es sich gut* 'With this mouse one can click/work easily'; M. Haspelmath, p.c.). More important, the adverbial (*müheless* 'without difficulty, easily', *gut* 'well') cannot be left out, nor can one add an agentive complement (cf. the expressions with asterisks in brackets) (Stötzel 1970: 162, 180ff.; Nedjalkov 1976[1971]: 201; Wagner 1977: 108f.; Abraham 1995: 547ff.). The latter restriction is true also of the so-called "resultative-passive" verbs with the RM (Geniušienė 1987: 263f.), which do not contain a modal meaning (as in (15)); cf. (16b):

- (16) a. *Im Laufe von 10 Jahren haben wir einiges Geld angespart.*
 'During 10 years we have saved some money.'
 → b. *Im Laufe von 10 Jahren hat sich (bei uns, *durch/von uns) einiges Geld angespart.*
 'During 10 years some money has accumulated (at us, *by us).'

Other verbs of this type are:

- (17) *sich abnutzen* 'to wear away/get worn out'
sich ergeben 'to fall out/happen'
sich eröffnen, sich auftun 'to arise' (of nouns like *Möglichkeit* 'occasion', etc.).

4. Subject-oriented diathesis types of reciprocal constructions with the clitic *sich*

4.1 General remarks

All the reciprocal verbs with the clitic *sich* can be divided into three categories.

Category A comprises verbs with the RM which enter into a standard reciprocal relation with the base verb; they may also have a reflexive proper or some other reading; e.g.:

- (18) a. *erinnern* 'to remind sb'
 → b. *sich erinnern* i. 'to remind oneself' (reflexive)
 ii. 'to remind each other' (reciprocal)
 iii. 'to remember' (anticausative)

Category B comprises (a) lexicalized reciprocal verbs which are clearly derived from formally non-reflexive (two-place transitive) verbs, but do not show a regular semantic relationship to them; e.g.:

- (19) a. *austauschen* 'to exchange'
 → b. *sich austauschen* 'to exchange news'

9. Instead, modal (personal and impersonal) causatives with *lassen* 'to let' are used extensively (cf. Nedjalkov 1976: 199ff.).

Table 3. Reciprocal verbs with *sich* (with plural subjects)

A	B	C	Total
479 (88.1%)	22 (4%)	44 (7.9%)	545 (100%)

and (b) *reciproca tantum*, i.e. verbs with a reciprocal reading which do not occur without the reflexive pronoun in the respective meaning; e.g.:

- (20) a. **bereden* lit. 'to talk at sb (in order to persuade)'
 → b. *sich bereden* 'to counsel, discuss with each other.'

As it happens, such verbs become *en vogue* or, reversely, go out of use quite quickly. This is the case with *bereden* which is still registered by some dictionaries though it has actually become obsolete.

Category C comprises anticausatives with *sich* derived from object-oriented reciprocals (three-place lexical causatives) and retaining the reciprocal meaning of the underlying verb (see 8.2.3); e.g.:

- (21) a. *vermischen* 'to mix sth with sth'
 → b. *sich vermischen* 'to get mixed' (anticausative)

Table 3 shows the ratio of the three categories in our list of 545 reciprocals.

As we see, the bulk of reciprocal verbs are in a standard semantic relation to their derivational bases (non-reflexive verbs).

In the following, non-standard cases of category B will be discussed first, in order to free ourselves from more or less idiosyncratic irregularities. The more regular cases will be submitted to discussion in Sections 4.2–4.6.

4.1.1 Lexicalized reciprocals and *reciproca tantum*

Lexicalized reciprocals derive from non-reciprocal (formally non-reflexive) verbs, but have deviated from them lexically. Often additional metonymical shifts appear; cf. (19) and the following example:

- (22) a. *Sie zerwarfen das Bündnis.* 'They destroyed their treaty.'
 → b. *Sie haben sich zerworfen (*mit ihnen).* 'They have broken up with one another.'

The number of both *reciproca tantum* and lexicalized reciprocal verbs proves to be very limited. The following lists are probably exhaustive (compare with the lists in 8.1):

- (23) Lexicalized reciprocals (Category B):
sich aufrechnen 'to add up' (vi)¹⁰ ← *aufrechnen* 'to calculate'
*sich austauschen*₂ 'to exchange news' ← *austauschen* 'to (ex)change'
 (≠ *sich austauschen*₁ 'to replace one another')

10. Only with impersonal subjects, with a meaning of "modal-passive"; compare: *Er rechnete Verluste und Gewinne gegeneinander auf.* 'He balanced the books.' (causative) → *Verluste und Gewinne rechneten sich [gegeneinander] auf.* 'Losses and gains cancelled each other out.'

<i>sich bereden</i> ‘to counsel’	← *bereden ‘to discuss’ (see (20a))
<i>sich besprechen</i> ‘to counsel’	← besprechen ‘to discuss’
<i>sich überschlagen</i> ¹¹ ‘to turn over/round’	← überschlagen ‘to assess roughly’
<i>sich überstürzen</i> (same as (23e))	← überstürzen ‘to do sth too quickly, etc.’
<i>sich unterhalten</i> ‘to talk, chat’	← unterhalten i. ‘to entertain’ ii. ‘to maintain, give a living’
<i>sich verabreden</i> ‘to make a date’	← verabreden ‘to make an agreement’
<i>sich verabschieden</i> ‘to say good-bye’	← verabschieden ‘to ratify’
<i>sich zerwerfen</i> ‘to separate’	← zerwerfen ‘to annul.’

(24) *Reciproca tantum:*

<i>sich anfreunden</i>	‘to become friends’
<i>sich duellieren</i>	‘to duel’
<i>sich fraternisieren</i>	‘to fraternize’
<i>sich überkreuzen</i>	‘to cross’
<i>sich überlagern</i>	‘to cover (each other)’
<i>sich überlappen</i>	‘to overlap’ (same without <i>sich</i> ; see 8.1.2)
<i>sich überschneiden</i>	‘to intersect/cross’
<i>sich verbrüdern</i>	‘to fraternize’
<i>sich verkrachen</i> ¹²	‘to split (up)’(coll.)
<i>sich verschwören</i>	‘to conspire.’

Verbs of the above group B and also of group C are excluded from the analysis in the remaining part of this section. Thus, 479 verbs constitute the basis (= 100%) for statistical data in 4.2–3.

4.2 Two-place relations (“canonical” reciprocals)

4.2.1 *The RM taking the place of direct object*

These reciprocals are subsumed under Category A in Table 3. They may be split up into three subcategories, according to the following criteria:

A1. By default, the reciprocal meaning overrules the reflexive or other meanings when used with a plural subject, as in (1b), the other meanings requiring contextual support; e.g.:

- (25) a. *Er umarmte sie.* ‘He embraced her.’
→ b. *Sie umarmten sich.* ‘They embraced each other / *themselves.’

Other verbs of this subgroup are:

- (26) *sich anblaffen* ‘to yell, snarl at each other’
sich befehlen ‘to be at war with each other’
sich grüßen ‘to greet/welcome each other’

11. As a reciprocal verb used only with nouns like *Ereignisse* ‘events’, rendering the meaning ‘follow one after another very quickly, unexpectedly’.

12. A causative *verkrachen* ‘to split up (X with Y)’ seems to be acceptable at best in highly colloquial speech.

<i>sich haschen</i>	‘to play catch’
<i>sich ignorieren</i>	‘to ignore each other’
<i>sich jagen</i>	‘to hunt each other/run after each other’
<i>sich mögen</i>	‘to like each other’
<i>sich necken</i>	‘to tease each other’
<i>sich rammen</i>	‘to bump into each other’
<i>sich schätzen</i>	‘to appreciate each other’
<i>sich unterstützen</i>	‘to support each other.’

A2. No definite decision can be taken with regard to a reciprocal vs. reflexive default (it is much less clear than in A1 and A3, respectively); e.g.:

- (27) *Wir musterten uns (von Kopf bis Fuß) ab.*
 i. ‘We looked over *ourselves* thoroughly (from head to foot).’ (reflexive)
 ii. ‘We looked over *each other* thoroughly (from head to foot).’ (reciprocal)

Other verbs of this subgroup are:

- (28) *sich ablecken* ‘to lick oneself / each other clean’
sich achten ‘to esteem, respect oneself / each other’
sich anfassen ‘to touch oneself / each other’
sich aufmuntern ‘to cheer up oneself / each other’
sich begutachten ‘to watch oneself / each other attentively’
sich bestaunen ‘to admire oneself / each other’
sich umbringen ‘to murder oneself / each other’
sich unterschätzen ‘to underestimate oneself / each other.’

A3. By default the reflexive meaning overrules the reciprocal one (the latter, though, remains in principle possible but it requires contextual support, e.g. the adverb *gegenseitig* ‘mutually’); cf.:

- (29) a. *Hans_i zog sich_i an, und Erich_j zog sich_j an.* ‘Hans dressed and Erik dressed.’
 → b. *Hans_i und Erich_j zogen sich_{i+j} an.* ‘Hans and Erik dressed.’ (i.e. ‘each himself’)
 → c. *Hans und Erich zogen sich gegenseitig an.* ‘Hans and Erik dressed each other.’

This group of verbs includes, among others, the following:

- (30) *sich eincremen* ‘to rub oneself with cream’
sich loben ‘to praise oneself’
sich putzen ‘to clean oneself (with a brush)’
sich reinigen ‘to clean oneself’
sich verletzen ‘to hurt oneself’
sich waschen ‘to wash oneself.’

The number of these verbal items is shown in Table 4 (the data have been checked several times):

The revealing conclusion to be drawn from this Table is that, despite the polysemy of the RM *sich*, at least three thirds of all “canonical” reciprocal verbs (with a plural subject) encode a reciprocal relation by default. Only with about one fourth of all verbs is the reflexive vs. reciprocal reading not disambiguated by the morphological form alone, and

Table 4. Semantic subgroups of “canonical” reciprocals

A1	A2	A3	Total
364 (76%)	68 (14%)	47 (10%)	479 (100%)

nonetheless the number of more or less ambiguous cases (A2) surmounts more or less clear cases of reflexive predicates (in the plural, A3).

4.2.2 The RM taking the place of oblique object (two-place intransitives)

Two-place relations with the second argument in the dative case are encoded by only 39 verbs (out of 479, which equals 8%). The derivative relation can again be illustrated as follows:

- (31) a. *Ich winkte ihr zu, und sie winkte mir zu.*
 ‘I waved his hand at/to her, and she waved her hand at/to me.’
 → b. *Wir winkten uns (zu).*
 ‘We waved our hands (at/to each other).’

Some other examples are:

- (32) a. *Sie blinkten sich zu.* ‘They flickered at each other.’
 b. *Sie standen sich bei.* ‘They aided/supported each other.’
 c. *Ihr mißfielt euch.* ‘You (PL) felt antipathy to each other.’
 d. *Sie stimmten sich zu.* ‘They agreed with each other.’

In most cases these verbs bear the lexical meaning of support or sympathy/antipathy. Three lexical reciprocals can also be mentioned here:

- (33) a. *Sie ähnelten/glichen sich.* ‘They resembled each other.’
 b. *Ihr seid euch begegnet.* ‘You (PL) encountered/met each other.’

From the morphological viewpoint it should be noted that verbs prefixed with *zu-* (originally ‘towards’) are the most numerous ones. The following list is probably exhaustive:

- (34) *sich zuarbeiten* ‘to work jointly on the same topic from different angles’
*sich zubllicken*¹³ ‘to flicker at each other’
sich zuhören ‘to listen to each other’
sich zulachen ‘to look at each other laughing’
sich zulächeln ‘to look at each other smiling’
sich zunicken ‘to nod to each other’
sich zuprosten ‘to drink to each other’s health’
sich zusehen, zuschauen ‘to observe each other’
sich zustimmen ‘to express agreement with each other’s opinion’
sich zutrinken ‘to drink to each other’s health’
sich zuwinken ‘to wave to each other’
sich zuzwinkern ‘to squint one’s eyes at each other.’

13. There are two synonyms with the same morphological structure: *zubllicken*, *zublitzeln*.

This morphological specificity, though, holds not only for two-place intransitives but also for three-place transitives (see (40) in 4.3.2). Consequently, it is the affinity of this prefix to the addressive meaning that is crucial, rather than [\pm transitivity]. It should be emphasized that reciprocals from two-place intransitive verbs of the (34) type appear to be used only in unambiguous cases of reciprocity (cf. Wiemer, Ch. 11, §5.2.1.2). This happens to be less common with three-place predicates, where *sich* occupies the place of the third argument.

4.3 Three-place relations (“indirect” reciprocals)

4.3.1 Standard three-place transitives

The same threefold classification which has been applied to two-place transitives (see 4.2.1) in principle applies also to reciprocal verbs with *sich* occupying the place of the third syntactic argument (indirect object). This group, though, comprises much fewer verbal items, viz. 57 (\approx 12% of 479).

I. The reciprocal meaning is the only one possible for pragmatic or world-referential reasons; cf.:

- (35) a. *Ich erzählte ihm lustige Geschichten, und er erzählte mir lustige Geschichten.*
 ‘I told him funny stories, and he told me funny stories.’
 → b. *Wir erzählten uns lustige Geschichten.*
 ‘We told each other funny stories.’
- (36) *Sie mißgönnten/neideten sich ihre Erfolge.*
 ‘They envied each other success.’
- (37) *Sie reichten sich Getränke.*
 ‘They gave each other drinks.’

II. The reciprocal meaning prevails over the reflexive or is equally likely:

- (38) a. *Wir versperrten uns die Sicht.*
 ‘We obstructed the sight to each other/ourselves.’
 b. *Sie logen sich etwas vor.*
 ‘They told lies to one another/themselves.’
 c. *Sie vermittelten sich die besten Jobs.*
 i. ‘They helped each other get the best jobs.’
 ii. ‘They organized themselves the best jobs.’
 d. *Sie gestanden sich ihre Fehler ein.*
 ‘They admitted their mistakes to each other/themselves.’

III. The reciprocal reading is by default overruled by the reflexive one: among all three-place verbs which were investigated systematically we did not detect any clear cases that would fit this condition

As a matter of fact, the reflexive meaning of the dative *sich* in a three-place diathesis is mostly restricted to benefactives (see 4.5).

4.3.2 Transitive verbs prefixed with *zu-*

As mentioned in 4.2.2, dative reciprocals are formed quite systematically from two- or three-place verbs with the prefix *zu-* (28 out of 96 lexemes with a syntactic dative). This prefix conveys an addressive (or benefactive) meaning and is responsible for this apparent regularity. The base verbs denote either speech acts or directed motion (transfer). Compare a standard example:

- (39) a. *Er flüsterte ihr etwas zu, und sie flüsterte ihm etwas zu.*
 'He whispered sth to her, and she whispered sth to him.'
 → b. *Sie flüsterten sich etwas zu.*
 'They whispered sth to each other.'

Here is a list of three-place transitives prefixed with *zu-*:

- (40) *sich (etwas) zudrehen* 'to turn sth to each other'
sich (etwas) zuflüstern 'to whisper sth to each other'
sich (etwas) zugeben 'to admit sth to each other'
sich (etwas) zugeloben 'to administer an oath to' (arch.)
sich (etwas) zugestehen 'to acknowledge each other sth'
sich (etwas) zukehren 'to turn sth to each other'
sich (etwas) zuraunen 'to murmur sth to each other'
sich (etwas) zurufen 'to call sth to each other'
sich (etwas) zuschreien 'to turn to each other shouting sth'
sich (etwas) zusichern 'to ensure each other (about sth)'
sich (etwas) zuspieren 'to pass over sth to each other'
sich (etwas) zustellen 'to dispatch sth to each other'
sich (etwas) zutreiben 'to urge, chase sth/sb into each other's direction'
sich (etwas) zutuscheln 'to whisper sth into each other's ear'
sich (etwas) zuwenden 'to turn sth to each other.'

This pattern is not extinct, since such examples like *sich (etwas) zupfeifen* 'to whistle (sth) to each other' are imaginable (the authors owe this statement and example to M. Haspelmath, p.c.).

4.4 "Possessive" reciprocals

German has almost no morphological means of unambiguously expressing reciprocity in possessive constructions. The only possible way of explicitly combining possessivity with reciprocity is the use of the analytical pronoun-like phrase *eine(r) des/der anderen* 'one (M/F) of the other (M/F)' (see Section 6); cf.:¹⁴

14. Note that in this case the grammatical number of the reciprocal marker is determined by distributive agreement: the noun denoting the possessed object has to be used in the singular, i.e. its grammatical number agrees with each single "possessor" (expressed in the subject NP). The same holds for a possible reciprocal reading of (42a).

- (41) a. *Hans wusch Marias Kopf, und Maria wusch Hans' Kopf.*
 'Hans washed Mary's hair, and Mary washed Hans's hair.'
 → b. *Hans und Maria wuschen **einer des anderen** Kopf.*
 H. and M. washed.PL one of the other's head.sg
 'Hans and Mary washed each other's hair.'

But such sentences sound clumsy and are, as a rule, avoided. They are restricted to derivatives from two-place transitives, as in (1b), and impossible with any other base diathesis. It is much more usual to employ constructions with *sich* or, for the sake of clarifying the reciprocal meaning, the specialized pronoun *einander* (see 5.3–4), both in the dative position. These constructions, though, are potentially ambiguous, because their interpretation can vacillate between a possessive and a benefactive reading (for the latter see 4.5). (42a–b) appear to be in need of disambiguation (reflexive vs. reciprocal), whereas (42c) is clearly reciprocal:

- (42) a. *Hans und Maria wuschen **sich den Kopf**.*
 H. and M. washed.PL RM ART head.SG.ACC
 'Hans and Mary washed their hair.'
 = b. *Hans und Maria wuschen **sich ihre Köpfe**.*
 H. and M. washed.PL RM POSS head.PL.ACC
 'Hans and Mary washed their hair' = i. 'each his/her own'; ii. 'each other's'.
 c. *Hans und Maria wuschen **einander den Kopf** (ihre Köpfe).*
 H. and M. washed.PL REC ART head.SG.ACC POSS head.PL.ACC
 'Hans and Mary washed each other's hair.'

In general, when investigating possessivity in German, one cannot avoid taking into account the interplay between *sich*, the definite article, the denotational class the nouns belong to and diathesis defaults of the predicate. Here is, however, not the place for going into any details.

4.4.1 *Inalienable possession*

Body part relations and similar cases of inalienable possession, taken in isolation, are widely expressed by the subjective genitive (*Hugos Haare* 'Hugo's hair'). But with agentive verbs the "possessor" of an inalienable referent is usually explicated by the dative, provided this referent is the patient of the action and the "possessor" is alive (*Maria wusch Hugo (DAT) die Haare (ACC)* 'Mary washed Hugo's hair.'). The genitive construction proves indifferent with regard to the feature [±alive]. For this reason reciprocal possessives are commonly expressed in the way shown in (42b) above, despite the potential interference of the reflexive reading.

4.4.2 *Alienable possession*

Although the distinction between alienable and inalienable possession does not show any repercussions for the use of markers of reciprocity (and reflexivity), we would like, for the sake of typological comparability, to add the following remarks. The inference which showed valid for inalienable possession may be less strong with alienable objects.

If the manipulated objects are alienable such an interference is much less likely (Martin Haspelmath objects to it, p.c.); cf.:

- (43) *Anne und Marie zogen sich Schuhe an.*
 A. and M. put.PL RM shoes on
 i. ?‘Ann and Mary put shoes on each other.’
 ii. ‘Ann and Mary put on their shoes (each).’

This is due to the fact that benefactivity comes to the fore here. And for some pragmatic reasons it seems much more likely that each agent acts on behalf of him/herself, less so mutually. With verbs denoting some kind or other of harmdoing a reciprocal interpretation seems more probable than a reflexive one. This effect is even stronger if the dative *sich* is used together with a possessive pronoun (cf. (44a)); e.g.:

- (44) a. *Sie setzten sich ihre Häuser in Brand.*
 lit. ‘They set themselves their houses on fire.’
 (most likely or even only ‘each other’s’).
 b. *Sie setzten ihre Häuser in Brand.*
 ‘They set their houses on fire.’
 (rather their own ones, i.e. each his/her or possessed together).

4.5 Benefactive meaning (potential ambiguity)

In German the reflexive-benefactive function of *sich* is encountered frequently if the base verb is a two-place transitive and allows an optional indirect object expressed by the dative case;¹⁵ cf.:

- (45) a. *Norbert kaufte ihm ein Buch.*
 ‘Norbert bought him a book.’
 → b. *Norbert kaufte sich (DAT) ein Buch.*
 ‘Norbert bought himself a book.’

Noteworthy enough, the benefactive *sich* can hardly be used in the reciprocal sense with these verbs; cf.:

- (46) a. *Norbert kaufte sich Bücher und Erika kaufte sich Bücher.*
 ‘Norbert bought [himself] books and Erika bought [herself] books.’
 → b. *Norbert und Erika kauften sich Bücher.*
 i. ‘Norbert and Erika each bought books for themselves.’
 ii. ?‘Norbert and Erika bought books for each other’ (much less likely).

The reciprocal sense is rendered by the unambiguous reciprocal pronoun *einander* (in written, or highly stylized German only: W. Abraham, p.c.).

- (47) *Norbert und Erika kauften einander Bücher.*
 ‘Norbert and Erika bought books for each other’ (cf. (46b.i)).

15. Benefactives can be distinguished from datives proper (and possessives) by a permutation test: if dative-*sich* can be replaced by *für + sich* ‘for + RM’ the meaning is benefactive. Note that there is no formal identity between benefactivity and possessivity as, e.g., in Bulgarian (cf. Penchev, Ch. 13, Section 5.1.1).

4.6 Clitic *sich* + adverb *gegenseitig* ‘mutually’

The adverb *gegenseitig* lit. ‘(on) the opposite’ can be used only together with the pronoun *sich*;¹⁶ cf.:

- (48) a. *Sie halfen sich gegenseitig.* ‘They helped each other.’
 b. **Sie halfen gegenseitig.* (same intended meaning).

Its derivational relationship with the adjective *gegenseitig* ‘mutual’ is transparent enough (see 5.2). It does not specify the syntactic link between the two involved arguments (subject vs. direct, indirect or prepositional object?), i.e. it remains totally neutral with respect to diathetical distinctions. Therefore nominalisation of (48b) sounds correct; cf.:

- c. *Ihre gegenseitige Hilfe.* ‘Their mutual help.’

For this reason it seems justified to regard *gegenseitig* as a marker of reciprocity deprived of an independent syntactic function. However, it cannot be used (in order to rule out the reflexive reading) in constructions with *sich* derived from two-place intransitives taking a prepositional object (but in colloquial speech (49c) for some Germans seems to be acceptable; W. Abraham, p.c.). In such cases only *einander* can be used (see 5.3).

- (49) a. *Hans meckerte über Peter.* ‘Hans deplored Peter.’
 b. *Sie meckerten über sich (selbst).* ‘They deplored themselves.’
 c. **Sie meckerten gegenseitig über sich.* (intended meaning:) ‘They deplored each other.’

Gegenseitig can hardly be used tautologically with lexical reciprocals; at best it may appear with predicates of joining as in (50), and in no case with predicates of separating, as in (51) (see 8.2.1–8.2.2). Most native speakers reject both of them;¹⁷ cf.:

16. Cf. WdG, vol. 2 (1977:1488): “(...) is often added to the reciprocal pronoun *sich* for clarity” (“tritt oft zur Verdeutlichung zum reziproken Pronomen *sich* hinzu”).

17. Wandruszka (1973:13) rejects the possibility of collocating *gegenseitig* with inherently symmetrical predicates altogether, and, by and large, this corresponds to the standard norm. This assertion, however, needs specifying and additional study. As follows from example (e) found in a text, at least some inherently symmetrical predicates allow such use of *gegenseitig*, though it remains redundant; this seems to be related to the use of the reciprocal pronoun; cf.:

- a. *Diese Balkansprache grenzt an eine andere Balkansprache*
 ‘This Balkan language borders on another Balkan language’
 b. **Die Balkansprachen grenzen*
 lit. ‘The Balkan languages border’
 c. **Die Balkansprachen grenzen gegenseitig*
 lit. ‘The Balkan languages border mutually’
 d. *Die Balkansprachen grenzen aneinander*
 ‘The Balkan languages border on each other’
 e. *Die Balkansprachen grenzen gegenseitig aneinander*
 lit. ‘The Balkan languages border on each other mutually.’

- (50) [?]*Sie trafen sich gegenseitig.* lit. ‘They met mutually.’
 (51) **Sie trennten sich gegenseitig.* lit. ‘They parted with each other mutually.’

The merits of *gegenseitig* show up in cases of topicalization, as in (52d), where one cannot use *sich* because of its clitic nature and because this pronoun would be interpreted only as a reflexive proper (i.e. meaning ‘each him/herself’); cf.:

- (52) a. *Holger und Erich lieben (beide) Annette.*
 ‘Holger and Erik (both) love Annette.’
 b. *Holger und Annette lieben sich gegenseitig.*
 ‘Holger and Annette love each other mutually.’
 c. **Sich (gegenseitig) mögen sie gar nicht.*
 RM REC like they at.all not
 (intended meaning as (52d)).
 = d. *Gegenseitig ↑ mögen sie sich gar nicht.*
 REC like they RM at.all not
 ‘Each other they don’t like at all.’

The reciprocity markers *einander* (see 5.3) and *einer den anderen* (see Section 6) function in a similar way, although one can hardly combine them with *sich*.

4.7 Discontinuous constructions

Certain non-reciprocal two-place verbs are reciprocalized by means of the RM *sich* and then allow for discontinuous expression with the preposition *mit*. Only verbs with the RM in a simple construction (see (53b) and (53e)) allow the “comitative variant” *miteinander* ‘with each other’ (see 5.5.5.2). Constructions with *einander* cannot be discontinuous (cf. (53g)).

- (53) a. *Hans schlägt Paul. ≠ Paul schlägt Hans.* ‘Hans beats Paul’ ≠ ‘Paul beats Hans.’
 → b. *Hans und Paul schlagen sich.* ‘Hans and Paul beat each other/fight.’
 → c. *Hans schlägt sich mit Paul.* ‘Hans fights with Paul.’
 = d. *Paul schlägt sich mit Hans.* ‘Paul fights with Hans.’
 = e. *Hans und Paul schlagen sich miteinander* ‘Hans and Paul fight with each other’,
 but f. *Hans und Paul schlagen einander.* (= (53b)) ‘Hans and Paul beat each other/fight.’
 g. **Hans schlägt mit Paul einander.* lit. *‘Hans beats with Paul each other.’

As can be seen from the translation, the inclusion of *sich* with verbs of this subgroup triggers a shift in meaning. Here is a list of verbs which show this derivative behaviour; all of them belong to the lexical group with the general meaning ‘to fight’, related semantically to many lexical reciprocals listed in 8.1 (which can also be used in discontinuous constructions with the preposition *mit*).

- (54) *hauen* ‘to beat, strike’ → *sich hauen* ‘to fight, box’
knuffen (coll.) ‘to prod’ → *sich knuffen* ‘to prod each other’
prügeln ‘to fight’ (with fists) → *sich prügeln* ‘to beat one another up’
schlagen ‘to hit, beat’ → *sich schlagen* ‘to fight.’

Another subset of verbs (of social (ritual) behaviour), which otherwise behave like the verbs under (53)–(54), do not at all or at best marginally allow for discontinuous constructions nor for the “comitative variant”.¹⁸ These are at least the following verbs:

- (55) *begrüßen* ‘to welcome’ → *sich begrüßen* ‘to greet each other’
küssen ‘to kiss’ → *sich küssen* ‘to kiss each other’
umarmen ‘to embrace’ → *sich umarmen* ‘to embrace one another’; cf.:
- (56) a. *Hans umarmte Maria.*
‘Hans embraced Mary.’
→ b. **Hans umarmte sich mit Maria.*
lit. *‘Hans embraced himself with Mary.’
c. **Hans und Maria umarmten sich miteinander.*
lit. *‘Hans and Mary embraced themselves with each other.’

(But in Martin Haspelmath’s opinion, p.c., the sentence *Hans küsste sich mit Maria* sounds almost acceptable for some native speakers.)

Finally, in rare cases even verbs which encode a reciprocal relation without *sich*, but also allow its inclusion, behave like the verbs under (54) in that they allow a discontinuous construction; cf. the verb *treffen* ‘to meet’ → *sich treffen* ‘to meet’:

- (57) a. *Peter traf Hans.* ‘Peter met Hans.’ = *Hans traf Peter.* ‘Hans met Peter.’
→ b. *Peter und Hans trafen sich.* ‘Peter and Hans met.’
= c. *Peter traf sich mit Hans.* = *Hans traf sich mit Peter.*
‘Peter met with Hans.’ ‘Hans met with Peter.’
but d. **Peter und Hans trafen* (the same as (b), but without *sich*; cf. with 8.1.1.2).

Discontinuous constructions are possible also with almost all lexicalized reciprocals and *reciproca tantum* listed in (23)–(24) (see 4.1.1), an exception being *sich überschlagen* ‘to occur very rapidly one after another’. Separate lexical reciprocals may appear with a preposition other than *mit* (see (59)):

- (58) a. *Hans verabredete sich mit Marie.*
‘Hans agreed about a date with Mary.’
= b. *Marie verabredete sich mit Hans.*
‘Mary agreed about a date with Hans.’
= c. *Hans und Marie verabredeten sich (miteinander).*
‘Hans and Marie agreed (with each other) about a date.’
- (59) a. *Hans verabschiedete sich von Marie.*
‘Hans said goodbye to Marie’ (implies most likely (b)).
= b. *Marie verabschiedete sich von Hans.*
‘Mary said goodbye to Hans.’
= c. *Marie und Hans verabschiedeten sich voneinander.*
‘Mary and Hans said goodbye to each other.’

18. This idiosyncratic behaviour of verbs in German demonstrates the difference from Slavonic languages and Lithuanian, where discontinuous constructions with these verbs are much less restricted (see the respective contributions in this volume).

4.8 Embedded subject-oriented reciprocals in non-causative constructions

Reciprocal subject-oriented predicates can be embedded as the infinitival part of *acusativus cum infinitivo* constructions, regardless of the diathesis type of the simple sentence (a); cf.:

- (60) a. *Sie_k beschimpften sich_k.* 'They insulted each other.'
 → b. *Er₁ sah sie_k sich_k beschimpfen.* 'He saw them insult each other.'

In case of interference of reflexive interpretations one can use for disambiguation the reciprocal pronoun *einander* (see Section 5) in place of *sich*.

5. The reciprocal pronoun *einander* 'each other' and units deriving from it

5.1 Introductory

The least restricted lexical unit marking reciprocity explicitly is *einander* (besides the syntactically non-self sufficient *gegenseitig* 'mutually' discussed in 4.6). It can always substitute for *sich* if the latter cannot distinguish between a reflexive vs. reciprocal meaning (this happens with plural and coordinated subjects; see Section 4). Its paradigmatic behaviour is analogous to the reflexive pronoun in the plural in that *einander* does not have case markings and cannot be used in discontinuous phrases (for these see Section 8); but, differently from *sich*, it is not marked for person either (see the right-hand part of Table 1).

The syntactically unrestricted character of *einander* is demonstrated by the fact that it can combine with almost any preposition. As a consequence, combinations of prepositions with this unit have developed, which will be discussed in 5.4. From a stylistic viewpoint *einander* is usually viewed as a marker of elaborated speech (Berger (ed.) 1985:560) and, as such, does not show any restrictions with respect to grammatical person. For an understanding of the syntactic behaviour of the unambiguous reciprocity markers and their distribution in modern German, some brief remarks on their origin and historical development may be appropriate.

5.2 Diachronic remarks

The unit *einander* descends from the older dative and accusative form *ein andar* (without an article before the second part!, contrary to the English *one another*); cf.: *alsō ungelih sint sie alle ein anderen* (Notker 1, 491) lit. 'too much unequal are they all to one another' (cf. Kluge 1957: 157). It has the same etymology as the complex marker *einer den anderen* (see Section 6; cf. Behaghel 1923: 409f., 447ff.). But as early as Notker's time (ca 1000) the position of prepositions varied, and with time both parts ceased to be declined. Already in Middle High German (12th–15th centuries) *ein andar* was treated consistently as one unit and became ultimately distinct from its analytic counterpart. Thus it very early got close to adverbials (Grimm & Grimm 1862: 143). According to Lockwood (1968: 69f.), *sich* and

einander have competed with each other since the same period. Vernaleken (1861:93) and Behaghel (1923:306) give examples from the 12th–17th centuries in which both pronouns are used together (see 5.3.2), and Lemmer (1987:69) notes that such use was attested as early as 1070.

For comparison, the history of *gegenseitig* (4.6) is much shorter. According to Grimm & Grimm (1897: 2260f.) it derives from the adjective *gegenseits*, and can be found not earlier than from the 17th century onwards. At the beginning it was used exclusively as a juridical term denoting the respective opponent before a court of law (e.g., *als der gegenseitige sachverwalter sich weigerte* ‘when the other party’s administrator refused’). Then its usage expanded and came to mean the members of any opposition and even differences of opinion in general. Finally it spread to denote opposite sides in space (landscape, etc.). The contemporary meaning of mutuality developed in the beginning of the 18th century. Curiously enough, *wechselseitig*, which can be regarded as a synonym of *gegenseitig* in its contemporary usage, is employed to a much lesser extent. It will therefore be neglected in the following.¹⁹

5.3 Constructions with *einander* (subject-oriented)

As noted in 5.1, *einander* can always replace the clitic *sich* in reciprocal function. For this reason, the same subdivision of diathesis types which was elaborated for the reflexive clitic in Section 4 holds for *einander*, too. It can be used regularly with “canonical” (61a), “indirect” (61b) as well as with “possessive” reciprocals (61c) instead of the reflexive pronoun:

- (61) a. *Sie verletzten einander* (ACC) (*mit einem Messer*).
 ‘They hurt each other (with a knife).’
 b. *Sie sandten einander* (DAT) *Nachrichten* (ACC) *zu*.
 ‘They conveyed news to each other.’
 c. *Sie wuschen einander* (DAT) *das Haar*.
 ‘They washed each other’s hair.’

The “possessive” reciprocal interferes with the benefactive one on the same grounds as those touched upon in 4.4 and 4.5.

Einander proves not only unambiguous, but even syntactically more universal than *sich* because it can combine with almost every preposition (Stötzel 1970:196f.; Kwapisz 1978:77f.) and therefore clearly mark benefactive reciprocals as well (see 4.5):

- (62) a. *Sie erledigten für sich wichtige Geschäfte*. (only reflexive-benefactive)
 ‘They managed different deals for themselves.’
 b. *Sie erledigten füreinander wichtige Geschäfte*. (reciprocal-benefactive)
 ‘They managed different deals for each other.’

19. Grimm & Grimm (1922:2761, Vol. 13) note that *wechselseitig* could have been introduced in the first half of the 18th century as an equivalent of French *réiproque*. They add that afterwards it became much less frequent than *gegenseitig*.

It can also freely substitute for the reflexive pronoun with lexically reciprocal predicates (see 8.1); e.g.:

- (63) *Sie ähnelten einander* (DAT).
‘They resembled each other.’

5.3.1 *Multiple use within clauses*

The reciprocal pronoun can also be used more than once within one and the same clause, if there are more than two arguments (besides the subject) and regardless whether the outcome corresponds to non-lexical reciprocals, as in (64), or the predicate is a lexical reciprocal, as in (65):

- (64) a. *Er_i erzählte ihr_j von ihr_j, und sie_j erzählte ihm_i von ihm_i.*
‘He_i talked to her_j about her_j, and she_j talked to him_i about him_i.’
→ b. *Sie_{i+j} erzählten einander_{i+j} voneinander_{i+j}.*
‘They_{i+j} talked to each other_{i+j} about each other_{i+j}.’
- (65) a. *Sie_i stritt mit ihm_j über ihn_j, und er_j stritt mit ihr_i über sie_i.*
‘She_i quarrelled with him_j about him_j, and he_j quarrelled with her_i about her_i.’
→ b. *Sie_{i+j} stritten miteinander_{i+j} übereinander_{i+j}.*
‘They_{i+j} quarrelled with each other_{i+j} about each other_{i+j}.’

5.3.2 “Tautological” combination of *einander* and *sich*

Although standard grammars and stylistic handbooks on German usage reject *sich* together with *einander* (cf. Berger 1985:561; Engel 1988:665f.; Hentschel & Weydt 1990:62f.), it is not very unusual to encounter such pleonastic constructions in casual speech. It can be shown that the acceptability of such pleonasm depends on at least two factors, namely: the diathesis type represented and topicality (marked vs. unmarked).

Clearly unacceptable cases are recessive diatheses deriving from base two-place verbs, i.e. where no need of disambiguation of case roles arises. A combination of both markers then proves impossible; cf. a standard example:

- (66) a. *Hans wusch Otto, und Otto wusch Hans.*
‘Hans washed Otto and Otto washed Hans.’
→ b. **Sie wuschen sich* (ACC) *einander* (ACC).
*‘They washed themselves each other.’

If, however, a third argument becomes syntactically involved in the diathesis, provided *sich* does not mark the direct object but only an optional (“benefactive”) argument or the “possessor”, tautologic emphasis turns out to be less “out of order”; cf.:

- (67) a. *Hans putzte Willys Schuhe, und Willy putzte Hans’ Schuhe.*
‘Hans cleaned Willy’s shoes, and Willy cleaned Hans’s shoes.’ (“possessive”)
b. *Hans putzte die Schuhe für Willy, und Willy putzte die Schuhe für Hans.*
‘Hans cleaned the shoes for Willy, and Willy cleaned the shoes for Hans.’ (benefactive)
→ c. ²*Sie putzten sich einander* (DAT) *die Schuhe* (ACC).
‘They cleaned the shoes for each other.’ (reciprocal derived from benefactive)

This observation agrees with the diachronic development (see 5.2), due to which *sich* extended to the dative only after 1500 (Behaghel 1968:179; Lockwood 1968:69; Stötzel 1970:173). In this “younger” position it might therefore nowadays be expected to be more marked and substitutable.

Furthermore, *einander* is obligatory if a reciprocal relationship is denoted by *reflexiva tantum* (e.g. *sich sorgen (um)* ‘to take care of’), by lexicalized reflexive verbs (e.g. *sich verlassen (auf)* ‘to rely upon’, as in (68)) or by autocausatives (e.g. *sich zudrehen* ‘to turn to’, as in (69)). With *sich* only the reflexive meaning can be expressed, but it is then recommendable to add the reflexive intensifier *selbst* ‘self’ (see 2.2.1); cf.:

- (68) a. *Die alten Leute verlassen sich ?auf sich / auf sich selbst.* (reflexive)
 ‘The elderly people rely on themselves.’
 b. *Die alten Leute verlassen sich **aufeinander**.* (reciprocal)
 ‘The elderly people rely on one another.’
- (69) *Die Opponenten drehen sich einander zu.* (reciprocal of autocausative)
 ‘The opponents turned (lit. ‘themselves’) to each other.’

Finally, *sich + einander* may be possible if the reciprocity marker is topicalized in sentence-initial position (indicated by bold type); cf.:

- (70) *Hans und Peter sahen **sich** im Spiegel. **Einander** ↑ konnten sie (*sich*) nicht sehen.*
 ‘Hans and Peter saw each himself in the mirror. Each other they could not see.’

In such a case *sich* becomes merely optional, but it can well be inserted for rhythmic reasons and because the topicalized element tends to be treated as a left-dislocated, i.e. syntactically disconnected, element (cf. with *gegenseitig* in (50)). From this angle, *einander* in (70) still shows a behaviour similar to that of *einer den anderen* (see Section 6).

Our informants (almost all of them linguists) did normally not accept such utterances if asked explicitly about their wellformedness, arguing that such a construction would be totally redundant.²⁰ However, besides an occasional need to emphasize reciprocity (see (67)), another reason for a pleonastic use of *sich + einander* may be detected in a syntactic analogy to object-oriented lexical reciprocals, as in *Mehl und Zucker miteinander verrühren* ‘to mix flour with sugar’ (see 8.2), to anti- and autocausatives deriving from them (e.g., *Weibchen und Männchen paaren sich miteinander*. ‘Male and female copulate’; see 8.2.3) and to discontinuous constructions with lexical reciprocals, e.g. *sich mit jdm. streiten* ‘to have a quarrel with sb’ (see 4.7, 8.1, (101a)).

20. Similar pleonasms are quite widespread in other languages, e.g. French or Bulgarian. In the history of German *sich* and *einander* have been compatible with each other (see 5.2), and nowadays considerably systematic tautologies in relevant parts of the lexicon are apparent, e.g. in productive word formation (see 2.3, 5.5 and many verbs in 7.2, 8.2). Consequently, the argument that *sich + einander* is tautological does not suffice to reject their combinability. Despite its stigmatization in normative speech possible lines of evolution should be indicated, and one of them might result in the expansion or, on the opposite, some archaic residues of *sich + einander*.

5.4 Object-oriented constructions

The unexpanded form of the pronoun *einander* can be used in non-causative embedded constructions (see 4.8), but not with object-oriented lexical reciprocals (see 8.2). Instead, combinations of this pronoun with prepositions have to be used (see 5.5).

5.5 Lexical combinations of preposition + *einander*5.5.1 *Introductory*

In modern German almost every simple preposition can combine with the pronoun *einander* to form one lexical unit. Only two underived prepositions do not collocate with *einander*, *außer* ‘except’ and *seit* ‘since’. With *bis* ‘up to’ the combination *biseinander* seems possible, but is unusual, probably because locative *zu-* and *aneinander* with some appropriate directional adverbs do the same job (see below). The preposition is always fronted. Altogether 16 such combination types exist (see below). In most cases their meaning is related directly to the semantics of the respective preposition. These more or less trivial cases will be considered in 5.5.2–4; then the meaning of joint action and other non-standard cases will be discussed (5.5.5).

Combinations of preposition and *einander* do not collocate with verbs that occur with the separate form *einander* (see 5.3–5.4), and, contrary to the latter, these combinations are employed with object-oriented lexical reciprocals (see 8.2, 9). As for two-place predicates, such combinations can be encountered only with verbs that require a prepositional object (see (71)). With two-place predicates these combinations are clearly preferred to the reflexive pronoun; with object-oriented lexical reciprocals only these combinations (and not *sich*) can be used.

It is often arguable whether these combinations are to be regarded as parts of a verb lexeme (“Verbzusatz”) or as separate adverbs (see 2.3). Together with Mater’s list (see 1.4) about 90 more or less frequently used reciprocal verbs could be established which are prefixed with *-einander-* together with another prefix (*an-* ‘at’, *auf-* ‘on(to)’, *aus-* ‘from, off, out’, *bei-* ‘at’, *gegen-* ‘against’, *hinter-* ‘behind’, *in-* ‘in’, *neben-* ‘beside’, *über-* ‘above’, *unter-* ‘under’, *zu-* ‘(directed) at’); e.g.:

(71) <i>aneinanderreihen</i>	‘to line up next to each other’
<i>aufeinanderhäufen</i>	‘to heap things together’
<i>auseinanderdividieren</i>	‘to divide from each other’
<i>beieinanderhalten</i>	‘to keep together’
<i>gegeneinanderlegen</i>	‘to put next to one another (contiguously)’
<i>ineinanderschieben</i>	‘to push into one another’
<i>übereinanderstapeln</i>	‘to pile on top of one another’
<i>zueinanderordnen</i>	‘to group.’

Of course, this number has to be treated as a minimum, for reasons given in 2.3. For instance, the compound prefix *auseinander-* serves as a productive means of forming object-oriented lexical reciprocals (see 8.2). Its third, “reciprocal” argument becomes incorporated into the prefix itself, e.g.:

- (72) *Die jüngsten Ereignisse dividierten sie auseinander.*
 ‘The last events separated them (lit.: ...divided them apart) from each other.’

That these two prefixes have merged into one morphological entity, is partly confirmed by the fact that the particular locative prefix and *einander* are separated from the stem only jointly, never one without the other. In Berger (1985), *füreinander* ‘for each other’, *miteinander* ‘with each other’, *nacheinander* ‘after each other’, *umeinander* ‘for/about each other’, *voneinander* ‘from/about each other’ and *voreinander* ‘in front of each other’ are treated only as adverbial complements spelt separately from verbs. *Durcheinander* does not convey a reciprocal meaning, though it is encountered as a prefix in complex verbs (see 5.5.6.1).²¹ But the tendency in modern German has been to link such complex adverbials together with the respective verbs (see 2.3). Since we cannot go into any details here, suffice it to say that preposition + *einander* should best be characterized as part of the verb itself if it fills out one of its valencies, irrespective of whether it is spelt jointly with or separately from the verb stem (in the infinitive).

5.5.2 Non-locative constructions

Many prepositions can be used both with locative and non-locative meanings. No decision concerning the semantic or pragmatic relations between these domains will be made here. We shall begin with non-locative constructions.

5.5.2.1 Subject-oriented constructions. Here is an example:

- (73) a. *Er wartet auf sie, und sie wartet auf ihn.*
 ‘He waits for her, and she waits for him.’
 → b. *Sie warten aufeinander.*
 ‘They wait for each other.’

Besides *aufeinander* (meaning also ‘on(to) each other’), the following combinations exist:

- | | |
|---|--|
| (74) <i>auseinander nicht schlau werden</i> | ‘to be unable to make sense of each other’ |
| <i>füreinander leben</i> | ‘to live for each other’ |
| <i>gegeneinander</i> ²² <i>kämpfen</i> | ‘to fight against each other’ |
| <i>sich ineinander verlieben</i> | ‘to fall in love with each other’ |
| <i>sich nacheinander sehnen</i> | ‘to long for (lit. ‘after’) each other’ |
| <i>übereinander reden</i> | ‘to talk about each other’ (<i>über</i> = lit. ‘above’) |
| <i>voneinander erzählen</i> | ‘to tell stories about each other’ |
| <i>voreinander Angst haben</i> | ‘to be afraid before each other’ |
| <i>zueinanderstehen</i> | ‘to stick to each other.’ |

21. It can, though, be encountered as a trivial combination to denote a “reciprocal agent“ in regular passives (see also (159)).

22. The synonym *widereinander* has become obsolete.

5.5.2.2 *Object-oriented constructions.* Among the combinations listed in 5.5.2.1, only *aufeinander* and *gegeneinander* can be employed with some specific three-place transitives. This normally occurs with verbs of joining, disjoining and competition (see 8.2.2); cf.:

- (75) a. *Er hetzte Peter auf Hans und Hans auf Peter.*
 ‘He baited Peter against Hans and Hans against Peter.’
 → b. *Er hetzte sie **aufeinander**.*
 ‘He baited them against (lit. *on*) each other.’
- (76) a. *Sie wollte Gerda gegen Hans und Hans gegen Gerda ausspielen.*
 ‘She wanted to play Gerda against Hans and Hans against Gerda.’
 → b. *Sie wollte sie **gegeneinander** ausspielen.*
 ‘She wanted to play them against each other.’

But even those combinations which are not encountered otherwise with more specific causative verbs can be used with the highly productive construction *machen* ‘to make’ + predicative adjective [= three-place predicate] signalling causativity; cf.:

- (77) a. *Er machte sie **füreinander** akzeptabel.*
 ‘He made them acceptable for each other.’
 b. *Er machte sie **voneinander** abhängig.*
 ‘He made them dependent on each other.’

5.5.3 *Locative constructions*

More than half of all underived locative prepositions enter into converse relations indicated by two-headed arrows below (6 pairs where 3 units correspond to 2 each). These relations are preserved in reciprocal constructions with *einander*, regardless of whether they denote location or directed movement; cf.:

- (78) a. ***untereinander*** ‘under/below each other’ $\left\{ \begin{array}{l} \rightarrow \text{a.} \text{ } **aufeinander** \text{ ‘onto each other’}^* \\ \rightarrow \text{a.} \text{ } **übereinander** \text{ ‘above each other’}^{**} \\ \rightarrow \text{b.} \text{ } **hintereinander** \text{ ‘behind each other’} \end{array} \right.$
- b. ***voreinander*** ‘in front of each other’ $\left\{ \begin{array}{l} \rightarrow \text{b.} \text{ } **nacheinander** \text{ ‘after each other’} \\ \rightarrow \text{c.} \text{ } **voneinander** \text{ ‘away from each other’} \end{array} \right.$
- c. ***zueinander*** ‘towards each other’ $\left\{ \begin{array}{l} \rightarrow \text{c.} \text{ } **voneinander** \text{ ‘away from each other’} \\ \rightarrow \text{c.} \text{ } **auseinander** \text{ ‘away from each other.’} \end{array} \right.$

* With direct contact.

** Direct contact not necessary.

There are only 5 combinations without converse counterparts:

- (79) ***aneinander*** ‘(tightly) at/on each other’ (contact necessary)
beieinander ‘near to/at/besides each other’ (direct contact not necessary)
ineinander ‘one into the other’
nebeneinander ‘besides each other’ (without direct contact)
zwischeneinander ‘between each other.’

Zwischeneinander can be used only with regard to objects of a toothed form, i.e. consisting of parts which can mutually be dovetailed (e.g. *Die Zahnräder griffen zwischeneinander*. 'The cog-wheels came together'). This unit is rare and can most often be replaced by *ineinander*. Note that *ineinander* 'one into the other' and *auseinander* 'away from each other' are not converses of each other, contrary to the simple prepositions *in* vs. *aus* (see 5.5.5.1).

5.5.3.1 Subject-oriented constructions. An example of a regular converse relation with reciprocal combinations is the following:

- | | | | |
|------|----|-----------------------------|-------------------------------|
| (80) | a. | <i>auf jmdn zugehen</i> | 'to go towards sb' |
| | → | <i>aufeinander zugehen</i> | 'to go towards each other' |
| | ↔ | b. <i>von jmdm weggehen</i> | 'to go away from sb' |
| | → | <i>voneinander weggehen</i> | 'to go away from each other.' |

As an example of a reciprocal combination without a converse counterpart cf.:

- (81) *Hans und Maria saßen nebeneinander.* 'Hans and Mary sat next to each other.'

With *umeinander* 'around each other' a locative prefix (or adverb) has to be added; cf.:

- | | | | |
|------|----|---------------------------------|-----------------------------|
| (82) | a. | * <i>um jmdn gehen</i> | (intended meaning as (82b)) |
| | → | b. <i>um jmdn herumgehen</i> | 'to go around sb' |
| | → | c. <i>umeinander herumgehen</i> | 'to go around each other.' |

5.5.3.2 Object-oriented constructions. Object-oriented counterparts to the constructions just mentioned can be formed regularly with the causative counterparts of motion verbs, such as (*hin*)*stellen* 'to put upright', (*hin*)*legen* 'to lay (down)', (*hin*)*setzen* 'to seat/make sb sit (down)'; cf. (*weg* in (83) means 'away from'):

- | | | | |
|------|----|--|--|
| (83) | a. | <i>Er zog die Kästen von der Wand weg.</i> | 'He pulled the boxes away from the wall.' |
| | → | b. <i>Er zog beide Kästen voneinander weg.</i> | 'He pulled both boxes away from each other.' |

The separable prefix *hin-* bears a vague meaning of 'directed towards (sth)'. By saying 'causative' we shall have in mind lexical causatives.

5.5.4 Reciprocals of converse bases

Relations denoted by these reciprocals belong to the periphery of reciprocity since they hold between a whole set of referents constituting a group (agglomerate) in which most of the members do not stand in direct contact to each other and, thus, do not enter into a really symmetrical relationship (cf. Lichtenberk 1985:24ff.; Kemmer 1993:100f.). For this reason such relations may be called quasi-reciprocal (Otkupshchikova 1978:185) or chaining. Nonetheless, German *einander*-combinations are used to denote them in the same way as they denote reciprocity proper. (For chain relations in the temporal domain see 10.3 below).

5.5.4.1 *Subject-oriented constructions.* Similarly to symmetrical locative constructions, some *einander*-combinations denoting chain relations can be paired as converses; these are:

- (84) a. *übereinander* ‘above each other’ ↔ *untereinander* ‘under each other’
 b. *aufeinander* ‘onto each other’ ↔ *untereinander* ‘under each other’
 c. *hintereinander* ‘after each other’ ↔ *voreinander* ‘before each other’, e.g.:
- (85) a. *Die Bücher lagen über den Zeitschriften.* ‘The books lay on the journals.’
 → b. *Die Bücher lagen übereinandergestapelt.* ‘The books lay heaped onto one another.’

Aufeinander can be used as a synonym of *nacheinander* denoting temporal succession (see 10.3). *Hinter-* and *voreinander* do not always behave as real converses, since one cannot say (86b):

- (86) a. *Die Schlepper fahren vor den Segelbooten.*
 ‘The tug-boats drove in front of the sailboats.’
 → b. *Die Schlepper und die Segelboote fahren *voreinander.*
 ‘The tug-boats and the sailboats drove one before the other.’

Instead, *hintereinander* has to be used. This reflects a more general restriction, since the same holds for English ‘to precede’ compared with ‘to follow’ (cf. Kemmer 1993:256, fn. 64; see also 10.3). It is, however, possible to use *voreinander* (as well as *hintereinander*), with a slight change of perspective, if the local particle *her* (‘towards sb/sth’) is added:

- c. *Die Schlepper und die Segelboote fahren voreinander her.*
 ‘The tug-boats and the sailboats proceeded one in front of the other.’

Lack of genuine converseness has already been stated for *in-* and *auseinander* (5.5.3).

5.5.4.2 *Object-oriented constructions.* All combinations listed in 5.5.4.1 can be employed in object-oriented reciprocal constructions on the same conditions as symmetric locative reciprocals (see 5.5.3.2); cf.:

- (87) a. *Die Arbeiter legten die Heuballen auf den Wagen.*
 ‘The workers put the bales on top of the car.’
 → b. *Die Arbeiter legten die Heuballen aufeinander.*
 ‘The workers put the bales on top of each other.’

It should be noted that in causative constructions the restriction on *voreinander*, which has been stated for subject-oriented constructions, is less rigid. Compare (86) and (88):

- (88) a. *Die Techniker koppelten die Schlepper vor die Segelboote.*
 ‘The technicians connected the tug-boats to the front of the sailboats.’
 → b. *Die Techniker koppelten die Schlepper und die Segelboote voreinander.*
 ‘The technicians connected the tugs-boats and the sailboats to each other.’

5.5.5 *Non-trivial (“non-reversible”) derivative relations*

Some units consisting of *einander* and a fronted preposition bear idiosyncratic meanings, because they either do not denote a proper reciprocal relationship or their meaning cannot

be derived directly from the preposition and *einander*. Contrary to the above combinations, none of the items in this subsection can be replaced by the reciprocal construction *eine(r) den/die andere(n)* (see Section 6).

5.5.5.1 *Constructions with productive combinations.* These are represented by two items:

- (89) a. *durcheinander* lit. 'through each other'
 b. *auseinander* lit. 'out of each other.'

Unlike *zwischeneinander* (see 5.5.3), *durcheinander* establishes only one set of haphazardly co-located objects without any (obvious) reciprocal notion. It therefore refers to any chaotic, improper state of a collective entity. Compare an example of a subject-oriented construction:

- (90) a. *Im Kinderzimmer lagen alle Spielsachen durcheinander* (= *verstreut auf dem Boden*).
 'In the children's room all toys lay scattered around (= in disorder on the floor).'

In colloquial speech it is often used to denote a distracted state of mind:

- b. *Hans ist vollkommen durcheinander* (= *kann keinen klaren Gedanken fassen*).
 'Hans is absolutely confused (= doesn't have any clear thoughts).'

And it serves as a prefix of causative verbs denoting actions (or behaviour) that lead to a disorderly state; cf. the following object-oriented sentence:

- c. *Die neue Verwaltung brachte alles durcheinander* (= *in Unordnung*).
 'The new administration turned everything upside down.'

The meaning of *auseinander* is best captured as an antonym of *zusammen*, but not of *ineinander* 'one into the other' (see 5.5.3); cf.:

- (91) a. *Sie setzten sich auseinander.* 'They sat down at different places'
 ↔ b. *Sie setzten sich zusammen.* 'They gathered and sat down'
 c. **Sie setzten sich ineinander.* *'They sat (down) into one another.'

5.5.5.1.1 *Subject-oriented complex verbs.* The following items can be named as typical representatives of intransitive *durcheinander*-verbs (for an example see (90a)):

- (92) *durcheinanderlaufen* 'to run in different directions (without aim)'
durcheinandergeraten 'to get disordered'
durcheinanderpurzeln 'to get thrown around/about.'

An example for *auseinander*-:

- (93) a. *auseinanderfallen* 'to fall to pieces'
 b. *Das Gerüst fiel auseinander.* 'The scaffolding went tumbling down.'

Other typical verbs are:

- (94) *auseinanderfließen* 'to flow out in different directions'
auseinanderfliegen 'to fly in different directions; to explode.'

5.5.5.1.2 *Object-oriented complex verbs.* *Durcheinander-* has been illustrated by *durcheinanderbringen* ‘to cause confusion’ in (90c). Other verbs are:

- (95) a. *durcheinanderschütteln* ‘to mix sth by shaking up’
 b. *durcheinanderwerfen* ‘to scatter sth around’
 c. *durcheinanderwehen* ‘to scatter sth by blowing.’

The examples show that *durcheinander-* often changes the meaning of transitive verbs by adding, roughly speaking, the resultative sense of disorder achieved by the action named by the base verb (cf. *schütteln* ‘to shake up’ and (95a)) and often involving transitivity (cf. *wehen* ‘to blow’ and (95c) and (96b)). (The component *durcheinander-* behaves like many other verbal components with the initial spatial meaning, in particular *weg-*, *hinaus-*, *heraus-*, *hinunter-*, etc.; see, for instance, Nedjalkov 1961b:81–3, 101, 104–5). Compare:

- (96) a. *Der Wind wehte durch das Tal.*
 ‘The wind blew through the valley.’
 → b. *Der Wind wehte die losen Blätter und Äste durcheinander.*
 ‘The wind scattered the leaves and boughs all over the ground.’

An example of derived *auseinander-*verbs is the following:

- (97) *Sie nahm die Schachteln auseinander.* ‘She took the boxes apart.’

Here are some more verbs with this morpheme:

- (98) *auseinanderbiegen* ‘to bend straight’
auseinandersetzen ‘to set apart’
auseinanderschneiden ‘to cut apart.’

5.5.5.2 *Miteinander* ‘with each other’. From a morphological point of view, *miteinander* has to be considered as a combination of comitative and reciprocal. It has this meaning in all cases when it does not occupy a valency slot of the respective predicate; e.g.:

- (99) a. *Erika ging mit Peter zur Schule.* = *Peter ging mit Erika zur Schule.* (comitative)
 ‘Erika went to school with Peter.’ ‘Peter went to school with Erika.’
 → b. *Erika und Peter gingen miteinander zur Schule.* (reciprocal from comitative)
 ‘Erika and Peter went to school together.’

(99b) implies both temporal and spatial simultaneity. In its second function *miteinander* serves to indicate reciprocal arguments; e.g.:

- (100) a. *Erika machte sich mit Peter bekannt.* = *Peter machte sich mit Erika bekannt.*
 ‘Erika became acquainted with Peter.’ ‘Peter became acquainted with Erika.’
 → b. *Erika und Peter machten sich miteinander bekannt.*
 ‘Erika and Peter got (lit. ‘made themselves’) acquainted with each other.’

In the first, comitative, function (see (99b)) *miteinander* is readily replaceable by *zusammen* or *gemeinsam* ‘together’ (see 7.3). In the second function (see (100b)) it cannot be replaced by the latter two adverbs.

If, however, some lexical reciprocals are used in a simple (not discontinuous) construction where both participants are named by the subject, the (optional) *miteinander* can be replaced by the (likewise optional) lexemes *zusammen* or *gemeinsam*.

- (101) a. *Sie unterhielten sich miteinander / zusammen.*
 ‘They talked with each other / together.’
 b. *Sie haben miteinander / zusammen angestoßen.*
 ‘They clinked glasses.’

As an adverbial, *miteinander* has become lexicalized in the meaning of *insgesamt* ‘altogether’, though in this function it has to be regarded archaic or dialectal; cf.:

- (102) *Alcestens Geld, das er nicht lang erhielt, ist miteinander fort.* (Goethe)
 ‘Alcesten’s money, which he didn’t preserve for a longer time, has totally disappeared’ (lit.: ‘... is altogether off’).

In this meaning *miteinander* has been used since ancient times, as testified by Jelinek (1911: 187).

Furthermore, only *miteinander*, contrary to *untereinander* (see 5.5.5.4), is used in some Southern German varieties as part of greeting formulae, e.g.: *Grüß Gott, miteinander!* (= *zusammen*) ‘Hi, everybody!’.

5.5.5.3 *Beieinander* ‘at each other = together’. In this context *beieinander* (*beieinand*’) and *beisammen* can also be encountered (cf. the entry on *zusammen* in WdG, Vol. 6, 1977: 4511). The comitative meaning of both *mit-* and *beieinander* is quite old and may well have preceded proper reciprocal meanings (cf. ample examples in Grimm & Grimm 1854: 1367f., 1862: 143, 1885: 2337).

5.5.5.4 *Untereinander* ‘among each other’. This adverb is more restricted than *miteinander* because it bears a clear meaning of exclusiveness. This is due to the semantics of the preposition *unter* in the meaning ‘among’, and the reader is referred to Subsection 7.4, since all that can be said about the discontinuous *unter sich* ‘among + RM’ holds for *untereinander*, too. The following example from M. Luther’s translation of the Gospel is of interest in which *sich* is used together with *untereinander*:

- (103) “... so sollen wir uns auch untereinander lieben.” (1. Joh. 4, 11)
 ‘... we in turn are bound to love one another.’

5.5.5.5 *Lexicalized compound verbal units.* The following lexicalizations can be listed:

- (104) a. *aneinandergeraten* = *in Streit geraten* ‘to rub one another the wrong way’
 b. *Leitungen nebeneinanderschalten* = *parallelschalten* ‘to lay parallel switches’
 c. *sich (mit etwas) auseinandersetzen* = *sich beschäftigen* ‘to deal with sth seriously’
 d. *seine Gedanken beieinander haben* ‘to think clearly.’

There is furthermore an adverb *hintereinanderweg* ‘(fast) one after the other’, which can be used with verbs of motion and, even better, with verbs of speech. It entails a notion of distributiveness and of rapid or fluent speed; e.g.:

- (105) *Er listete alle Teilnehmer hintereinanderweg auf.*
 ‘He named all participants rapidly one after the other.’

This adverb is morphologically isolated since no other combinations of this kind are attested.

6. The phrase *einer den anderen* ‘one the other’

This is a cover phrase for the following phrases marked for gender and case: *einer den anderen* (= SG.M.NOM – SG.M.ACC) and *eine die andere* (= SG.F.NOM – SG.F.ACC). This marker of reciprocity is peculiar inasmuch as it can be used productively with all the oblique cases and readily permits prepositions to be included. But nonetheless it cannot be considered a grammaticalized marker (see below). It is not properly discontinuous since it repeats the syntactic status of the subject-NP and only “spells out” what has already been encoded by the latter. Like *einander*, which has developed from this syntactic marker (see 5.2), this phrase does not combine with *sich* in normative standard speech. It is often encountered in dictionary explications of reciprocal verbs or of combinations of the type discussed in 5.5. But on the textual level it is employed to a much lesser extent than the markers already presented. It can, though, be preferred for emphasis (see 6.2). Therefore, without some special context, sentences like the following appear to be quite unusual, albeit acceptable:

- (106) a. *Die Hunde bellten einer den anderen an.*
 the dogs barked one.SG.M.NOM the other.SG.M.ACC at.PREF
 ‘The dogs barked at one another.’ (two-place transitive)
- b. *Sie übermittelten einer dem anderen Neuigkeiten.*
 they conveyed one.SG.M.NOM the other.SG.M.DAT news
 ‘They conveyed news to each other.’ (three-place transitive)

The same holds for the other diathesis types dealt with in Section 4.

Note that both components are marked for the same gender and number and, if used in a subject-oriented construction, the first component is always in the nominative (cf. (106)). Object-oriented constructions seem principally possible, but sound artificial and may not be accepted by many native speakers; cf.:

- (107) [?]*Er machte sie einen mit dem anderen bekannt.*
 ‘He introduced them to each other.’

6.1 As grammatical subject (independent nominative)

That *einer den anderen* is but a semi-grammaticalized marker of reciprocity can be demonstrated if we look at what happens when it does not repeat a subject-NP and is

split up into a normal subject-object construction (see also (190b)). In such a case the meaning of the sentence becomes potentially ambiguous, since it need not denote a really symmetrical relationship between the two participants; cf.:

- (108) a. *Einer blaffte den anderen an.* ‘One shouted at the other’
 b. *Eine sah erschrocken auf die andere.* ‘One (woman) looked fearfully at the other.’

6.2 As a syntactically desintegrated marker

Native speakers’ judgements about the acceptability of *einer den anderen* vary considerably. It certainly sounds natural rather as a kind of afterthought (right dislocation), i.e. if it is prosodically disconnected from the preceding sentence and serves to accentuate a reciprocal relation. Thus, one can hear say:

- (109) *Sie reizten ↓ sich, einer den anderen ↓*
 they irritated.PL RM ONE.NOM.M ART.ACC.M OTHER.ACC.M
 ‘They irritated each other, one the other one.’

7. Verbs with locative reciprocal prefixes

In this section we will discuss lexically reciprocal morphemes that are often incorporated into the verb, but which can also be used as adverbs. As was noted in 2.3 and 5.5.1, many such morphemes in German “oscillate” between these two statuses.

7.1 With *entgegen-* ‘from the opposite side’ and *gegenüber-* ‘vis-à-vis’

Both morphemes are used as adverbs and verbal prefixes as well, the latter specifying location on two opposite sides (cf. (110); Eroms 1981:167), the former indicating motion towards one another (cf. (111)). In standard cases they encode more or less symmetrical (reciprocal) relations and are used in discontinuous constructions; cf.:

- (110) a. *Das Paar tanzte uns gegenüber.* ‘The pair danced opposite to us.’
 b. *Er saß ihr gegenüber. = Sie saß ihm gegenüber.*
 ‘He sat opposite to her. = She sat opposite to him.’
 (111) a. *Das Paar tanzte uns entgegen.* ‘The pair moved dancing towards us.’
 b. *Er ging ihr entgegen.* ‘He went towards her.’

There is an internal difference of degree of natural reciprocal implicature in these sentences, (110b) being the most natural one. The reason lies in the fact that *entgegen* and *gegenüber* do not specify what is happening with the counterpart. He/she/it may be totally passive (static), so that verbs of location normally render totally symmetrical situations, while verbs of motion do not entail a necessarily reciprocal relationship.

With plural subjects, reciprocal standard constructions with the RM *sich* (Section 4) or *einander* (5.3) are used; the bulk of the verbs belong to the intransitive subtype of “canon-

ical” reciprocals (4.2.2) (e.g., *Sie tanzten einander/sich entgegen* ‘They danced towards each other’).

Verbs with the prefix *entgegen-* are considerably more numerous than verbs prefixed with *gegenüber-* (70:7). Of each verb type only the smaller part, though, represents lexically symmetrical items, namely 14 for *entgegen-*, of which most are verbs of rather unspecified motion (e.g., *entgegenfahren* ‘to drive towards’, *entgegenkommen* ‘to come towards’ or the autocausative *sich entgegenbewegen* ‘to move towards’), and 3 for *gegenüber-*, all of them derived from base verbs of location (*gegenüber-liegen*, *-sitzen*, *-stehen* ‘to lie, sit, stand opposite to’). There is a semantic continuum from these necessarily symmetrical verbs to verbs prefixed with *entgegen-* which encode a totally non-symmetrical situation, e.g. (*einer Prüfung*) *entgegenbängen* ‘to be anxious about a test’, (*ein Geschenk*) *entgegennehmen* ‘to receive a present’.

7.2 With *zusammen* ‘from different directions towards each other’, ‘joint identical actions’

In one of its functions the morpheme *zusammen* serves as a prefix to derive subject- and object-oriented lexical reciprocals (see 8; compare Lithuanian verbs on *su-* and *susi-* in Geniušienė (Ch. 14, §5.2) and Polish verbs on *z(e)-* + *się* (Wiemer (Ch. 11, §8.4)). It is noteworthy that only about half (i.e. 87) out of 160 verb lexemes with this prefix which are attested in the dictionaries encode a proper reciprocal meaning, with the generalized meaning ‘to come/bring (put) together’. With these verbs there is, for sure, a continuum ranging from genuinely reciprocal meanings, e.g. (*die Hände*) *zusammenfalten* ‘to fold one’s hands’, to nearly lexicalized non-reciprocal meanings, e.g. (*einen Text*) *zusammenfassen* ‘to summarize’. The degree of a verb’s ability to denote a reciprocal event is quite clearly dependent on the referential status of its arguments, in particular, with object-oriented lexical reciprocals: they name an object created of parts vs objects manipulated together; cf. respectively: (*das Mosaik*) *zusammenfügen* ‘to fit together (the mosaic)’ vs. (*die Steine*) *zusammenfügen* ‘to fit together (the stones)’. These verbs can occur both in simple and discontinuous constructions; cf.:

- (112) a. *Elsie vermischte das Mehl und den Zucker.*
 ‘Elsie mixed up the flour and the sugar.’
 b. *Elsie vermischte das Mehl mit dem Zucker.*
 ‘Elsie mixed the flour with the sugar.’

These patterns are highly productive, i.e. one can encounter numerous occasional and tautological verbs (e.g., *zusammen|addieren* ‘to add together’, *zusammen|sammeln* ‘to gather together’).

7.2.1 Subject-oriented lexical reciprocals

There are 42 items of this type in our corpus. Here belongs a subgroup of 17 items, which can, in turn, be subdivided into verbs conveying a notion of ‘meeting’ (e.g. *zusammen-treffen* ‘to meet’) and verbs with a general meaning of ‘harmonizing’ (e.g. *zusam-*

menpassen 'to fit, suit each other'). They derive from one-place (see (113)) or two-place verbs (see (114)); e.g.:

- | | | | | |
|-------|----|--|---|---|
| (113) | a. | <i>fließen</i> 'to flow' | → | <i>zusammenfließen</i> 'to flow together' |
| | b. | <i>stimmen</i> 'to be true/in concord' | → | <i>zusammenstimmen</i> 'to agree' |
| | c. | <i>wachsen</i> 'to grow' | → | <i>zusammenwachsen</i> 'to grow together.' |
| (114) | a. | <i>geraten</i> 'to get into' | → | <i>zusammengeraten</i> 'to clump together' |
| | b. | <i>kommen</i> 'to come' | → | <i>zusammenkommen</i> 'to assemble, gather' |
| | c. | <i>treten (in)</i> 'to enter (into)' | → | <i>zusammentreten</i> 'to assemble.' |

A larger subgroup of verbs prefixed with *zusammen-* (25 items) does not show a proper reciprocal meaning. On the periphery of reciprocity we can locate verbs denoting some kind or other of diminishing. These can be subdivided into two small sets of items:

1. Verbs with the meaning of shrinking, e.g.:

- | | | |
|-------|---------------------------|----------------------|
| (115) | <i>zusammenschrumpfen</i> | 'to shrink together' |
| | <i>zusammenlaufen</i> | 'to shrink.' |

2. Verbs referring to natural reactions of fear, fright, e.g.:

- | | | |
|-------|-----------------------|------------------------|
| (116) | <i>zusammenfahren</i> | 'to start with fright' |
| | <i>zusammenzucken</i> | (the same). |

Semantically related verbs bear a generalized meaning of crashing down, e.g.:

- | | | |
|-------|-------------------------|-----------------|
| (117) | <i>zusammenbrechen</i> | 'to break down' |
| | <i>zusammenstürzen.</i> | 'to fall down.' |

These verbs are not included in the subgroup of 17 verbs noted above. With proper reciprocal verbs they share, however, the semantic feature of 'motion directed from the edges to the centre'. Finally, there are verbs with a mere sociative meaning, e.g.:

- | | | |
|-------|-----------------------|--------------------|
| (118) | <i>zusammenwohnen</i> | 'to live together' |
| | <i>zusammenwirken</i> | 'to act jointly.' |

With verbs of this latter group the prefix *zusammen-* can often be replaced by *miteinander-* 'with each other' (see 5.5.5.2). For the statistics see below.

7.2.2 Object-oriented lexical reciprocals

This group is considerably larger and comprises about 118 verbs. These are derived from two-place (see (119)) or three-place base verbs (see (120)); e.g.:

- | | | | | |
|-------|----|-------------------------------|---|--|
| (119) | a. | <i>knoten</i> 'to tie a knot' | → | <i>zusammenknoten</i> 'to tie sth together' |
| | b. | <i>leimen</i> 'to glue' | → | <i>zusammenleimen</i> 'to glue together' |
| | c. | <i>schließen</i> 'to close' | → | <i>zusammenschließen</i> 'to unite, group together.' |
| (120) | a. | <i>bringen</i> 'to bring' | → | <i>zusammenbringen</i> 'to bring together' |
| | b. | <i>legen</i> 'to put' | → | <i>zusammenlegen</i> 'to put/place together' |
| | c. | <i>stecken</i> 'to stick' | → | <i>zusammenstecken</i> 'to stick together.' |
| (121) | a. | <i>fügen</i> 'to fit, join' | → | <i>zusammenfügen</i> 'to put together' |
| | b. | <i>heften</i> 'to fasten' | → | <i>zusammenheften</i> 'to staple' |
| | c. | <i>pferchen</i> 'to push in' | → | <i>zusammenpferchen</i> 'to round up.' |

7.2.2.1 *Lexical subgroups.* Among the object-oriented verbs a number of lexical subgroups can be distinguished.

1. Verbs denoting causation of direct contact without its fixation (4 items only); e.g.:

- (122) a. (*die Zähne*) *zusammenbeißen* 'to clench one's teeth'
 b. (*zwei Gläser*) *zusammenstoßen* 'to knock (two glasses) together.'

2. Verbs of connecting (see 9.1), which are the most numerous ones, including:

2a. verbs denoting mere uniting of two or more objects, e.g.:

- (123) a. (*Papiere*) *zusammenheften* 'to staple together (pieces of paper)'
 b. (*Stühle*) *zusammenstellen*₁ 'to place together (chairs).'

2b. Verbs denoting bringing into existence of a new object (composed of some united parts) or repairing a broken or damaged object, e.g.:

- (124) a. (*die Hose*) *zusammenflicken* 'to patch (the pants) together'
 b. (*einen Blumenstrauß*) *zusammenstellen*₂ 'to make a bouquet.'

2c. Verbs that may have either of these meanings, e.g.:

- (125) a. (*ein Haus / die Wände*) *zusammenbauen* 'to build (a house)/connect (the walls)'
 b. (*einen Strauß / Blumen*) *zusammenbinden* 'to tie (a bouquet / the flowers) together.'

3. Verbs denoting causation of diminution; here some subgroups can be named:

3a. Verbs referring to two or more distinct objects, these objects often being parts of a larger, integral object, e.g.:

- (126) a. (*zwei Brote*) *zusammenklappen* 'to put (two bread slices) together.'
 b. (*Bücher*) *zusammenrücken* 'to push together (books).'

3b. Verbs denoting the diminishing of an object by folding, rolling or pressing it, e.g.:

- (127) a. (*einen Teppich*) *zusammenrollen* 'to roll up (a rug)'
 b. (*die Faust*) *zusammenballen* 'to ball (the fist).'

4. Verbs with a generalized meaning of gathering, assembling sth, e.g.:

- (128) a. (*Blätter*) *zusammenfegen* 'to sweep (the leaves) together'
 b. (*Geld*) *zusammensparen* 'to save up (money).'

The order of these subgroups, from 1 to 4, roughly reflects a decrease of the prototypical reciprocal meaning. From a semantic viewpoint groups 3 and 4 are peripheral. Beside these groups, among verbs prefixed with *zusammen-* at least two more can be figured out which are more or less void of a reciprocal meaning and which do not belong to the 160 verbs mentioned in 7.2.

5. Verbs denoting actions that lead to demolition, damaging or harming, e.g.:

- (129) a. (*jmdn*) *zusammenschießen* 'to shoot down'
 b. (*jmdn*) *zusammenstauchen* 'to beat down.'

Table 5. Lexical subgroups of verb lexemes prefixed with *zusammen-*

5.1. Subject-oriented (7.2.1)						
'harmonize'	'meet'	'shrink'	'crash down'	sociative	Total	
5	12	9	4	10	40	
5.2. Object-oriented (7.2.2.1)						
contact without fixation	'connect'	'gather'	'diminish'	'demolish'	disorderly actions	Total
4	35	26	22	10	16	113

6. Verbs referring to actions done without order or sloppily, e.g.:

- (130) a. (*etwas wahllos*) *zusammenschreiben* 'to write something up (blindly)'
 b. (*sich etwas*) *zusammenlügen* 'to fabricate lies.'

Subgroup 5 is represented only by a few verbs, while subgroup 6 belongs to the most prolific ones in colloquial speech.

Table 5 summarizes the distribution of the lexical subgroups considered in 7.7.1 and 7.7.2.

There are 2 subject-oriented (*sich zusammenkauern* 'to huddle up', *sich zusammensetzen* 'to sit down together') and 5 object-oriented verbs (e.g., *sich zusammennehmen* 'to pull oneself together', which is semantically irreversible since *zusammennemen* means 'to take together') which can be used only with the RM and/or are lexicalized. Altogether we obtain 42 subject-oriented + 118 object-oriented verb items.

7.3 Markers of collective actions with reciprocals (the adverbs *zusammen*, *gemeinsam* 'together, jointly')

These two adverbs are almost totally synonymous. They may be optionally employed with inherently reciprocal verbs and cannot differentiate between reciprocal and comitative meaning (see 5.5.5.2). *Gemeinsam*, but not *zusammen* can be used to stress joint action if the subject of the sentence (i.e. the first argument) denotes a collective referent (irrespective of grammatical number); cf.:

- (131) *Die Gruppe versammelte / traf* (SG) *sich* [*gemeinsam*, **zusammen*] *im Restaurant*.
 'The group gathered / met [+ *gemeinsam*, **zusammen*] in the restaurant.'
 (132) *Alle versammelten / trafen* (PL) *sich* [*gemeinsam*, **zusammen*] *im Restaurant*.
 'All (people) gathered / met [+ *gemeinsam*, **zusammen*] in the restaurant.'

With the comitative meaning there seem to be no restrictions; cf.:

- (133) *Olaf ging* [*gemeinsam*, *zusammen*] *mit Renate ins Restaurant*.
 'Olaf went to the restaurant [together] with Renate.'

7.4 “Reciprocal exclusiveness” of *unter* ‘among’

The preposition *unter* has a primarily spatial meaning ‘under’. But with lexical reciprocals it can also be used to mean ‘among’. In comparison to *mit* ‘with’ (see 8.1) it adds a clear sense of exclusiveness (cf. Brinkmann 1971:174; Reiter 1975:206); e.g.:

- (134) *M. und L. berieten unter sich / untereinander* (was zu tun war).
 M. and L. counseled among themselves / among each other what to do
 ‘Max and Lisa counselled with one another (what to do).’

Unter cannot be used with non-reciprocal predicates, probably the only exception being existential and state verbs like *sein* ‘to be’ or *sitzen* ‘to sit, be seated’; cf. (in (135) *untereinander* could have only a locative reading ‘one higher than the other’):

- (135) *Max und Lisa waren / saßen unter sich / *untereinander.*
 ‘Max and Lisa were / sat alone (spending their time together).’

From a diachronic viewpoint *unter* (*under*) acquired its contemporary meaning only at the beginning of the New High German period (15th–16th centuries). Notker and Heliand (9th–10th centuries) used *undor tuisk* (lit. ‘among two’) in the meaning of *untereinander* ‘among each other’ (Behaghel 1924:32; Grimm & Grimm 1954, Vol. 16:1321ff.). For the Middle High German period Lexer (1876:1777) and Benecke et al. (1963:187) give meanings of *under* as ‘in the midst of’ or ‘in between’ (e.g. *under den Zeiten* = *manchmal* ‘from time to time, sometimes’; as for *untereinander* cf. the example from M. Luther *under* (103)). Even more interesting, *under* could be used together with *sich* indicating reciprocity (Benecke et al. *ibid.*).

7.4.1 Extinct reciprocal meaning of the prefix *under* ‘among’

Furthermore, at that time *under* was productive as a prefix ascribing a reciprocal meaning. In Lexer (1876:1179–814, 1969:246–49), Jelinek (1911:753–60), Pretzel et al. (1959:47) and Benecke et al. (1963:187) 51 reciprocal verbs prefixed with *under-* are registered. Among them slightly more than half (i.e. 29) are accompanied by the RM *sich*; e.g.:

- (136) *sich underbâgen* ‘to brawl’
sich underbrîzen ‘to bite one another’
sich undergrüezen ‘to greet each other’
sich underkennen ‘to know each other’
sich underkösen ‘to talk (with each other)’
sich underminnen ‘to love each other’
sich undersêhen ‘to look at each other.’

The remaining 22 verbs did not take the RM, regardless of whether they were transitive (see (137)) or intransitive (see (138)):

- | | | |
|-------|----------------------|--|
| (137) | <i>undergöben</i> | ‘to give sth to each other’ |
| | <i>undermengen</i> | ‘to mix sth with each other’ |
| | <i>underschicken</i> | ‘to separate sth’ |
| | <i>undervarn</i> | ‘to make sth different’ |
| | <i>undervrâgen</i> | ‘to ask each other.’ |
| (138) | a. <i>underreden</i> | ‘to counsel (with each other)’ |
| | b. <i>understân</i> | ‘to have intercourse (with each other).’ |

In contemporary German only remnants of this quite productive pattern have survived, e.g. the lexical reciprocal *unterscheiden* ‘to distinguish’, the lexicalized reflexive *sich unterhalten* ‘to talk (with each other)’ and some derived nouns (e.g. *Unterredung* ‘counselling session’, compare with (138a)).

8. Lexical reciprocals

In German the highly polysemous preposition *mit* ‘with’ (Eroms 1981:327ff.) can serve to mark the syntactically subordinate member of a reciprocal relationship, but only with lexical reciprocals. Beside *mit*, only occasionally the prepositions *gegen* ‘against’ and *von* ‘from, off’ (see 9.2) can be encountered in this function, depending on the syntactic valencies of a particular verb. Because of the polysemy of *mit* (it also broadly expresses comitativity; cf. Seiler 1974:37f.; see 5.5.5.2), it cannot be regarded as a *grammatical* marker of reciprocity. Therefore, discontinuous constructions, with the subject-NP (first argument) in the singular, cannot be connected with simple constructions beyond quite limited semantic sets of verbs. One such set has already been discussed in 4.7. Others will be treated in the following subsections; for some details concerning particular verbs the reader is referred to Wandruszka (1969:448ff., 1973), Stötzel (1970:197f.), Eroms (1976:228ff., 1981:375ff.) and Kunze (1995:28ff.).

8.1 Two-place intransitive reciprocals (verbs with *mit* ‘with’)

8.1.1 Verbs without *sich*

They readily occur in discontinuous constructions; e.g.:

- | | | | | |
|-------|----|---|--|-----------------------------------|
| (139) | a. | <i>Er rang (*sich) mit ihr um den Sieg.</i> | ‘He competed with her for victory.’ | |
| | = | b. | <i>Sie rangen (*sich) beide um den Sieg.</i> | ‘They both competed for victory.’ |

It is an open question whether these verbs are to be treated as two- or three-place; but its solution does not hinge upon the character of reciprocal expression. (The same holds for verbs in 8.1.2.) Here is the probably entire list of this subgroup; most of them share the general meaning of competition, and some communication:

- | | | |
|-------|--------------------|--------------|
| (140) | <i>diskutieren</i> | ‘to discuss’ |
| | <i>fechten</i> | ‘to fence’ |
| | <i>kämpfen</i> | ‘to fight’ |

<i>kommunizieren</i>	‘to communicate’
<i>konkurrieren</i>	‘to compete/rival’
<i>korrespondieren</i>	‘to have correspondence (with each other)’
<i>ringen</i>	‘to compete/wrestle’
<i>rivalisieren</i>	‘to rival’
<i>verhandeln</i>	‘to negotiate’
<i>wetteifern</i>	‘to compete/take part in a competition.’

8.1.2 Verbs with optional *sich*

Semantically close to the previous subgroup is a small number of verbs which do occur with the *mit*-phrase, but do not necessarily take an additional reflexive pronoun; cf.:

- (141) a. *Er zankte [sich] mit ihr.* ‘He quarrelled with her.’
 = b. *Beide zankten [sich].* ‘Both quarrelled (with each other).’

Here is a list of these verbs:

- (142) *abwechseln* ‘to alter (= be altered by each other)’
balgen ‘to wrestle (in a playful manner, pleasantly)’
beraten ‘to counsel (with each other)’
boxen ‘to box’
raufen ‘to wrestle’
streiten, zanken ‘to quarrel/brawl’
überlappen ‘to crosscut.’

Almost all of these verbs share a notion of *competition*, with the exception of *beraten* and *überlappen*. The latter verbs, together with *abwechseln* and *boxen*, are also peculiar in that they can be used in the singular in an ordinary transitive diathesis (cf. the meaning shift hinted at in 4.7). They are then void of any reciprocal meaning; cf.:

- (143) a. *Hans beriet Peter.* ≠ *Peter beriet Hans.*
 ‘Hans counseled Peter.’ ≠ ‘Peter counseled Hans.’
 b. *Hans beriet [sich] mit Peter.* = *Peter beriet [sich] mit Hans.*
 ‘Hans counseled with Peter.’ = ‘Peter counseled with Hans.’

8.2 Three-place reciprocals

Object-oriented reciprocal relations can be expressed only by a relatively small number of verbs (about 50 items). But there are surely more than these 50 verbs if we take into consideration all the compound verbs with “reciprocal prefixes” like *auseinander-*, *zusammen-* etc., which were discussed in 5.5, 7.1–7.2. Three-place reciprocals show numerous irregularities in their derivation of recessive diatheses and in syntactic behaviour. Since it is impossible here to give an exhaustive account of all German object-oriented lexical reciprocals and their peculiarities, we shall give only the outlines viewed, first, from a syntactic and, second, from a semantic angle (8.2.1–2). Subsequently we shall analyse anticausatives (8.2.3) and, finally, give attention to one peculiar subset of verbs (8.2.4).

8.2.1 Syntactic types

Typical three-place lexical reciprocals (see 8.2.2) show no restrictions with respect to a discontinuous expression of their two objects. However, verbs of disconnecting (see 8.2.2.), focussing on splitting or dispersion of a previously integral referent (set) have to be regarded as peripheral cases of object-oriented reciprocal verbs, because they encode actions of destroying or dividing an entity and thus creating new objects which are *parts* or *portions* of the previously *whole* object. Such verbs can be used only in simple constructions, as e.g. *teilen* ‘to divide sth into separate parts or portions’:

- (144) *Er teilte das Brot in Scheiben.*
 ‘He sliced the bread into pieces.’

The meaning of the related verb *aufteilen* ‘to distribute parts or portions of sth among a number of persons’ (cf. *verteilen*, *aufteilen*) includes, as it is, a part of the above meaning and the additional component of distribution, and thus it involves two steps of “disconnecting”, which finds expression in two objects (but the construction is not discontinuous); cf.:

- (145) *Er teilte das Brot unter den Kindern auf.*
 ‘He distributed the bread among the children.’

Other verbs with the meaning of disconnecting that do not allow for discontinuous constructions are:

- | | | |
|-------|-----------------------|-----------------------------------|
| (146) | <i>antagonisieren</i> | ‘to antagonize sb’ |
| | <i>entzweien</i> | ‘to split sb up, set at variance’ |
| | (zer)spalten | ‘to cleave sth’ |
| | <i>zersplittern</i> | ‘to split sth (up)’ |
| | <i>zersprengen</i> | ‘to scatter sth’ |
| | (zer)teilen | ‘to divide sth (up)’ |
| | <i>zerreißen</i> | ‘to tear sth into pieces.’ |

There are three semantically isolated verbs which allow a simple construction only:

- | | | |
|-------|------------------------|------------------------------|
| (147) | <i>ablösen</i> | ‘to exchange, replace’ |
| | <i>versammeln</i> | ‘to assemble’ |
| | <i>zusammensammeln</i> | ‘to gather, flock together.’ |
- (148) a. *Der Rektor versammelte die Professoren und Dozenten.*
 ‘The dean assembled the professors and instructors.’
 = b. **Der Rektor versammelte die Professoren mit den Dozenten.*
 ‘The dean assembled the professors with the instructors.’

The semantic reason for the idiosyncratic behaviour of *versammeln* (148) rests on the fact that this verb denotes gathering (assembling) of objects which are just juxtaposed, but not opposed to each other (as is the case with verbs of connecting; see 8.2.2). Thus, *versammeln* turns out semantically to be two-place with one plural object (represented either by the morphological plural or by a collective noun). The same regards *zusammensammeln*.

Finally, verbs with a complex prefix containing *-einander-* (see 5.5), as a rule, also allow simple constructions only; cf.:

- (149) *Erich hat beide Hälften aneinandergefügt.*
 ‘Erik has joined together the two halves.’

This is only natural since the complex prefix by itself incorporates a “reciprocal argument”.

Apart from such “reciprocal prefixes”, but including verbs prefixed with *zusammen-* (see 7.2), the bulk of object-oriented lexical reciprocals can be used both in simple and discontinuous constructions; cf.:

- (150) a. *Hans verwechselte Erich mit Willy.* lit. ‘Hans mixed Erik up with Willy.’
 = b. *Hans verwechselte Willy mit Erich.* lit. ‘Hans mixed Willy up with Erik.’
- (151) a. *Anna tauschte die Blumen aus.*
 ‘Anna changed the flowers.’
 = b. *Anna tauschte die einen Blumen gegen die anderen aus.*
 ‘Anna changed one set of flowers with another.’

The predominant number of these verbs, in order to be used in a discontinuous construction, requires the preposition *mit* ‘with’; here belong:

- (152) *bekanntmachen* ‘to acquaint’
verbinden ‘to connect’
versöhnen ‘to reconcile’
vertauschen ‘to mix up’
zusammenbringen ‘to bring together.’

There are only a few verbs with the general meaning of ‘separating’ or ‘mutual exchange’ which require *gegen* ‘against’ (see (153)), or *von* ‘from, against’ (see (154)); e.g.:

- (153) *austauschen* ‘to exchange’
auswechseln ‘to replace.’
- (154) *abgrenzen* ‘to separate’
unterscheiden ‘to distinguish.’

Most of the verbs that allow both constructions can combine with an *-einander-* phrase, according to their syntactic valency, i.e. *mit|einander*, *gegen|einander* or *von|einander* (see 5.5).

The reciprocity marker *gegenseitig* (see 4.6) can be employed only to a very limited extent. It can be used with verbs of exchange (see (158)). But even these verbs, with the exception of *ablösen* (see (147a)), sound better with an *-einander-* phrase (*gegen-* or *mit-einander*) than with *gegenseitig*. As for the remaining bulk of lexical reciprocals, only the “comparison verbs” *abgleichen*, *abpassen*, *abstimmen* (see (160)) and the “connecting verbs” *bekanntmachen* ‘to acquaint’, *kreuzen* ‘to (inter)cross’, *verschränken* ‘to cross’ sound natural also with *gegenseitig*.

8.2.2 Semantic types

1. The most numerous and typical groups are verbs of connecting; e.g.:

- | | | |
|-------|----------------------------------|------------------------------------|
| (155) | <i>X mit/und Y vereinen</i> | ‘to unite X with/and Y’ |
| | <i>die Arme verschränken</i> | ‘to cross one’s arms’ |
| | <i>X und Y zusammenbringen</i> | ‘to bring together X and Y’ |
| | <i>zwei Apfelsorten kreuzen</i> | ‘to cross two varieties of apples’ |
| | <i>X mit/und Y bekanntmachen</i> | ‘to acquaint X with/and Y’ |

28 out of the 50 verbs mentioned above belong in this group. Among them, in turn, the most regular prefix, beside *zusammen-*, is *ver-* (25 verbs).

2. The number of verbs with the meaning of disconnecting (separating) is smaller. They are formed predominantly with the “reciprocal prefix” *auseinander-*; cf.:

- | | | |
|-------|--------------------------------------|---|
| (156) | <i>X und Y auseinanderdividieren</i> | ‘to divide X and Y (to opposite sides)’ |
|-------|--------------------------------------|---|

Only 4 verbs have been found without this prefix:

- | | | | |
|-------|----|----------------------------------|---|
| (157) | a. | <i>X und Y antagonisieren</i> | ‘to antagonize X and Y’ |
| | b. | <i>X und Y entzweien</i> | ‘to set X and Y at variance’ |
| | c. | <i>X von/und Y unterscheiden</i> | ‘to distinguish X from/and Y’ |
| | d. | <i>X mit/und Y verfeinden</i> | ‘to cause X and Y to fall out with each other.’ |

3. Somewhat differently from the “disconnecting group”, a small number of verbs can be distinguished that denote situations of competition and mutual exchange. This group consists of five verbs:

- | | | |
|-------|----------------------------------|--------------------------------------|
| (158) | <i>X und Y ablösen</i> | ‘to replace X and Y’ |
| | <i>X gegen/und Y austauschen</i> | ‘to exchange, replace X by Y’ |
| | <i>X gegen/und Y auswechseln</i> | ‘to exchange, replace X by Y’ |
| | <i>X mit/und Y vertauschen</i> | ‘to change the positions of X and Y’ |
| | <i>X mit/und Y verwechseln</i> | ‘to mix up (in mind, by mistake).’ |

The reciprocal situation encoded by *ablösen* must be interpreted as occurring repeatedly or even regularly (cf. Kunze 1992: 122, 1995: 30f.):

- | | | |
|-------|---|-------------------|
| (159) | <i>Er löste sie gegenseitig (= durcheinander) ab.</i> | (see footnote 21) |
| | ‘He replaced them by each other (regularly).’ | |

The same often holds for *auswechseln* ‘to change, replace’.

4. A further small subgroup of 6 verbs has the meaning of comparing, harmonizing or confronting two objects; these are:

- | | | |
|-------|---|---|
| (160) | <i>Version A mit Version B abgleichen</i> | ‘to compare version A to version B’ |
| | <i>Zug A auf Zug B abpassen</i> | ‘to time trains A and B’ |
| | <i>das Hemd auf das/mit dem Jacket abstimmen</i> | ‘to fit the shirt with the jacket’ |
| | <i>eine Theorie einer anderen entgegenstellen</i> | ‘to compare one theory against another’ |
| | <i>zwei Zeugen einander gegenüberstellen</i> | ‘to bring two witnesses face to face’ |
| | <i>X mit/und Y vergleichen</i> | ‘to compare X with/and Y.’ |

5. Last not least, there are 7 verbs related to matrimonial events which behave quite idiosyncratically and, therefore, will be treated separately in 8.4.

8.2.3 Anticausatives

1. Only about a dozen object-oriented lexical reciprocals show a standard derivational relation with respective anticausatives. Some of them belong only to the periphery of reciprocity. Beside the already mentioned [*sich*] *entzweien* (see (146b), (157b)) and the near synonyms *verbünden/vereinen/vereinigen* (vt) vs *sich verbünden/vereinen/vereinigen* (vi), here belong the following verbs:

- | | | | |
|-------|--|---|---|
| (161) | <i>aneinanderfügen</i> ‘to knit, set together’ | → | <i>sich aneinanderfügen</i> ‘to fit together’ |
| | <i>kreuzen</i> ‘to cross, intersect’ | → | <i>sich kreuzen</i> ‘to intersect’ (vi) |
| | <i>verbinden</i> ‘to connect’ (vt) | → | <i>sich verbinden</i> ‘to connect’ (vi) |
| | <i>verbrämen</i> ‘to mix up’ | → | <i>sich verbrämen</i> ‘to get mixed up’ |
| | <i>verfeinden</i> ‘to set at variance’ | → | <i>sich verfeinden</i> ‘to become enemies’ |
| | <i>verfransen</i> ‘to make ragged’ | → | <i>sich verfransen</i> ‘to become ragged’ |
| | <i>verhaken</i> ‘to hook up’ | → | <i>sich verhaken</i> ‘to get entangled’ |
| | <i>vermischen</i> ‘to mix’ (vt) | → | <i>sich vermischen</i> ‘to mix (up)’ (vi) |
| | <i>verrühren</i> ‘to mix’ (about liquids) (vt) | → | <i>sich verrühren</i> ‘to mix up’ (vi) |
| | <i>versammeln</i> ‘to assemble’ (vt) | → | <i>sich versammeln</i> ‘to assemble’ (vi) |
| | <i>die Arme verschränken</i> ‘to cross one’s arms’ | → | <i>sich verschränken</i> ‘to intersect’ |
| | <i>versöhnen</i> ‘to reconcile’ | → | <i>sich versöhnen</i> ‘to become reconciled’ |
| | <i>zusammenrollen</i> ‘to roll together’ | → | <i>sich zusammenrollen</i> ‘to whirl’ |

2. There are a number of other verbs which however do not show a regular semantic relationship to the derived anticausatives, since the latter do not encode the implications of the underlying causatives (as do the verbs in (161)) or they show lexical shifts. Here belong [*sich*] *unterscheiden* (see (154b), (157c)) and the following verbs:

- | | | | |
|-------|---|---|--|
| (162) | <i>zusammenballen</i> ‘to ball (e.g. the fist)’ | → | <i>sich zusammenballen</i> ‘to agglomerate’ |
| | <i>zusammensetzen</i> ‘to put together’ | → | <i>sich zusammensetzen</i> ‘to consist of’ |
| | <i>zusammensparen</i> ‘to save (money)’ | → | <i>sich zusammensparen</i> ‘to accumulate (of money).’ |

The remaining verbs discussed in 8.2.1–2 do not have anticausative derivatives at all. Some of them form reciprocal constructions with *sich* according to the “canonical” pattern (see 4.2.1); cf.:

- | | | | |
|-------|----|--|--|
| (163) | a. | <i>Petra verwechselte Marta und Helga.</i>
‘Petra mixed up Martha and Helga.’ | |
| | → | b. | <i>Petra und Marta verwechselten sich [gegenseitig] (mit Helga).</i>
‘Petra and Martha mixed each other up (with Helga).’ |

Derived anticausatives show almost no restrictions on discontinuous constructions; compare (112) with its derivatives:

- | | | | |
|-------|----|---|---|
| (164) | a. | <i>Das Mehl und der Zucker vermischten sich.</i>
‘The flour and the sugar mixed up.’ | |
| | = | b. | <i>Das Mehl vermischte sich mit dem Zucker.</i>
‘The flour mixed up with the sugar.’ |

As concerns verbs with a peripheral reciprocal meaning, the restrictions that were observed with their causative counterparts (see 8.2.) are less serious, although the discontinuous construction (165b) still sounds odd:

- (165) a. *Die Professoren und Dozenten versammelten sich.*
 ‘The professors and instructors assembled.’
 = b. [?]*Die Professoren versammelten sich mit den Dozenten.*
[?]‘The professors assembled with the instructors.’ (cf. (148)).

8.2.4 Verbs pertaining to matrimonial events

This small group of verbs shows idiosyncrasies both syntactically and semantically. *Verheiraten* ‘to cause to marry’ indicates a reciprocal relation, but the simple construction requires an explicit marker to signal (166c) that both objects get married to each other and not each to a third person; cf.:

- (166) a. *Er verheiratete ihn mit ihr.* ‘He married him to her.’
 b. *Er verheiratete beide.* i. ‘He married both [to sb else]’
 ii. [?]‘He married both to each other.’
 c. *Er verheiratete beide miteinander.* ‘He married both to each other.’

In the case of the first interpretation of (166b), which is preferred by native speakers (especially if the object phrase *beide* ‘both’ is stressed), the sentence is syntactically complete but semantically elliptical implying third parties in two marriages, because a change in the social status of the referents is foregrounded. The second interpretation is, as a rule, rejected. The derived anticausative even more strongly suggests that each one marries another (third) person; cf.:

- d. *Sie verheirateten sich.* ‘They married’ (each a third person).

At this point, the two-place reciprocal verb *heiraten* ‘to marry’, from which *verheiraten* derives, should be mentioned. It can be used as a transitive (167a) or as an intransitive predicate (167b):

- (167) a. *Hans heiratet Maria.* = *Maria heiratet Hans.*
 ‘Hans marries Mary.’ = ‘Mary marries Hans.’
 = b. *Hans und Maria heiraten.*
 ‘Hans and Mary marry.’

Most native speakers do not accept *heiraten* together with a reflexive pronoun, though this can still sporadically be encountered in some descriptions and dictionaries.²³ In other words, *heiraten* is ceasing to derive a recessive diathesis and cannot be used with a prepositional phrase (with *mit*, see 4.7, 8.1).

Verehelichen should be treated as an obsolete synonym of *verheiraten*, which has diatheses identical with those of the latter verb (both in a causative and anticausative construction). The synonym *vermählen* and the analogous *verloben* ‘to engage/betroth’ differ

23. It is included in Mater’s list (see 1.4) and is considered as collocating with *sich* by Kunze (1995:32). But the collocation with *sich* is clearly becoming obsolete.

from *verheiraten* in this respect, since native speakers are more apt to discern a reciprocal relation both in the causative and the derived anticausative construction (cf. with (166)).

9. Reciprocals in periphrastic causative constructions

In German, analytic causative constructions with the auxiliary *lassen* ‘to let’ are used abundantly. Other causative auxiliaries are used to a much lesser extent (Nedjalkov 1976: 32ff.). The following remarks concern constructions with *lassen*.

1. *Embedded infinitives*. Simple reciprocal constructions with either the reflexive pronoun or the unambiguous reciprocal pronoun can be embedded into analytic causative constructions without any difficulty, both with transitives (see (168)) and intransitives (see (169)):

- (168) a. *Peter_i und Maria_j küssten sich_{i+j}*
 ‘Peter_i and Mary_j kissed each other_{i+j}’
 → b. *Er_k ließ Peter_i und Maria_j sich_{i+j} küssen.*
 he let.PAST P. and M. RM kiss.INF
 ‘He_k let Peter_i and Mary_j kiss each other_{i+j}’.
- (169) a. *Sie_{i+j} halfen sich_{i+j}*
 ‘They_{i+j} helped each other_{i+j}’
 → b. *Hans_k ließ sie_{i+j} sich_{i+j} helfen.*
 ‘He_k let them_{i+j} help each other_{i+j}’.

Instead of the RM *sich* one can use the reciprocal pronoun *einander*, too.

No major problems arise with three-place transitives, either, though such sentences may sound rather clumsy. Lexical reciprocals can be encountered as well (e.g., *Er_k ließ sie_{i+j} sich_{i+j} verabreden* ‘He let them make an agreement’).

Note that with the reflexive pronoun ambiguity (reciprocal vs. reflexive proper) can arise on the same conditions which were shown in Section 4. (The same holds for distant reciprocal constructions, see below.) Lexical causative reciprocals in embedded infinitival constructions imply yet another referent as the immediate agent of the causative situation who is not identical with the causer named by the subject-NP; cf.:

- (170) a. *Er versammelte sie.*
 ‘He gathered/assembled them.’
 → b. *Er ließ sie versammeln.*
 ‘He ordered them to assemble (via his assistant(s)).’

This additional referent in (170b) can even be syntactically specified. Compare (170c) and (171c) below:

- c. *Er_i ließ sie_{j+k} durch seine_i Helfer₁ versammeln.*
 ‘He_i ordered his_i assistants₁ to assemble them_{j+k}.’
 lit.: ‘He_i ordered to assemble them_{j+k} by his_i assistants₁.’

2. *Distant reciprocal constructions.* In German one can totally incorporate reciprocals into an analytic causative construction if the plural subject corresponds at once to the initiator and to the patient or recipient (beneficiary) of the whole situation. These constructions are possible with all two- and three-place simple reciprocals, e.g.:

- (171) a. *Sie_{i+j} beobachteten sich [gegenseitig]_{i+j}.*
 ‘They_{i+j} observed each other_{i+j}.’
 → b. *Sie_{i+j} ließen sich [gegenseitig]_{i+j} beobachten.*
 they let.PAST RM REC observe.INF
 ‘They let/made each other be observed (by third persons).’
- (172) a. *Ernst_i und Helga_j halfen sich [gegenseitig]_{i+j}.*
 ‘They_{i+j} helped each other_{i+j}.’
 → b. *Ernst_i und Helga_j ließen sich [gegenseitig]_{i+j} helfen.*
 E. and H. let.PAST RM REC help.INF
 ‘Ernst and Helga let/made each other be helped (by third persons).’

Again, the RM *sich* can be replaced by the reciprocal pronoun *einander* (see above).

The crucial difference in comparison with the embedded infinitives (see above) rests in the fact that the referent of the subject-NP remains the intrasentential antecedent of the reciprocal (direct or indirect) object. Thus, the subject-NPs of the derived (b) sentences are coreferential with those of the (a) sentences. Furthermore, the (b) sentences imply a semantic inclusion of a further referent who is supposed to be the proper agent (“executor”) of the event caused (see the added phrase in the translations of the (b) sentences). But these third persons are usually not named. Their explicit naming, albeit principally possible, renders quite awkward sentences; cf.:

- (171) c. *Sie_{i+j} ließen einander_{i+j} sich_{i+j} [?]durch ihre Helfer / [?]von ihren Helfern beobachten.*
 ‘They ordered to observe each other [?]by their assistants.’

10. Simultaneity and succession of reciprocal events

10.1 Introductory

When it comes to analyzing the internal temporal structure of reciprocal predicates, perhaps the most intimate interaction of diathesis with actionality can be revealed. Basically, we ought to distinguish at least between absolute simultaneity (coincidence), partial parallelism (overlapping) and regular succession of actions or events (chaining). Overlapping should further be subdivided into singular subsequence and (more or less) regular exchange (“dovetailing”). The chaining type is to be regarded as the most marginal one (cf. Kemmer 1993:101). Since there is no space here to dwell on the interrelation between actionality, time-locatedness (episodicity) and diathesis in detail, the following remarks will suffice.

10.2 Obligatory simultaneity (coincidence)

For a verb to encode coincidence in its proper sense, two conditions must be fulfilled: first, the relationship between the respective participants has to be really symmetrical. And, second, the situation denoted by the verb must either not be discernible as consisting of discrete “acts” (or phases), i.e. it must encode a state or a homogeneous activity (cf. Kemmer 1993: 109ff.), or, otherwise, consist of but one punctual prompt, i.e. denote an achievement.²⁴ Homogeneous activities are inherent in lexically reciprocal predicates which have been discussed in Section 8, since these, as a rule, leave open the question of the degree of internal fragmentation of the encoded situation.

Coincidental states can easily be encoded by two-place verbs; cf.:

- (173) a. *Er mochte sie, und sie mochte ihn.* ‘He liked her and she liked him.’
 = b. *Sie mochten sich [gegenseitig].* ‘They liked one another.’

Other appropriate state verbs are:

- (174) *sich achten* ‘to value each other’
sich (ver)ehren ‘to adore/venerate each other’
sich kennen ‘to know each other’
sich lieben ‘to love each other’
sich schätzen ‘to value/appreciate each other’
sich verstehen ‘to understand each other’ (only as a state verb!).

Because a state is not fractionable in phases, the substitution of the clitic *sich* by the pronominal *einander* does not change anything in its temporal structure.

As concerns achievements, with ordinary reciprocal verbs other readings easily come to the fore; cf.:

- (175) a. *Hans erblickte Erich, und Erich erblickte Hans.*
 ‘Hans caught sight of Erik and Erik caught sight of Hans.’
 → b. *Hans und Erich erblickten sich.* (simultaneously or after one another?)
 ‘Hans and Erik caught sight of each other.’

We have found only two exceptions to this rule. These are the synonyms *verfehlen*, *verpassen* ‘to fail to meet’. This exception can be explained as the effect of a semantically included negation; cf.:

- (176) a. *Olga verfehlte Anna, und Anna verfehlte Olga.*
 ‘Olga missed Anna, and Anna missed Olga.’
 → b. *Olga und Anna verfehlten sich.*
 ‘Olga and Anna missed each other (= did not meet).’

As for activities, there are certain exceptions to the rule that subevents should not be internally discernible for an activity to be interpreted as mutually simultaneous. These are predicates denoting processes that may last over some conceivable time interval, but re-

24. The terms ‘state’, ‘activity’ and ‘achievement’ are used in Vendler’s (1957: 146f.) sense.

quire a constant physical (cf. (177)) or perceptual (cf. (178)) contact between the two referents (resp. their body parts). Note that it is irrelevant whether the respective participants are conceived of as agents or not. Typical agentive reciprocals more often than not belong under 2. in 10.3:

- (177) a. *Sie schüttelten sich [gegenseitig] die Hände.*
 ‘They shook hands [with one another].’ (totally simultaneous)
 vs. b. *Sie klopfen sich [gegenseitig] auf die Schulter.*
 ‘They patted each other on the back.’ (successive or simultaneous-repetitive?)
- (178) a. *Sie sahen sich [gegenseitig] scharf in die Augen.* (totally simultaneous)
 ‘They looked intently into each other’s eyes.’
 vs. b. *Sie besahen sich aufmerksam von oben bis unten.*
 ‘They looked at each other attentively from top to bottom.’
 (successive or simultaneous-repetitive?)

This brings us to the question if and to which degree different reciprocity markers can trigger a fragmentation of the denoted situations into subevents. First of all, the “reciprocity intensifier” *gegenseitig* can be added to the reflexive pronoun on the conditions named in 4.6. But it alters nothing with regard to the internal structure of the event. As concerns the pronoun *einander* (see Section 5), it cannot generally be stated that this “heavier” marker enhances internal segmentation (in comparison to the “light” marker *sich*). This happens only with *küssen* ‘to kiss’ (see (179)), but not even with *die Hände schütteln* ‘to shake hands’ (see (177a)), *umarmen* ‘to embrace’ or *zuprosten* ‘to toast’. With the latter verbs the internal segmentation (without context) in any case remains vague (for more on this subject see Turek 1988: 116; Kemmer 1993: 102ff.; Knjazev, Ch. 2, §2.3); cf.:

- (179) a. *Hans und Maria küßten sich.* (rather simultaneously)
 ‘Hans and Mary kissed.’
 b. *Hans und Maria küßten einander.* (more likely, one after the other)
 ‘Hans and Mary kissed each other.’
- (180) *Hans und Maria umarmten sich / einander.*
 ‘Hans and Mary embraced each other.’
- (181) *Hans und Maria prosteten sich / einander zu.*
 ‘Hans and Mary toasted each other.’

The point is that, in order to “segmentize“, the heavier marker must distinguish some feature which is not necessarily specified by the predicate itself. With shaking hands the three features of direct physical contact, mutual emotional involvement and specification of the affected body part are *eo ipso* named, not so with kissing. (One can imagine a situation with mutual, but successive kissing, and not necessarily on each other’s lips and by the free will of both referents.) Thus, with the latter the heavier marker suggests additional subevents, whereas with the former the actional character of the denoted situation is not modified. With the other predicates, which do not include physical contact (or one of the other two components), the choice of *sich* or *einander* does not have bearing on the internal segmentation of the situation either (see (181)). It will be simply underdetermined, as it would with *sich*, too.

With the even heavier marker *einer den anderen* (see Section 6), though, those reciprocal situations can also be internally fragmented which otherwise encode totally simultaneous events – provided direct physical contact obtains. Compare, for this purpose, (177a) and (177a’):

(177) a. *Sie schüttelten einer dem anderen die Hände.* (rather one after the other).

If physical contact is lacking no such effect can be observed; cf. (178a) and (178a’):

(178) a. *Sie sahen einer dem anderen scharf in die Augen.* (rather simultaneously).

As for *aufeinander warten* ‘to wait for each other’, *sich beobachten* ‘to observe one another’, *einander hören* ‘to hear each other’ and similar verbs of perception, the interpretation of [\pm simultaneity] depends on the time interval presupposed or set up by the context. Furthermore, if verbs denoting attentive perceptual activities, like *zuhören* ‘to listen (to)’ and *zusehen* ‘to look at’, are used as reciprocal predicates they do not refer to totally simultaneous processes, since they then can only presuppose a change of roles (comparable with ‘ask-reply’ turns) and automatically belong under 1. or 2. in 10.3 (depending on the number of role changes).

10.3 Types of sequences

As is remarked in 10.1, partially parallel reciprocal actions (events) should be subdivided into singular and repetitive sequences of subevents.

1. *Singular subsequence.* Here belong events which are normally not conceived of as consisting of repeated subactions (within one episode). Nothing changes when the clitic *sich* is replaced by the pronominal *einander*. Most typically, such reciprocals are encoded by predicates which name encounters or similar kinds of social interaction (welcoming, greeting, introducing oneself to each other); cf.:

(182) *Hans und Maria begrüßten sich [gegenseitig].*
‘Hans and Mary welcomed each other.’

2. *Repeated sequences* (“dovetailing”). Without context, the only factor inclining to fraction or not reciprocal events is the actional value of the predicates and some encyclopaedic knowledge. Substitution of the pronominal *einander* for the RM *sich* does not change anything in the internal temporal structure of the denoted event. Thus, sentences (183) probably will be conceptualized rather as repeated similar actions, while sentences (184) do not preclude an interpretation of uninterrupted, internally not fractionable complex mutual processes:

- (183) a. *Sie riefen sich Befehle zu.*
‘They called orders to each other.’
b. *Sie antworteten sich auf ihre Fragen.*
‘They answered each other’s questions.’
c. *Sie verbesserten (= korrigierten) sich gegenseitig.*
‘They corrected each other.’

- (184) a. *Sie bewarfen sich mit Schneebällen.*
 ‘They threw snow-balls at each other.’
 b. *Sie beschossen sich gegenseitig.*
 ‘They shot at each other.’
 c. *Die Verwundeten stützten sich gegenseitig beim Gehen.*
 ‘The wounded supported each other while walking.’

3. *Obligatory succession of subevents.* Certain verb-object constellations, if used in reciprocal constructions, encode actions that, according to encyclopaedic knowledge, most probably take place subsequently. Typical examples are reciprocals of “grooming verbs”; cf.:

- (185) a. *Sie schnitten sich gegenseitig die Haare kürzer.*
 ‘They trimmed each other’s hair.’
 b. *Sie wuschen sich gegenseitig den Rücken.*
 ‘They washed each other’s back.’

The temporal interpretation of such sentences heavily depends on the type of object involved, but not on the choice of the clitic *sich* or the pronominal *einander*.

10.4 Uni-directional succession of events (chaining)

There is a restricted group of verbs which force to view situations as consisting of discrete instances but deprived of a real symmetrical relationship between them (compare with case 2 in 10.3). Different from the other subgroups, most verbs of this subgroup need the pronominal marker *einander* since most of them either require a prepositional object (see the remarks in 5.1, 5.3) or because the clitic RM would render a reflexive meaning (e.g., *vor sich hergehen* ‘to stroll along’). Exceptions are the verbs *verfolgen* and *jagen* (see (189)); but the choice of the marker does not have an impact on the temporal fragmentation of the event.

The prototype verb of this group in German is (*aufeinander/hintereinander/nacheinander*)*folgen* ‘to follow (each other/one after the other)’:

- (186) a. *Einer folgte dem anderen / auf den anderen.*
 ‘One followed after the other.’
 = b. *Sie folgten (auf)einander.*
 ‘They followed each other / one after another.’

Among the semantically similar *vorausgehen* ‘to precede’ and *voreinander hergehen* ‘to go in front of each other’ only the latter can be used as an antonym of *folgen* (i.e., with the necessary change in perspective); cf.:

- (187) a. *Einer ging vor dem anderen her.*
 ‘One went before the other.’
 = b. *Sie gingen voreinander her.*
 ‘They went one before the other.’

As for *vorausgehen* most informants do not accept it at all in a reciprocal construction:

- (188) ?*Sie gingen einander voraus.*
 ‘They pursued/went one before the other.’

Thus, only *vorausgehen* fits the behaviour of English ‘to precede’ (Kemmer 1993:256, fn. 64), whereas a mere change of deictic viewpoint with regard to an otherwise identical situation type can principally be encoded in German. Other verbs that allow to encode temporal chaining relations with reciprocal constructions are:

- | | | |
|-------|--|--------------------------|
| (189) | <i>verfolgen</i> | ‘to pursue’ |
| | <i>jagen</i> | ‘to chase’ |
| | <i>hinterherjagen (nach)</i> | ‘to follow up (chasing)’ |
| | <i>hinterherlaufen, hinterhereilen</i> | ‘to run, hurry after.’ |

Note that all of these verbs, if used in ordinary reciprocal constructions, as a rule, convey only repeated sequences with a permanent change of roles (“chased” vs. “chasing”; see case 2 in 10.3). A reciprocal relationship is obstructed if only two referents are spoken of and the periphrastic construction *einer den anderen* is used:

- | | | | |
|-------|------|--|--|
| (190) | a. | <i>Die Jungen jagten sich gegenseitig [über die Wiesen].</i> | (temporal chaining) |
| | | ‘The boys chased each other [over the meadows].’ | |
| | ≠ b. | <i>Einer (der Jungen) jagte den anderen.</i> | (without role change, non-symmetrical) |
| | | ‘One (of the boys) chased the other (one).’ | |

This agrees with the observation, made with regard to simultaneous events (see 10.2), that only the heaviest marker can lead to a more discrete division into subevents.

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Reciprocal and reflexive constructions in Polish

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“Co się lubi, to się czubi.”

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1. Introduction

1.1 Polish

Polish belongs to the Western subgroup of the Slavonic language family. It is spoken by about 35 mln native speakers in Poland. There is also a considerable number of Poles and people of Polish origin living abroad from Poland (~ 10 mln., mainly in the USA, Canada, Brazil, England, France, Germany, Sweden, Lithuania, Ukraine), who to some degree or other have retained Polish as their first or second mother tongue.

Post-war Polish shows very little regional differentiation (in phonetics as well as in the grammar and the lexicon). At least, it is, in this respect, much more homogeneous than English, French or German.

1.2 Overview

The standard reciprocal construction in Polish is expressed by a verb in the plural collocating with the clitic *się*, a highly polysemous reflexive pronoun, and productively derived from a base non-reflexive verb. As in German (cf. Wiemer & Nedjalkov, Ch. 10, Section 1.2), such verbs with plural subjects often render potentially ambiguous sentences; cf.:

- (1) a. *As-ia codziennie czesa-ł-a Jank-a.*
 A.-NOM every.day comb.IPFV-PAST-F.SG J.-ACC
 ‘Every day Asia combed Janek.’
- b. *As-ia i Jan-ek czesa-ł-i się codziennie.*
 A.-NOM and J.-NOM comb.IPFV-PAST-PL.MP RM every.day
 i. ‘Every day Asia and Janek combed *each other*.’
 ii. ‘Every day Asia and Janek combed *themselves* (i.e. each her/himself).’

The ACC-GEN of the reflexive pronoun is used either in the clitic form *się* or in an orthotonic variant *siebie* (see Sections 2.2.1, 4.5, and 5). Orthotonic forms also replace clitic ones after prepositions. The dative reflexive *sobie* and the instrumental *sobą* do not have separate clitic forms; cf.:

- (2) a. *Jan-ek pomaga-ł Frank-owi, a Fran-ek pomaga-ł Jank-owi.*
 J.-NOM help.IPFV-PAST.SG.M E.-DAT and ...
 ‘Janek helped Franek, and Franek helped Janek.’
- b. *Jan-ek i Fran-ek pomaga-ł-i sobie.*
 J.-NOM and F.-NOM help.IPFV-PAST-PL RM
 ‘Janek and Franek helped each other.’

Unlike German, the reflexive pronoun distinguishes regular case forms with complementary distribution.

The lexical markers *nawzajem* and *wzajemnie* ‘mutually’ can be employed (see 6.1) to mark reciprocity unambiguously. They can be added to almost every kind of predicate, regardless of its diathesis, but they cannot occur without the reflexive pronoun (compare German *gegenseitig*); cf.:

- (3) a. *El-a podtrzymywa-ł-a Mariol-ę, a Mariol-a podtrzymywa-ł-a El-ę.*
 E.-NOM hold.up.IPFV-PAST-F.SG M.-ACC and ...
 ‘Ela was holding up Mariola, and Mariola was holding up Ela.’
- b. *El-a i Mariol-a podtrzymywa-ł-y się nawzajem.*
 E.-NOM and M.-NOM hold.up-PAST-NMP RM mutually
 (**podtrzymywały nawzajem*)
 ‘Ela and Mariola were holding up one another.’

In addition, it is possible to make use of another unambiguous marker of reciprocity, the construction *jeden drugiego* lit. ‘one another’ (see Section 7). Its status remains half-way

between a nominal and a pronominal, it is regularly inflected in its second part and readily includes prepositions, if needed. This construction is used much more rarely than the two means already mentioned (for differences in comparison to Russian *odin drugogo* ‘one another’, *drug druga* ‘each other’ see 7.1).

1.3 Data base and lexicographical principles

More than 1200 Polish verbs collocating with the clitic reflexive pronoun (either as part of lexicalized items or as marker of recessive diatheses) have been systematically extracted from the *Słownik Języka Polskiego* (SJP, 3 vols.) and some literature on the subject. In cases of doubt I have also consulted the larger *Słownik Języka Polskiego* edited by W. Doroszewski (SJP Dor, 11 vols.). Systematic questionnaires with these verbs were prepared for checks by native speakers.¹

Without going into any detail, it should be briefly remarked that Polish has a grammaticalized aspect system of a derivational type. As a consequence the amount of verbs to be investigated would increase considerably if every kind of correlation between corresponding verbs of two aspects were analysed more systematically. Some preliminary observations show that many perfective verbs do not lend themselves easily or at all to an alternative reciprocal interpretation, whereas their imperfective counterparts do so more often.² As a rule, this is conditioned by the interval structure, which plays a central role in the functioning of grammatical aspect. Here I will account for the interaction of reciprocity with aspect only in the concluding section (Section 10, but see also 8.1, 8.1.1, and 8.2.1).

1.4 Definition of ‘reciprocal verb’

See the definition given for German reciprocal verbs in Wiemer & Nedjalkov (Ch. 10, §2.4).

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2. I thank Ela Solak for confirmation on this point.

2. Grammatical notes

2.1 Flexion and structure of the verb phrase

Polish is highly inflected for the nominal parts of speech (6 cases + vocative), less so in verbal morphology, as it has only one past tense paradigm and no synthetic future tense. It shows consistent morphonological alternations, both with consonants and vowels. The past tense is derived from a separate stem and its formation shows some agglutinative features, inasmuch as after the verb stem the categories of tense (marked by *-ł*), number/gender and person are often distinguishable by different morphemes one after the other (in the mentioned order). Person morphemes behave like enclitics and can be separated from the rest of the verb.

2.2 Grammatical status of pronominal forms

All third person pronouns distinguish case and number; in the singular there are three genders – with a subgender of the masculine, restricted to animate male referents, in the plural two (the so-called masculine-personal, *MP*, vs. non-masculine-personal, *NMP*). In the masculine and neuter also some distinctions of \pm clitic forms occur. The clitics always behave like enclitics and, thus, cannot be used sentence initially. Provided a clitic form does not have a non-clitic counterpart it can become orthotonic by being put under stress (e.g., the feminine accusative singular *ją* for indicating a marked topic or a marked rheme). Non-possessive reflexive pronouns do not show number distinctions. The *RM* *się* distinguishes cases and shows clitic and orthotonic (accentuated) forms; the dative form of the *RM* (*sobie*) can be used both as a clitic and orthotonic morpheme (Table 1a). In this regard it behaves like the German *RM* *sich* (cf. Wiemer & Nedjalkov, Ch. 10, Section 2.2.1). The *3PL* pronoun is marked for masculine-personal vs. non-masculine-personal gender (Table 1b).

As for the 1st person pronouns, at least in contemporary speech, only the dative singular distinguishes clitic vs. orthotonic form (*mi* vs. *mnie*). With the 2SG pronouns the *ACC-GEN* clitic *cię* has an orthotonic counterpart *ciebie*, as has the dative *ci* vs. *tobie*.

Table 1a. The forms of the reflexive pronoun

Singular	Clitic	Non-clitic
NOM	–	–
GEN	<i>się</i>	<i>siebie</i>
DAT	(<i>se</i>)*	<i>sobie</i>
ACC	<i>się</i>	<i>siebie</i>
INS	–	<i>sobą</i>
LOC	–	(prep.+) <i> sobie</i>

* See 2.2.2 below.

Table 1b. The paradigm of 3rd person pronouns

		Clitic		Non-clitic	Plural (all genders, no distinction of \pm clitic)	
Singular	M	N	F		<u>MP</u> *	<u>NMP</u>
NOM	<i>on</i>	<i>ono</i>	<i>ona</i>		<i>oni</i>	<i>one</i>
	M	N	F	M, N		
GEN	<i>go</i>	<i>go</i>	<i>jej</i>	<i>jego</i>		<i>ich</i>
DAT	<i>mu</i>	<i>mu</i>	<i>jej</i>	<i>jemu</i>		<i>im</i>
ACC	<i>go</i>	<i>je</i>	<i>ją</i>	<i>jego</i> (only M)	<i>ich</i>	<i>je</i>
INS	<i>nim</i>	<i>nim</i>	<i>nią</i>	(<i>nim, nim, nią</i>)		<i>nimi</i>
LOC	(prep.+) <i>nim</i>	<i>nim</i>	<i>niej</i>	(<i>nim, nim, niej</i>)		(prep.+) <i>nich</i>

* Basically, this gender refers to male adult persons (Polish “rodzaj męsko-osobowe”).

If two or more predicates with the reflexive clitic are coordinated within one clause, all but the first clitic are omitted. This regards derivational (see (4a)) as well as grammatical functions (cf. (4b)) of the clitic:

- (4) a. *Bracia często klócili się i znowu [#się] godzili.*
 ‘Often the brothers brawled with each other and again became reconciled.’
 b. *Na przyjęciu piło się, rozmawiało [#się] i tańczyło [#się] bardzo dużo.*
 ‘During the banquet there was very much drinking, talking and dancing.’

2.2.1 The morphosyntactic status of *się* vs. *siebie*

Only the clitic form *się* is employed as part of certain reflexive-causative constructions (see 3.3.2, 9). The non-clitic *siebie* replaces the clitic form in rhematic and marked-topic positions (cf. Buscha & Wiese 1983:73). Naturally, in this function it can be employed only as a marker of semantic reflexivity or reciprocity (cf. Fokker & Smolikowska 1971:26; Niedzielski 1976:171), but not in any derivational functions of recessive diathesis.

2.2.2 The status of the dative clitic *se*

Differently from the ACC/GEN-form, the dative of the reflexive pronoun has actually only one form, *sobie*. The clitic *se* could at best be regarded as a substandard variant with a very unclear distribution. Informants reject it altogether. (For details on the loss of the dative clitic *si* and the history of *se* see Decaux 1955:83.)

2.3 Possessive pronouns

The 3rd person reflexive possessive pronoun *swój* always refers back to the sentence subject (see 2.2.1 for personal pronouns). Non-reflexive forms of the 1st and 2nd person (*mój*, *twój*) are used rather for the purpose of empathy. If the subject is not coreferential with the specified referent, the suppletive forms *jego* (M, N), *jej* (F), *ich* (PL, all genders) must be used. The latter forms agree in gender and number with their antecedents, while all other forms show agreement with their head noun; cf. Table 2.

Table 2. Possessive pronouns (without case distinctions)

	1st person		2nd person		3rd person			
	Singular	Plural	Singular	Plural	coreferential		non-coreferential	
					Singular	Plural	Singular	Plural
M	<i>mój</i>	<i>moje / moi*</i>	<i>twój</i>	<i>twoje/twoi*</i>	<i>swój</i>	<i>swoje/swoi*</i>	<i>jego</i>	} <i>ich</i>
F	<i>moja</i>	<i>moje</i>	<i>twoja</i>	<i>twoje</i>	<i>swoja</i>	<i>swoje</i>	<i>jej</i>	
N	<i>moje</i>	<i>moje</i>	<i>twoje</i>	<i>swoje</i>	<i>swoje</i>	<i>swoje</i>	<i>jego</i>	

* Masculine-personal gender.

2.4 Productive conversion (*nomina actionis*)

Standard Polish demonstrates regular derivation of gerundial nouns, which exist beside lexicalized deverbial nouns (Netteberg 1953: 118ff.; Tkachenko 1969; Fokker & Smolikowska 1971: 26; Kwapisz 1978: 87; Faulstich 1981); cf.:

- (5) a. *wyrąbać* (PFV) / *wyrąbywać* (IPFV) (las) 'to cut down' (forest.ACC)
 → b. *wyrąbanie* (PFV) / *wyrąbywanie* (IPFV) (lasu) 'cutting down' (of the forest.GEN).

(The lexicalized item would be *wyrąb* 'fall, felling'.) Differently from the other Slavonic languages, Polish *nomina actionis* retain the distinction of grammatical aspect (5) and the reflexive pronoun, i.e. the marker of recessive diathesis. Among others, this concerns also reciprocal meanings; cf.:

- (6) a. *opierać rower o słup* 'to lean.IPFV the bike.ACC against a pillar.ACC'
opierać się o siebie 'to lean.IPFV (+ RM) against each other.'
 → a. *opieranie roweru o słup* 'the leaning of-the-bike.GEN against a pillar.ACC'
opieranie się o siebie 'the leaning.IPFV (+ RM) against each other'
 (compare with (53c)).

Productivity of derivation is not restricted by any type of valency; other examples would be: *podziękować/dziękować* (PFV/IPFV) *sobie* (DAT) *za pomoc* 'to thank each other for help' → *podziękowanie/dziękowanie* *sobie* *za pomoc* 'thanking of each other for help', *przekomarzać* (IPFV) *się ze sobą* 'to poke fun at each other' → *przekomarzanie się ze sobą* 'poking fun at each other', *skłócić się* (PFV) *między sobą* 'to be set at variance among themselves' → *skłócenie się między sobą* 'setting at variance among each other' etc.

3. Non-reciprocal functions of *się*

The clitic *się* can be encountered in all main subject- and object-oriented types of recessive diathesis, excluding passive proper (see 3.2.4, 3.3.1). Below I shall leave aside isolated, rare cases of polysemy.

3.1 Subject-oriented meanings

The following meanings can be distinguished here:

1. *Reflexive proper*. See first reading of (1b) and the following:

- (7) a. *Kierownik wynagrodził współpracownika za dobre wyniki pracy dodatkowym urlopem.*
 ‘The supervisor rewarded the collaborator for his good work with some extra free days.’
 → b. *Kierownik wynagrodził się za wyniki pracy dodatkowym urlopem.*
 ‘The supervisor rewarded himself for his good work by some extra free days.’

2. *Possessive-reflexive*. Only the dative reflexive can be used in this diathesis (see 5.2.3).

3. *Partitive-reflexive*. This type is attested only with a few verbs denoting performance on one’s own body parts (*wysmarkać się* ‘to blow one’s nose’, *uczesać się* ‘to comb one’s hair’, *malować/szminnować się* ‘to make up’, *zmarszczyć się* ‘to frown’) and with another few verbs encoding actions upon parts of one’s own clothes (e.g., *zapiąć się* ‘to button one’s coat, trousers etc.’, *rozpiąć się* ‘to unbutton one’s clothes’).

4. *Autocausative*. Beside the reflexive proper and reflexive-possessive, the auto-causative meaning is the most frequently attested subject-oriented type; cf. an example:

- (10) a. *Jan rzuca piasek do basenu.*
 J.NOM throw.IPFV.PRES.3SG sand.ACC to pool.GEN
 ‘Jan throws sand into the swimming-pool.’
 → b. *Jan rzuca się do basenu.*
 J.NOM throw.IPFV.PRES.3SG RM to pool.GEN
 ‘Jan throws himself into the swimming-pool.’

5. *Deaccusative*. Such verbs are less numerous; e.g.:

- (11) a. *Marek podjął ciężką pracę(ACC).* ‘Marek undertook some hard work.’
 → b. *Marek podjął się ciężkiej pracy(GEN).* ‘Marek engaged himself in hard work.’

6. *Absolute diathesis*. It is difficult to find clear examples of reflexive verbs with “absolute” (a kind of anti-passive) meaning.³ Close to the “absolute” function are reflexive variants of some very few intransitive verbs. These are normally not found in works on reflexives, e.g. *(po)wrócić (się)* ‘to return’, *(po)śpieszyć (się)* ‘to be in a hurry’, *(po)patrzeć (się)* ‘to look at’, as well as some seven verbs denoting luminous phenomena (e.g., *lśnić (się)* ‘to sparkle’; cf. Wilczewska 1966:102).⁴

3. This observation indicates quite clearly the intermediate status of Polish in areal terms: the Eastern Slavonic and Baltic languages do have both partitive object and absolute functions of the RM, whereas the languages West from them hardly have any (see Geniušienė 1987:244, 249f. and Wiemer & V. Nedjalkov, Ch. 10, 3.1).

4. Only slight differences on the level of semantic roles can be observed, which cannot be dwelt on here (cf. Schenker 1985:16ff., 1993:68f.; Greń 1991:129–32).

3.2 Object-oriented meanings

1. *Anticausative*. This is probably the most frequent type of all recessive diatheses (beside the reflexive proper and reciprocal meanings); cf.:

- (12) a. *Ewa uspokoiła małą siostrę.* ‘Ewa calmed down her little sister.’
 → b. *Mała siostra uspokoiła się.* ‘The little sister calmed down.’

2. *Converse relations*. These are conveyed by only a few verbs and their reflexive counterparts; e.g.:

- (13) a. *Pleśń(NOM) pokryła chleb(ACC).* ‘Mould covered the (loaf of) bread.’
 → b. *Chleb(NOM) pokrył się pleśnią(INS).* ‘The bread was/got covered by mould.’

3. *Reflexive causatives*. Such relations can be expressed by another lexically very restricted group of verbs. All of them arise on the basis of metonymic relationships between an inalienable “possessor”, his/her body parts and a separate implied agent. The latter can be explicated by a prepositional *u* +GEN phrase (lit. ‘at sb’); cf.:

- (14) *Adam strzy-że się (= swoje włosy) u modnego fryzjera.*
 A_i-NOM cut.hair.IPFV-PRES.3SG RM his_i hair at fashionable.GEN barber.GEN
 ‘Adam has his hair cut at a fashionable barber’s.’

(Cf. Bogusławski 1977: 102ff.; Kwapisz 1978: 68.)

4. *Passive-like meanings*. The reflexive pronoun does not serve as a marker of a genuine (three-partite) passive, since in contemporary Polish there are no derived constructions with *się* that would allow a syntactic explication of the demoted agent by the construction *przez* lit. ‘through’ + ACC, which is otherwise applied with the analytic passive (Weiss 1982: 198f., 212ff.; Rytel-Kuc 1990: 120; Wiemer 1996: 174).⁵ There are, however, different passive-like meanings, which often overlap with the anticausative referring either to ongoing actions (e.g., *Spodnie się piorą* ‘The trousers are being laundered’) or to events that happened against the will or without the control of an agent, e.g. (cf. Geniuśienė 1987: 275):

- (15) *Rozla-ł-o mi się mleko.*
 spill.PFV-PAST.SG-N me.DAT RM milk.NOM
 ‘I have spilled the milk unintentionally’, or (less likely)
 ‘The milk got spilt on me.’

A clear modal meaning is rendered by these constructions if they co-occur with evaluative adverbials, such as *łatwo* ‘easily’, *szybko* ‘quickly’, *przyjemnie* ‘with pleasure’ etc. (cf. Bogusławski 1977: 119; Kwapisz 1978: 57),⁶ e.g.:

- (16) *Nasze drzwi zamykaj-ą się łatwo.*
 our.PL door.PL* close.IPFV-PRES.3PL RM easily
 ‘Our door closes easily.’

* *Drzwi* is a *plurale tantum*.

5. A regular reflexive passive most probably existed in Polish only for a very short period, namely in the first half of the 19th century (cf. Szlifersztejnowa 1968: 133, 154f., 157ff.).

6. Compare with the German equivalents in Wiemer & Nedjalkov (Ch. 10, 3.2).

3.3 Grammatical functions of the clitic *się*

3.3.1 Impersonal (*deagentive*) constructions

Beside more or less lexicalized and restricted functions of the clitic RM (see 3.1–2) modern Polish permits the reflexive pronoun to be used as a marker of recessive diathesis with the 3SG of any verb having a personal agent in its diathesis, e.g.

- (17) a. *Adam i Bartek gra-l-i w szachy.*
 A.NOM and B.NOM play.IPFV-PAST.3PL-MP in chess.ACC.PL
 ‘Adam and Bartek played chess.’
- b. *Gra-ł-o się w szachy.*
 play.IPFV-PAST.3SG-N RM in chess.ACC.PL
 ‘There was some chess-playing.’

(Compare with lexically impersonal verbs, e.g. *świtać* ‘to dawn’, which do not allow for this construction: **Świtało się.*) Demotion of the first argument, without any other changes on the syntactic level, operates almost universally with respect to verbs of both aspects and almost all base diatheses (Bogusławski 1977: 118; GWJP 1984: 139–41; Rytel-Kuc 1990: 110), and even with the copula *być* ‘to be’ – a phenomenon which is singular among all Slavonic languages (Růžička 1986: 265f.).

3.3.2 Complex reflexive-causatives

In connection with the reflexive-causative function discussed in 3.2 it has to be mentioned that in Polish considerable use is made of the verb *dać*(PFV)/*dawać*(IPFV) lit. ‘to give’, in an auxiliary-like way of marking reflexive causativity. This verb forms the inflected part of compound predicates with an infinitive and the clitic reflexive (cf. Rothstein 1970: 194); e.g.:

- (18) *Magda nie da-ł-a się ogłupi-ć.*
 M-.NOM NEG give-PAST3-SG.F RM make.fool-INF
 ‘Magda did not let herself be fooled.’

Such constructions are roughly equivalent semantically and syntactically to the German analytic causatives with *lassen* (Nedjalkov 1976: 32ff.; Kwapisz 1974, 1978: 38f.; Gehrmann 1983: 11; Wiemer & Nedjalkov, Ch. 10, §9) and the English ones with *to let*, but are encountered only jointly with the reflexive clitic. With non-agentive subject-NPs the analytic reflexive-causative construction is freely interchangeable with the “modal passive”; cf. (16) in 3.2 and the following:

- (19) *Nasze drzwi da-j-a się zamkną-ć łatwo.*
 our.PL door.NOM give.IPFV-PRES.3PL RM close.PFV-INF easily
 ‘Our door can be closed easily.’

4. Reciprocals with the clitic *się* (ACC) (“canonical” reciprocals only)

4.1 General remarks (concerning Sections 4 and 5)

The reciprocal reading brought by the reflexive clitic can derive only from an interaction of this marker with semantic components of the respective verb (usually together with grammatical number). Tables 3–4 comprise verbs that are encountered in one of the syntactic patterns demonstrated in 4.2 and 5.2. The criteria for the labels in Table 3 itself are semantic and derivational: category **A** represents verb pairs with the reflexive derivative having a possible (see (25)–(26), (28)–(29)) or predominant (see (24), (27)) reciprocal meaning; category **B** comprises lexicalized reciprocals and *reciproca tantum*; and category **C** consists of reflexive derivatives of three-place object-oriented lexical reciprocals (see 8.3). As for category **B**, look the following examples of lexicalized reciprocal verbs (20) and *reciproca tantum* (21) (cf. also Wilczewska 1966:89ff.; Zawilska 1996:61):

- (20) a. *złożyć* ‘to found’ → b. *złożyć się* ‘to bet (with sb)’
 (21) a. **droczyć* → b. *droczyć się* ‘to tease each other.’

Verbs of category **A** can be further subdivided according to the syntactic criteria which are applied in 4.2, 5.2.1 and 5.2.2: category **AA** of Table 4 comprises “canonical” cases with the clitic reflexive pronoun occupying the place of the direct object (accusative) (4.2); **AB** comprises two-place intransitive reciprocals (5.2.1.2), **AC** those with the dative reflexive with transitive three-place verbs (5.2.2); and **AD** subsumes cases with the orthotonic forms (*siebie*, *sobie* or *sobą*) occupying the place of a prepositional argument (5.2.1.1).

The “canonical” cases (= category **AA**) can further be split up by separating two-place verbs allowing for recession of their second argument from three-place verbs permitting the same derivation with their second argument (see (23), (27)–(29)). Such a division shows that two-place verbs considerably more often allow recessive diatheses of their second argument than three-place verbs, the split-up being 641:92, i.e. almost 7:1 (see the right-most column of Table 5).

Table 3. Reciprocal verbs collocating with *się* (with plural subjects)

Category	A	B	C	Total
number of reflexive verbs	975 (85%)	78 (7%)	97 (8%)	1150 (100%)
examples	(see 4.2, 5.2.1–2)	(20)–(21)	(see 8.3)	

Table 4. Syntactic subtypes of standard (simple) reciprocal constructions

Category	AA	AB	AC	AD	Total
number of verbs	733 (76%)	55 (6%)	109 (11%)	72 (7%)	969 (100%)
examples	(20)–(21)	(45)–(46)	(47)–(50)	(43)–(44)	

Table 5. Semantic subgroups of canonical reciprocal constructions

Category	A1	A2	A3	Total
two-place verbs	362 (49%)	100 (14%)	179 (24%)	641 (87%)
three-place verbs	37 (5%)	15 (2%)	40 (5%)	92 (13%)
	419 (54%)	100 (16%)	214 (29%)	733 (100%)

4.2 Reciprocals from two- and three-place transitives

As has just been said, reciprocals with the reflexive clitic occupying the position of the second argument (direct object) should be divided into derivatives of two-place (see (22)) and of three-place verbs (see (23)):

- (22) a. *Jacek ściska Wacka.* 'Jacek is hugging Wacek.'
 → b. *Jacek i Wacek ściskają się.* 'Jacek and Wacek are hugging each other.'
- (23) a. *Asia namawia Basię do wagarowania.* 'Asia persuades Basia to play truant.'
 → b. *One namawiają się do wagarowania.* 'They persuade each other to play truant.'

4.3 Semantic subdivision

The verbs of category AA can further be distinguished roughly by their default meanings: either the reciprocal meaning will prevail over other meanings (especially the reflexive proper) and be subsumed under A1; or no definite decision can be taken as for the default meaning (A2); or the reflexive or autocausative meaning will be stronger than the reciprocal one (A3). The distribution is shown in Table 5.

Here some two-place verbs of these subtypes are listed:

- A1 (24) *doceniać się* 'to value/appreciate each other'
implikować się 'to imply one another'
kopać się 'to kick each other'
mijać się 'to pass (by) each other'
obalać się 'to overthrow each other.'
- A2 (25) *brudzić się* 'to soil each other' vs. 'to get dirty'
chwalić się 'to praise each other' vs. 'to boast'
kontrolować się 'to control *each other* / *oneselves*'
opryskać się 'to spray, sprinkle *each other* / *oneselves*'
zadręczyć się 'to worry the life out of *each other*' vs.
 'to worry *oneselves* to death.'

The lexical items listed for A1 and A2 coincide only partly with the verbs given by Penchev (Ch. 13, §§4.1.1.1.1–2) for Bulgarian.

- A3 (26) *bronić się* 'to defend oneself'
huśtać się 'to swing/rock (oneself)'
kształcić się 'to educate oneself'
łudzić się 'to delude/deceive oneself'
rozebrać się 'to undress.'

And here are some recessive three-place verbs of these subgroups:

A1 (27)	<i>darzyć się</i> (zaufaniem) <i>instruować się</i> (+ clause) <i>ostrzec się</i> (o niebezpieczeństwie) <i>powiadomić się</i> (o czymś) <i>wtajemniczyć się</i> (w coś)	‘to give trust to each other’ ‘to instruct each other (how to do)’ ‘to warn each other (about some danger)’ ‘to inform each other (about)’ (see (31b)) ‘to initiate each other (into a secret).’
A2 (28)	<i>bawić się</i> (czymś) <i>obarczać się</i> (czymś) <i>obsypać się</i> (czymś) <i>wpędzić się</i> (w tarapaty) <i>wynagrodzić się</i> (czymś)	‘to amuse <i>each other / oneselves</i> (with)’ ‘to burden <i>each other / oneselves</i> (with)’ ‘to shower <i>each other / oneselves</i> (with)’ ‘to drive each other (into trouble)’ ‘to reward <i>each other / oneselves</i> (by).’
A3 (29)	<i>nastroić się</i> (do czegoś) <i>oduczyć się</i> (czegoś) <i>otulić się</i> (w coś) <i>przekonać się</i> (o czymś) <i>uodpornić się</i> (na coś)	‘to adopt a mood (of doing sth)’ ‘to lose the habit (of doing sth)’ ‘to wrap, tuck <i>oneselves</i> (in sth)’ ‘to take a conviction (about sth)’ ‘to harden, inure <i>oneselves</i> (to sth).’

30 out of 40 three-place verbs of type A3 can equally well be interpreted as derived anticausatives (20 items) or autocausatives (10 items). It must be stressed that many native speakers are reluctant to accept even quite far-fetched reciprocal readings with many verbs of group A2 and A3. Here I can hint only at the most widespread types of polysemy with derived reflexive verbs. A thorough analysis of these defaults, their strength and the role of the reflexive pronoun would require systematic lexicological investigations – an enormous task for future research.

4.4 Discontinuous constructions

A discontinuous encoding of reciprocal relations is, as a rule, excluded for prototypical “canonical” reciprocals (30) and for reciprocals from intransitive two-place verbs (31), but it is possible for such “canonical” reciprocals which show a certain semantic shift with regard to their transitive (two-place) base verbs (32) (for some details on these see 6.2, 8.1). The discontinuous argument is expressed by a comitative object *z* ‘with’ + INST. There are no restrictions exerted by grammatical person; cf.:

- | | | | |
|------|------|---|--|
| (30) | a. | <i>Jola ceni Bartka.</i> | ‘Jola has a high opinion of Bartek.’ |
| | b. | <i>Jola i Bartek się cenią.</i> | ‘Jola and Bartek have a high opinion of each other.’ |
| | → c. | * <i>Jola ceni się z Bartkiem.</i> | lit. ‘Jola esteems herself with Bartek.’ |
| (31) | a. | <i>Pomagam ci [odrobić zadania].</i> | ‘(I) help you [to do your school exercises].’ |
| | b. | <i>Pomagamy sobie [odrobić zadania].</i> | ‘We help each other [to do our exercises].’ |
| | → c. | * <i>Pomagam sobie z tobą.</i> | lit. ‘(I) help myself with you.’ |
| (32) | a. | <i>Widz-isz babc-ię [na uroczystości rodzinnej].</i> | see.IPFV-PRES.2SG grandma-ACC.SG on celebration.LOC.F of.family.LOC.F |
| | | | ‘(You) see grandma [at the family ceremony].’ |

- b. *Widz-isz się z babc-ią [dwa razy w tygodn-iu].*
 see.IPFV-PRES.2SG RM with grandma-INST.F.SG two times in week-LOC.M
 = ‘You and grandma meet [twice a week].’
 lit. ‘(You) see yourself with grandma [twice a week].’

4.5 Comitative subject

Beside the *comitative object* construction in (32b) there are, however, two *comitative subject* constructions. The first is of the same structure as the discontinuous object (see (32b)), but the prepositional phrase *z* + INST has to appear before the finite verb and cannot be disjoined from the nominative NP (cf. Szupryczyńska 1993:417; Kopcińska 1995:133). The comitative subject can be placed after the finite verb only if the nominative NP (or pronoun) is omitted by general rules of ellipsis (cf. Szupryczyńska 1990:441); the comitative subject then becomes distinguishable from the comitative object only by virtue of the plural marking in the predicate (finite verb); compare (32b) with (32c):

- c. *Widz-icie się z babc-ią dwa razy w tygodn-iu.*
 see.IPFV-PRES.2PL RM with grandma-INST.F.SG two times in week-LOC.SG
 (the same as in (32b)) lit. ‘(you.PL) see.2PL yourselves with grandma twice a week.’

It then represents the second type of comitative subject which consists of the *plural subject-NP* with *z* + INST (cf. Dyla 1988; Greń 1991:133f.). Comitative subjects with nominative NPs and finite verbs in the plural are ambiguous, since they permit both an exclusive (i.) or an inclusive (ii.) interpretation of the prepositional phrase with respect to the plural subject-NP: i. ‘you = you(PL) + grandma (grandma $\not\subseteq$ you)’, ii. ‘you = you(SG) + grandma (grandma \subseteq you)’. This type can be encountered only very marginally, this being also the main difference from a parallel construction in Lithuanian (cf. Geniušienė, Ch. 14, §7.2, example (90b); it is also encountered in Russian).

Semantically both constructions come close to sociativity inasmuch as they convey that “the simultaneity of action of two agents is not accidental”;⁷ they are used first of all to refer to a couple of (just two) referents, not more (Szupryczyńska 1990:440).

5. Reciprocals with *siebie* (ACC), *sobie* (DAT) and *sobą* (INST) (non-clitic)

5.1 Remarks on the opposition *się* vs. *siebie* in “canonical” reciprocals

Quite often the clitic *się* is interchangeable with *siebie*. When this takes place a meaning of reflexive proper can come to the fore. Although the conditions on which this happens are extremely difficult to explicate and native speakers’ judgements are far from unanimous, some tendencies can be shown. I will begin with cases where a substitution of *siebie* for *się* is (almost) totally excluded and proceed stepwise to cases where such a replacement

7. “(...) równoczesność działań dwóch agensów nie jest przypadkowa” (Kopcińska 1995:134).

is possible, triggering a change of meaning (for a detailed account see Wiemer 1999: 304–9). The preliminary results conveyed here confirm only partly an iconic principle due to which the phonologically “stronger” form entails greater internal discrimination of the involved participants than the “weaker” (= clitic) form (see Kemmer 1993: 109–19, 122).

5.1.1 *Się* not replaceable by *siebie*

Reflexive verbs which typically denote naturally reciprocal events (cf. Kemmer 1993: 102ff.) do not allow at all *siebie* in place of *się*; e.g.:

- | | | |
|------|--|---|
| (33) | <i>spotkać się</i> | ‘to meet’ |
| | <i>zamienić się</i> [<i>miejscami</i>] | ‘to exchange (places)’ |
| | <i>żegnać się</i> | ‘to take one’s leave (from one another).’ |

The same holds for *reflexiva tantum* with reciprocal meaning (e.g., *rozstać się*/**siebie* ‘to take one’s leave from each other’) and for certain non-reciprocal derivatives, e.g. for anticausative and partitive-reflexive verbs:

- | | | | |
|------|----|--|--------------------------------------|
| (34) | a. | <i>powstrzymać się</i> / * <i>siebie</i> | ‘to abstain/resist (from doing sth)’ |
| | → | <i>powstrzymać</i> | ‘to restrain/suppress.’ |
| | b. | <i>rzucić się</i> / * <i>siebie</i> na obiad lit. | ‘to throw oneself on the lunch’ |
| | → | <i>rzucić</i> | ‘to throw (sth).’ |
| | c. | <i>trzymać się</i> / * <i>siebie</i> za poręcz(ACC) / poręczy(GEN) | ‘to hold on to the handrail’ |
| | → | <i>trzymać</i> | ‘to hold (sth)/keep holding.’ |
| | d. | <i>ukryć się</i> / * <i>siebie</i> | ‘to hide’ |
| | → | <i>ukryć</i> | ‘to hide/conceal.’ |

5.1.2 *Siebie* replaces *się* with a change to reciprocity

But native speakers accept properly reflexive verbs with *siebie*. With the clitic the diathesis remains vague. Cf. (35)–(36) in which the (a) sentences may be interpreted in three different ways: the subject referents act (i) each for him/herself (reflexive), (ii) jointly and only for themselves (“exclusive” collective reading), (iii) for/against one another. A reciprocal reading was judged as less probable. But with *siebie*, in the (b)-sentences, the reciprocal reading becomes preferable:

- | | | | |
|------|----|------------------------------------|---|
| (35) | a. | <i>Przyjaciele bronili się.</i> | ‘The friends were defending themselves.’ (ambiguous) |
| | b. | <i>Przyjaciele bronili siebie.</i> | ‘The friends were defending each other.’ (reciprocal) |
| (36) | a. | <i>Znajomi oszukiwali się.</i> | ‘The acquaintances were deceiving themselves.’ |
| | b. | <i>Znajomi oszukiwali siebie.</i> | ‘The acquaintances were deceiving each other.’ |

At first sight, this is a paradoxical situation, since *siebie* is customarily considered as a marker of reflexivity proper. This issue requires further investigation.

With anticausative reflexives such a substitution in many cases proves if not impossible but unnatural (mainly for pragmatic reasons). However, some of my informants confirm that *siebie* can be used and then entails a reciprocal reading, e.g.:

- | | | | |
|------|----|--|--|
| (37) | a. | <i>Bartek i Ania uspokoiłi się.</i> | ‘Bartek and Ania calmed down.’ |
| | b. | <i>Bartek i Ania uspokoiłi siebie.</i> | ‘Bartek and Ania appeased each other.’ |

- (38) a. *Bracia obudzili się.* ‘The brothers woke up (at once).’
 b. *Bracia obudzili siebie.* ‘The brothers woke up each other’ (e.g., by snoring).

5.1.3 *Siebie* replaces *się* with a change to reflexivity proper

Here belong verbs that are on the periphery of verbs denoting naturally reciprocal events (see above). Typically these are verbs naming some kind or other of beating, e.g. *bić się* ‘to beat each other’, *kopać się* ‘to kick each other’, *dziobać się* ‘to peck each other’, but also *całować się* ‘to kiss each other’ (see 8.1); e.g.:

- (39) a. *Ptaki się dziobią.* ‘The birds are pecking each other.’
 b. *Ptaki dziobią siebie.* ‘The birds are pecking each itself.’

More complicated and least clear is the case of reflexives proper and autocausatives which in 4.3 were put into groups A2 and A3 (see (25)–(26)). They stand somewhat opposite to the reflexives proper discussed in 5.1.2: with verbs of these groups the clitic *się* still renders principally possible the three interpretations mentioned in 5.1.2, but with *siebie* the reciprocal interpretation becomes either less probable, or nothing changes with regard to *się*; cf.:

- (40) a. *Siostry chwaliły się.* ‘The sisters praised *themselves* / *each other*.’
 b. *Siostry chwaliły siebie.* ‘The sisters praised themselves (= each herself).’
 (= ii. both jointly; “exclusive“ reading).

Native speakers’ judgements differ especially with regard to these verbs. In both (39) and (40), addition of the reflexive intensifier *samych/same*(ACC.PL, MP/NMP, respectively) would stress reflexivity. And, the other way round, the reciprocity marker *nawzajem* ‘mutually’ (see 6.1) or *jeden drugiego* ‘one another’ (see Section 7) would obstruct the reflexive meaning.

All this shows the instability of defaults with the mentioned verbs taking *się* or *siebie*, and we see that the possibility and effect of placing *siebie* instead of *się* largely depend on the range of polysemy of a given reflexive verb. In no case is this opposition to be regarded as grammaticalized.

5.2 Diathesis types

In the following subsections I will discuss the behaviour of orthotonic, i.e. basically non-clitical forms of the reflexive pronoun (see Table 1).

5.2.1 “Canonical” reciprocals

These subsume constructions with reciprocal verbs that have only two arguments, the second of which not being encoded by an accusative without preposition (the direct object of traditional grammar).

5.2.1.1 *Derived from two-place intransitives with prepositional objects (na siebie, za sobą, o sobie etc.).* There are reciprocals derived from two- or three-place verbs with the reflexive pronoun employed in prepositional arguments, e.g.:

- (41) a. *Adam mrug-a do Ew-y.*
 A.NOM wink.IPFV-PRES.3SG to E.-GEN
 ‘Adam is winking at Ewa.’
 → b. *Adam i Ew-a mrug-ają do siebie.*
 A.NOM and E.-NOM wink.IPFV-PRES.3PL to themselves
 ‘Adam and Ewa are winking at one another.’

They represent category AD of Table 4 and can be exemplified by the following items:

- (42) *czekać na siebie* ‘to wait for each other’
mrugać do siebie ‘to wink to each other’
myśleć o sobie ‘to think about each other’
patrzeć na siebie ‘to look at each other’
 tęsknić za sobą ‘to long for each other.’

Like three-place “dative” verbs (5.2.2), many verbs with obligatory prepositional objects demonstrate a more or less clear polysemy of reciprocal vs. reflexive meaning, e.g. *dbać o siebie* ‘to take care of each other / oneselves’, *wątpić w siebie* ‘to have doubts as to each other / oneselves’ or *patrzeć na siebie* ‘to look at each other / oneselves’.

5.2.1.2 *Derived from two-place intransitives with dative objects (sobie)*. Here belong productive simple reciprocal constructions derived from non-transitive verbs which require an indirect object in the dative (see AB in Table 4); cf. construction (43b) and the list in (44):

- (43) a. *Janek sympatyz-uje Frank-owi.*
 J.NOM sympathize.IPFV-PRES.3SG F.-DAT
 ‘Janek sympathizes with Franek.’
 → b. *Janek i Franek sympatyz-ują sobie.*
 J.NOM and F.NOM sympathize.IPFV-PRES.3PL themselves.DAT
 ‘Janek and Franek sympathize with each other.’
- (44) *asystować sobie* ‘to assist each other’
dokuczać sobie ‘to annoy/bore each other’
dorównywać sobie ‘to equal one another’
urągać sobie ‘to revile each other’
wierzyć sobie ‘to trust each other.’

Remarkably enough, there is almost no two-place intransitive which would not be characterized by a reciprocal default when it takes the reflexive *sobie* (for a parallel with German cf. 4.2.2 in Ch. 10). Nor do reciprocals of this kind allow any discontinuous coding (see 4.4).

5.2.2 “Indirect” reciprocals (*sobie*)

These are reciprocals derived from three-place verbs with the mutual relationship concerning the first and the third argument expressed by the dative case (see category AC in Table 4); cf.:

- (45) a. *Agata pożycza-ł-a książki Eli.*
 A.NOM lend.IPFV-PAST.SG-F book.ACC.PL E.DAT
 ‘Agata lent books to Ela.’
- b. *Agata i Ela pożycza-ł-y sobie książki.*
 A.NOM and E.NOM lend.IPFV-PAST.PL-NMP themselves.DAT books
 ‘Agata and Ela lent each other books.’

Here are a few more verbs of this type:

- (46) *aranżować sobie (zlecenia)* ‘to organize (orders) for each other’
oddać sobie (klucze) ‘to return (the keys) to each other’
narzucać sobie (poglądy) ‘to impose (one’s opinion) on each other’
odwzajemniać sobie (grzeczności) ‘to reciprocate each other (niceties)’
wypożyczyć sobie (książki) ‘to lend each other (books).’

This group can be characterized by a considerable polysemy of reciprocal vs. reflexive-benefactive meaning (see 5.2.4). Typically, this can be observed regularly with predicates naming situations of deprivation or acquisition; e.g.:

- (47) *Basia i Kasia codziennie kradły sobie cukierki.*
 i. ‘Every day B. and K. stole *from each other* (= *each other’s*) sweets.’
 ii. ‘Every day B. and K. stole sweets (*for their own benefit*).’

But also with many *verba dicendi*, especially those encoding explanation;⁸ e.g.:

- (48) *Przyjaciele tłumaczyli sobie problem.*
 i. ‘The friends explained the problem *to each other*.’
 ii. ‘The friends tried to find a solution of the problem (*for themselves*).’

5.2.3 “Possessive” reciprocals (*sobie, swój*)

Though Polish has possessive pronouns (see 2.3), the possessive relation is not obligatorily expressed by them but rather by a dative personal pronoun. Thus, in practice “indirect” and “possessive” reciprocals often are formally identical. Especially with arguments denoting body parts and other cases of inalienable possession one normally uses *sobie*, not *swój* (cf. Wierzbicka 1988: 411ff.; compare with German in Buscha & Wiese 1983: 75f.; and Wiemer & Nedjalkov, Ch. 10, § 4.4.1):

- (49) a. *Piotr i Paweł myli sobie twarz.*
 ‘Peter and Paul washed their face(s)’ = i. ‘*each his own face*’; ii. ‘*each other’s face*.’
 b. *²Piotr i Paweł myli nawzajem swoje twarze.*
 ‘Peter and Paul washed each other’s face(s)’ (unambiguous, but not idiomatic).

8. Another problem arises with many verbs which do have a reciprocal default, but as for which it remains arguable whether they are really three-place. E.g., *gratulować sobie (z jakiejś okazji)* ‘to congratulate each other (on some occasion)’ or *oświadczyć (sobie), że* ‘to declare (each other) that’ do not necessarily need a third argument to be explicated syntactically, though on the semantic level it is clearly implied. As concerns the syntactic level, one has also to indicate that nine verbs of the group under discussion require their second argument (direct object) to be not in the accusative, but the genitive (e.g. *dostarczać* ‘to supply, provide’, *udzielać* ‘to dispense’).

On the contrary, if the “possessor” is separated from the “possessed object” (or only temporary) the possessive pronoun proves more natural, but should be accompanied by an explicit reciprocity marker (see 6.1) in order to block the default of the reflexive-possessive:

- (50) a. [?]*Basia i Kasia karmi-ł-y nawzajem sobie*
 B.NOM and K.NOM feed.IPFV-PAST-3PL.NMP mutually RM.DAT
kon-ie. (unidiomatic)
 horse-ACC.PL.NMP
- b. *Basia i Kasia karmi-ł-y nawzajem swoje*
 B.NOM and K.NOM feed.IPFV-PAST-3PL.NMP mutually POSS.ACC.PL.NMP
konie.
 horse.ACC.PL.NMP
 ‘Basia and Kasia fed each other’s horses.’

5.2.4 Benefactive meaning

Benefactives can theoretically be made more explicit by the preposition *dla* ‘for’, but only with a limited number of verbs. In practice prepositional phrases with benefactive meaning are used very rarely, probably because – without explicit reciprocal markers – the standard ambiguity with the reflexive proper remains; cf.:

- (51) *Małżonk-owie kupowa-ł-i dla siebie (= sobie)*
 married.couple-NOM.PL buy.IPFV-PAST-3PL.MP for themselves.GEN = themselves.DAT
książk-i.
 book-ACC.PL
 ‘Man and wife bought books for each other / themselves.’

Furthermore, benefactive meanings are normally distinguishable from possessive neither morphologically nor syntactically, in sentences both with uni-directional and reciprocal predicates. (Compare German in Wiemer & Nedjalkov, Ch. 10, § 4.5.)

5.3 Reciprocals with *sobie* derived from verbs with *się*

Since the reflexive pronoun covers an enormous range of functions both in lexical derivation and as grammatical marker of argument demotion (see Section 3), its forms can also be exploited more than once within one clause fulfilling different functions (Kwapisz 1978:36, 40, 64f.). One thus encounters sentences in which the reflexive clitic performs a derivational function, whereas the orthotonic forms *siebie*, *sobie* etc. can serve to mark reciprocity.⁹

5.3.1 Reciprocals from reflexive verbs (standard constructions)

“Double reflexives” occur regularly with recessive diatheses of three-place verbs, i.e., first of all, anti- and autocausatives. Compare the anticausative verb *przyzwyczaić się* ‘to get accustomed’ (← *przyzwyczaić* ‘to accustom’):

9. The same holds, *mutatis mutandis*, for reflexivity proper with converses, e.g. *dziwić się sobie* ‘to be surprised by oneself’ (← *dziwić* (tr.) ‘to astonish (sb)’) (on *reflexiva tantum* see below).

- (52) a. *Marek przyzwyczaił się do Basii.*
 M.NOM get.used.PFV-PAST.3SG.M RM to B.GEN
 ‘Marek accustomed himself (= got accustomed) to Basia.’
 → b. *Marek i Basia przyzwyczaił-i się do siebie.*
 M.NOM and B.NOM get.used.PFV-PAST-3PL.MPR RM to themselves.GEN
 ‘Marek and Basia accustomed themselves to each other.’

Other examples are:

- (53) a. (*odwzajemnić* ‘to reciprocate’ → *odwzajemnić się* (the same)
 → *odwzajemnić się sobie* ‘to reciprocate with each other’
 b. (*narzucać* ‘to impose (sth on sb)’ → *narzucać się* ‘to impose oneself (on)’
 → *narzucać się sobie* ‘to impose oneself upon each other’
 c. (*opierać* ‘to lean sth against sth’ → *opierać się (na czymś)* ‘to rely on sb, repose on sth’
 → *opierać się na sobie* ‘to rely/repose on each other.’

Compare also reflexive-causatives. With these, however, regular reflexive/reciprocal polysemy arises; cf. (14) with the following:

- (54) *Adam i Jan strzy-gą się u siebie.*
 A.NOM and J.NOM cut.hair.IPFV-PRES.3PL RM at themselves.GEN
 i. ‘Adam and Jan have their hair cut at *one another’s* home.’
 ii. ‘Adam and Jan have their hair cut *each at his* home.’

On the one hand, the interpretation of the two reflexive morphemes depends on the reflexive vs. reciprocal default in simple constructions (see 4.3), i.e. if the reflexive derivative belongs to subgroup A3 (= non-reciprocal default) the orthotonic form will mark reciprocity (see (52)–(53)). On the other hand, there are hardly any verbs belonging to subgroup A1 (= reciprocal default) with which *siebie* could be used in natural contexts; cf. the derivative of the imperfective *zapraszać* ‘to invite (repeatedly)’:

- (55) a. *Marek zapraszał Basię do siebie.*
 ‘Marek invited Basia to his house.’
 → b. [?]*Marek i Basia zapraszali się do siebie.*
 ‘Marek and Basia invited each other to their houses.’

5.3.2 Lexicalized reflexives and reciprocal verbs

Lexicalized reflexives (e.g., *odwołać się do siebie* ‘to let each other know about oneself’ ← *odwołać (kogoś ze stanowiska)* ‘to dismiss (sb from service)’) and reflexiva tantum like *odwdziżyć się komu*(DAT) ‘to repay sb’s service’ behave alike; cf. for the latter:

- (56) *Jacek i Wacek odwdziżyć-l-i się sobie [za swoje usługi].*¹⁰
 J.NOM and W.NOM repay.PFV-PAST-3PL.MP RM themselves.DAT for their.ACC.PL
 service.ACC.PL
 ‘Jacek and Wacek repaid service to each other [for their mutual help].’

10. It should be remarked that the reflexive possessive *swoje* is used here to mark reciprocity, too.

Syntactically they are comparable to “indirect” reciprocals if these are combined with autocausative derivation (see (53b) in 5.3.1).

Orthotonic forms can occur jointly also with the comitative marker *ze sobą*, which stresses reciprocity with lexical reciprocal verbs (see 6.2.1). Again, regular ambiguity with the reflexive proper meaning and the “exclusive collective” reading (see 5.1.2) arises; cf.:

- (57) a. *Przyjaciele rozmawiali [ze sobą].*
 ‘The friends were talking [with each other].’
 b. *Przyjaciele rozmawiali ze sobą o sobie.*
 ‘The friends were talking *with each other*’ (i.) ‘*about each other*.’
 (ii.) ‘*each about him/herself*’ / (iii.) ‘*exclusively about themselves*.’

6. Adverbial reciprocity markers

6.1 The adverbs *nawzajem*, *wzajemnie* ‘mutually’

To make the reciprocal relation explicit one of the two synonymous adverbs *nawzajem* and *wzajemnie* is applied. Although *wzajemnie* is directly related to the adjective *wzajemny* ‘mutual’, it is used less frequently than *nawzajem*, which does not have an adjectival counterpart. (If not indicated otherwise, all that will be said about *nawzajem* in principle holds for *wzajemnie*, too.) As often as not these lexemes are used in dictionaries to explicate the reciprocal meaning of formally reflexive verbs with a plural subject. However, more often than not they are not obligatory explicants of reciprocity in natural discourse and are often felt to be redundant (but see (61) below).

These markers can be employed only jointly with the reflexive pronoun, either *się* (58) or *sobie* (50)–(51), or with the reflexive possessive *swój* (see (61b) below), but regardless of the syntactic valency structure.

- (58) a. *Oni bronili się przed wrogami.*
 ‘They defended themselves against enemies.’
 → b. *Oni bronili się wzajemnie przed wrogami.*
 ‘They defended each other against enemies.’
 c. **Oni bronili wzajemnie przed wrogami* (same intended meaning).
 (59) a. *Chłopcy złorzeczyli sobie (nawzajem).*
 ‘The boys cursed each other.’
 b. **Chłopcy złorzeczyli nawzajem* (same intended meaning).
 (60) a. *Bracia przekazali sobie (wzajemnie) pozdrowienia.*
 ‘The brothers conveyed greetings to each other.’
 b. **Bracia przekazali wzajemnie pozdrowienia* (same intended meaning).

Nawzajem usually is a necessary marker of reciprocity in possessive constructions, both with alienable and inalienable objects (see 5.2.3). Sentences with alienable objects, encoded by the possessive pronoun *swój*, by default (61a) have a reflexive meaning, but the addition of *nawzajem* (61b) annuls this default to render a reciprocal reading:

- (61) a. *Marek i Jan nakarmili swoje konie.*
 ‘Marek and Jan fed their (own) horses.’
 → b. *Marek i Jan nakarmili nawzajem swoje konie.*
 ‘Marek and Jan fed each other’s horses.’

Basically the same holds for inalienable objects, indicated by the dative *sobie* (see 5.2.3).

Generally, *nawzajem*, *wzajemnie* cannot be used with inherently reciprocal predicates (see Section 8); cf.:

- (62) a. *Oni obradują (*nawzajem).* ‘They conferred (*mutually).’
 b. *Oni naradzili się *nawzajem.* ‘They counselled (with each other).’

They can be used neither with reflexive derivatives of object-oriented lexical reciprocals (63a) nor with their resultative derivatives (63b):

- (63) a. *Oni sprzymierzyli się (*nawzajem).* ‘They allied (with each other).’
 b. *Oni są (*nawzajem) skoliżaceni.* ‘They are related by marriage.’

Along with this, *nawzajem* cannot be employed in discontinuous constructions (see 8.1.2, 8.2.2); cf.:

- (64) *Piotr powitał się (*nawzajem) z Marysią.* ‘Peter exchanged greetings with Mary.’

6.1.1 Diachronic remarks

Both *nawzajem* and *wzajemnie* derive ultimately from the verb **jąć* ‘to take’, from which first the now archaic noun *zajem* ‘loan’ was formed. This, in turn, rendered *wzajem*, which in the 15th–16th centuries came to be used as an adverbial complement with nouns of exchange to denote lending/borrowing sth for some time on condition of return (*Słownik Staropolski* 1993:603; Brückner 1970:202). The form *wzajemnie* is considerably older than *nawzajem*, which only by the 19th century came into use in its contemporary meaning (originally as *na wzajem* ‘on condition of mutual obligation’; cf. Linde ²1860: 662f.). The form *wzajem* has now become obsolete. Native speakers’ judgements concerning the interchangeability of *nawzajem* and *wzajemnie* (and *jeden drugiego*; see Section 7) in the above contexts vary quite considerably, though *nawzajem* is clearly preferred. Both adverbs form part of certain petrified formulae of greeting, thanksgiving, wishing etc.; cf.:

- (65) – *Wesołych Świąt!* ‘Merry Christmas!’
 – *Nawzajem / Wzajemnie.* ‘Same to you’ (lit. ‘Mutually’).

6.2 Prepositional phrases

In Polish two prepositional constructions with the reflexive pronoun and plural subjects exist.

6.2.1 *Ze sobą* ‘with each other’

This construction, with the literal meaning ‘with oneself/oneselves’, is, in general, to be considered a comitative marker. If used with inherently reciprocal predicates its meaning

becomes sociative, regardless of the derivational history of the reciprocal (for object-oriented lexical reciprocals see 8.2.2); cf.:

- (66) a. *Jan umówił się z Magdą.* ‘Jan made an agreement with Magda.’
 → b. *Oni umówili się ze sobą.* ‘They made an agreement with each other.’

Analogous examples are:

- (67) a. *Oni spotykali się ze sobą / *nawzajem.* ‘They met (repeatedly).’
 b. *Oni pertraktowali ze sobą / *nawzajem.* ‘They negotiated (with each other).’

With many lexical reciprocals, however, *ze sobą* is usually felt to be wholly superfluous and hardly acceptable. This seems to be true especially of lexicalized reflexive reciprocals. But there is no straightforward connection with the way the second participant is encoded, since many, albeit not all, of these verbs sound natural with a discontinuous phrase (*z + INST*); cf.:

- (68) a. *Oni pobrali się [?]ze sobą.* ‘They married.’
 a’. *[?]On pobrał się z nią.* lit. ‘He got married with her.’
 b. *Oni się [?]ze sobą ożenili.* ‘They married.’
 b’. *On się z nią ożenił.* ‘He married her.’
 c. *Wymieniliśmy się [?]ze sobą wrażeniami.* ‘We exchanged our impressions.’
 c’. *Ona wymieniła się z nim wrażeniami.* ‘She exchanged impressions with him.’

Ze sobą shows almost identical distribution with discontinuous constructions (see 8.1.2, 8.2.2), but not with simple constructions – neither with the comitative subject construction, which, as we have seen (4.4), is less restricted than ordinary discontinuous constructions, nor with reciprocal simple constructions being the topic of Sections 4–5; cf.:

- (69) a. *Oni lubili się *ze sobą.* ‘They liked each other.’
 b. *Oni pomagali sobie *ze sobą.* ‘They helped each other.’

Thus, from a lexical and a syntactic viewpoint, *ze sobą* and the adverbs discussed in 6.1 are distributed complementarily. Note, however, that neither *ze sobą* nor *nawzajem* collocate with reciprocal verbs derived from verbs of directed motion discussed in 8.4. This holds not solely with regard to verbs denoting motion into different directions (70), but concerns also their antonyms; compare *zejść się* with its near synonym *spotkać się* (71):

- (70) *Uczniowie rozbiegli się *nawzajem / *ze sobą.*
 ‘The pupils dispersed running.’
 (71) a. *Uczniowie zeszli się *nawzajem / *ze sobą.*
 ‘The pupils came together.’
 b. *Uczniowie spotkali się *nawzajem / ze sobą po lekcjach.*
 ‘The pupils met with each other after school lessons.’

In cases when the denoted situation lacks mutual interaction lexemes indicating sociativity have to be used, i.e. *razem*, *wspólnie*, more rarely *współ* ‘together, jointly’; cf.:

- (72) *Dzieci razem / *ze sobą chodzą do szkoły.*
 ‘The children went to school together.’

These lexemes, however, cannot be used with inherently reciprocal predicates¹¹ (see above).

6.2.2 *Między sobą* ‘with, among each other’

The other prepositional marker used with reciprocal predicates is *między sobą*. The preposition itself means not only ‘among’, but first of all ‘between’. The meaning of *między sobą* is more complex than that of *ze sobą*, since in addition to reciprocity it implies a particular notion of exclusiveness (on German *unter* ‘under’ see Wiemer & Nedjalkov, Ch. 10, §7.4). This meaning can be explicated as ‘distributive relation of more than two participants taking part in one event’ or ‘repetition of an identical event type distributed over a certain closed group of (two or more) participants’. That such a twofold explication is adequate (and necessary) can be demonstrated by the following examples (compare with (68)–(70) in 6.2.1):

- (73) a. *?Oni umówili się*(PFV) *między sobą*.
 ‘They made an agreement’ (lit. ‘between each other’).
 b. **Oni spotkali się*(PFV) *między sobą*.
 lit. ‘They met between each other’ (once).
 c. **Oni pobrali się*(PFV) *między sobą*.
 lit. ‘They married between each other’ (once).

If instead of the perfective verb in (73b) its imperfective counterpart were used (*spotykali się*) we would interpret it as an iterative event (‘used to meet’) and could use *między sobą*, since in such a case the denoted state of affairs concerns several events involving all the time the same set of persons (most likely more than two and probably at different places). With *pobierać się*, the imperfective equivalent of *pobrać się* in (73c), this alternative reading seems rather excluded, unless we induce about the (quite strange) distributive, and felicitous, marrying among the members of two (or a few) families. Finally, even (73a), denoting a singular event, would sound quite strange, if it were to mean an arrangement between just two and not more persons.¹²

The affinity of the preposition *między* to distributiveness is confirmed by its use with the accusative of the reflexive pronoun (*między siebie*), which is applied with some verbs of the generalized meaning ‘to distribute’, such as *rozdąć* or *rozdzielić* (*podzielili jabłka między siebie* ‘(they) distributed/shared apples among themselves/between each other’). The feature of exclusiveness is corroborated by the fact that those lexical reciprocals, like *dzielić się* (*czymś*) ‘to share sth (with each other)’, which presuppose rather a closed number of participants, often sound better with *między sobą* than with *ze sobą*. With such

11. This distinguishes them from their German counterpart *gemeinsam* (cf. Wiemer & Nedjalkov, Ch. 10, 7.3).

12. For this reason the difference between *ze sobą* and *między sobą* can be compared to the distinction made by English *between* vs. *among* (cf. Todaka 1996: 32f.). With regard to the number of presupposed participants, also the Lithuanian and Russian equivalents of *między sobą* show very similar behaviour (cf. Geniušienė, Ch. 14, Section 9; Knjazev, Ch. 15, Section 5.3).

predicates exclusiveness can pertain even to just two, and not more, referents. In any case *ze sobą* does not rule out a collective reading, whereas *między sobą* does:

- (74) *Wszyscy / dwaj podróżnicy dzielili się między sobą /² ze sobą wrażeniami.*
 ‘All / (the) two travellers exchanged their impressions among / between themselves /² with each other.’

Predicates of a static, unagentive character usually do not permit *między sobą*, since they typically do not imply a notion of an “every-member-to-every-member” exclusiveness:

- (75) *Wszystkie te / owe dwie sprawy nie mają *między sobą / ze sobą nic wspólnego.*
 ‘All these / those two matters don’t have anything in common with one another.’

6.3 Minor markers

Other notable, albeit lexically considerably restricted, explicit markers of reciprocal relations are the adverbials *na przemian* ‘by turns’, *naprzeciw(ko)* ‘vis-à-vis, from the opposite side’, *po kolei*, *kolejno* ‘in a row, successively’, *obopólnie*, *obustronnie* ‘bilaterally’. The last three have semantically identical adjectives (*kolejny*, *obopólny*, *obustronny*; compare with *wzajemnie* in 6.1). *Na przemian* serves to express a constant, more or less regular alternation of referents or events. The referents have to belong to one unchanging set (76). *Po kolei* and *kolejno*¹³ differ in the latter respect, since they presuppose an alternation of referents (events) of a principally open set (77). What all three adverbials share is that they specify reciprocity in the temporal domain (see 10.3 on chain relations):

- (76) *Tego dnia wciąż na przemian to się pokazywało słońce, to znów deszcz padał.*
 ‘All that day the weather alternated between rain and sunshine.’
 (lit. ‘rain and sun-shine appeared alternately’).
- (77) *Każdy uczeń musiał po kolei odpowiadać na pytania nauczyciela.*
 ‘Every pupil had one after the other to answer the teacher’s questions.’

The adverb *naprzeciw* refers to the locative domain. It mainly denotes motion directed towards one another.¹⁴ Its variant *naprzeciwko* occurs with a properly locative meaning. This expression indicates that two referents are placed opposite to one another.¹⁵ It, therefore, expresses reciprocity in a more straightforward way than *naprzeciw*, since one can use the latter also in situations when only one referent is moving towards the other (e.g., *Gdy nas zobaczył, ruszył (nam) naprzeciw* ‘When (he) caught sight of us, (he) went towards us’ – for analogies in German see Wiemer & Nedjalkov, Ch. 10, §7.1).

13. Both lexemes derive etymologically from the noun *kolej* meaning ‘row, turn, change of life’ (beside ‘rail’).

14. If *naprzeciw* occurs with a (pro)noun it is often postposed and can be syntactically cut off from the noun, the latter being in the dative (e.g., *Gdy się zobaczyliśmy, ruszyliśmy sobie naprzeciw*. ‘As we saw each other, we went to meet half-way.’).

15. It can be used only preposed, the noun being in the genitive (e.g., *Obydwie grupy stanęły naprzeciwko siebie*. ‘Both groups stood opposite to each other.’).

Table 6. Adverbial markers of reciprocity

Domain		Multiple (iterated) events only
temporal		<i>na przemian; po kolei, kolejno</i>
locative	<i>naprzeciw(ko)</i>	
social	<i>obopólnie, (obustronnie)</i>	

Obopólnie encodes reciprocal relations in the social domain inasmuch as it refers to the sphere of understanding, agreement etc. between humans. Cf. such common collocations like *obopólne zobowiązanie* ‘bilateral obligation’, *obopólna życzliwość* ‘mutual warm-heartedness, disposition’. *Obustronnie* is almost totally synonymous to it, though it may be used also in a concrete spatial sense (e.g., *U pacjenta stwierdzono obustronne zapalenie płuc.* ‘They ascertained that both of the patient’s lungs were inflamed’ (= that the patient suffered from double pneumonia).

Table 6 subsumes what has just been shown.

7. The syntactic marker *jeden drugiego* ‘one another, one the other’

The phrase *jeden drugiego* has the same etymology, internal structure and inflectional paradigm as its Russian equivalent *odin drugogo*, described in Knjazev (Ch. 15, §7.2), and in many respects it behaves like the latter. For this reason the following remarks will be limited to the differences with regard to the Russian counterpart.

7.1 Main differences with regard to Russian equivalents

The most important difference is that Polish *jeden drugiego* ‘one another’ does not have an alternative (and more frequent) reciprocal marker, like Russian *drug druga* ‘each other’ alongside *odin drugogo* ‘one another’. *Jeden drugiego* is employed much more rarely than Russian *drug druga*, and there are almost no cases where this marker would not be replaceable by another, more idiomatic one (see below). It is therefore not the main means of encoding reciprocal relations in speech, though it is frequently used in dictionary explanations of reciprocal meanings, just like *nawzajem* and *wzajemnie* (see 6.1). It is mutually interchangeable with these adverbs and the reflexive pronoun:

- (78) a. *Jan i Piotr pomagali sobie nawzajem.* ‘Jan and Peter helped each other.’
 = b. *Jan i Piotr pomagali jeden drugiemu.* ‘Jan and Peter helped one another.’

But it cannot co-occur with the reflexive pronoun nor with *nawzajem, wzajemnie*:

- (79) a. *Jan i Piotr pomagali *sobie jeden drugiemu.*
 b. *Jan i Piotr pomagali *nawzajem jeden drugiemu.*

7.2 Diathesis types

Jeden drugiego can be used in most subject-oriented diathesis types (as for object-oriented constructions see 8.2): in “canonical” reciprocals, both transitive (see (80)) and intransitive (see (78b)), and in “indirect” reciprocals (see (81)):

- (80) *Magda i Marta lubiły jedna drugą.*
‘Magda and Marta liked one another.’
- (81) *Ania i Asia przekazują jedna drugiej wszystkie wiadomości.*
‘Ania and Asia convey all the news to each other.’

It is unidiomatic, and for many native speakers unacceptable, to use *jeden drugiego* in “possessive reciprocals” (see (82b)), at least if the “possessed” object is alienable:

- (82) a. *Marek sprzedał Piotrowi [swoj] dom.*
M_i.NOM sell.PFV-PAST.3SG.M P.DAT his_i.ACC.SG.M house.ACC.SG.M
- b. *?Marek i Piotr sprzedał-i domy jeden drugiego.*
M.NOM and P.NOM sell.PFV-PAST-3PL.MP house.ACC.PL one other.GEN
‘Marek and Peter sold each other’s houses.’
lit. ‘Marek and Peter sold the houses one of the other.’

Somewhat more acceptable are sentences with inalienable objects requiring the dative case of *jeden drugiego* (see 4.6.3); cf.:

- (83) a. *Marek szczotkował Piotrowi plecy.*
M.NOM brush.IPFV-PAST.3SG.M P.DAT back.ACC.PL (plural only)
- b. *Marek i Piotr szczotkował-i jeden drugiemu plecy.*
M.NOM and P.NOM brush.IPFV-PAST-3PL.MP one other.DAT back.ACC.PL
‘Marek and Peter were brushing each other’s backs.’
(lit. ‘... one the other(DAT) the back’ = ‘...the backs to one another?’).

But even such sentences sound quite unusual. Informants prefer simple constructions with the reflexive pronoun, despite the potential interference of a reflexive interpretation:

- c. *Marek and Paweł szczotkowali sobie plecy.*
(translation as in (83b) vs. ‘were brushing each his back’).

For the sake of clarity one can always add *nawzajem* (see 6.1), and this is the normal way of avoiding ambiguity. The same holds if the reflexive pronoun would render a benefactive-reflexive reading (see 5.2.4); cf.:

- (84) a. *Oni robią sobie zdjęcia.* ‘They take photos for each other/themselves.’
b. *Oni robią zdjęcia jeden drugiemu.* ‘They take photos for each other.’

7.3 Lexical restrictions and preferences

Jeden drugiego can hardly be used instead of the non-clitic form of the reflexive pronoun in constructions with two forms of the reflexive pronoun (85) (see 5.3) and with predicates denoting naturally reciprocal events (86):

- (85) a. *Oni zachwycają się sobą.* ‘They are ravished by each other.’
 b. ²*Oni zachwycają się jeden drugim.* (same).
- (86) *poznać się / ²jeden drugiego* ‘to make acquaintance of one another’
całować się / ²jeden drugiego ‘to kiss (each other)’
spotkać się / ²jeden drugiego ‘to meet.’

If *jeden drugiego* is possible at all, a slight shift in meaning occurs (see 10.1 below).

On the contrary, *jeden drugiego* turns out to be preferable or even necessary if a derived verb with the RM has a meaning other than reflexive proper; *jeden drugiego* then marks an otherwise blocked or obliterated reciprocal reading. Especially autocausative predicates can be cited here:

- (87) a. *Jan i Piotr ukrywali się.*
 ‘Jan and Peter hid themselves’ (repeatedly or for a long time).
 ≠ b. *Jan i Piotr ukrywali *się nawzajem / jeden drugiego.*
 lit. ‘Jan and Peter were hiding one another’ (alternately).

7.4 *Jeden drugiego* in subject position

Although *jeden drugiego* cannot be used jointly with the RM within one clause, it can be used as an afterthought, i.e. in a syntactically disintegrated construction, after a predicate with the RM:

- (88) *Oni się nie znosili↓, jeden drugiego↓ / ²nawzajem / ²wzajemnie.*
 ‘They didn’t stand each other.’
 (lit. ‘they themselves not stand.IPFV.PAST.3PL.MP, one.other.GEN’),

or as topicalizer to be “picked up” by the RM (see (89b–c)), being possible continuations of (89a) (cf. with example (52) in Ch. 10 on German, §4.6):

- (89) a. *Piotr i Jan kochali się w Asi.* ‘Both Peter and Jan loved Asia.’
 b. *Jeden drugiego↑ oni się nie cierpieli.* ‘They couldn’t stand one another.’
 = c. *Nawzajem/Wzajemnie↑ oni się nie cierpieli.* ‘Mutually they couldn’t stand each other.’

7.5 Object-oriented constructions

Native speakers are not unanimous about the encoding of the first part of *jeden drugiego* in object-oriented constructions. This demonstrates that this marker is not really grammaticalized. Compare the two possibilities of encoding the first component:

- (90) a. *Komendant wymienił żołnierzy jeden(NOM) na drugiego.*
 = b. *Komendant wymienił żołnierzy jednego(ACC) na drugiego.*
 lit. ‘The commander replaced the soldiers one by/for the other.’

Some informants abandon the second possibility, while others prefer it (if at all; see above and 8.2.2).

7.6 Diachronic remark

Some evidence exists that – in distinction to modern Polish (see 7.1, 7.4) – *jedyn drugiego* and “reciprocal adverbs” (*wzajemnie, nawzajem*) could be used together within one clause in earlier stages of the language. Compare the following example from a religious text written in a mixture of Latin and 15th century Polish (cited after *Słownik Staropolski* 1993:603; cf. with the German translation of the same Bible fragment in Wiemer & Nedjalkov, Ch. 10: (103) in 5.5.5.4):

- (91) (...) *et nos debemus altervtrum diligere wzajemnye geden drugiego mylowacz.*
lit. ‘and we should be diligent to love mutually one another.’
(from the Johannes Gospel, Book 1, Ch.4, Verse 11).

8. Lexical reciprocals (two- and three-place)

Since lexical reciprocals are generally extremely “capricious” in their derivational and syntactic behaviour, I can but mention the most relevant features here, leaving aside really idiosyncratic ones.

8.1 Subject-oriented constructions (including *reciproca tantum*)

Let us begin with the statistics (Table 7).

The number of reflexive *reciproca tantum* in group B is 46 (including the 10 “defective” anticausatives listed in (95) below).

Subject-oriented lexical reciprocals can be divided into three types:

1. Verbs that do not take the reflexive clitic for derivational functions, e.g.

- (92) a. *harmonizować* ‘to harmonize’
b. *obradować* ‘to counsel’
c. *obcować* ‘to be in contact with’
d. *współżyć* ‘to have sexual intercourse.’

2. Verbs with the clitic, formally derived from transitive bases. Within this group we should further distinguish between those which have a formal transitive equivalent, but do not show a regular semantic relation to it, e.g. (cf. also the verbs discussed in 8.4):

Table 7. Two-place (subject-oriented) lexical reciprocals

A without <i>się</i>	B with <i>się</i> and with an irregular semantic relation to a base transitive verb	C derivatives of three-place (object-oriented) lexical reciprocals (see 8.3–4)	Total
26 (9%)	86* (33%)	152 (58%)	264 (= 100%)

*This number includes 29 items from Table 9 in 8.4.

- (93) *policzyć* ‘to count’ → *policzyć się* ‘to settle accounts (with sb)’
spróbować ‘to try’ → *spróbować się* (*z kimś na rękę*) ‘to arm-wrestle’

and *reciproca tantum* (94). To the latter belong also confixed verbs to be discussed in 8.4 (29 items):

- (94) a. *czubić się* i. ‘to tease each other’, ii. ‘to scuffle each other (for)’
 b. *droczyć się* ‘to tease one another’
 c. *rozstać się* ‘to separate, leave each other’
 d. *zżyć się* ‘to become familiar with each other.’

3. Reflexive derivatives from object-oriented lexical reciprocals (see 8.3–4): some anticausatives have only potential causative base verbs, which are not used in practice. For this reason I have included these anticausatives among the *reciproca tantum* (see column B in Table 8). Their list in (95) is probably exhaustive. To these we ought to add totally lexicalized items like *pobrać się* ‘to marry’ (← *pobrać* (*należność*) ‘to take (the due amount, fee)’) and those discussed in 8.4:

- (95) a. *bratać się* (IPFV) ‘to fraternize’
 b. *klócić się* (IPFV) i. ‘to quarrel’, ii. ‘to be in contradiction with’
 c. *koligacić się* (IPFV) ‘to become related by marriage’
 d. *kumać się* (IPFV) ‘to hob-nob’
 e. *parzyć się* (IPFV) ‘to mate/copulate’ (about animals)
 f. *przyjaźnić się* (IPFV) ‘to be friends/good colleagues’
 g. *spokrewnić się* (PFV) ‘to become related’
 h. *sprzymierzyć się* (PFV) ‘to ally/unite’
 i. *zazębiać się* (IPFV) ‘to dovetail/be interrelated.’

Curiously enough, the perfective equivalents of the imperfective *bratać się*, *klócić się*, *koligacić się* do have object-oriented lexical reciprocal counterparts: *po/zbratać (się)*, *skłócić (się)*, *skoligacić (się)* (see 8.3).

Table 8 (see 8.2) does not include those subject-oriented reciprocals which come very close to verbs denoting naturally reciprocal events (groups B and C; cf. Kemmer 1993: 102ff.). This intermediate group comprises about 30 items, e.g. *całować się* ‘to kiss’, *dotykać się* ‘to touch each other’, *widzieć/widywać się* ‘to meet (regularly, on purpose)’. I shall dwell on them in 8.1.2.

8.1.1 *Semantic subtypes*

The most prominent lexical subgroup consists of verbs denoting competition (in a broad sense; 49 items), in particular fighting (29 items; e.g., *bić się*, *boksować się*, *prać się* all meaning ‘to fight (with fists)’, *szarpać się*, *targać się* ‘to pluck each other’s hairs, beard’) and quarelling (11 items; see (94a–b, 95b, 96, 98)). Within this subgroup only two verbs, encoding less concrete action, do not take the reflexive clitic, namely: *walczyć* and *wojować* with the common meaning ‘to fight/participate in a war (battle)’.

Less numerous lexical subgroups are formed by verbs denoting

1. Conversational collaboration; e.g., *rozmawiać* ‘to talk (with each other)/converse’, *negocjować* ‘to negotiate’.

2. Harmony or harmonizing; e.g., *porozumieć się* ‘to come to an agreement’, see also (92a, 94d, 95a, d, f–h).
3. Contrast; e.g., *kontrastować* ‘to contrast’, see also the second meaning of (95b).
4. Geographical, local contact; e.g., *graniczyć* ‘to border’; *przylegać*, *sąsiedować* ‘to adjoin’.

The bulk of all verbs with the RM belong to the imperfective aspect, they by lexical default encode activities or states (for the terminology see Section 10).

8.1.2 Syntactic subtypes (*discontinuous vs. simple constructions*)

With some particular exceptions (see 8.4), lexical reciprocals allow both a comitative subject (see 4.5) and discontinuous constructions. The latter are almost always replaceable by a construction containing *ze sobą* or *między sobą* (see 6.2.1–2). Above it was stated that this construction and adverbial reciprocal markers (see 6.1) are distributed complementarily. Now this statement should be partly modified, since verbs with *się* and a general meaning of competition (see 8.1.1) permit both markers (of course, one at a time). They therefore occupy an intermediate position between *reciproca tantum* and verbs denoting naturally reciprocal events, on the one hand, and prototypical reciprocals which were the subject of 4.2.1 (“canonical” reciprocals of transitive verbs), on the other.¹⁶

1. *Nawzajem, wzajemnie* ‘mutually’ not possible. Here belong reflexive verbs that can encode only reciprocal events, like those in (93)–(95). The discontinuous construction is replaceable by a simple construction with *ze sobą* (for exceptions see 6.2.1) – or, on the conditions discussed in 6.2.2, with *między sobą*; but the addition of *nawzajem* in a simple construction is ruled out. Compare the following set of synonymous sentences:

- (96) a. *Jacek sprzeczał się z Wackiem.*
 ‘Jacek was squabbling with Wacek.’
 = b. *Wacek sprzeczał się z Jackiem.*
 ‘Wacek was squabbling with Jacek.’
 = c. *Jacek i Wacek sprzeczali się [*nawzajem].*
 ‘Jacek and Wacek were squabbling [with each other].’
 = d. *Jacek i Wacek sprzeczali się ze sobą.*
 (same as (c)).

Lexical reciprocals without the reflexive clitic occur in the same types of construction (subtracting the clitic); cf.:

- (97) a. *Policjant walczył z włamywaczem.*
 ‘The policeman fought with the burglar.’
 = b. *Włamywacz walczył z policjantem.*
 ‘The burglar fought with the policeman.’
 = c. *Policjant i włamywacz walczyli ze sobą.*
 ‘The policeman and the burglar fought with each other.’

16. More on the difference between both types of reciprocals cf. Kemmer (1993: 100, 109ff.).

2. All constructions (*simple + adverb, discontinuous, comitative*) possible. Verbs denoting fighting or quarrelling which do not belong to *reciproca tantum* and have transitive counterparts (see 8.1.1) are peculiar insofar as they permit not only for discontinuous marking, but also for adverbial intensifiers of reciprocity; cf. the following synonymous sentences:

- (98) a. *On się z nią tłukł.* lit. ‘He was beating with her’ (= fighting).
 = b. *Oni się ze sobą tłukli.* lit. ‘They were beating with each other.’
 ≈ c. *Oni się [nawzajem] tłukli.* ‘They were beating [each other].’

3. *Discontinuous construction hardly possible.* Among verbs denoting naturally reciprocal events, central and peripheral representatives should be distinguished, since the peripheral deviate syntactically from the central ones. The central verbs do allow adverbial marking by *nawzajem* (see 1. above) only in particular contexts (on these see (136)–(137) in 10.1), whereas the peripheral constitute another intermediate group between class 2 and “canonical” transitive reciprocals (4.2), which altogether do not occur in discontinuous constructions. Compare the peripheral *całować się* ‘to kiss each other’ with the quite canonical *obejmować się* ‘to embrace each other’: the latter is hardly acceptable with *ze sobą* (b) or in a discontinuous construction (c), whereas with the former it is usual to choose just these two ways of saying:

- (99) a. *Dziewczyna i chłopak całowali się [nawzajem].*
 ‘The girl and the boy were kissing [mutually].’
 a’. *Dziewczyna i chłopak obejmowali się [nawzajem].*
 ‘The girl and the boy were embracing each other.’
 b. *Dziewczyna i chłopak całowali się ze sobą.*
 lit. ‘... with each other.’
 b’. *Dziewczyna i chłopak obejmowali się *ze sobą.*
 lit. ‘... with each other.’
 c. *Chłopak całował się z dziewczyną.*
 lit. ‘The boy was kissing +RM with the girl.’
 c’. *Chłopak *obejmował się z dziewczyną.*
 lit. ‘The boy was embracing +RM with the girl.’

By comparison with the previous classes we can thus assume a kind of semantic and syntactic continuum of cliticized verbs denoting naturally reciprocal events: verbs deriving from normal transitives can behave like “canonical” reciprocals (e.g., *obejmować się*) or be close to natural reciprocals (e.g., *całować się*, *tluc się* – see above). It remains an open question here to which degree each verb with a high degree of “natural reciprocity” should be split up into two lexical items, depending on the absence/presence of the reflexive clitic (for an analogous problem in German cf. Wiemer & Nedjalkov, Ch.10, §8.1).

8.2 Object-oriented constructions

There are about 256 object-oriented lexical reciprocal verbs.¹⁷ They are morphologically dominated by verbs prefixed with *z-* (84 items) and *roz-* (106 items), the first group contributing to verbs meaning ‘connecting’ (129 items), the latter being the main stock of verbs denoting ‘disconnecting’ (123 items). From this we can see that the ‘disconnecting’ group, though slightly less numerous, is morphologically more homogeneous than the ‘connecting’ group. Only five verbs form a small group of items naming situations of exchange. The bulk of all these groups are derivatives from verbal stems (*simplicia*); other verbs are in the definite minority (e.g., (100d), (101a, b), (102b), 1.4; 2.3, (111b–e), (112b); compare also with 8.4). Among them there are usually loans of Latin, French or German origin (e.g., *harmonizować* ‘to harmonize’, *koordynować* ‘to coordinate’, see (100d), (101b)).

8.2.1 Semantic subtypes

1. *Verbs of connecting* fall into six lexical groups.

1.1. Verbs of joining, e.g.:

- | | | | |
|-------|----|--|-----------------------------|
| (100) | a. | <i>połączyć, złączyć</i> | ‘to join/tie together’ |
| | b. | <i>szepić</i> | ‘to couple/fasten together’ |
| | c. | <i>sprząc (konie)</i> | ‘to team (horses)/couple’ |
| | d. | <i>ześrubować</i> (← <i>śruba</i> ‘screw’) | ‘to screw together.’ |

1.2. Verbs of assembling, e.g.:

- | | | | |
|-------|----|--|--------------------------------------|
| (101) | a. | <i>scalić</i> (← <i>cały</i> ‘whole/entire’) | ‘to unite/merge sth’ |
| | b. | <i>skadrować</i> (← <i>kadr</i> ‘frame (in a film)’) | ‘to make frames from a film’ |
| | c. | <i>skupić</i> | i. ‘to concentrate’, ii. ‘to buy up’ |
| | d. | <i>zebrać</i> | ‘to assemble/collect.’ |

1.3. Verbs denoting contraction or diminishing, either of a single object (102) or of a plural or collective one (103), e.g.:

- | | | | |
|-------|----|---|-------------------------------|
| (102) | a. | <i>skręcić</i> | ‘to twist’ |
| | b. | <i>skulić</i> (← <i>kula</i> ‘ball’) | ‘to curl up’ |
| | c. | <i>zgiąć</i> | ‘to bend (together)/curve’ |
| | d. | <i>zwinąć</i> | ‘to roll up/furl.’ |
| (103) | a. | <i>spędzić</i> | ‘to gather/bring together’ |
| | b. | <i>zbić</i> | ‘to tap into a mass, to nail’ |
| | c. | <i>zegnać</i> | ‘to gather/to bring together’ |
| | d. | <i>zgrabić</i> (← <i>grable</i> ‘rake’) | ‘to rake up (together).’ |

1.4. Verbs of comparison. Characteristic of this subgroup is that there is only a single, and now obsolete, verb (see (104a)) which is derived from a (non-reciprocal) verbal

17. Many of these verbs have been taken from SJP Dor and lists in Śmiech (1986: 29f., 69ff.), which are, however, totally unknown to many native speakers or are used nowadays only in another than reciprocal meaning. A thorough diachronical examination of the origin and semantics of these items would be necessary here.

stem with the “reciprocal” prefix *z/s-*, the other being derived from inherently reciprocal adjectival stems:

- | | | |
|----------|--|-------------------------------|
| (104) a. | <i>sczytać</i> (← <i>czytać</i> ‘to read’) | ‘to collate’ |
| b. | <i>porównać</i> (← <i>równy</i> i. ‘equal/even’) | ‘to compare’ |
| c. | <i>upodobnić</i> (← <i>podobny</i> ‘similar’) | ‘to liken/make similar’ |
| d. | <i>utożsamić</i> (← <i>tożsamy</i> ‘identical’) | ‘to identify/make identical.’ |

1.5. Verbs of mixing (up), e.g.:

- | | | |
|-------|-----------------------------|-----------------------------|
| (105) | <i>po-/prze-/wy-mieszać</i> | ‘to mix (up)’ |
| | (<i>po</i>) <i>mylić</i> | ‘to mistake sb for sb else’ |
| | (<i>s</i>) <i>plątać</i> | ‘to ravel.’ |

1.6. Only three verbs denote acquainting sb with sb else, these are:

- | | | |
|-------|-------------------------|--|
| (106) | <i>poznać, zapoznać</i> | ‘to acquaint, introduce (to each other)’ |
| | <i>zaprzyjaźnić</i> | ‘to make, cause to become friends.’ |

These are semantically relatable to verbs denoting matrimonial events, which are

- | | | |
|-------|-------------------------------|-------------------------------------|
| (107) | (<i>o</i>) <i>żenić</i> | ‘to marry (X with Y)’ |
| | (<i>za</i>) <i>swatać</i> * | ‘to (begin to) act as a matchmaker’ |
| | <i>zaruczyć</i> | ‘to betroth, to affiancé.’ |

* The imperfective verb is also used intransitively in the meaning ‘to act as a matchmaker’ or as a non-reciprocal transitive: *swatać córce*(DAT) *syna*(ACC) *sąsiadów* ‘to match one’s daughter with the neighbours’ son’. The perfective counterpart of the latter takes another prefix (*wy-swatać*).

Many of the above verbs, especially those belonging to subgroup 1.3, have homonyms rendering not a notion of connecting, but a spatial or figurative meaning ‘from downwards’ or ‘off, away’. For instance, *zbić* (cf. (103b)) can also mean ‘to smash/break down’, *zegnać* (103c) also ‘to drive away’ (cf. footnotes 18 and 19). In yet other cases the prefix *z-* serves only as a marker of perfective aspect, adding nothing or only very little to the lexical meaning of the verb (e.g., *rym* ‘rhyme’ → *rymować*(1PFV) → *zrymować*(PFV) ‘to rhyme’), or it has no motivating simplex verb, but an imperfective counterpart with another suffix (e.g., *bliski* ‘nearby’ → *zbliżyć*(PFV) → *zbliżyć*(1PFV) ‘to bring nearer, closer to one another’).

2. Verbs of disconnecting can be sub-classified as follows:

2.1. Verbs naming *decontraction* of a formerly contracted (diminished) object, taken either as one (maybe collective) whole (108) or as consisting of distinct similar parts (109):

- | | | |
|-------|---|---|
| (108) | <i>rozkurczyć</i> [<i>pięść</i>] | ‘to unclench’ |
| | <i>rozłożyć</i> [<i>gazetę</i>] | ‘to unfold (a newspaper)’ |
| | <i>rozewrzeć</i> [<i>usta</i>] | ‘to open/widen one’s mouth’ |
| | <i>rozwinąć</i> [<i>dywan</i>] | ‘to unfold (a carpet).’ |
| (109) | <i>rozczapierzyć</i> [<i>skrzydła, palce</i>] | ‘to spread (out) one’s fingers (wings)’ |
| | <i>rozdmuchać</i> [<i>liście</i>] | ‘to blow about (leaves)’ |
| | <i>rozepchać</i> [<i>przechodniów</i>] | ‘to push aside (passers-by)’ |
| | <i>rozgałęzić</i> [<i>przewody</i>] | ‘to ramify, to branch out.’ |

It is not difficult to notice that this subgroup consists of antonyms of the ‘connecting’ subgroup 1.3. Antonymous relationships are often coupled with morphological parallelism, e.g., *s-piąć* ‘to buckle/clasp together’ – *roz-piąć* ‘to unbuckle/unbutton’, *s-pędzić* ‘to gather’ – *roz-pędzić* ‘to disperse/scatter’.

2.2. Verbs of the previous subgroup are often not distinguishable from verbs with a more clear-cut *distributional* meaning, e.g.:

- | | | |
|-------|---|---|
| (110) | <i>rozdać</i> [<i>role aktorom</i>] | ‘to deal out (parts to actors)’ |
| | <i>rozesłać</i> [<i>listy, zaproszenia</i>] | ‘to send right and left, to distribute’ |
| | <i>rozkrzyczeć</i> [<i>wiadomość</i>] | ‘to shout right and left (news)’ |
| | <i>rozzucić</i> [<i>papiery po biurku</i>] | ‘to throw about.’ |

2.3. Only a few verbs with a general meaning of ‘*distinguishing* (between one another)’ could be found. Similarly to verbs of comparison (see above 1.4), this subgroup is particular in that all verbs with this meaning derive from nominal stems, and only one (111d) has the prefix *roz-*; one, (111a), is a borrowed verb. Here is their presumably exhaustive list:

- | | | | |
|-------|----|--|----------------------------------|
| (111) | a. | <i>konfrontować</i> | ‘to confront’ |
| | b. | <i>przeciwwstawić</i> (← <i>przeciw</i> ‘against’) | ‘to confront’ |
| | c. | <i>odróżnić</i> (← <i>różny</i> ‘different’) | ‘to distinguish/differentiate’ |
| | d. | <i>rozróżnić</i> (see (111c)) | ‘to differentiate’ |
| | e. | <i>różnić</i> (see (111c)) | ‘to make different/make differ.’ |

2.4. Verbs conveying a meaning of *destruction*. This meaning is surely the most peripheral of all reciprocal meanings presented here. As with verbs of decontraction, predicates with singular and plural objects should be kept apart, but I will not differentiate them here; cf.:

- | | | | |
|-------|----|--|--|
| (112) | a. | <i>rozbić</i> [<i>talerz</i>] | ‘to shatter/break (a plate)’ |
| | b. | <i>rozetrzeć</i> [<i>papier</i>] | ‘to tear into pieces (paper, documents)’ |
| | c. | <i>rozkruszyć</i> [<i>chleb</i>] (← <i>kruchy</i> ‘fragile/crisp’) | ‘to crumble (bread)’ |
| | d. | <i>rozpiłować</i> (← <i>piła</i> ‘saw’) | ‘to saw into pieces.’ |

3. *Verbs of exchange*. The only verbs encoding this separate meaning are the following:

- | | | | |
|-------|----|---|--|
| (113) | a. | <i>luzować</i> | ‘to replace/relieve (the guard)’ |
| | b. | <i>rozmienić</i> [<i>banknot na drobne</i>] | ‘to change (a banknote into petty cash)’ |
| | c. | <i>wymienić</i> [<i>stare części na nowe</i>] | ‘to replace (old parts by new ones)’ |
| | d. | <i>zamienić</i> [<i>wizytówki</i>] | ‘to exchange (visiting-cards)’ |
| | e. | <i>zmienić</i> [<i>żołnierzy na posterunku</i>] | ‘to relieve/change (the sentry).’ |

Table 8 shows the statistics on the two main groups discussed in 1 and 2.

8.2.2 Syntactic subtypes

Verbs that cannot occur with discontinuous phrases (nor, consequently, with *ze sobą*) belong, as a rule, either to the contraction (1.3.) and decontraction (2.1.) subtypes, or to the assembling group; cf.:

- | | | | |
|-------|----|---|---|
| (114) | a. | <i>Dziekan zebrał wszystkich docentów i profesorów</i> (* <i>ze sobą</i>). | ‘The dean assembled all instructors and professors (*with each other).’ |
|-------|----|---|---|

Table 8. Object-oriented lexical reciprocals

1. Verbs denoting <i>connecting</i> : 129 (100%)						
joining	assembling	contraction	comparison	mixing	acquainting + matrimonial events	other
32 (25%)	25 (19%)	26 (20%)	11 (8%)	9 (7%)	6 (5%)	20 (16%)
2. Verbs denoting <i>disconnecting</i> : 123 (100%)						
decontraction/dispersion	distribution	distinguishing	distinguishing	destruction	other	
26 (21%)	29 (24%)	5 (4%)		19 (15%)	44 (36%)	

b. **Dziekan zebrał docentów z profesorami.*

*‘The dean assembled the instructors with the professors.’

Such verbs should be classified as two-place object-oriented reciprocal verbs requiring either a simple phrase with functionally identical plural objects (e.g., *rozchylić okiennice* ‘to half-open the shutters’). Or they have an object in the singular, denoting either a collective referent (e.g., *rozegnać stado* ‘to scatter the flock’) or a complex one, which is conceptualized as consisting of distinct and functionally different parts (e.g., *złożyć łóżko składane* ‘to fold, put together a folding bed’, *rozkleić kopertę* ‘to unstick an envelope’). Verbs of destruction allow only for non-complex referents either in the singular or in the plural (see (112)). Some verbs of distribution (2.2) show similarities to three-place predicates: although they cannot encode their objects discontinuously either, the prepositional phrase *między siebie*(ACC) ‘among, between themselves’ (see 6.2.2) or *po* + LOC may be added to the simple construction (e.g., *Franek rozkrzyczał wiadomość po okolicy / po znajomych* ‘Franek shouted about the news in all directions / among his acquaintances’).

Only verbs that denote joining (115), comparing, distinguishing, mixing (116) and acquainting permit discontinuous phrases (and *ze sobą*); they should therefore be considered true three-place verbs, e.g.:

- (115) a. *Elektryk połączył kable (ze sobą).*
‘The electrician joined the cables with one another.’
b. *Elektryk połączył jeden kabel z drugim.*
‘... joined one cable with the other.’
= c. *Elektryk połączył kable jeden z drugim.*
‘... joined the cables one with the other.’
- (116) *Jolanta rozbełtała żółtko z cukrem.*
‘Jolanta stirred up the yolk with sugar.’

As can be seen from (115b–c), the analytic marker *jeden drugiego* (*jeden z drugim* ‘one with the other’) is equally possible in cases when a discontinuous construction can be used. Mostly, however, this construction is felt to be “too heavy” and avoided (see 7.2, 7.5).

The four verbs of replacing which have the common stem *-mien-* (see (113)) permit a discontinuous construction with the preposition *na* (lit. ‘on’); a simple construction will be understood elliptically with the third argument lacking (see (117a)). *Zmienić*, as well as *luzować*, are used solely in this construction. The imperfective counterparts of *wymienić*,

zamienić and *zmienić* are also the only verbs among all lexical reciprocals that may be combined with the adverbial reciprocity intensifiers *nawzajem*, *wzajemnie* (see 6.1); cf.:

- (117) a. *Komendant zmienił żołnierzy* $\emptyset_{\text{na+ACC}}$
 b. *Komendant zmienił* (PFV) **nawzajem* *żołnierzy*.
 c. *Komendant zmieniał* (IPFV) *nawzajem* *żołnierzy*.

The reason is that imperfective verbs may refer to unrestricted iterative events. They thus do not block an interpretation of referents successively replacing one another (see 10.2.2).

8.3 Anticausative derivatives

On the one hand, there is a quite considerable number of lexicalized reciprocal anticausatives without a regular relation to causative verbs (see 8.4, but also (68a) in 6.2.1). On the other hand, among all 256 three-place object-oriented lexical reciprocals 114 verbs (= 44,5%), i.e. almost half of them, do not have anticausative counterparts. If both main groups, the verbs of connecting and disconnecting, are considered apart from each other it turns out that the percentages of verbs without anticausative derivatives are almost equal (47% for the connecting group, 43% among the disconnecting verbs). Among the verbs of the exchange group we find at best marginal cases of anticausatives: e.g., in (118b) the action is performed in obedience of a command (order) of a third person who is endowed with the respective social power (cf. Geniušienė 1987: 103f., who speaks of “distant causation”). But in other circumstances these reflexive derivatives can also be regarded as genuine subject-oriented reciprocals; see the two interpretations of (118b):

- (118) a. *Komendant luzował wartowników w regularnych odstępach czasu.*
 ‘The commander replaced the sentries at regular intervals.’
 → b. *Wartownicy luzowali się w regularnych odstępach czasu.*
 i. ‘The sentries were replaced by each other (by order of the commander at regular intervals).’
 ii. ‘The sentinels relieved each other at regular intervals.’ (autocausative).

Syntactically, regular anticausatives behave more or less the same way as their German equivalents (cf. Wiemer & Nedjalkov, Ch. 10, §8.2.3): they “inherit” their behaviour from their causative bases, but they also demonstrate more “freedom” for the adverbial intensifier *nawzajem* (119):

- (119) a. *Marysia poznała *nawzajem / ze sobą swoich przyjaciół.* (causative)
 ‘Marysia introduced her friends to each other.’
 → b. *Przyjaciele Marysi poznali się nawzajem / ze sobą.* (anticausative)
 ‘Marysia’s friends introduced themselves to each other.’

Anticausative verbs of assembling also can collocate with discontinuous phrases, though they remain incompatible with *ze sobą*; compare (114) with their anticausative derivatives (120):

Table 9. Verbs with confixes *z-* or *roz+*STEM+*się*

reciprocals denoting	<i>z-</i> +STEM+ <i>się</i> 'connecting'	<i>roz-</i> +STEM+ <i>się</i> 'disconnecting'	sum REC	vs. other
anticausative	32	11	43	141
from motion verbs	7	11	18	0
other	9	2	11	109
total	48	24	72 (22%)	250 (78%)

- (120) a. *Profesorowie i docenci zebrali się *ze sobą.*
 = b. *Profesorowie zebrali się z docentami.*
 'The professors assembled with the instructors.'

8.4 Object-oriented lexical reciprocals with confixes (*z-/roz-*(STEM) + *się*)

There exist two groups of antonymous verbs of *connecting* and *disconnecting*, which are morphologically more complex, albeit salient, and often semantically separated from the groups discussed in 8.2-3. They are characterized by an additional reflexive clitic. Their structure is therefore *z-*+STEM+*się* (with two morphological variants)¹⁸ for the connecting meaning and *roz-*+STEM+*się* for the disconnecting meaning, respectively. The connecting group corresponds to reciprocals with the prefix complex *su-si-* in Lithuanian and has the same general meanings 'to crowd/huddle together' and 'to come together' (cf. Geniušienė, Ch. 14, §§5.2.2–3). But whereas the Lithuanian verbs are classified as anticausatives, among Polish reciprocal verbs of this morphological type anticausatives prevail, for their derivational history, as a rule, is not STEM → STEM+RM (anticausative) → PREFIX+RM+STEM as in Lithuanian (see Geniušienė *ibid.*: example (66)), but STEM → PREFIX+STEM (causative) → PREFIX+STEM+RM (see (121)–(122) below). Furthermore, with Polish verbs denoting 'coming together' the reflexive marker (*się*) is obligatory.

Anticausatives with either confix form only small subgroups within highly productive morphological classes, in which many potential verbs can be derived *ad hoc*, not being attested by dictionaries (Dulewiczowa 1981:120f.; Ostromęcka-Frączak 1983:129). These are typically desubstantival or, to a lesser extent, deadjectival (cf. Grzegorzczkowska 1969:95, 99; Ostromęcka-Frączak *ibid.*:120). But from this productivity reciprocal meanings are evidently excluded (and no deadjectival derivatives are found; compare with 8.2). Reciprocal verbs are about 3.5 times less numerous than verbs with other meanings (see Table 9), and their percentage is probably even lower, accounting for the mentioned productivity of this derivational class with verbs that do not render reciprocal meanings. As for reciprocal verbs, items of the connecting group prevail considerably over items belonging to the disconnecting group (Table 9), and for the latter the disproportion between reciprocal

18. Note that *z-*, which is also widely applied to mark prefixed verbs of the perfective aspect, is here a genuinely derivational prefix (more precisely, part of a confix) changing the lexical meaning of the simplex (in addition to marking perfective aspect) or the syntactic category (with denominals).

and non-reciprocal verbs (24:175 > 1:7) is considerably larger than with verbs denoting crowding/huddling or coming together (48:75 ≈ 1,5).

It follows from the above that reciprocal verbs with the confixes *z-/roz-...się* became lexicalized a long time ago; cf.:

- (121) *rozproszyc się* ‘to disperse’ ← *rozproszyc* ‘to break up’ (← *proch* ‘powder’)
rozpruć się ‘to come unstitched’ ← *rozpruć* ‘to unstitch.’
- (122) a. *skrzyknąć się* ‘to assemble by shouting to each other’
 ← *skrzyknąć* ‘to call together’ (← *krzyk* ‘scream’)
 b. *złączyć się* ... ← *złączyć* ‘to join/connect.’ (vi ← vt).

Such anticausatives either do not allow singular participants to occupy subject position (e.g. **Jan się zjednoczył* ‘*Jan united.’), unless they are used in discontinuous constructions (see 8.3), or, if so, do not denote a properly reciprocal event (e.g. *Koperta się rozkleiła* ‘The envelope got unstuck’).

Beside anticausatives there are two further very small groups: one consists of a closed set of intransitive reflexives deriving from verbs of directed motion (Śmiech 1986: 29, 69) with zero valency change (following Geniušienė 1987: 137, 156ff.; this vol., Ch. 14, §3.1). Since they have no base verbs (cf. (123)) or the latter have unrelated meanings (cf. (124)), they belong to *reciproca tantum*; cf.:

- (123) *rozejść się* ‘to separate, to radiate, to spread’ ← **rozejść*
 (124) *zbiec się* i. ‘to come together (running)’, ii. ‘to coincide’ ← *zbiec* ‘to run away.’¹⁹

The third group consists of verbs derived from other diverse intransitive bases, which are also non-existent without the RM or have unrelated meanings (see (126c)); cf.:

- (125) a. *rozpierzchać się* ‘to scamper off’ ← **rozpierzchać*
 b. *rozpaść się* ‘to break up’ ← **rozpaść*
 c. (only two examples, see Table 9).
- (126) a. *zgadać się* ‘to chance to talk’ ← **zgadać*
 b. *zrosnąć się* ‘to accrete’ ← **zrosnąć*
 c. *zmówić się* ‘to come to an agreement’ ← *zmówić* [*pacierz*] ‘to recite (a prayer).’

9. Reciprocals in analytic causative constructions

As has been said in 3.3.2, the verb *dać* (PFV)/*dawać* (IPFV) lit. ‘to give’, can be exploited as a kind of causative auxiliary together with the RM. The usual polysemy of reciprocity and reflexivity proper holds also for such analytic reflexive causatives, but only on condition that the infinitive is a lexical three-place reciprocal. Thus, one may occasionally say (127b):

19. Actually, even the hypothetical derivation of *zbiec się* from *zbiec* is probably not correct, since there are two homonymous prefixes *z-* which merged from ancient Slavonic *s* ‘together’ and *iz-* ‘from downwards, away’ (Śmiech 1986: 29, 35). Only the first participates in the meaning of the reciprocal verb.

- (127) a. *Sąsiedzi*(NOM) *skłócili Jacka i Wacka*(ACC).
 ‘The neighbours set Jacek and Wacek at variance (with each other).’
 → b. *Jacek i Wacek*(ACC) *dali się skłócić sąsiedom*(DAT).
 ‘Jacek and Wacek let themselves be set at variance (with regard to each other) by the neighbours.’

Otherwise a reflexive reading prevails over reciprocity by default; cf.:

- (128) a. *Jacek uczesał Wacka, a Wacek uczesał Jacka*.
 ‘Jacek combed Wacek, and Wacek combed Jacek.’
 ≠ b. *Jacek i Wacek dali się uczesać (komuś innemu)*.
 ‘Jacek and Wacek let themselves be combed (by a third person).’

Among explicit reciprocity markers only *jedyn drugiemu* is accepted by some informants in order to modify the reflexive default. The dative reflexive *sobie* and, all the more, *nawzajem* are rejected by almost all informants:

- c. *Jacek i Wacek dali się jeden drugiemu / *sobie (nawzajem) uczesać*.
 ‘Jacek and Wacek let themselves be combed one by the other.’

10. Simultaneity and succession of reciprocal events

Whenever dealing with actionality in Polish one has to account for grammatical aspect (see 1.3). Here I cannot go into any details. However, generally speaking, Slavonic perfective aspect has to be regarded as the grammaticalization of events that cannot be partitioned into subevents or phases. Prototypical verbs of this aspect encode such events by default, though they do not at all preclude the possibility of indicating internal fragmentation with the aid of certain lexical (adverbial etc.) modifiers of the sentence (see below). Thus a typical context of a perfective verb is an episodic singular event in the past (cf. (129a)), while imperfective verbs encode states (without temporal limitations) (cf. (130)) or processes (cf. (131))²⁰ without focussing on (pragmatically probable) limits in time (beginning or end). They can also denote iterative events (129b):

- (129) a. *Siostry zobaczyły się*(PFV) *na przyjęciu*.
 ‘The sisters saw each other at the banquet.’
 b. *Siostry widziały się*(IPFV) *na przyjęciach*.
 ‘The sisters saw each other at banquets.’
 (130) *Chłopcy znali się*(IPFV) *od szkolnej ławki*.
 ‘The boys knew each other since school.’
 (131) *Widzowie szturchali się*(IPFV) *łokciami*.
 ‘The spectators were prodding one another with their ellbows.’

20. The terms ‘state’, ‘process’ (= ‘activity’), ‘accomplishment’ and ‘achievement’ will be used here in the traditional Vendlerian sense (Vendler 1957: 146f.).

10.1 Obligatory simultaneity (“coincidence”)

We can distinguish three main groups of verbs:

1. Numerous lexical reciprocals, especially those encoding achievements, since their subevents must coincide totally. Cf. the situations encoded by the following perfective verbs:

(132)	<i>spotkać się</i>	‘to meet’
	<i>porozumieć się</i>	‘to come to an agreement’
	<i>rozminąć się</i>	‘to fail to meet’
	<i>sprzysiąc się</i>	‘to vow to each other (for conspiracy)’
	<i>założyć się</i>	‘to (agree on a) bet’
	<i>zderzyć się</i>	‘to bump into each other/collide.’

2. Imperfective counterparts of these verbs typically encode either only repetitive achievements (133) or denote a state or property holding between two (or more) subjects (cf. (134); see also (130) above):

- (133) *Spotykamy się co tydzień.* ‘We meet every week.’
- (134) a. *Porozumiewamy się świetnie.*
 ‘We understand each other splendidly.’
- b. *Porozumiewamy się za pomocą języka angielskiego.*
 ‘We (normally) communicate in English.’

3. Simultaneity can also be denoted by verbs encoding processes, i.e. homogeneous activities (see (131)). This group, however, should be considered more peripheral, because these verbs encode neither logical coincidences, as do reciprocal achievement verbs (see above), nor unfractionable states of affairs with a *necessarily* symmetrical relation between the participants. This peripheral status holds for activity verbs with a regular polysemy of reflexive vs. reciprocal reading discussed in 4.3 and 5.2.1–2; compare such reciprocal predicates as the following:

- | | | | |
|-------|----|---|---|
| (135) | a. | <i>ganią się</i> | ‘(they) criticize each other’ |
| | b. | <i>oskarżali się</i> | ‘(they) accused one another’ |
| | c. | <i>krzyczą na siebie (nawzajem)</i> | ‘(they) shout/yell at each other’ |
| | d. | <i>opierali się o siebie (nawzajem)</i> | ‘(they) were leaning against each other.’ |

An exception are cliticized verbs of competition mentioned in 8.1.1 (*bić się*, *klócić się* and their respective synonyms), which usually denote simultaneous reciprocal activities. This can be explained by the fact that, though derivationally belonging to the “canonical” type, they are semantically very close to naturally reciprocal events. The same holds for verbs encoding naturally reciprocal events only occasionally, e.g. *całować się* ‘to kiss (each other)’ (see (99)). By and large, the possibility of a simultaneous interpretation increases with the decrease of concreteness of the denoted action: the larger the internal fragmentation of an interval becomes, the worse the respective sub-actions can be distinguished and the more they become “simultaneous” in a more global sense (e.g., *pilnować się [nawzajem]* ‘to watch, guard each other’, *narzekać na siebie* ‘to complain about each other’, *doskwierać*

sobie ‘to worry one another’, *folgować sobie* ‘to relieve each other’, *popierać się* ‘to support one another’).

The addition of the adverbial reciprocal *nawzajem* or the syntactic marker *jeden drugiego*, where they are at all possible, does not have any impact on the internal temporal structure of the described event, the only exception being once more verbs on the periphery of those encoding naturally reciprocal events: with either of these markers the subevents become distinguishable in such a way that an interpretation of repeated reciprocal sequences becomes very likely (see 10.2.2; cf. Kemmer 1993: 112ff.); cf.:

- (136) a. *Pijacy bili się [zażarcie].* ‘The drunks fought [grimly].’
(simultaneous, without fragmentation)
b. *Pijacy bili jeden drugiego.* ‘The drunks beat each other.’
(alternation of particular subevents: ‘first X, then Y...’).
- (137) a. *On i ona całowali się.* ‘He and she kissed.’
(simultaneous, without fragmentation)
b. *On i ona całowali się nawzajem.* ‘He and she kissed one another.’
(alternation of kisses: ‘first she, then he...’).

By contrast to the markers just mentioned, discontinuous constructions – which are possible only with naturally reciprocal events and some lexical reciprocals (see 4.4, 8.1.2) – do not influence the simultaneous character of the denoted activity.

10.2 Types of sequences

These may be subdivided into singular and repetitive sequences of subevents.

1. *Singular subsequences* can be denoted only by a very limited number of verbs. Because of the correlation of grammatical aspect with situation types and temporal locatedness (\pm episodicity) only perfective verbs typically denote singular subsequences. The most common situation where one can conceive of both a non-repeated and non-simultaneous reciprocal event are social encounters like conveying greetings, introducing each other etc., which imply a more or less preconceived order of speech acts (and are often likely to be preconceived as necessarily reciprocal events and encoded by lexical reciprocals; see (138b)):

- (138) a. *Jan i Staś przedstawili sobie swoje żony.*
‘Jan_i and Staś_j introduced their_{i+j} wives to each other_{i+j}.’
b. *Asia i Ania wymieniły pozdrowienia.*
‘Ania and Asia exchanged greetings.’

Nothing changes with the addition of explicit reciprocity markers. Discontinuous phrases (with or without *ze sobą*) are possible with verbs of exchange (e.g., *Asia wymieniła z Asią pozdrowienia*, compare with (138b)²¹).

21. It should be remarked that two verbs of exchange (*wymienić, zamienić*) show an alternative possibility of discontinuous coding, namely by a derived diathesis of the deaccusative type. Thus, it is usual to say *X i Y wymienili się adresami (zamienili się miejscami)* ‘X and Y exchanged their addresses (= gave each other their addresses) (changed

2. *Repeated sequences* (“*dovetailing*”) are much more widespread. Almost any activity verb among those discussed in 4.2 and 5.2 is able to denote a situation of multiple reciprocal action. The addition of *nawzajem* or *jeden drugiego* would not change the internal temporal structure (an exception being verbs of competition; see 10.1):

- (139) a. *Odpowiadaliśmy sobie na pytania.* ‘We answered each other’s questions.’
 b. *Oni wyznaczali sobie terminy.* ‘They fixed, set one another dead-lines.’
 c. *Dziewczyny egzaminowały jedna drugą.* ‘The girls examined one the other.’

Perfective verbs can refer to repeated reciprocal events only if the embracing time interval is, in one way or another, marked as limited; cf.:

- (140) a. *W ciągu tygodnia kierownik wymienił swoich współpracowników między sobą.*
 ‘In the course of one week the supervisor replaced his collaborators with one another.’
 b. *Podczas spotkania odpowiedzieliśmy sobie na wszystkie pytania.*
 ‘During our meeting we answered each other all questions.’

With reflexive derivatives of exchange verbs, adverbial reciprocity markers are merely optional. Only these few verbs and their object-oriented base verbs allow discontinuous constructions (see (68c), (113b, c, e) and 8.2.2).

10.3 Uni-directional succession of events (chaining)

Another very limited group of verbs is able to denote situations of succeeding one after another provided there are more than two participants. In order to mark an observable temporal succession, one has to use an imperfective verb. For this reason almost only such verbs will be quoted below. If a perfective verb can be used the respective event is envisaged as consisting of successively ordered subevents summarized to one global event (see (144)).

First of all, the core group of “chaining verbs” comprises lexemes that primarily or exclusively refer to the temporal domain. With the exception of the intransitive *następować* ‘to follow (one another), happen’ these are reflexive verbs with a regular relation to transitive base verbs (“canonical” subtype):

- (141) *doganiać się* ‘to catch up/overtake’
łapać się ‘to catch/seize, grasp one another, to race’
łowić się ‘to hunt each other, to race’
przeganiać się ‘to outstrip/surpass one another’
prześcigać się ‘to outvie each other’
ścigać się ‘to race/vie with each other’
wyprzedzać się ‘to outstrip/overtake one another.’

places), which is to be interpreted as derived from the discontinuous *X wymienił się z Y(INST) adresami (zamienił się z Y(INST) miejscami)* (see (33b)), meaning the same. These sentence types are synonymous with sentences of type (138b). But such cases are idiosyncratic and, thus, lexicalized.

With the exception of *doganiać się*, all verbs of (141) can also be used to denote repeated sequences (see 10.2.2), regardless whether there are two or more subjects (e.g., *Oba psy / Wszystkie dzieci łąpały się na łące* ‘The two dogs / All children were clutching one another on the meadow’). A similar polysemy holds for the verbs below. *Pędzić się* ‘to drive/hurry each other’ is peculiar in that it derives from a three-place *pędzić* (*kogo*(ACC) *do pracy, do domu*) ‘to hurry sb up to work, home’, but there is also an intransitive *pędzić* ‘to rush’ as a near synonym of *biec, gnać* ‘to run quickly, hurry’.

Another set of verbs, which primarily refers to the spatial domain, can be used to indicate a temporal succession as well. These are:

(142)	<i>ciągnąć się</i>	‘to run/extend (of mountains, etc.)’
	<i>literować</i>	‘to spell (out)’
	<i>nanizywać się</i>	‘to string’ (intr.)
	<i>nawlekać</i>	‘to string (pearls etc.)’
	<i>nizać</i>	‘to thread (beads etc.)’
	<i>prowadzić się</i> [za rękę]	‘to lead each other by the hand’
	<i>prześladować się</i>	‘to persecute/oppress each other’
	<i>rozciągać się</i>	‘to extend/stretch (of hills etc.)’
	<i>szeregować się</i>	‘to line up/be lined up’ (intr.)
	<i>ustawiać się</i> [<i>Y_{P1}</i> w szereg, obok siebie]	‘to draw up, to form ranks.’

The reflexive verbs derive regularly from two-place transitives, with the exception of *ustawiać się*, which derives from the three-place *ustawiać* (*w szereg*) ‘to align, to draw up’, and *ciągnąć się*, which has semantically separated from its base verb *ciągnąć* ‘to pull’ (see below). The non-reflexive verbs *nawlekać* and *nizać* do not have reflexive derivatives.

To stress temporal succession no discontinuous construction can be employed. For this purpose one has to use the adverbials *po kolei* ‘by turns’ (more rarely its synonym *kolejno*; see 6.3), *po sobie* ‘after each other’ (temporal), *za sobą* ‘behind each other’ (spatial) and *jeden po drugim, jeden za drugim* ‘one (after) the other’ (temporal, spatial), respectively. With regular reflexive derivatives of two- and three-place transitives (e.g., *ścigać się, ustawiać się*; see above) *jeden za drugim, jeden po drugim* can be used (on the same conditions which have been discussed above), but the orthotonic *siebie* occurs to be possible only jointly with the adverbial *nawzajem* (e.g., *?łowili siebie* lit. ‘were catching themselves’ (reflexive, fig.) vs. *łowili się/siebie nawzajem* ‘were catching one another’). *Nawzajem*, in turn, is outruled for reciprocal diatheses other than the “canonical” one (e.g., *wydarzenia następowały *nawzajem po sobie* lit. ‘the events succeeded mutually after each other’). Furthermore, it favours rather a collective-simultaneous reading than a successive-reciprocal one; cf.:

- (143) a. *Dzieci prowadziły się nawzajem za rękę* (= *wszyscy razem*).
 ‘The children led each other, holding by the hand’ (= all together).
- ≠ b. *Dzieci prowadziły się jedno drugie za rękę* (= *kolejno, szeregiem*).
 ‘The children led one another by the hand’ (= one after another, in a row).

With perfective verbs these markers happen to be even necessary, because otherwise a lack of internal fragmentation would result. Compare perfective (a–b) and imperfective verb (c):

- (144) a. *Wydarzenia nastąpiły*(PFV) *w ciągu tygodnia.*
 ‘The events happened within one week.’ (simultaneously or successively?)
 b. *Wydarzenia nastąpiły*(PFV) *po sobie w ciągu tygodnia.* (only successive reading)
 c. *Wydarzenia następowały*(IPFV) *w ciągu tygodnia.* (only successive reading)
 ‘The events happened (= unfolded) one after another in the course of one week.’

With verbs of motion proper one can also use the expression *szeregiem* ‘in a row’, which is a lexicalized instrumental of the noun *szereg* ‘row’. It can be used jointly neither with *za sobą* nor with *jeden za drugim*; cf. (143b) and the following:

- (145) *Taternicy posuwali się* [**za sobą*, **jeden za drugim*] *szeregiem.*
 ‘The mountaineers proceeded [one after another] in a file.’

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Reciprocal and reflexive constructions in French

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Acknowledgments

References

1. Introduction

1.1 French

French, a Romance language, is the official language of France. It is spoken by 58 million inhabitants of France, Monaco and Corsica. It is also used by 60 million speakers in France's overseas territories and outside France: in parts of Belgium (5 million), Switzerland (2 million), Luxembourg, Canada (6 million), and in the Val d'Aosta (Italy). It is often the official language of former French and Belgian colonies in North, Central and West Africa, and in Southeast Asia.

Eight other languages are spoken indigenously in France: Occitan (southern third of France, 10,000; the most closely related to French), Breton (Lower Brittany, 500,000), Flemish (by the Belgian frontier, 90,000); in the Northeast, the Germanic varieties Alsacian (1,200 000) and Lorrain (170,000); in the Southeast, Monaco and the Bonifacio district of Corsica, Ligurian is spoken; in the Department of Pyrénées Orientales 200,000 inhabitants speak Catalan, and in the Southwest, 80,000 speak Basque. Corsican, a variety of Tuscan is spoken by 160,000 speakers.

1.2 Expression of reciprocity – an overview

French can express reciprocity in two different ways.

1. The first possibility is the so-called plural reflexive pronouns in enclitic position (except for affirmative imperative) which have a specific form only in the 3rd p. *se* (*s'* before vowel-initial words, see 2.4); these pronouns will be further referred to as clitic *se* and their resulting constructions as reflexive reciprocals.

Generally, reflexive constructions are highly polysemous (see 3.3) and their semantic values depend exclusively on the context in which they occur. For instance, (1b) is assigned the value of proper reflexive in context (1c), and the value of reciprocal in context (1d), respectively:

- (1) a. *Pierre aim-e Marie et Marie aim-e Pierre.*
 Pierre love-3SG Marie and Marie love-3SG Pierre
 'Pierre loves Marie and Marie loves Pierre.'
- b. *Pierre et Marie s' aim-ent.*
 Pierre and Marie REFL love-PRES.3PL
 i. 'Pierre and Marie love *each other*.'
 ii. 'Pierre and Marie love *themselves*.'
- c. *Pierre et Marie s'aiment plus qu'ils n'aiment les autres.*
 'Pierre and Marie love themselves more than they love the others.'
- d. *Pierre et Marie s'aiment éperdument.*
 'Pierre and Marie love each other wildly.'

This means of marking reciprocity is affected by few restrictions (cf. (3b); see 11.1.3). French reflexive reciprocals are typologically similar to the respective formal type of reciprocals in Bulgarian (see Penchev, Ch. 13) and German (Wiemer & Nedjalkov, Ch. 10).

There is a special small group of reflexive reciprocals in which the prefix *entre-* ‘between’ is attached to the verb, for example, *s’entredévorer* ‘to devour one another’, *s’entretuer* ‘to kill one another’, etc.:

- (2) a. *Les pauvres aident les pauvres.* ‘The poor help the poor.’
 b. *Les pauvres s’aident entre eux.* ‘The poor help each other.’
 c. *Les pauvres s’entraident.* ‘The poor help each other.’

It should be pointed out that some verbs with the prefix *entre-*, like the verb *s’entraimer* ‘to love each other’, though mentioned in dictionaries, are now out of usage:

- (1) e. **Pierre et Marie s’entraiment.* ‘Pierre and Marie love each other.’

2. The compound reciprocal pronoun *l’un l’autre* ‘each other’ (marked for gender and number, and taking prepositions which are inserted between the two components, see Section 7). When applied to two relatively small groups of two-place intransitives, i.e. verbs with a prepositional object, it produces reciprocal constructions. The use of the compound reciprocal pronoun is the only way for two-place intransitives to express reciprocity, either because they are incompatible with reflexive pronouns ((3), see also 7.2.2):

- (3) a. *Pierre pense à Marie.*
 ‘Pierre thinks about Marie.’
 b. **Pierre et Marie se pensent.*
 ‘Pierre and Marie think about each other’ (intended meaning)
 c. *Pierre et Marie pensent l’un à l’autre.*
 ‘Pierre and Marie think about each other.’

or because they represent *reflexiva tantum* verbs (see (4)) which are interpreted exclusively as reflexives (see 7.2.1.1). In no case (whether it be *reflexivum tantum* or a derived reflexive) is the repetition of the reflexive pronoun allowed (see (4d)):

- (4) a. *Pierre s’est amouraché de Marie.*
 ‘Pierre fell in love with Marie.’
 b. **Pierre et Marie se sont amourachés.*
 ‘Pierre and Marie fell in love with each other.’
 c. *Pierre et Marie se sont amourachés l’un de l’autre.*
 ‘Pierre and Marie fell in love with each other.’
 d. **Pierre se s’est amouraché de Marie.*
 Pierre REFL REFL-fell.in.love with Marie.

The compound reciprocal pronoun cannot replace the reflexive pronoun in constructions like (1b) and (2b) (see below (1f) and (2d)). In this, French is similar to Bulgarian (see Penchev, Ch. 13) and different from German (Wiemer & Nedjalkov, Ch. 10):

- (1) f. **Pierre et Marie aiment l’un l’autre.* ‘Pierre and Marie love one another.’
 (2) d. **Les pauvres aident les uns les autres.* ‘The poor help one another.’

The compound pronoun often co-occurs with the reflexive pronoun, thus resolving the possible polysemy of a construction:

- (5) a. *Pierre a blessé Jean.*
 ‘Pierre hurt Jean.’
 b. *Pierre et Jean se sont blessés.*
 i. ‘Pierre and Jean got hurt.’ (‘anticausative’)
 ii. ‘Pierre and Jean hurt themselves.’ (reflexive proper)
 iii. ‘Pierre and Jean hurt each other.’ (reciprocal)
 c. *Pierre et Jean se sont blessés l’un l’autre.*
 ‘Pierre and Jean hurt each other.’

or just emphasizing the reciprocal meaning (cf. (2e)). In the latter case, the co-occurrence of the reflexive reciprocal and *l’un l’autre* is constrained (see (1g)):

- (2) e. *Les pauvres s’aident les uns les autres.* ‘The poor help each other.’
 (1) g. [?]*Pierre et Marie s’aiment l’un l’autre.* lit. ‘Pierre and Marie love each other.’

Similarly to *l’un l’autre*, the adverbs *mutuellement* ‘mutually’ and *réciroquement* ‘reciprocally’ can also resolve polysemy and emphasize the reciprocal meaning. Also like *l’un l’autre*, they display a kind of co-occurrence selectivity which cannot be provided with a satisfactory explanation so far (see Section 8).

The use of the reciprocal pronoun *l’un l’autre* is naturally incompatible with discontinuous reciprocal constructions (i.e. constructions in which one of the reciprocal arguments takes an object position). As to reflexive reciprocals, only a very small group of standard (non-lexical) reciprocals may occur in discontinuous constructions:

- (6) a. *Pierre bat Jean.* ‘Pierre beats Jean.’
 ≠ a’. *Jean bat Pierre.* ‘Jean beats Pierre.’
 b. *Pierre et Jean se battent.* i. ‘Jean and Pierre are fighting.’
 ii. ‘Pierre and Jean fight each other.’
 c. *Pierre se bat avec Jean.* ‘Pierre fights (with) Jean.’
 = c’. *Jean se bat avec Pierre.* ‘Jean fights with Pierre.’

Lexical reciprocals can be subdivided into subject-oriented (two-place transitive, two-place intransitive) and object-oriented reciprocals (see Section 11). All the three syntactic types occur in discontinuous constructions. Simple reciprocal constructions can be formed either with or without the reflexive pronoun; cf. respectively:

- (7) a. *Pierre a rencontré Marie.* ‘Pierre met Marie.’
 = a’. *Marie a rencontré Pierre.* ‘Marie met Pierre.’
 = b. *Pierre et Marie se sont rencontrés.* ‘Pierre and Marie met.’
 (8) a. *Pierre rivalise avec Jean.* ‘Pierre competes with Jean.’
 = a’. *Jean rivalise avec Pierre.* ‘Jean competes with Pierre.’
 = b. *Jean et Pierre rivalisent l’un avec l’autre.* ‘J. and P. compete with each other.’
 = b’. **Jean et Pierre se rivalisent.* (same intended meaning).

2. Grammatical notes

2.1 Sentence structure

The basic word order in French is SVO. It is relevant for the interpretation of the function of the arguments. There is no case marking on the nouns.

French has lost the Latin case marking affixes for nouns and adjectives and has only preserved three forms (inherited from Latin case-marking affixes): “nominative”, “accusative” and “dative” – in the 3rd p. singular and plural (see 2.4.1).

Nouns have gender (masculine or feminine) and vary in number (singular and plural). Adjectives agree with head nouns in gender and number. This is also true of participles in periphrastic verb forms with the auxiliary *être* ‘to be’ (cf. *amouraché* in (4a) and *amourachés* in (4b–c)).

2.2 Tense and aspect system

Verbs are inflected for number and person, as well as gender in periphrastic forms. There are “simple” (Présent, Passé simple, Imparfait, Futur) and periphrastic tense forms (Passé composé, Passé antérieur, Plus-que-parfait, Futur antérieur). The latter are formed with the help of two auxiliary verbs: *avoir* ‘to have’ and *être* ‘to be’. The auxiliary *être* occurs in four cases: (1) with a limited number of intransitive verbs (e.g. *il est venu* ‘he has come’, cf. **Il a venu*); (2) with *reflexiva tantum*; (3) with verbs combined with the clitic *se*, regardless of meaning (cf. (5a) and (5b), see also Section 3); (4) in passive constructions (cf. *Elle est aimée de Pierre* ‘She is loved by Pierre’).

2.3 Verb classes

For the purposes of this paper, it is sufficient to distinguish the following verb classes (a verb can naturally change its class membership with a possible change of meaning):

1. One-place intransitives, e.g. *dormir* ‘to sleep’, *vivre* ‘to live’, *tomber* ‘to fall’...:

(9) *Pierre est tombé.* ‘Pierre fell down.’

2. Two-place intransitives, taking an obligatory prepositional object:

(10) *Pierre a nui à Jean.* ‘Pierre harmed Jean.’

Verbs with non-standard formation of reciprocal constructions are prevalent in both of these classes of verbs (cf. (3), (4), and (7)).

3. Two-place transitives, i.e. verbs which take a direct object. These verbs can occur in reciprocal constructions with *se* without any restrictions: they are formed from all transitives whose lexical meaning allows reciprocal use (which is a trivial restriction; in other words, verbs with an inanimate object cannot be used reciprocally).

4. Three-place transitives, i.e. verbs which take a direct and an indirect object, e.g. *donner* ‘to give’, *offrir* ‘to offer’, *envoyer* ‘to send’, etc.

2.4 Personal pronouns and reflexives

Personal pronouns have number (singular and plural) and gender (masculine and feminine). The latter is only expressed in the 3rd person. Personal pronouns fall into two large sets, conjunctive (unstressed) and disjunctive (stressed, see Table 1). Conjunctive forms precede the verb (with two exceptions, imperative and some interrogative sentences) and can be separated from it by other conjunctive pronouns only; disjunctive forms behave like nouns (cf. *Il pense souvent à Marie/à elle* ‘He often thinks about Marie/about her’).

The forms *me*, *te*, *se* lose their vowel before vowel-initial verbs. In Table 1, if two pronouns are placed in the same slot, the first one is masculine, the second feminine.

Pronouns which mark reflexive verb forms are given in Table 2. French uses only one pronominal form to express the reflexive – the pronoun *se*, which appears in the 3rd p. It does not vary in gender or number, it has not retained any morphological case-marking distinctions. Since the reflexive pronoun lacks forms in the 1st and 2nd person singular and plural, its function is taken over by the respective forms of the personal pronouns. Given that simple reciprocal constructions have only three forms, viz. plural forms, the pronominal forms are repeated twice, once as reflexive and once as reciprocal. In the right column we present the reflexive forms of the verb *se blesser* ‘to hurt oneself/each other’. Sentences (a, b, c) have a reflexive meaning only, while (d, e, f) have two readings, reflexive and reciprocal.

Table 1. Personal pronouns

	CONJUNCTIVE			DISJUNCTIVE
	“nominative”	“accusative”	“dative”	
SG 1	<i>je</i>		<i>me</i>	<i>moi</i>
2	<i>tu</i>		<i>te</i>	<i>toi</i>
3	<i>il, elle</i>	<i>le, la</i>	<i>lui</i>	<i>lui, elle</i>
PL 1	<i>nous</i>		<i>nous</i>	<i>nous</i>
2	<i>vous</i>		<i>vous</i>	<i>vous</i>
3	<i>ils, elles</i>	<i>les</i>	<i>leur</i>	<i>eux, elles</i>

Table 2. The reflexive pronouns

	REFLEXIVE	RECIPROCAL	examples
SG 1: <i>je</i>	<i>me</i> ‘myself’		a. <i>Je me suis blessé(e) / Je me suis dit</i>
2: <i>tu</i>	<i>te</i> ‘yourself’		b. <i>Tu t’es blessé(e) / Tu t’es dit</i>
3: <i>il/ elle</i>	<i>se</i> ‘him/it//herself’		c. <i>Il s’est blessé / elle s’est blessée / Il (elle) s’est dit</i>
PL 1: <i>nous</i>	<i>nous</i> ‘ourselves’	<i>nous</i> ‘each other’	d. <i>Nous nous sommes blessé(e)s</i>
2: <i>vous</i>	<i>vous</i> ‘yourselves’	<i>vous</i> ‘each other’	e. <i>Vous vous êtes blessé(e)s</i>
3: <i>ils elles</i>	<i>se</i> ‘themselves’	<i>se</i> ‘each other’	f. <i>Ils se sont blessés / elles se sont blessées</i>

2.5 The compound pronoun *l'un(e) l'autre* 'each other'

The compound pronoun *l'un(e) l'autre* lit. 'the one the other' is composed of two pronouns. The first component of this complex is inflected for gender and number and the second for number. The reciprocal meaning of the compound pronoun is due to the capacity of its components to denote elements that form an already fixed set. Each of the two components is associated with one of the two arguments involved in a reciprocal relationship:

l'un l'autre (M.SG) if the arguments are of the masculine or of different genders;
les uns les autres (M.PL) (idem);
l'une l'autre (F.SG) if the arguments are of the feminine gender;
les unes les autres (F.PL) (idem).

The compound pronoun allows the insertion of prepositions between its two components: *l'un à l'autre*, *l'un de l'autre*, *l'un vers l'autre*, etc. These prepositions are determined generally by the syntactic and semantic properties of the verb.

3. Polysemy of reflexive constructions

The same reflexive construction can often be assigned different meanings. Yet, the boundaries between these meanings are not always clearly defined. Very small modifications of the context can entail different interpretations: the various semantic values form a continuum (Desclés et al. 1986; Geniušienė 1987; Gerritsen 1990; Kemmer 1993; Rivière 1995, 1997). The major values are organised in semantic types such as proper reflexives, reciprocals, quasi-passives, potential-passives, etc.

3.1 Subject-oriented reflexive constructions

Verbs with the clitic *se* that belong to this type have the following meanings:

1. *The reflexive proper.* The meaning of the proper reflexive is based upon the co-reference of the agent and the patient. The subject, which is the only argument in the construction, denotes an animate referential entity capable of controlling the activity carried out on itself. The possibility to substitute a personal pronoun which plays the role of an object for the reflexive pronoun sets off the parallelism between the reflexive construction and its transitive counterpart.

- | | | |
|---------|-------------------------------------|---------------------------------------|
| (11) a. | <i>Les parents lavent l'enfant.</i> | 'The parents are washing the child.' |
| b. | <i>Les parents le lavent.</i> | 'The parents are washing him/her.' |
| c. | <i>Les parents se lavent.</i> | 'The parents are washing themselves.' |

In the transitive construction the verb *lavent* acts as a two-place predicate. The two arguments are clearly distinguished and play different semantic roles, the agent and the patient respectively. In the reflexive construction proper, the predicate *se lavent* acts as a one-place complex predicate. Being coindexed with the subject the reflexive pronoun does not distinguish the agent and the patient clearly.

2. *The reflexive-possessive and reflexive-benefactive meanings.* Unlike the reflexive proper, these closely related meanings are not based on argument deletion. The first meaning expresses a possessive relation (inalienable, quasi-inalienable) and is realized by two-place transitive verbs with two arguments. One of the arguments represents the possessor and occupies the position of the subject whereas the other stands for the possessed entity and has the syntactic position of an object. The relation between the two arguments is considered as “intrinsic”, which determines partial co-reference of the subject and the object: in fact, the agent “effects by affecting himself” (Benveniste 1966: 173) On the one hand, the clitic *se* establishes a relation between the possessor-agent and possessed-patient. On the other hand, it fails to distinguish between the possessor and the beneficiary (or detrimentally affected), as is discussed in Rivière (2000). This construction is very similar to the true-reflexive construction, but it is affected by some constraints (cf. (13b)):

- (12) a. *Il a ouvert ses veines avec un rasoir.*
‘He cut his (own) veins with a blade.’
b. *Il s’est ouvert les veines avec un rasoir.*
lit. ‘He cut himself the veins with a blade.’
c. **Il s’est ouvert ses veines avec un rasoir.*
lit. ‘He cut himself his (own) veins with a blade.’
- (13) a. *Il a ouvert ses yeux.* ‘He opened his eyes.’
b. **Il s’est ouvert les yeux.* lit. ‘He opened himself his eyes.’

If the relation of possession involves an alienable property, the *se* clitic denotes that the agent is the beneficiary of the activity which he is carrying out:

- (14) a. *Il lui a acheté un chapeau.* ‘He bought him/her a hat.’
b. *Il s’est acheté un chapeau.* ‘He bought himself a hat.’

3. *The reciprocal meaning* (see (1)).

4. *The absolutive meaning.*¹ These reflexive constructions require a complement of space or time or an appreciative adverb (cf. (16c)) in order to construct a well-formed sentence and/or to obtain an absolutive interpretation (cf. (15b)):

- (15) a. *Jean pousse les autres.* ‘Jean elbows the others.’
b. *Jean se pousse dans le monde.* ‘Jean elbows his way in the world.’
- (16) a. *Jean bat les autres.* ‘Jean beats the others.’
b. *Jean se bat souvent/toujours.* ‘Jean beats (very often/always).’

5. *The autocausive meaning.* These constructions express situations where the agent changes his position. The change can be perceived as a change of location or as a change of state:

- (17) a. *Jean a déplacé les meubles.* ‘Jean moved the furniture.’
b. *Jean s’est déplacé.* ‘Jean moved.’

1. This type of construction, as well as the following one, has been generally analysed as ‘middle’ in the French voice system (Stéfanini 1962; Mélis 1990; Desclés et al. 1986; Rivière 1995, 1997).

3.2 Object-oriented constructions

According to the context, verbs with the clitic *se* that belong to this group have the following meanings:

1. *The quasi-passive meaning.* Passive reflexive constructions occur only in the 3rd. p. Unlike the periphrastic passive (*être* ‘to be’ + past participle) (18b), the passive reflexive does not allow the formal expression of the agent. The latter can appear only as a metonymic circumstantial expression (cf. (18e)). Yet, the quasi-passive meaning implies a non-specified or potential or generic agent which, in turn, entails the presence of a patient and relates a quasi-passive sentence to its active counterpart with the indefinite pronoun *on* in subject position (cf. (18f)):

- | | | |
|---------|--|---|
| (18) a. | <i>L'éditeur a bien vendu ce livre.</i> | ‘The editor sold this book well.’ |
| b. | <i>Ce livre a été bien vendu.</i> | lit. ‘This book was sold well.’ |
| c. | <i>Ce livre s'est bien vendu.</i> | ‘This book sold well.’ |
| d. | <i>*Ce livre s'est bien vendu par les libraires.</i> | lit. ‘This book sold well by the bookstores.’ |
| e. | <i>Ce livre s'est bien vendu en librairie.</i> | ‘This book sold well in the bookstores.’ |
| f. | <i>On a bien vendu ce livre.</i> | lit. ‘This book was sold well.’ |

2. *The potential-passive meaning.* In potential-passive constructions, the only argument in subject position denotes an entity which can undergo changes or be affected by a “change-of-state” process. This entity can neither control nor carry out the “change-of-state” process which is often perceived as an intrinsic property of this entity. No agent may be either formally expressed or semantically implied:

- | | | |
|---------|----------------------------------|---|
| (19) a. | <i>La laine se feutre.</i> | ‘Wool felts.’ |
| b. | <i>Le blanc se salit vite.</i> | ‘White clothes get dirty very quickly.’ |
| c. | <i>Les fruits se dessèchent.</i> | ‘Fruit dry.’ |

3. *The anticausative meaning.* In this case the causative sense is subtracted from the meaning of a lexically causative verb, the underlying object taking subject position in the derivative (cf. Haspelmath 1993:91):

- | | | |
|---------|--------------------------------|-------------------------|
| (20) a. | <i>Jean a ouvert la porte.</i> | ‘Jean opened the door.’ |
| b. | <i>La porte s'est ouverte.</i> | ‘The door opened.’ |

(See also (5b.i), (59b), (98), (103b), and 11.2).

3.3 Overlapping of reflexive significations

In most cases the range of polysemy depends on the semantic and syntactic properties of the base verb as well as the semantic properties of the participant(s) involved in the described situation. Thus, according to the context, the same reflexive construction will be assigned different interpretations. For instance, the verb *apercevoir* ‘to see’, which is a two-place transitive, can occur in a proper reflexive, a reciprocal, a possessive-reflexive, or a quasi-passive sense, cf. respectively:

- (21) a. *Pierre s'est aperçu dans la glace.*
 'Pierre saw himself in the mirror.'
 b. *Pierre et Marie se sont aperçus dans la rue.*
 'Pierre and Marie saw each other in the street.'
 c. *Elle s'est aperçue de son erreur.*
 'She saw her error.'
 d. *Ce détail s'aperçoit à peine.*
 'That detail shows hardly.'

4. Diathesis types of reciprocal constructions with the clitic *se*

In this section we will discuss constructions with *se* and constructions in which *se* can co-occur, optionally or obligatorily, with *l'un l'autre* 'each other'. Constructions with *l'un l'autre* as the only marker of the reciprocal meaning will be considered in Section 7.

4.1 Subject-oriented constructions

4.1.1 "Canonical" reciprocals

We take it for granted that the relations between the participants are congruent with a reciprocal relationship.

4.1.1.1 Derived from two-place transitives. These reciprocals are quite numerous. It is in this type of reciprocals that polysemy is most highly developed. Two groups can be distinguished: in Group A *l'un l'autre* 'each other' is optional or redundant; in Group B, due to polysemy either *l'un l'autre* or contextual support is necessary.

A. Due to the verb meaning, reflexive constructions containing a subject in the plural (formally or semantically) are usually considered as reciprocal situations (the situation can be naturally simultaneous or sequential). The following list (which partially overlaps with the one proposed by Penchev for Bulgarian (Ch. 13)), is not exhaustive; neither is it based on a semantic verb typology:²

- | | |
|------------------------------------|--------------------------------|
| (22) <i>Ils se sont appréciés.</i> | 'They appreciated each other.' |
| <i>Ils se sont attirés.</i> | 'They attracted each other.' |
| <i>Ils se sont admirés.</i> | 'They admired each other.' |
| <i>Ils se sont complétés.</i> | 'They completed each other.' |
| <i>Ils se sont consultés.</i> | 'They consulted each other.' |
| <i>Ils se sont dénigrés.</i> | 'They denigrated each other.' |
| <i>Ils se sont détestés.</i> | 'They hated each other.' |
| <i>Ils se sont épaulés.</i> | 'They supported each other.' |
| <i>Ils se sont embrassés.</i> | 'They kissed.' |
| <i>Ils se sont soutenus.</i> | 'They helped each other.' |
| <i>Ils se sont supportés.</i> | 'They backed up each other.' |

2. For some semantic classes see Kordi (1978).

<i>Ils se sont salués.</i>	‘They greeted each other.’
<i>Ils se sont caressés.</i>	‘They stroked each other.’
<i>Ils se sont congratulés.</i>	‘They congratulated each other.’
<i>Ils se sont dévisagés.</i>	‘They stared at each other.’
<i>Ils se sont engueulés.</i>	‘They bawled at each other.’
<i>Ils se sont acceptés.</i>	‘They accepted each other.’
<i>Ils se sont choisis.</i>	‘They chose each other.’
<i>Ils se sont connus.</i>	‘They got to know each other.’
<i>Ils se sont chatouillés.</i>	‘They tickled each other.’
<i>Ils se sont mordus.</i>	‘They bit each other.’
<i>Ils se sont respectés.</i>	‘They respected each other.’
<i>Ils se sont ignorés.</i>	‘They ignored each other.’
<i>Ils s’estiment.</i>	‘They esteem each other.’
<i>Ils s’épiaient.</i>	‘They spied on each other.’

B. The meaning of these verbs entails ambiguous constructions. In order to activate the reciprocal meaning, a specifier is to be added:

1. *Reflexive / reciprocal ambiguity:*

- | | | | | |
|------|----|--|-----------------------------|--------------|
| (23) | a. | <i>Ils se vantent.</i> | ‘They boast.’ | (reflexive) |
| | b. | <i>Ils se vantent mutuellement.</i> | ‘They praise each other.’ | (reciprocal) |
| (24) | a. | <i>Ils s’accusent.</i> | ‘They blame themselves.’ | (reflexive) |
| | b. | <i>Ils s’accusent l’un l’autre.</i> | ‘They blame each other.’ | (reciprocal) |
| (25) | a. | <i>Ils se sont empoisonnés.</i> | ‘They poisoned themselves.’ | (reflexive) |
| | b. | <i>Ils se sont empoisonnés l’un l’autre.</i> | ‘They poisoned each other.’ | (reciprocal) |

2. *Autocausative / reciprocal ambiguity:*

- | | | |
|------|----|--|
| (26) | a. | <i>Jean et Marie se redressent.</i>
‘Jean and Marie straighten up.’ |
| | b. | <i>Jean et Marie se redressent l’un l’autre.</i>
‘Jean and Marie help each other to straighten up.’ |

3. *Absolutive / reciprocal ambiguity:*

(27) = (6b).

4.1.1.2 *Derived from three-place transitives.* There are several verbs whose syntactic structure is more complex than that of the verbs presented above. In fact, the following transitive verbs can appear both in “indirect” reciprocal, proper to three-place transitives, and in “canonical” subject-oriented reciprocal. The latter use is possible provided that their three arguments refer to agentive entities:

- | | | |
|------|-----------------------------------|---------------------------------|
| (28) | <i>recommander</i> ‘to recommend’ | <i>décrire</i> ‘to describe’ |
| | <i>présenter</i> ‘to present’ | <i>dénoncer</i> ‘to give away.’ |
| | <i>introduire</i> ‘to introduce’ | |

Unlike the “indirect” reciprocal, the participant in the indirect object position is not concerned and the derived reflexive is ambiguous. Hence, in order to obtain the reciprocal interpretation, it is necessary to resort to *l’un l’autre*:

- (29) a. *Jean a dénoncé le collaborateur à la police.*
 ‘Jean gave the collaborator away to the police.’
 b. *Ils se sont dénoncés à la police.*
 i. ‘They gave themselves up to the police.’
 ii. ‘They gave each other away to the police.’
 c. *Ils se sont dénoncés l’un l’autre à la police.*
 ‘They gave each other away to the police.’

4.1.1.3 *Derived from two-place intransitives.* These verbs fall into three groups.

1. The following verbs (the list is exhaustive) in some of their uses require a particular preposition which is omitted in a derived construction. They can appear in reflexive constructions with reciprocal interpretation (for reciprocal lexical verbs of this class, like *coïncider* ‘to coincide’, see 11.1.1):

- | | | | | |
|------|--------------------|--------------------|-------------------|---------------------|
| (30) | <i>complaire à</i> | ‘to try to please’ | <i>obéir à</i> | ‘to obey’ |
| | <i>plaire à</i> | ‘to appeal’ | <i>résister à</i> | ‘to resist’ |
| | <i>mentir à</i> | ‘to lie’ | <i>suffire à</i> | ‘to be sufficient.’ |
| | <i>nuire à</i> | ‘to harm’ | | |

Compare:

- (31) a. *Pierre ment à son ami.* ‘Pierre is lying to his friend.’
 b. *Pierre se ment.* ‘Pierre is fooling himself.’
 c. *Ils se mentent.* i. ‘They are fooling themselves.’
 ii. ‘They are lying to each other.’

The possible confusion of the two interpretations can be easily avoided by the introduction of *l’un l’autre* in which the preposition reappears:

- (32) a. *Il plait à Marie.*
 ‘Marie likes him.’ (lit. ‘He appeals to Marie’).
 b. *Il se plait dans son nouveau costume.*
 ‘He likes himself in his new suit.’
 c. *Ils se plaisent dans leurs nouveaux costumes.*
 i. ‘They like themselves in their new suits.’
 ii. ‘They like each other in their new suits.’
 d. *Ils se plaisent l’un à l’autre.*
 ‘They like each other.’

2. A small group of verbs of motion can also form reciprocal constructions (both in the literal and in the figurative meanings. This is possible if the two arguments in the basic construction denote or are assimilated to agentive entity, the second argument occurring as a prepositional group with a locative complement function:

- | | | |
|------|--------------------------------------|---------------------------------------|
| (33) | <i>tomber (sur)</i> ‘to fall over’ | <i>sauter (sur)</i> ‘to jump on’ |
| | <i>marcher (sur)</i> ‘to walk on’ | <i>bondir (sur)</i> ‘to jump on’ |
| | <i>rentrer (dans)</i> ‘to bump into’ | <i>courir (après)</i> ‘to run after.’ |

There are two possible constructions: a simple one (34e) (with plural subject) whose reciprocal meaning is due to the compound pronoun (see 7.2.1.) and a reflexive construction (34c) related to a derived construction (34b). The latter contains a conjunctive form of the personal pronoun representing the second participant and the prepositions *dessus* ‘over’, *dedans* ‘in’,³ or *après* ‘after’ (but never *dessous* ‘under’ and *dehors* ‘out’). As prepositions (*sur* ‘on’, *dans* ‘in’, *après* ‘after’), in the basic construction, they introduce the locative complement:

- | | | | |
|------|-----|---|--|
| (34) | a. | <i>Jean est tombé sur Pierre.</i> | ‘Jean fell on Pierre.’ |
| | b. | <i>Jean lui est tombé dessus.</i> | ‘Jean fell on him.’ |
| | b’. | <i>Pierre lui est tombé dessus.</i> | ‘Pierre fell on him.’ |
| | c. | <i>Jean et Pierre se sont tombé dessus (à bras raccourcis).</i> | ‘Jean and Pierre fell on each other (with all their might).’ |
| | c’. | <i>*Jean et Pierre se sont tombé.</i> | lit. ‘Jean and Pierre fell on.’ |
| | d. | <i>Jean et Pierre se sont tombé l’un sur l’autre.</i> | ‘Jean and Pierre fell on each other.’ |
| | e. | <i>Jean et Pierre sont tombés l’un sur l’autre.</i> | ‘Jean and Pierre fell on each other.’ |

The verbs expressing socially disapproved acts and behaviour, like *cracher* ‘to spit’ (both in figurative and in literal meanings) can be added to this group:

- | | | | |
|------|-----|---|---|
| (35) | a. | <i>Pierre a craché par terre.</i> | ‘Pierre spat on the ground.’ |
| | a’. | <i>Jean a craché à la figure de Pierre.</i> | ‘Jean spat at Pierre’s face.’ |
| | b. | <i>Pierre a craché à la figure de Jean.</i> | ‘Pierre spat at Jean’s face.’ |
| | c. | <i>Pierre et Jean se sont craché à la figure.</i> | ‘Jean and Pierre spat at each other’s faces.’ |

4.1.2 “Indirect” reciprocals

“Indirect” reciprocals are derived from three place transitives. The reciprocal relation does not affect the patient (the direct object), but the participant which is in indirect object position in the underlying construction. Thus, the preposition *à* which introduces the indirect object is omitted in the reciprocal construction. “Indirect” reciprocals can be organized in three groups:⁴

A. Reflexive constructions which allow reciprocal interpretation without syntactic markers like *l’un l’autre*:

3. Formerly, *dessus* and *dedans* integrated the prepositions *de* and *sur* or *dans*, respectively, and could be used as true prepositions as well as adverbs.

4. In Tesnière (1959:256) they constitute two groups (group of *giving* and group of *saying*).

- | | | |
|------|-----------------------------|----------------------------------|
| (36) | <i>céder</i> 'to yield' | <i>rapporter</i> 'to report' |
| | <i>concéder</i> 'to grant' | <i>refiler</i> 'to palm off' |
| | <i>léguer</i> 'to bequeath' | <i>rendre</i> 'to give back' |
| | <i>passer</i> 'to pass' | <i>transmettre</i> 'to transmit' |
| | <i>prêter</i> 'to lend' | <i>vendre</i> 'to sell.' |

In some cases the object should always be in the plural:

- (37) a. *Pierre a prêté des livres à Marie.*
 'Pierre lent some books to Marie.'
 b. *Pierre et Marie se sont prêté des livres.*
 'Pierre and Marie lent some books to each other.'
 c. **Pierre et Marie se sont prêté un livre.*
 lit. 'Pierre and Marie lent a book to each other.'

The verbs *présenter* 'to present' and *recommander* 'to recommend' can be added to the list of the reciprocals derived from three-place transitives (see 4.1.1.2); an object-oriented passive reciprocal construction is also possible (see 7.2.2.3):

- (38) a. *Jean a présenté Marie au public et Marie a présenté Jean au public.*
 'Jean introduced Marie to the public and Marie introduced Jean to the public.'
 b. *Ils se sont présentés au public.*
 i. 'They introduced themselves to the public.'
 ii. 'They introduced each other to the public.'
 c. *Ils se sont présentés l'un l'autre au public.*
 'They introduced each other to the public.'
- (39) a. *Jean a présenté ses amis à Marie et Marie a présenté ses amis à Jean.*
 'Jean introduced his friends to Marie and Marie introduced her friends to Jean.'
 b. *Jean et Marie se sont présenté leurs amis.*
 'Jean and Marie introduced their friends to each other.'

B. The second group contains verbs which allow reflexive or reciprocal interpretation when considered out of context. The reciprocal reading is usually either derived from the context, or determined by the pronoun *l'un l'autre*:

- | | | | |
|------|---------------------------------|-------------------------------|------------------------------|
| (40) | <i>accorder</i> 'to grant' | <i>consentir</i> 'to consent' | <i>imposer</i> 'to impose' |
| | <i>allouer</i> 'to allot' | <i>donner</i> 'to give' | <i>infliger</i> 'to inflict' |
| | <i>assigner</i> 'to assign' | <i>envoyer</i> 'to send' | <i>laisser</i> 'to let' |
| | <i>attribuer</i> 'to attribute' | <i>fixer</i> 'to set' | <i>octroyer</i> 'to grant' |
| | <i>consacrer</i> 'to dedicate' | <i>fournir</i> 'to provide' | <i>offrir</i> 'to offer.' |

Some cases manifest the same constraint as the one discussed above, namely, that the object should be plural:

- (41) a. *Pierre a donné des claques à Jean.* 'Pierre slapped Jean.'
 b. *Jean a donné des claques à Pierre.* 'Jean slapped Pierre.'
 c. *Ils se sont donné des claques.*
 i. 'Jean and Pierre slapped *themselves*.'
 ii. 'Jean and Pierre slapped *each other*.'

C. The third group contains *verba dicendi* (see 11.3):

- | | | |
|------|-------------------------------------|-------------------------------------|
| (42) | <i>affirmer</i> ‘to assert’ | <i>dire</i> ‘to say’ |
| | <i>assurer</i> ‘to assure’ | <i>proclamer</i> ‘to proclaim’ |
| | <i>chuchoter</i> ‘to whisper’ | <i>promettre</i> ‘to promise’ |
| | <i>communiquer</i> ‘to communicate’ | <i>raconter</i> ‘to tell (stories)’ |
| | <i>confier</i> ‘to entrust’ | <i>répéter</i> ‘to repeat’ |
| | <i>crier</i> ‘to shout’ | <i>révéler</i> ‘to disclose’ |
| | <i>déclarer</i> ‘to declare’ | <i>souffler</i> ‘to prompt.’ |
| | <i>dévoiler</i> ‘to reveal’ | |

The expression of reciprocity does not require any syntactic marker and the use of *l’un l’autre*, though possible, is redundant:

- (43) a. *Il a raconté des histoires drôles à son ami.*
 ‘He told funny stories to his friend.’
 b. *Ils se sont raconté des histoires drôles [l’un à l’autre].*
 ‘They told each other funny stories.’

4.1.3 “Possessive” reciprocals

4.1.3.1 *Inalienable possession.* The name of a body part in object position can be preceded by a possessive adjective (cf. (44a)) or co-occur with a complement introduced by the preposition *de* (cf. (44a’)). In the latter case, due to the solidarity between the whole and its parts, the semantic roles of the possessor and the beneficiary become confused. This is why in some cases “possessive” reciprocals can be replaced by semantically equivalent constructions with the preposition *à* (cf. (44a’)). In these constructions the object is pronominalised by personal pronouns in their disjunctive form which rules out the use of possessive adjectives (cf. (44b’)):

- | | | | |
|------|-----|---|--------------------------------|
| (44) | a. | <i>J’ai teint ses cheveux.</i> | ‘I dyed her hair.’ |
| | a’. | <i>J’ai teint les cheveux de Marie.</i> | ‘I dyed Marie’s hair.’ |
| | a’. | <i>J’ai teint les cheveux à Marie.</i> | ‘I dyed Marie’s hair for her.’ |
| | b. | <i>Je lui ai teint les cheveux.</i> | ‘I dyed her hair for her.’ |
| | b’. | <i>*Je lui ai teint ses cheveux.</i> | ‘I dyed her hair.’ |

Reflexive constructions with plural subjects are ambiguous and, out of context, suggest the reflexive interpretation. Yet, a syntactic marker like *l’un l’autre* is enough to assign them a reciprocal reading. The co-occurrence of *l’un l’autre* and possessives within the same construction makes the sentence unacceptable (cf. (44d’)):

- (44) c. *Nous nous sommes teint les cheveux.*
 i. ‘We dyed our hair.’
 ii. ‘We dyed each other’s hair.’
 d. *Nous nous sommes teint les cheveux l’une l’autre.*
 ‘We dyed each other’s hair.’
 d’. **Nous nous sommes teint nos cheveux l’une l’autre.*
 lit. ‘We dyed each other’s our hair.’

It must be pointed out that, contrary to our expectations, (44d) lacks a preposition between the two components of the compound pronoun. However, the following example shows that this is not a general rule:

- (45) a. *Tu as coupé les ongles de Marie.* 'You clipped Marie's nails.'
 a'. *Tu as coupé ses ongles.* 'You clipped her nails.'
 b. *Elle lui a coupé les ongles.* 'She clipped her/his nails.'
 b'. **Elle lui a coupé ses ongles.* 'You clipped her/his nails.'
 c. *Vous vous êtes coupé les ongles.* i. 'You clipped your nails.'
 ii. 'You clipped each other's nails.'
 d. *Vous vous êtes coupé les ongles l'une à l'autre.*
 'You clipped each other's nails.'
 d'. **Vous vous êtes coupé vos ongles l'une à l'autre.*
 lit. 'You clipped your nails to each other.'

It is difficult to explain the absence of the preposition between the two components of *l'un l'autre*, as in (44d). Some authors consider the preposition as redundant in the presence of the clitic *se* (Grevisse & Goosse 1993: 1486). We would propose another hypothesis: given the fact that the form of the compound pronoun analyses the plural subject argument and expresses a double semantic role (agent and beneficiary in (57d)), the absence of the preposition sets off the agentive role.

The compound pronoun *l'un l'autre* is not always compatible with this type of reciprocal:

- (46) a. *Pierre a serré la main de son ami.*
 'Pierre shook his friend's hand.'
 b. *Les deux amis se sont serré la main.*
 'The two friends shook hands.'
 c. **Les deux amis se sont serré la main l'un à l'autre.*
 'The two friends shook each other's hands.'

Many set phrases with names of body parts give rise to reciprocal constructions:

- (47) a. *Elles se sont crêpé le chignon.*
 'They had a dust-up.'
 b. *Elles se sont pris aux cheveux.*
 'They pulled at each other's hair.'

4.1.3.2 *Alienable possession.* It can be expressed by a reciprocal construction with an indefinite pronoun (see (112)).

4.1.4 *Reciprocals from comitative/sociative constructions*

Constructions of this type will be divided into two groups:

A. A very limited number of one-place intransitives like *danser* 'to dance', *chanter* 'to sing', *jouer* 'to play', *dormir* 'to sleep', *vivre* 'to live' can increase their valency by taking an internal object as a direct object. As a rule, the use of the internal object is subject to a certain number of constraints. For instance, *vivre* and *dormir* require determination:

**vivre une vie* lit. 'live a life' – *vivre sa vie* lit. 'to live one's life' / *vivre une vie agréable* lit. 'to live a nice life'.

The verbs *chanter* and *danser* are the only ones which allow a second participant expressed by a noun phrase with the preposition *avec* 'with' (see (48c)). Thus, they combine the two valency-increasing techniques; the derivation is a discontinuous comitative construction:

- | | | | |
|------|----|--|-------------------------------------|
| (48) | a. | <i>Pierre a dansé.</i> | 'Pierre danced.' |
| | b. | <i>Pierre a dansé une danse.</i> | 'Pierre danced a dance.' |
| | c. | <i>Pierre a dansé avec Marie.</i> | 'Pierre danced with Marie.' |
| | d. | <i>Pierre a dansé une danse avec Marie.</i> | 'Pierre danced a dance with Marie.' |
| (49) | a. | <i>Pierre a chanté.</i> | 'Pierre sang.' |
| | b. | <i>Pierre a chanté une chanson.</i> | 'Pierre sang a song.' |
| | c. | <i>Pierre a chanté avec Marie.</i> | 'Pierre sang with Marie.' |
| | d. | <i>Pierre a chanté une chanson avec Marie.</i> | 'Pierre sang a song with Marie.' |

Without using the clitic *se*, the two verbs allow the following derived constructions:

(a) a reciprocal construction with plural subject + *l'un l'autre*:

- | | | |
|------|----|--|
| (48) | e. | <i>Pierre et Marie ont dansé une danse l'un avec l'autre.</i>
lit. 'Pierre and Marie danced a dance each with the other.' |
| (49) | e. | <i>Pierre et Marie ont chanté une chanson l'un avec l'autre.</i>
'Pierre and Marie sang a song each with the other.' |

(b) A sociative construction with the marker *ensemble* 'together':

- | | | |
|------|----|---|
| (48) | f. | <i>Pierre et Marie ont dansé une danse ensemble.</i>
'Pierre and Marie danced a dance together.' |
| (49) | f. | <i>Pierre et Marie ont chanté une chanson ensemble.</i>
'Pierre and Marie sang a song together.' |

If the two verbs occur with the clitic *se* they form reciprocal constructions which impose some constraints on the realisation of the object. For instance, if the object is unspecified, the sentence becomes ill-formed:

- | | | |
|------|----|--|
| (48) | g. | * <i>Pierre s'est dansé une danse avec Marie.</i>
lit. 'Pierre danced himself a dance with Marie.' |
| | h. | * <i>Pierre et Marie se sont dansé une danse.</i>
lit. 'Pierre and Marie danced themselves a dance.' |
| | i. | * <i>Pierre et Marie se sont dansé une danse l'un avec l'autre.</i>
lit. 'Pierre and Marie danced themselves a dance together.' |
| (49) | g. | * <i>Pierre s'est chanté une chanson avec Marie.</i>
'Pierre sang himself a song with Marie.' |
| | h. | * <i>Pierre et Marie se sont chanté une chanson.</i>
lit. 'Pierre and Marie sang themselves a song together.' |
| | i. | * <i>Pierre et Marie se sont chanté une chanson l'un avec l'autre.</i>
lit. 'Pierre and Marie sang themselves a song together.' |

On the other hand, if the internal object refers to a particular kind of dance (*tango*, *mazurka* ... for the verb *danser*, or *duo* ‘duet’, *chant patriotique* ‘patriotic song’ ... for the verb *chanter*, respectively), the reflexive constructions are well-formed. The clitic *se* does not replace any word in the underlying construction; its role is limited to specifying that the participants are the beneficiaries of the situation. The reflexive construction can receive a reciprocal interpretation:

- (48) j. *Pierre et Marie se sont dansé un tango d'enfer.*
 ‘Pierre and Marie danced a fantastic tango together and for themselves.’
- (49) j. *Ils se sont chanté un de ces duo!*
 ‘They sang a fabulous duet together and for themselves.’

(c) A discontinuous construction with reciprocal and comitative interpretation at the same time:

- (48) k. *Pierre s'est dansé un tango d'enfer avec Marie.*
 ‘Pierre danced a fabulous tango for himself with Marie.’
- (49) k. *Pierre s'est chanté un de ces duo avec Marie!*
 ‘Pierre sang a fabulous duet for himself with Marie.’

B. The semantics of the verbs *partager* ‘to share’ and *répartir* ‘to share out, to divide up’ is more complex. These two two-place transitives can take an extra argument and increase their valency. Let us consider the verb *partager*: its extra argument is introduced by the preposition *avec* ‘with’ and the resulting construction is a comitative discontinuous one (50b). The conjunction of two constructions defined as comitative discontinuous (50b) and (50b’) can be considered as a starting point for two different constructions with reciprocal interpretation (50c) and (50d); in both cases the base constructions retain the direct object:

- (50) a. *Jean a partagé l'héritage.*
 ‘Jean shared the inheritance.’
- b. *Jean a partagé l'héritage avec Marie.*
 ‘Jean shared the inheritance with Marie.’
- b’. *Marie a partagé l'héritage avec Pierre.*
 ‘Marie shared the inheritance with Pierre.’
- c. *Jean et Marie ont partagé l'héritage entre eux.*
 ‘Jean and Marie shared the inheritance between them.’
- d. *Jean et Marie se sont partagé l'héritage.*
 ‘Jean and Marie shared the inheritance between them.’

Gaetone (1971:217sq) points out rightly that the syntactic constraint which allows to derive *se* from a construction with direct or indirect objects does not apply to these verbs. In fact, (50c) is a simple two-place transitive with a plural subject whose reciprocal interpretation is determined by the expression *entre* + personal pronoun (see 9.1) which is coreferent with the subject. On the other hand, the reciprocal meaning in (50d) is due to the clitic *se*, but rules out *P'un l'autre* (see 8.3.4.):

- (50) e. **Jean et Marie se sont partagé l'héritage l'un avec l'autre.*
lit. 'Jean and Marie shared the inheritance the one with the other.'

4.2 Object-oriented constructions

Verbs like *faire* 'to do/make', *laisser* 'to let', *inciter* 'to incite', *obliger* 'to oblige', etc., can occur in causative reciprocal object-oriented constructions. The reciprocal arguments which are never coreferent with each other enter a double syntactic relation: they behave both as the objects of the causative verbs and as the subjects of the subordinate verbs. Compare the reciprocal (51a) and the causative constructions (51b–c):

- (51) a. *Pierre et Marie se sont embrassés.* 'Pierre and Marie kissed.'
b. *Jean les a fait s'embrasser.* 'Jean made them kiss.'
c. *Jean les a obligés à s'embrasser.* 'Jean forced them to kiss.'

5. Reciprocals with the verbal prefix *entre-* 'among'

Attached to a certain number of verbs this prefix can either emphasize the reciprocity (*croiser* 'to cross' – *entrecroiser* 'to intertwine'), or simply mark it, if it co-occurs with the clitic *se* (*s'entre-*verbs) (*tuer* 'to kill' – *s'entretuer* 'to kill each other'). When used with some verbs, it denotes attenuation (*entrevoir* 'to catch a glimpse of', *entraapercevoir* 'to catch a faint glimpse of') or the notion of "between" (*entrelarder* 'to interlard', *entretisser* 'to put a brace between two beams'). Although the creation of new *s'entre-*verbs is still possible and made use of by the speakers, even in the cases where the reciprocity is implied by the meaning of the verb or by the syntactic environment, the number of the verbs which remain in active usage has been decreasing over the last centuries.

5.1 Subject-oriented constructions: *Verba reflexiva tantum* (*s'entre-*verbs)

In the list of verbs given below which can be considered as synchronically exhaustive, *entre-* is used as a verbal prefix that imposes the presence of the clitic *se*.

- (52) *s'entradmirer* 'to admire each other'
s'entraider 'to help each other'
s'entre-déchirer 'to tear each other'
s'entre-détruire 'to destroy each other'
s'entre-dévoré 'to eat each other'
s'entre-égorger 'to tear each other's throats'
s'entre-nuire 'to harm each other'
s'entre-regarder 'to look at each other'
s'entre-tuer 'to kill each other.'

These verbs occur exclusively in reciprocal constructions, the subject is in the plural or denotes a set of individuals when it is expressed by a form in the singular:

- (53) *Les parents et les enfants s' entre-déchir-ent.*
 the parents and the children REFL between-tear-PL
 'The parents and the children tear one another to pieces.'
- (54) *Le ménage s'entredéchire.*
 'The couple tear each other to pieces.'

The *s'entre*-verbs given above are derived from two-place transitives, except for *s'entre-nuire* 'to harm each other' from a two-place intransitive whose usage is considered as literary:

- (55) a. *Pierre a nui à Marie.* 'Pierre harmed Marie.'
 a'. *Marie a nui à Pierre.* 'Marie harmed Pierre.'
 b. *Ils se sont entre-nui.* 'They harmed each other.'

The constructions with *s'entre*-verbs can be compared to those which follow the "canonical" derivation: given a transitive base verb the reciprocity requires that *se* and *entre*-be present simultaneously. Nevertheless, *entre* can always occur as a preposition and introduce a pronoun referring to the complex subject (see 8.4):

- (56) a. *Les loups s' entre-dévor-ent.*
 the wolves REFL between-devour-PL
 'The wolves devour one another.'
- b. *Les loups se dévor-ent entre eux.*
 the wolves REFL devour-PL between them
 'The wolves devour one another.'

Two verbs of perception *voir* 'to see' and *apercevoir* 'to notice' can alternate *entre*- / *s'entre*- and express attenuation or reciprocity which is otherwise excluded by the reflexive construction:

- (57) a. *J'ai à peine entrevu mon ami.* 'I hardly saw my friend.'
 b. *Nous nous sommes à peine entrevus.* 'We hardly saw each other.'

5.2 Object-oriented constructions (*entre*-verbs)

Reciprocity is expressed lexically: see 11.2.

5.3 Non-reciprocal verbs with the prefix *entre*-

Here belong the following *entre*-verbs:

- (58) *entrecouper* 'to intersperse'
entrelarder 'to interlard'
entretôiser 'to put a brace between two beams'
entrevoûter 'to put plaster between two joists'
entreposer 'to store'
entreprendre 'to undertake.'

These verbs form a very heterogeneous class. Some of them express a reciprocal meaning in very specific conditions. Thus, the verbs *entrebâiller* ‘to half open’ and *entrouvrir* ‘to half open’ where the prefix *entre-* expresses the idea of attenuation, denote an object-oriented reciprocity if the object refers to a pair. These constructions have their reflexive counterparts:

- (59) a. *Elle a entrebâillé ses lèvres.* ‘She half opened her lips.’
 b. *Ses lèvres se sont entrebâillées.* ‘Her lips half opened.’

Entrelarder ‘to put fat into the meat’ has a metaphoric meaning which denotes an alternating sequence (see 10.3). The reflexive construction is not possible with this verb:

- (60) a. *Elle a entrelardé la volaille.*
 ‘She put fat into the bird.’
 b. *Elle a entrelardé son discours de citations.*
 ‘She interspersed her speech with quotations.’
 c. **Elle s’entrelardait le discours de citations.*
 lit. ‘She REFL-interspersed her speech with quotations.’

6. Expression of reciprocal arguments with reflexive reciprocals

Expression of reciprocal arguments in simple constructions is the same for different types of reciprocals. As regards discontinuous constructions, the problem of expressing reciprocal arguments is relevant only for reflexive reciprocals and lexical reciprocals. If a reciprocal construction contains the pronoun *l’un l’autre* ‘each other’ a simple construction alone is possible.

6.1 Simple reciprocal constructions

These constructions presuppose a plural subject. The semantic roles of agent and patient are not distinguished and are assumed by the sole syntactic subject. It is expressed in the same ways as a plural subject in non-reciprocal constructions. In a sentence with a subject-oriented reciprocal interpretation, the subject argument occurs as a plural nominal, as a noun phrase with coordination, as a collective noun; cf. respectively:

- (61) a. *Ces deux enfants s’apprécient.* ‘These two children appreciate each other.’
 b. *Le mari et la femme s’apprécient.* ‘The husband and wife appreciate each other.’
 c. *Le couple s’apprécie.* lit. ‘The couple appreciate each other.’

If the plural subject refers to more than two individuals, the reciprocity can be fuzzy or collective. Thus:

- (62) *Les élèves de ma classe se sont congratulés.*
 ‘The pupils in my class congratulated each other’

expresses “a collective movement [...] and leaves it to the context to suggest the number of established relations” (Stefanini 1962:424). In order to obtain a strictly reciprocal

meaning, it is indispensable that the expression *deux à deux* ‘two by two’ be used, which expresses multiple coreference and reciprocity:

- (63) *Les garçons de ma classe se sont congratulés deux à deux.*
 ‘The boys in my class congratulated each other two by two.’

Reciprocals, like other verbs with a human subject referent, can be used with the indefinite-personal pronoun *on*. The reciprocal interpretation of a sentence containing *on* is due to the meaning of the verb, to the clitic *se* and to the context at the same time:

- (64) *On s’est aimé pendant deux ans et on s’est détesté pendant quarante.*
 = *Nous nous sommes aimés pendant deux ans et nous nous sommes détestés pendant quarante.*
 ‘We loved each other for two years and hated each other for forty years.’

In sentences like (65), *on*, according to the context, can replace each of the three persons in plural and in singular:

- (65) *Alors on se bat?*
 i. *Alors nous nous battons?* ‘So, we’re going to fight, aren’t we?’
 ii. *Alors vous vous battez?* ‘So, you’re are fighting, aren’t you?’
 iii. *Alors ils se battent?* ‘So, they’re fighting, aren’t they?’

6.2 Discontinuous reciprocal constructions

These are reciprocal constructions in which the second argument is expressed by an object. In standard reciprocals considered in Section 4, it can only be a comitative object with the preposition *avec* ‘with’. Non-lexicalized standard reciprocals do not as a rule form this type of constructions (see, however, (68)). The verbs under (66) are lexicalized reciprocals not semantically related to the base verbs in a standard way, therefore they may be interpreted as a kind of semantic *reciproca tantum* and placed in section 11.1.2 (concerned with lexical reciprocals that have lost the base verbs). It is these verbs that form discontinuous constructions with a comitative object. The list is not exhaustive:

- | | | | |
|---------|--|-----|--|
| (66) a. | <i>s’entendre avec</i>
‘to get along with’ | cf. | <i>entendre qqn</i>
‘to hear sb’ |
| b. | <i>s’arranger avec</i>
‘to come to an agreement with’ | cf. | <i>arranger qqn</i>
‘to suit sb’ |
| c. | <i>s’accommoder avec</i>
‘to come to an agreement with’ | cf. | <i>accommoder un plat</i>
‘to prepare a dish’ |
| d. | <i>se concerter avec</i>
‘to consult sb’ | cf. | <i>concerter un plan</i>
‘to devise a plan.’ |

These verbs also authorize simple reciprocal constructions. However, neither they nor the comitative discontinuous constructions can be semantically related to the base two-place transitive in a standard way:

- (67) a. *Je l’entends bien.* ‘I can hear him/her/it well.’
 b. *Nous nous entendons bien.* ‘We get along.’
 c. *Je m’entends bien avec elle.* ‘I get along with her.’

Discontinuous constructions seem to be characteristic only of some verbs of confrontation, like (68). These verbs have a slight degree of lexicalization.

- | | | | |
|---------|--|---|---------------------------------------|
| (68) a. | <i>s'engueuler avec</i> 'to quarrel with' | ← | <i>engueuler</i> 'to scold' |
| b. | <i>s'affronter avec</i> 'to confront' | ← | <i>affronter</i> 'to protest against' |
| c. | <i>s'accrocher avec</i> 'to have a clash with' | ← | <i>accrocher</i> 'to clash with' |
| d. | <i>se battre avec</i> 'to fight with' | ← | <i>battre</i> 'to beat/hit' |
| e. | <i>s'empoigner avec</i> 'to have a row with' | ← | <i>empoigner</i> 'to grasp.' |

In the case of *se battre avec* 'to fight with', the preposition can entail a double reading (Borillo 1971): "opposed to" or "together with", for example:

- (69) *Pierre se bat avec Jean.*
 i. *Pierre se bat avec Jean contre Paul.*
 'Pierre fights with Jean against Paul.'
 ii. *Pierre et Jean se battent l'un contre l'autre.*
 'Pierre and Jean fight each other.'

As mentioned above, the discontinuous construction is generally incompatible with reflexive reciprocals:

- | | | |
|---------|---|------------------------------------|
| (70) a. | * <i>Pierre s'embrasse avec Marie.</i> | lit. 'Pierre kisses with Marie.' |
| b. | * <i>Pierre s'aime avec Marie.</i> | lit. 'Pierre loves with Marie.' |
| c. | * <i>Pierre se respecte avec Marie.</i> | lit. 'Pierre respects with Marie.' |

However, some rare examples of *s'embrasser* or *s'aimer* can be found in the literature (Grevisse & Goosse 1993:1134). However, these examples clearly represent either metaphorical usages (71a), or meanings which can hardly be considered as a part of the verb's meaning (71b):

- (71) a. *La plupart des communistes voudraient s'embrasser avec vous sur une joue, et avec les Russes sur l'autre.* (Malraux)
 'Most communists would like to be on kissing terms with you on one cheek, and with the Russians on the other.'
 b. *Je sais bien que je me suis aimé avec toi.* (Barbusse)
 'I know well that I made love to you.'

7. *L'un l'autre* 'each other' as the only marker of reciprocity (restrictions on reflexive reciprocals)

One of the functions of the configuration *l'un l'autre* 'each other/one another' is to mark the opposition between two protagonists in two parallel predications (*l'un dit blanc, l'autre dit noir*, lit. 'the one says white, the other says black'). If *l'un l'autre* appears with a plural subject, it underlines and/or expresses reciprocity. Traditional grammars consider "these configurations as elliptic propositions, *l'un* standing either for subject, or for direct object and *l'autre* always representing the complement" (Grevisse 1964:519).

As French lacks specialized non-pronominal markers of reciprocity, the compound pronoun proves to be the only means to express reciprocity in certain constructions. The reciprocal constructions are derived from two-place verbs, either transitives or intransitives.

7.1 Subject-oriented constructions

7.1.1 Two-place intransitive constructions

7.1.1.1 *Constructions with reflexiva tantum.* In their base form, the *reflexiva tantum* verbs appearing in this construction take a complement introduced by *à*, *de* or *contre*. The following list is exhaustive:

(72) <i>Ils se sont amourachés l'un de l'autre.</i>	'They became infatuated with each other.'
<i>Ils se sont engoués l'un de l'autre.</i>	'They became infatuated with each other.'
<i>Ils se sont enamorés l'un de l'autre.</i>	'They fell in love with each other.'
<i>Ils se sont épris l'un de l'autre.</i>	'They fell in love with each other.'
<i>Ils se sont fiés l'un à l'autre.</i>	'They trusted each other.'
<i>Ils se sont gaussés l'un de l'autre.</i>	'They derided each other.'
<i>Ils se sont rebellés l'un contre l'autre.</i>	'They rebelled against each other.'
<i>Ils se sont rebiffés l'un contre l'autre.</i>	'They bridled up against each other.'
<i>Ils se sont souvenus l'un de l'autre.</i>	'They remembered each other.'

In a reciprocal construction the prepositional group is omitted, and *l'un l'autre* remains the only means to express reciprocity (see Section 8). As the preposition inserted between the two components introduces the prepositional complement, it cannot be omitted:

(73) a. <i>Jean se méfie de Marie.</i>	'Jean is wary of Marie.'
b. <i>Jean et Marie se méfient l'un de l'autre.</i>	'Jean and Marie are wary of each other.'
c. * <i>Jean et Marie se méfient l'un l'autre.</i>	lit. 'J. and M. are wary one of the other.'

7.1.1.2 *Constructions with reflexive derivatives.* These are constructions derived from reflexive constructions with autocausative interpretation, which are themselves derived:

(74) <i>se jeter</i> 'to hurl oneself'	← <i>jeter</i> 'to throw'
<i>se lancer</i> 'to launch'	← <i>lancer</i> 'to pitch, to throw'
<i>se précipiter</i> 'to rush'	← <i>précipiter</i> 'to speed, to throw down.'

In this construction the reciprocal interpretation is not determined by the clitic *se* (75b–c), and requires a syntactic marker (75d):

(75) a. <i>Jean a précipité Pierre par terre.</i>	'Jean threw Pierre down to the ground.'
b. <i>Jean s'est précipité vers Pierre.</i>	'Jean rushed towards Pierre.'
c. <i>Jean et Pierre se sont précipités l'un vers l'autre.</i>	'Jean and Pierre rushed towards each other.'

7.2 Constructions with two-place intransitive non-reflexive verbs

7.2.1 *Constructions with verbs of motion*

Regardless of their capacity to express oriented motion, certain verbs of motion can take an argument that denotes an animate entity as a locative prepositional phrase. The list of verbs presented below (prepositions may vary) completes the one given in 4.1.1.3:

- (76) *avancer vers* ‘to move towards’ *marcher vers* ‘to walk towards’
courir vers ‘to run towards’ *foncer sur* ‘to charge at’.

When these verbs take a single compound subject which represents animate entities, they can combine with *l’un l’autre* (with the appropriate preposition) and express reciprocity. If the clitic *se* occurs in this construction, it makes the sentence ill-formed:

- (77) a. *Pierre court vers Marie.*
 ‘Pierre runs towards Marie.’
 b. *Pierre et Marie courent l’un vers l’autre.*
 ‘Pierre and Marie run towards each other.’
 c. **Pierre et Marie se courent l’un vers l’autre.*
 lit. ‘Pierre and Marie (REFL) run one towards the other.’
- (78) a. *Jean est tombé sur Pierre.* ‘Jean fell on Pierre.’
 b. *Ils sont tombés l’un sur l’autre.* ‘They fell on each other.’
 c. **Ils se sont tombés l’un sur l’autre.* lit. ‘They (REFL-)fell one on the other.’

For the difference between this construction and reciprocals expressed by the clitic *se*, see 4.1.1.3.

7.2.2 *Constructions with other verbs*

These constructions represent two-place intransitive verbs whose complements are introduced by fixed prepositions.

- (79) *compter sur* ‘to count on’ *raffoler de* ‘to be keen on’
dépendre de ‘to depend on’ *recourir à* ‘to resort to’
parler de ‘to speak about’ *renoncer à* ‘to give up’
penser à ‘to think about’ *rêver à* ‘to dream of’
profiter de ‘to profit from’

These verbs fall into the group of French verbs that are incompatible with the clitic *se* (80b), but can express reciprocity by means of *l’un l’autre* with an inserted preposition (see also 8.3.1):

- (80) a. *Jean compte sur Marie et Marie compte sur Jean.*
 ‘Jean counts on Marie and Marie counts on Jean.’
 b. **Jean et Marie se comptent.*
 lit. ‘Jean and Marie (REFL-)count.’
 c. **Jean et Marie se comptent l’un sur l’autre.*
 ‘Jean and Marie (REFL-)count on each other.’
 d. *Jean et Marie comptent l’un sur l’autre.*
 ‘Jean and Marie count on each other.’

7.2.3 Passives from object-oriented reciprocals

With several three-place transitives (Kayne (1975:360) also mentioned the verb *représenter* ‘to represent’), the passive construction with a plural subject can receive a reciprocal interpretation, provided that the compound pronoun *l’un l’autre* is present in the sentence:

- (81) *dresser qqn contre qqn* ‘to drive sb against sb’
exciter qqn contre qqn ‘to turn sb against sb’
monter qqn contre qqn ‘to set sb against sb’
pousser qqn contre / vers qqn ‘to push sb against sb’
présenter qqn à qqn ‘to introduce sb to sb.’
- (82) a. *Marie a dressé Jean contre Hélène et Marie a dressé Hélène contre Pierre.*
 ‘Marie set Jean against Hélène and Marie set Hélène against Pierre.’
 b. *Marie a dressé Jean et Hélène l’un contre l’autre.*
 ‘Marie set Jean and Hélène against each other.’
 b’. *Marie les a dressés l’un contre l’autre.*
 ‘Marie set them against each other.’
 c. *Jean et Hélène ont été dressés l’un contre l’autre par Marie.*
 ‘Jean and Hélène were set against each other by Marie.’

8. Similarities and differences between *l’un l’autre* ‘each other’, *mutuellement* ‘mutually’, *récioproquement* ‘reciprocally’; their use with reflexive reciprocals

L’un l’autre ‘each other’ is not the only syntactic specifier that makes it possible to distinguish reciprocal from non-reciprocal interpretations. Though obeying some constraints, the adverbs *récioproquement* ‘reciprocally’ and *mutuellement* ‘mutually’ can also play the role of reciprocity specifiers. Statistically, *l’un l’autre* is much more frequent than *mutuellement*, which, in its turn, is more frequent than *récioproquement*.

8.1 *Mutuellement*

This adverb stresses that reciprocity expressed through other means in the utterance does not imply simultaneity or strict equivalence of the reciprocal activity. The following example does not necessarily mean that the participants do each other a favour in strict alternation (that is, by returning a favour for each received favour):

- (83) *Ils se rendent service mutuellement.* ‘They do favours to each other.’

Since *mutuellement* does not imply an absolute symmetry between the act of giving and the act of receiving, it is usually used with verbs involving emotional attitudes:

- (84) *Les deux jeunes s’apprécient mutuellement.*
 ‘The two young people like each other.’
 (85) *Les époux se doivent mutuellement fidélité.*
 ‘The husband and wife shall be faithful to each other.’

In many contexts *mutuellement* can replace *l'un l'autre* (with or without an inserted preposition) without significantly changing the meaning of the construction (see 8.3.1 and 8.3.3). However, the fact that this adverb denotes alternating acts in a very general way makes it incompatible with contexts where such acts are countable:

- (86) b. *Ils se rendent service l'un l'autre.* 'They do favours to each other.'
 (87) a. *Ils s'écrivent l'un à l'autre.* 'They write to each other.'
 b. **Ils s'écrivent mutuellement.* lit. 'They (REFL-)write mutually.'

8.2 *Réciproquement*

This adverb insists on strict equivalence between what is done and what is returned: the act of giving implies the act of receiving. Unlike *mutuellement*, the reciprocity expressed by *réciproquement* should be absolutely symmetrical:

- (88) *Les deux amis s'accusent réciproquement de vol.*
 'The two friends accuse each other of the robbery.'
 (89) *L'enseignement et la recherche se gênent réciproquement.*
 'Teaching and research hamper each other.'

Due to the strict symmetry, *réciproquement* can replace an entire sentence if it denotes a response action. The response action is analogous to the action that precedes it and is conceived of as the second half of a reciprocal situation. In these expressions *réciproquement* is preceded by a conjunction of coordination *et* 'and' which highlights the identity of two relations of the same types. This is the most common usage of this adverb:

- (90) A: *Je vous souhaite de bonnes vacances!* 'I wish you happy holidays!
 B: *Et réciproquement!* 'Same to you!'

Due to its exact symmetry, *réciproquement* is widely used in scientific texts. In the following example it means that every property of the first equation with respect to the second is also true of the second equation with respect to the first:

- (91) *Ces deux équations s'associent réciproquement l'une à l'autre.*
 'The two equations are reciprocal.'

8.3 The pronoun *l'un l'autre* vs. the adverbs *mutuellement* and *réciproquement*

Rules are hardly to be expected here, as it would require a subtle and intricate semantic analysis. According to the types of constructions, there are four possibilities of co-occurrence.

8.3.1 *Interchangeability of l'un l'autre, mutuellement and réciproquement*

This case involves the following constructions:

1. Some "canonical" subject-oriented constructions of group A (4.1.1.1) where the lexical meaning of the base verb does not entail a reflexive polysemous construction.

Substitution of one specifier for another, in these cases, may bring about a more or less perceptible change of meaning (see 8.1, 8.2), all of them emphasizing reciprocity:

- (92) a. *Ils se supportent l'un l'autre / mutuellement / réciproquement.*
 'They put up with each other.'
 b. *Ils se sont engueulés l'un l'autre / mutuellement / réciproquement.*
 'They had a row.'
 c. *Ils se dévisagent l'un l'autre / mutuellement / réciproquement.*
 'They stare at each other.'

2. Some "canonical" subject-oriented constructions of group B (4.1.1.1) where the use of the marker resolves the polysemy of the reflexive construction:

- (93) a. *Ils se vantent l'un l'autre / mutuellement / réciproquement.*
 'They praise each other.'
 b. *Ils s'accusent l'un l'autre / mutuellement / réciproquement.*
 'They accuse each other.'
 c. *Ils se sont blessés l'un l'autre / mutuellement / réciproquement.*
 'They hurt each other.'

3. "Indirect" reciprocals (see 4.1.2): for group A, a syntactic specifier sets off the reciprocal meaning; for the majority of reciprocals in group B it resolves the ambiguity; for several reciprocals of group C it is redundant (the impossible constructions are discussed in 8.3.2):

- (94) a. *Ils se sont légué leurs biens l'un à l'autre / mutuellement / réciproquement.*
 'They left their property to each other.'
 b. *Ils se sont alloué une indemnité l'un à l'autre / mutuellement / réciproquement.*
 'They granted each other an allowance.'
 c. *Ils se sont promis une récompense l'un l'autre / mutuellement / réciproquement.*
 'They promised a reward to each other.'

8.3.2 *L'un l'autre* alone is possible

This concerns the following:

1. Some "canonical" subject-oriented constructions of group A (4.1.1.1) due to the lexical base verb meaning. In some cases *l'un l'autre* is an emphatic marker or indicates the non-simultaneity of two reciprocal activities:

- (95) a. *Ils se complètent l'un l'autre / *mutuellement / *réciproquement.*
 'They complete each other.'
 b. *Ils se sont connus l'un l'autre / *mutuellement / *réciproquement.*
 'They got to know each other.'
 c. *Ils se sont embrassés l'un l'autre / *mutuellement / *réciproquement.*
 lit. 'They kissed each other.'

2. The two-place intransitive ambiguous *reflexiva tantum* (type *se méfier* 'to be wary of', see 7.1):

- (96) *Ils se méfient l'un de l'autre / *mutuellement / *réciproquement.*
 'They are wary of each other.'

3. The vast majority of *verba dicendi*:

- (97) *Ils se communiquent les nouvelles l'un l'autre / *mutuellement / *réciproquement.*
 'They pass on the news to each other.'

4. Some anticausatives derived from lexical reciprocals denoting connecting or disconnecting (type *mélanger* 'to mix', *séparer* 'to split up', see 11.1.3).

- (98) a. *Ils se sont mélangés l'un l'autre / *mutuellement / *réciproquement.*
 'They mixed.'
 b. *Ils se sont séparés l'un de l'autre / *mutuellement / *réciproquement.*
 'They split up.'

5. *Reflexiva tantum s'entre-* verbs expressing subject-oriented reciprocity (cf. 5.1):

- (99) *Ils s'entraident les uns les autres / *mutuellement / *réciproquement.*
 'They help each other.'

8.3.3 *L'un l'autre and mutuellement only are possible*

This case concerns:

1. "Canonical" subject-oriented constructions derived from transitives listed in (22):

- (100) a. *Ils se sont choisis l'un l'autre / mutuellement / *réciproquement.*
 'They chose each other.'
 b. *Ils s'estiment l'un l'autre / mutuellement / *réciproquement.*
 'They hold each other in high esteem.'
 c. *Ils s'acceptent l'un l'autre / mutuellement / *réciproquement.*
 'They accept each other.'

2. "Possessive" reciprocals expressing body-care (type *se teindre les cheveux* 'to dye one's hair'; see 4.1.3.1) which are ambiguous. One can point out two particularities in these constructions: the absence of the preposition *de* between the two components of *l'un l'autre*, on the one hand, and on the other, the position of the direct object after the adverb *mutuellement* (examples (b)):

- (101) a. *Elles se sont teint les cheveux l'une l'autre / *réciproquement.*
 b. *Elles se sont mutuellement teint les cheveux.*
 'They dyed each other's hair.'
 (102) a. *Ils se sont massé les pieds l'un l'autre / *réciproquement.*
 b. *Ils se sont mutuellement massé les pieds.*
 'They massaged each other's feet.'

8.3.4 *The syntactic specifiers are impossible*

This case applies to all *entre-*verbs, both object-oriented lexical reciprocals (103a) and derived subject-oriented anticausatives, when the reciprocal arguments are in subject position (103b). (For the alternation of *entre-/s'entre-*, see 11.3).

- (103) a. *Pierre a entrechoqué les tasses *l'une contre l'autre / *mutuellement / *réciproquement.*
 'Pierre banged the cups against each other.'

- b. *Les tasses se sont entrechoquées *l'une l'autre / *mutuellement / *réciproquement.*
 'The cups clinked against each other.'

Constructions with the lexical reciprocals *partager* 'to share' and *répartir* 'to share out' (there might be many more of them, though) must be added to this group (see B in 4.1.4):

- (104) *Jean et Marie se sont partagé l'héritage *l'un avec l'autre / *mutuellement / *réciproquement.*
 'Jean and Marie shared the inheritance between each other.'

9. Other syntactic specifiers

9.1 The phrase *entre eux* 'between them'

This specifier integrates the preposition *entre* and the disjunctive form of a plural personal pronoun (see Table 1): *entre nous* 'between us', *entre vous* 'between you', *entre eux* 'between them'. It does not express a reciprocal meaning on its own, but often limits or emphasizes the group of persons involved in a reciprocal (105), or non-reciprocal (106) situation, by sometimes opposing them to other people or presenting the action as a characteristic of these people:

- (105) *Ils s'invitaient entre eux.* 'They (often) invited each other.'
 (106) *Nous restions toujours entre nous.* 'We always kept to ourselves.'

Sometimes *entre eux* is used to resolve the ambiguity between reciprocal and non-reciprocal interpretations in subject-oriented constructions:

- (107) a. *Ils se sont félicités du résultat.*
 i. 'They congratulated *themselves* on the result.'
 ii. 'They congratulated *each other* on the result.'
 b. *Ils se sont félicités du résultat entre eux.*
 'They congratulated each other on the result.'
- (108) a. *Ils se pardonnent tout.*
 i. lit. 'They forgive *themselves*.'
 ii. 'They forgive *each other*.'
 b. *Ils se pardonnent tout entre eux.*
 'They forgive everything to each other.'

9.2 Adverbial phrases

French uses a number of expressions which have obtained the status of adverbial phrases to describe a situation with only two protagonists. These phrases are either sociative or, less commonly, reciprocal in meaning; cf. (110c) and (110a) respectively:

- | | | |
|-------|---|---|
| (109) | <i>tête à tête</i> | ‘tête à tête’ |
| | <i>face à face</i> | ‘face to face’ |
| | <i>coude à coude</i> | ‘shoulder to shoulder’ |
| | <i>dos à dos</i> | ‘back to back’ |
| | <i>côte à côte</i> | ‘side by side’ |
| | <i>nez à nez</i> (informal) | ‘face to face’ (lit. ‘nose to nose’). |
| (110) | a. <i>Nous nous sommes trouvés nez nez.</i> | ‘We came face to face with each other.’ |
| | b. <i>Nous nous sommes promenés côte à côte.</i> | ‘We took a walk side by side.’ |
| | c. <i>Nous avons passé la soirée tête à tête.</i> | ‘We spent the evening tête à tête.’ |

9.3 Indefinite reciprocal constructions

9.3.1 *The complex chacun(e)... (à) l’autre* ‘each one... the other’

This complex is made up of two indefinite pronouns: its first component – *chacun(e)* – is inflected for gender and its second component – *l’autre* – for number. The two components stand for the subject and the direct or indirect object, respectively. The reciprocal meaning of the construction is determined by the distributive meaning of the first component: *chacun (e)* ‘each one’, i.e. the member of a set taken in isolation (e.g. *chacun a parlé* ‘each one spoke’; *chacun pour soi* ‘everyone for himself’). Since the subject position is occupied by the indefinite pronoun, its referent is (naturally) recovered from the context. Compare:

- | | | |
|-------|---|----------------------------------|
| (111) | a. <i>L’élève a roulé son professeur.</i> | ‘The pupil cheated his teacher.’ |
| | b. <i>Chacun a roulé l’autre.</i> | ‘Each cheated the other.’ |

The complex also authorizes a construction with a “possessive” reciprocal involving alienable possession: the direct object is a noun and the second component *l’autre*, which is preceded by the preposition *de*, represents the object’s possessor:

- | | | |
|-------|--|-----------------------------------|
| (112) | a. <i>Chacun d’eux a brûlé la maison de l’autre.</i> | ‘They burnt each other’s houses.’ |
| | b. <i>Chacun d’eux a lu l’article de l’autre.</i> | ‘They read each other’s papers.’ |

9.3.2 *The complex chaque + noun ... l’autre* ‘each + noun... the other’

This complex differs from the previous one in that the first component is an invariable (in number or gender) adjectival pronoun and thus occurs with a noun:

- | | | |
|-------|--------------------------------------|---------------------------------|
| (113) | <i>Chaque élève a roulé l’autre.</i> | ‘Each pupil cheated the other.’ |
|-------|--------------------------------------|---------------------------------|

10. Temporal and spatial relations

Strictly speaking, reciprocity is linked to a situation which is conceived of as a single event where two participants set up the same type of relation relatively to each other. However, the meaning of some verbs as well as the pragmatic conditions often require to consider reciprocity within a larger scope. The reciprocal activity in which the two protagonists are engaged is perceived or conceived of as two partially simultaneous relations, as successivity, or alternation, or as a reciprocal sequence.

10.1 Optional simultaneity

The two relations which lay the basis for reciprocity can be understood as simultaneity or sequentiality (including iterativity):

- (114) a. *Pierre et Marie se fusillaient du regard toute la journée.*
 ‘Pierre and Marie looked daggers at each other all day long.’

However, in the presence of a specifier (temporal or spatial) denoting the circumstances of an occurrence of the event, the meaning immediately shifts to strict simultaneity:

- (114) b. *Au moment de partir Pierre et Marie se sont fusillés du regard.*
 ‘Pierre and Marie looked daggers at each other *when they left*.’

10.2 Obligatory non-simultaneity

If two participants do not perform the activity referred to simultaneously or at the same place, the two activities are considered as symmetrical but successive. The aspect of such utterances can be habitual or iterative:

- (115) *Les deux garçons se lançaient le ballon.*
 ‘The two boys were throwing the ball to each other.’
- (116) *La Grande Catherine et Voltaire s’écrivaient des lettres.*
 ‘Catherine the Great and Voltaire used to write letters to each other.’

10.3 Chaining relations

In cases where there are several participants in the same event and where the relations of successivity, or sequentiality are predominant, the participants are perceived as coupled in pairs and the reciprocal relation as holding between the members of each pair. These ordered paired relations (or chaining relations) can be organised according to a temporal or a spatial order. They are rendered by a very small set of verbs which are semantically homogeneous and which most often define the same spatio-temporal domain:

- | | |
|---------------------------------------|---------------------------------------|
| (117) <i>se succéder</i> ‘to succeed’ | <i>s’enchaîner</i> ‘to chain up’ |
| <i>se suivre</i> ‘to follow’ | <i>se talonner</i> ‘to follow behind’ |
| <i>se poursuivre</i> ‘to chase’ | <i>s’emboîter</i> ‘to fit into.’ |

The arrangement of the participants in a chaining situation is such that each of them occupies a position in the chain (Lichtenberk 1985). Thus, all positions are relative and different every time and for every participant. However, they are ordered with regard to the others, except for the first one which “is followed” and the last one which “follows”:

- (118) *Les coureurs se talonnaient depuis le début.*
 ‘The racers had been hot on the heels of each other since the beginning.’
- (119) *Les enfants se sont alignés par taille.*
 ‘The children lined up by size.’

- (120) *Ils se sont transmis la consigne.*
 ‘They passed on the orders.’

Lichtenberk (1985:25) points out that “the only case where a chaining situation is at the same time reciprocal is one that consists of two relations in a closed chain [...]”. In French this situation can be rendered either by *s’enchaîner* ‘to chain’ + *l’un l’autre* or by the symmetrical verb *alterner* ‘to alternate’ which lacks reflexive forms (**s’alterner*).

- (121) *Les deux enfants se sont enchaînés l’un à l’autre.*
 ‘The two kids chained themselves together.’

Although each of the participants logically precedes another, the verb *précéder* ‘to precede’ cannot encode “chaining reciprocity” like its antonym *suivre* ‘to follow’:

- (122) a. *Les garçons se suivaient.* ‘The boys followed each other.’
 b. **Les garçons se précédaient.* ‘The boys preceded each other.’

We think that this constraint is due to the predominant value of each of the two verbs. The static meaning inherent in *précéder* is opposed to the notion of change which prevails in the meanings of *suivre* or *succéder* (for another explanation, see Gaatone 1975:216–20).

11. Lexical reciprocals

Lexical reciprocals are verbs which have an inherent reciprocal meaning and therefore can express reciprocity without additional markers. The notion of reciprocity is a constituent feature of their meaning, and is preserved in all derived constructions, regardless of the presence or absence of the clitic *se*. According to the syntactic features of the verb, the derived constructions can be subject-oriented or object-oriented. They share one common feature, namely, they can give rise to a discontinuous comitative variant.

This class incorporates a large part of “symmetrical” verbs defined on the basis of a syntactic pattern. In this pattern, the two subjects or the subject and the complement of these verbs can interchange without affecting the interpretation (Borillo 1971: 18).

11.1 Subject-oriented constructions: “Canonical” only

We will distinguish three types within this group: (1) the underlying discontinuous constructions do not contain the clitic *se*, while simple constructions contain it (i.e. formally, they are analogous to standard “canonical” reciprocals (see 4.1.1); (2) *reciproca tantum*, with the clitic *se* present in both discontinuous and simple constructions; (3) the clitic *se* is absent in both discontinuous and simple constructions.

11.1.1 A simple construction is formed with the clitic *se*

The underlying constructions are discontinuous. In the derived constructions both arguments occupy the subject position (the subject is in the plural) and the clitic *se* is obligatory

(cf. (124b) and (124c), and also (125b) and (125c)). According to the syntactic properties of the verb, we will distinguish three subgroups.

11.1.1.1 Derived from two-place transitives. These are constructions with symmetrical verbs where the second argument (the object) is prepositionless:

- (123) *rencontrer* ‘to meet’ *croiser* ‘to run into’
 retrouver ‘to meet’ *toucher* ‘to touch.’
 épouser ‘to marry’

Though the syntax sets up some sort of hierarchy between the two participants in (124a) and a perfect symmetry in (124b), the underlying discontinuous construction and the derived reflexive construction associated to it are synonymous. These verbs rule out a *comitative* discontinuous construction (124d), i.e. a construction derived from a simple one with the help of the preposition *avec* ‘with’:

- (124) a. *Jean a rencontré Marie à la cafétéria.*
 ‘Jean met Marie in the coffee shop.’
 b. *Jean et Marie se sont rencontrés à la cafétéria.*
 ‘Jean and Marie met in the coffee shop.’
 c. **Jean et Marie ont rencontré à la cafétéria.*
 (same intended meaning as in (b)).
 d. **Jean s’est rencontré avec Marie à la cafétéria.*
 lit. ‘Jean (REFL-)met with Marie in the coffee shop.’

A comitative discontinuous construction occurring with the verb *croiser* ‘to run into’ (125d) has been pointed out by several authors (Donaldson 1973; Mélis 1990:67). Though this construction (125d) appears in writers like V. Hugo (125e), it is marked from the synchronic point of view. In modern French it means “couple by crossbreeding” (125f):

- (125) a. *Jean a croisé Marie dans la rue.*
 ‘Jean ran into Marie in the street.’
 b. *Jean et Marie se sont croisés dans la rue.*
 ‘Jean and Marie ran into each other in the street.’
 c. **Jean et Marie ont croisé dans la rue.*
 (same intended meaning as in (b)).
 d. **Jean s’est croisé avec Marie dans la rue.*
 lit. ‘Jean (REFL-)ran into with Marie in the street.’
 e. *Il se croisa avec Courfeyrac sous les arcades de l’Odéon.* (Hugo)
 ‘He met Courfeyrac under the arcs of Odeon.’
 f. *Le loup peut se croiser avec le chien.*
 ‘Wolves can crossbreed with dogs.’

The verb *retrouver* ‘to meet’ authorizes discontinuous constructions with noun phrases introduced by the preposition *avec* ‘with’, but the meaning of the verb is slightly altered, cf. (126d) and (126b):

- (126) a. *Jean a retrouvé Marie à l’entrée du théâtre.*
 ‘Jean met Marie at the entrance of the theatre.’

- b. *Jean et Marie se sont retrouvés à l'entrée du théâtre.*
'Jean and Marie met at the entrance of the theatre.'
- c. **Jean et Marie ont retrouvé à l'entrée du théâtre.*
lit. 'Jean and Marie met at the entrance of the theatre.'
- d. *Jean s'est retrouvé avec Marie à l'entrée du théâtre.*
'Jean found himself with Marie at the entrance of the theatre.'

The verb *toucher* which plainly demonstrates the polysemy of French verbs falls into the group of lexical reciprocals when it receives the interpretation "to be in contact with something/somebody":⁵

- (127) a. *La maison touche l'église.*
'The house is right next to the church.'
- b. *La maison et l'église se touchent.*
'The house and the church are right next to each other.'

11.1.1.2 Derived from two-place intransitives

A. There are three symmetrical verbs which form a base construction with an object introduced by the preposition *à*:

- | | | |
|-------|-----------------------|-----------------|
| (128) | <i>ressembler à</i> | 'to resemble' |
| | <i>correspondre à</i> | 'to correspond' |
| | <i>équivaloir à</i> | 'to amount to' |

In the derived pronominal construction the prepositional complement is in the position of co-ordinated subject (the two arguments can also be rendered by a plural subject expressed by a pronoun). The use of *se* in these constructions is obligatory:

- (129) a. *Jean ressemble à Marie et Marie ressemble à Jean.*
'Jean looks like Marie and Marie looks like Jean.'
- b. *Marie et Jean se ressemblent.*
'Jean and Marie resemble each other.'
- c. **Marie et Jean ressemblent.*
lit. '*Marie and Jean resemble.'

B. The two-place intransitives of communication like *causer* 'to chat', *parler* 'to speak', *correspondre* 'to communicate' also follow this derivation type (130). However, the only basic construction which is capable of indicating communication between two participants and which allows the reciprocal interpretation of the derived pronominal construction, is the one whose second argument is introduced by the preposition *avec* 'with':

5. When the arguments refer to animate entities (and to human beings, in particular), *toucher* 'to touch' will be considered as "canonical" reciprocal which is highly ambiguous out of context (Boons et al. 1976):

- (1) *Les garçons se touchent.* i. 'the boys touch each other'
ii. 'the boys play with themselves'

- (130) a. *Jean parle avec Pierre* implies a'. *Pierre parle avec Jean.*
 'Jean speaks with Pierre.' 'Pierre speaks with Jean.'
 b. *Jean et Pierre se parlent.*
 'Jean and Pierre speak to each other.'

11.1.1.3 *Reciproca tantum*. Needless to say, both simple and discontinuous constructions contain *se*. The following four verbs, whose meaning is characteristic of *reciproca tantum* cross-linguistically, belong here. Discontinuous constructions contain a comitative object with the preposition *avec* 'with'.

- (131) *se chamailler* (**chamailler*) 'to squabble'
se disputer (**disputer*) 'to quarrel'
se quereller (**quereller*) 'to bicker'
se bagarrer (**bagarrer*) 'to fight'; cf.:
- (132) a. *Pierre et Marie se sont disputés.* 'Jean and Marie quarrelled.'
 b. *Pierre s'est disputé avec Marie.* 'Jean quarrelled with Marie.'

It must be pointed out that in informal speech as well as in some regional usages a transitive version of *se disputer* 'to quarrel' and *se quereller* 'to bicker' is still preserved, for example, *disputer qqn* 'to tell sb off' and *quereller qqn* 'to scold sb'.

Broadly speaking, lexicalized reciprocals which have underlying verbs to which they are semantically related in a non-standard way, can also be included here (see 6.2).

11.1.2 Constructions formed without the clitic *se*

There are two possible syntactic patterns for these constructions: (i) a simple construction where the two arguments in reciprocal relation are in subject position; (ii) a discontinuous construction where one of the arguments is in subject position and the other appears as a prepositional complement. Both constructions are incompatible with the clitic *se*. We will distinguish three sub-groups.

A. Symmetrical verbs which authorize the use of the preposition *avec* 'with'. These verbs are either denominal derived verbs (133a–d), or verbs with the prefix *con-* ((133e–l), or a variant of *con-*, see Section 12):

- (133) *alterner* 'to alternate' *communiquer* 'to communicate'
fraterniser 'to fraternise' *commuter* 'to commute'
rivaliser 'to compete' *concorder* 'to agree'
sympathiser 'to sympathise' *coopérer* 'to cooperate'
coexister 'to coexist' *converger* 'to converge'
cohabiter 'to live together' *pactiser* 'to take sides with'
coïncider 'to coincide' *parlementer* 'to negotiate'
collaborer 'to collaborate' *permuter* 'to permute.'
- (134) a. *Le directeur et les ouvriers ont fraternisé.* (simple construction)
 'The director and the workers fraternised.'
 b. **Le directeur et les ouvriers se sont fraternisé.*
 lit. 'The director and the workers (REFL-)fraternised.'

<i>associer</i> ‘to associate’	<i>joindre</i> ‘to join’
<i>assortir</i> ‘to match’	<i>lier</i> ‘to link’
<i>attacher</i> ‘to tie’	<i>mélanger</i> ‘to mix’
<i>combiner</i> ‘to combine’	<i>marier</i> ‘to marry’
<i>connecter</i> ‘to connect’	<i>mêler</i> ‘to mix’
<i>comparer</i> ‘to compare’	<i>réunir</i> ‘to put together’
<i>confronter</i> ‘to confront’	<i>souder</i> ‘to weld’
<i>emmêler</i> ‘to tangle up’	<i>unir</i> ‘to unite.’

The reciprocal arguments in a simple construction can occur either as a plural direct object (single noun phrase or co-ordinated noun phrases), or as a direct object plus a prepositional object:

- (141) a. *Il a mélangé la farine et le sel.* ‘He mixed the flour and the salt.’
 b. *Il a mélangé la farine avec le sel.* ‘He mixed the flour with the salt.’
 c. *Il a mélangé la farine au sel.* ‘He added the flour to the salt.’

There are two possible reflexive constructions which decrease the verb valency:

- a simple construction where both reciprocal arguments occur in subject position (141d);
- a discontinuous construction where one of the arguments is in the subject position and the other is represented by an object with the preposition *avec* ‘with’:

- (141) d. *La farine et le sel se sont mélangés.* ‘The flour and the salt mixed.’
 e. *La farine s’est mélangée avec le / au sel.* ‘The flour mixed with the salt.’

Other examples:

- (142) a. *Le maire a marié Jean et Hélène.* ‘The mayor married Jean and Hélène.’
 b. *Jean et Hélène se sont mariés.* ‘Jean and Hélène got married.’
 c. *Jean s’est marié avec Hélène.* ‘Jean married Hélène.’
- (143) a. *Il a soudé les tuyaux.* ‘He welded the pipes.’
 b. *Il a soudé la lampe et l’étagère.* ‘He welded the lamp and the shelf.’
 c. *Il a soudé la lampe à l’étagère.* ‘He welded the lamp to the shelf.’

B. Verbs with the meaning of disconnecting:

- (144) *désassembler* ‘to disassemble’ *distinguer* ‘to distinguish’
désunir ‘to take a part’ *diviser* ‘to divide’
détacher ‘to detach’ *écarter* ‘to move apart’
différencier ‘to differentiate’ *isoler* ‘to isolate’
disjoindre ‘to disconnect’ *séparer* ‘to separate’
dissocier ‘to dissociate’ *opposer* ‘to oppose.’

The number of these verbs (approximately 20) is much more limited than the number of connecting verbs, and they manifest heterogeneous behaviour and impose several constraints which interact:

(a) Some of these constraints block the possibility of formally expressing reciprocal arguments in the form of prepositional complements when the verb takes the prefix *de-* (*dé, des-, dés-*) which denotes estrangement, separation or removal:

- (145) a. *Elle a réussi à désunir le jeune ménage.*
 ‘She managed to disunite the young couple.’
 b. **Elle a réussi à désunir Pierre et Marie.*
 lit. ‘She managed to disunite Pierre and Marie.’
 c. **Elle a réussi à désunir Pierre de Marie.*
 lit. ‘She managed to disunite Pierre of Marie.’

(b) Other constraints concern the semantic properties of the arguments. Compare the following examples:

- (146) a. *Il a séparé les garçons et les filles.* ‘He separated the boys and the girls.’
 b. *Il a séparé les garçons des filles.* ‘He separated the boys from the girls.’
 c. *Les garçons et les filles se sont séparés.* ‘The boys and the girls separated.’
 d. *Les garçons se sont séparés des filles.* ‘The boys separated from the girls.’
 (147) a. *Le juge a séparé l’enfant de son milieu familial.*
 ‘The judge separated the child from his/her family.’
 b. **Le juge a séparé l’enfant et son milieu familial.*
 ‘The judge separated the child and his/her family.’
 (148) a. *Il a détaché l’affiche du mur.* ‘He detached the poster from the wall.’
 b. *L’affiche s’est détaché du mur.* ‘The poster got detached from the wall.’
 c. **L’affiche et le mur se sont détachés* lit. ‘The poster and the wall REFL-got detached.’

11.3 *Entre-verbs*

The following verbs express object-oriented reciprocity lexically. They denote the connecting of two or more entities in the reciprocal relation (cf. (69g)):

- (149) *entrechoquer (les tasses)* ‘to clink against each other (cups)’
entrecroiser (les rubans) ‘to intertwine (ribbons)’
entrelacer (les branches) ‘to interweave (branches)’
entremêler (les fils) ‘to entangle (threads)’

All these verbs are used with a plural direct object which is obligatorily inanimate ((150a) and (151a)). Except for *entremêler* ‘to entangle’ (151c), the reciprocal arguments cannot be dissociated (examples (b)):

- (150) a. *Marie entrecroisait les rubans.*
 ‘Marie intertwined the ribbons.’
 b. **Marie a entrecroisé le ruban vert et le rouge.*
 lit. ‘Marie intertwined the green ribbon and the red one.’
 (151) a. *Les arbres entremêlaient leurs branches.*
 ‘The trees entangled their branches.’
 b. **Les arbres entremêlaient une branche avec une autre.*
 lit. ‘The trees entangled one branch to/ with another one.’

- c. *La fille entremêlait les fleurs blanches aux fleurs rouges.*
 ‘The girl interwove the white with the red flowers.’

The addition of the clitic *se* to these verbs changes the orientation of the predicate and allows formation of a derived object-oriented construction (also reciprocal) where both reciprocal arguments move to subject position:

- (152) a. *Pierre entrechoquait des cailloux dans sa main.*
 ‘Pierre clinked pebbles in his hand.’
 b. *Les cailloux s’entrechoquaient.*
 ‘The pebbles clinked.’

11.4 Symmetric predicates and related meanings

These constructions may have the form either of *être* ‘be’ + relational noun (expressing kinship, affective relationships or status) or of *être* ‘be’ + lexically reciprocal noun.

A. The relational noun is followed by a noun introduced by the preposition *de*:

1. Nouns which denote symmetrical reversible relations, e.g. *collègue de* ‘colleague of’, *ami de* ‘friend of’, *cousin de* ‘cousin of’, *parent de* ‘relative of’, *voisin de* ‘neighbour of’:

- (153) a. *Jean est le cousin de Marie.* ‘Jean is Marie’s cousin.’
 = b. *Marie est la cousine de Jean.* ‘Marie is Jean’s cousin.’
 = c. *Jean et Marie sont cousins.* ‘Jean and Marie are cousins.’

2. Nouns which express reciprocity only if both participants occur in subject position:

- (154) a. *Jean est l’ennemi de Michel.* (non-symmetrical) ‘Jean is the enemy of Michel.’
 b. *Jean et Michel sont ennemis.* (reciprocal) ‘Jean and Michel are enemies.’

3. Pair nouns where the second member of the pair expresses a relation which is the converse of the relation expressed by the first member: *femme de – mari de* ‘wife of – husband of’, *employé de – patron de* ‘employee – employer’, *père de – fils de* ‘father of – son of’, etc.

B. Lexically reciprocal nouns.

1. Nouns derived from verbs:

- | | | |
|--------------------------------------|---|------------------------------------|
| (155) <i>associer</i> ‘to associate’ | → | <i>association</i> ‘association’ |
| <i>échanger</i> ‘to exchange’ | → | <i>échange</i> ‘exchange’ |
| <i>joindre</i> ‘to join’ | → | <i>jonction</i> ‘junction’ |
| <i>unir</i> ‘to unite’ | → | <i>union</i> ‘union’ |
| <i>additionner</i> ‘to add’ | → | <i>addition</i> ‘addition’ |
| <i>relier</i> ‘to relate’ | → | <i>relation</i> ‘relation’ |
| <i>soustraire</i> ‘to subtract’ | → | <i>soustraction</i> ‘subtraction.’ |

2. Non-derived nouns: some nouns use the prefix *inter-* (a variant of *entre-*; see also Section 12) to denote reciprocity. Though these nouns have a deverbal suffix, the corresponding verbs do not exist. This phenomenon is still very productive:

- | | | |
|-------|--|-------------------------------------|
| (156) | <i>intercommunication</i> (* <i>intercommuniquer</i>) | ‘intercommunication’ |
| | <i>interdépendance</i> (* <i>interdépendre</i>) | ‘interdependence’ |
| | <i>interrelation</i> (* <i>interrelier</i>) | ‘interrelation’ |
| | <i>interlocuteur</i> (* <i>interlocuter</i>) | ‘interlocutor.’ |
| (157) | <i>Jean est l’interlocuteur du ministre</i> | ‘Jean has the ear of the minister.’ |

12. Notes on diachrony

12.1 Latin

In classical (1st c. BC–2nd c. AD) and post-classical (3rd–4th cc. AD) Latin, reciprocals did not form a grammatical class (Flobert 1975:393). Latin expressed reciprocity in two different ways:

1. The phrase *inter se* (lit. ‘between themselves’) ‘each other, mutually’ already appeared in the first known texts and represented the most common and frequent marker. The preposition *inter* introduces the reflexive pronouns (*inter nos*, *inter vos*, *inter se*) and thus denotes the plural referent of the subject (also indicated by the verb forms). Subject-oriented reciprocals are formed by this means:

- | | | | |
|-------|----|--|--|
| (158) | a. | <i>colent inter se ac diligent.</i> (Cicero, <i>Lae.</i>) | ‘[they] will have respect and affection for each other.’ |
| | b. | <i>inter nos conjuncti sumus.</i> (Cicero, <i>Fin.</i>) | ‘We are united together.’ |
| | c. | <i>inter se mortales mutua vivunt</i> (Lucrece) | ‘The mortals live off each other.’ |

Reflexive 3rd p. pronouns which stand for an object complement and refer to the subject cannot co-occur with *inter se* (even with two-place transitives):

- | | | | |
|-------|----|---|---|
| (159) | a. | <i>se amant.</i> | ‘They love each other.’ |
| | b. | * <i>se amant inter se.</i> | REFL love between REFL |
| | c. | <i>Pueri et nos et inter se amant.</i> (Cicero) | ‘The children have love for us and for each other.’ |

2. The indefinite pronouns *alius* ‘the other’ (of more than two persons) or *alter* ‘the other’ (of two persons) are repeated in different cases (once in the nominative and once in the case required by the verb) and occur with all types of verbs:

- | | | | | |
|-------|----|--|--|-------------------------------------|
| (160) | a. | <i>Alios alii deinceps excipiebant.</i> (Caesar) | others.ACC.PL others.NOM.PL in.turn replaced | ‘They replaced each other in turn.’ |
| | b. | <i>Alter ab altero adjutus.</i> (Cicero) | | ‘Each helped by the other.’ |

Reciprocity can be rendered also by a reduplication of the noun; cf. (161a) and (161b):

- (161) a. *conciliare homines* (Cicero)
 ‘to reconcile the men’
 b. *Natura homin-em* (ACC) *conciat homin-i.* (DAT) (Cicero)
 ‘Human nature brings men closer to each other.’

Besides, reciprocity is relatively frequent with reflexives and even with deponent reflexives in the plural. Yet, as Flobert (1975:395) points out, “it is due to the sociative meaning of the verb (*fruor, osculor, utor*, etc.) and to a play on prefixes (*ad-*, *am-*, *com-*), as well as to the addition of *iunucem* ‘in turn’, *mutua* ‘mutually’, *alterutrum* ‘reciprocally’ which accentuates even more the reciprocal interpretation”:

- (162) a. *se contuebantur* (Ammianus)
 ‘They watched each other.’
 b. *olores mutua carne vescuntur inter se.* (Plinius Sec.)
 ‘The swans devour each other.’

In order to express reciprocity a small number of deponent verbs combine with the phrases *inter se* or *cum* ‘with’+ N (*cum* means ‘joint action’):

- (163) a. *amplectari* ‘to embrace sb’
 a’. *amplectari + inter se* ‘to embrace each other’
 b. *osculari* ‘to kiss sb’
 b’. *osculari + inter se* ‘to kiss each other’
 c. *luctari* ‘to fight, to resist against’
 c’. *luctari + cum + N* ‘to compete in wrestling’
 d. *altercari* ‘to argue, to struggle’
 d’. *altercari + cum + N* ‘to argue with’
 e. *fabulari* ‘to speak’
 e’. *fabulari + cum + N* ‘to speak with.’

The prefix *cum-* ‘with’ (variants *con-*, *com-*, *col-*) can be attached to a lexical reciprocal in a middle-passive form and emphasize the reciprocal meaning:

- (164) a. (*col-*)*loqui cum aliquo* (Cicero)
 ‘to speak with somebody.’
 b. *Col-loqui-mur inter nos.* (Cicero)
 with-speak-1PL.PASS between us
 ‘We speak with each other.’
- (165) a. *fabulari cum aliqui* (Suetone) ‘to speak to sb’ (*fabular*: the narrator)
 b. *con-fabulari* ‘to speak with sb’ (*confabulator*: the hearer).
- (166) a. *plectere* ‘to weave’ (Lucrece)
 b. *com-plectari* ‘to embrace sb’
 c. *complectari + inter se* ‘to be clasped in each other’s arms.’

This configuration can also express object-oriented reciprocity with lexically reciprocal verbs, but in the active (167) or in the passive voice (168):

- (167) a. *conciliare homines inter se* (Cicero) ‘to bring men closer to each other’
 b. *conciliare aliquos inter se* (Cicero) ‘to make sb friends.’

- (168) a. *congregari inter se* (Tacite)
 ‘to be brought together.’
 b. *Dextris inter se datis* (T. Livius)
 ‘Having given each other the right hand’ (when parting).

Post-classical Latin retains the same means of expressing reciprocity. But this function was gradually taken over by the reflexive (pronominal) form which succeeded the middle form, then was confused with the passive. This process takes place in the classical period and affects lexical reciprocals. In the following examples, the reciprocal meaning is expressed by means of the middle-passive form (169a) and the reflexive with *cum* (169b):

- (169) a. *Ciconiae abiturae congregantur in certo loco.* (Plinius Caecilius Secundus)
 ‘Departing storks gather in a definite place.’
 b. *Congregare se cum aequalibus.* (Cicero)
 ‘To unite with equals.’

During this period the clitic *se*, though rarely, can be combined with lexical reciprocals, thus achieving a step towards its integration into the means of expressing reciprocity (170d). Compare the following four cases which are roughly synonymous (examples borrowed from Referovskaja 1980:72–6):

- (170) a. *pugnare* ‘to fight’
 b. *inter se pugnare* ‘to fight against each other’
 c. *inter se compugnare* ‘to fight against each other.’
 d. *se fortiter compugnantes Chlodoreo, Gundobado...* (Liber Hist. Fr., 9th c. AD)
 ‘Chlodoreo, Gundobado... fight each other bravely.’

12.2 Expression of reciprocity in Old French

Old French has the following means to express the reciprocal meaning, some of them can be used simultaneously:

1. The reflexive pronoun *se* is quite frequent in Old French texts (though extremely rare during the same period in vulgar Latin). It occurs mostly under certain contextual conditions and often with the support of lexical means. In (171) the verb is two-place transitive; in (172) it is two-place intransitive (see 7.1.1 in modern French):

- (171) *Freres estoient, molt se durent aimer.* (Charroi de Nîmes, 12th c.)
 brother were much REFL MUST.PAST love
 ‘They were brothers, they must have loved each other a lot.’
 (172) *Li dui frère se cor-ent sore.* (Roman de Thèbes, 12th c.)
 the two brother REFL RUN-PL upon
 ‘The two brothers rush towards each other.’

2. The compound pronoun *li uns l’autre* (variant *l’autre*) lit. ‘the one the other’. This means was used more frequently than the first one. In vulgar Latin (Grégoire de Tours, 9th c.) the compound pronoun replaces the classical opposition *alius/alter* (see (160)). *Uns* (from Latin *unus* ‘one’) is a subjective singular case and with a singular verb form

agreement. *L'autre* is anaphoric and refers to the second participant and in most cases is preceded by a preposition. As the verb-subject agreement is singular, if the context establishes a hierarchy of participants, the interpretation is non-reciprocal. The reciprocal interpretation becomes possible in the absence of such a hierarchy or when the context makes it possible to resolve the ambiguity. According to the dictionary Le Robert (1992) and to Stéfani (1962:429) a sentence which contains *l'un* (or *li uns*)/*l'autre* could express reciprocity between two persons with singular agreement (cf. (173)). But the translators consider examples (174) and (175) as having two readings, reciprocal and non-reciprocal.

(a) The use of *li uns l'autre* without *se* in the case when Modern French requires *se*:

(173) *Li roys et la royne l'uns l'autre resgarda.* (Villehardouin, 13th c.)
 'The king and the queen looked at each other.'

(174) *Li un-s l'autre oceïst.* (Roman de Thèbes, 12th c.)
 the one-SG the other.SG kill-SG
 i. 'They killed each other.'
 ii. 'The one killed the other.'

(175) *A icel mot l'un a l'autre ad clinet.* (Chanson de Roland, 12th c.)
 with this word the.one to the.other to bow.PAST.SG
 i. 'Saying this, they bowed to one another.'
 ii. 'Saying this, one bowed to the other.'

(b) Joint use of *li uns l'autre* and *se*:

(176) *Li uns contre l'autre s'adresce.* (Erec)
 'They stand up to each other/one stands up to the other.'

The reciprocal interpretation is only definitely established after the early 15th c. when the plural verb form becomes regular and the prefix *entre-* (see 4) below) spreads:

(177) *Ceste entrevue fut pleine de louanges qu'ils s'entrefeirent l'un l'autre.* (Amyot, 16th c.)
 'That meeting was full of praise which they bestowed upon each other.'

3. The complex *chacun l'autre* (variant *cascun l'autre*) 'each one the other': it has a collective value and agrees with a verb in the singular. The following text describes the reaction of all the inhabitants of Saragozza who mourn for Marsile (Stéfani 1962:427):

(178) *Dist (sg) cascun a l'autre.* (Chanson de Roland, 12th c.)
 'Each says to the other', lit. 'says each to the other.'

4. The combination of *se* with the prefix *entre-*. In Gaul, under the influence of Celtic, *inter se amant* becomes *se interamant*. This phenomenon, which can be observed only in Gaul and not in Romania, seems to be the origin of the extension of *se* into constructions which receive a reciprocal interpretation: as a prefix, *entre-* combines with the auxiliary (a usage which has disappeared in modern French), or/and with the verb:

(179) *Il s'entrecommencent a regarder.* (Chrétien de Troyes, 12th c.)
 'They begin to look at each other.'

- (180) *Le peuple s'entrevooulaient tuer.* (Renart, 13th c.)
 'The people wanted to kill each other.'
- (181) *Il s'entresont mout doucement entracolé.* (Cochon, 15th c.)
 'They hugged each other softly.'
- (182) *Quant il s'entrecreuidaient ferir.* (Couronnement de Louis, 12th c.)
 'When they nearly hit each other.'

The combination of *se* + *entre*-V rapidly became a very productive derivational type for all verb classes which lasted until the 19th century (180 verbs in Littré's dictionary (1872)). However, 20th century French has preserved only a small number of *s'entre*-verbs (*reciproca tantum*; cf. Section 5).

In present-day Romance languages⁶ the reciprocal domain is typologically similar to that in French. The principal differences are observed in two languages. Rumanian retains the difference between the accusative (*se*) and dative (*si*) in the 3rd person reflexive pronoun. A more drastic development took place in Surselvan (one of the five Rhaeto-Romance languages), where the following three peculiarities are observed: (a) the reflexive clitic *se* has ousted the 1st and 2nd person pronouns and become the only marker of reflexivity, reciprocity and other meanings, whatever the person (cf. (183) where the subject is the 1PL pronoun *nus*); (b) this marker has become an undetachable verbal prefix (see (183)); (c) the reciprocal pronoun *in l'auter* 'each other', unlike its French counterpart *l'un l'autre*, may or must occur with verbs without *se* which obligatorily require this marker in French (cf. (184) and (1e); see Stimm 1973: 11, 39ff., 64):

- (183) *Nus sevesein lu aunc in di!* 'We shall see each other one day!'
- (184) *Els carezavan in l'auter.* 'They loved each other.' (see Stimm 1973: 84).

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Reciprocal and reflexive constructions in Bulgarian

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1. Introduction

1.1 Bulgarian

Bulgarian is a South Slavic language spoken by over 9 million Bulgarians living in the Republic of Bulgaria and outside in the neighbouring and some remote countries.

Contemporary standard Bulgarian unites a great many dialects. The dialects of the three main regions of Bulgaria (Moesia, Thrace and Madeconia) share more common than they have distinct features, and they are easily identified as Bulgarian.

1.2 Overview

Reciprocity can be expressed by verbal and/or syntactic reciprocal markers. Verbal reciprocals are derived by means of the polysemous reflexive pronominal clitic *se* (accusative) or *si* (dative); cf.:

- (1) a. *Te me gledat.*
 they 1SG.ACC watch.3PL.PRES
 ‘They watch me.’
 b. *Te se gledat.*
 i. ‘They watch *each other*.’
 ii. ‘They watch *themselves*’ (in the mirror, etc.).

In the *Bălgarski tǎlkoven rečnik* (Andreičin et al. 1963), in which about 3630 verbs are registered, there are over 180 verbs with the reflexive clitics which have or can acquire the reciprocal meaning. This number includes lexical reciprocals (see Section 9) and non-polysemous reciprocals (see 4.1.1.1.1). A great number (over 550 items) are semantically either reflexive or reciprocal (cf. (1b)) depending on context. The syntactic reciprocal marker *edin drug* ‘each other’ can be added to resolve the ambiguity of a derivative, although by itself, without *se* on the verb, it cannot be used. Thus, in contrast to (1c), only (1d) is grammatical:

- c. **Te gledat edin drug (s ljubov).*
 they watch.3PL each other with love
 ‘They watch each other (with love).’
 d. *Te se gledat edin drug (s ljubov).*
 they REFL.ACC watch.3PL each other with love
 ‘They watch each other (with love).’

The reflexive clitics are moveable: they may be either (distantly) preposed to the verb or (distantly) postposed to it, with insertion of unstressed words (in certain cases):

- e. (...) *gledat li se*
 watch whether REFL.ACC
 ‘(...) whether they watch each other’; or ‘Do they watch each other?’

Verbal reciprocals cannot be derived by means of *se* from verbs taking a prepositional object (excepting the dative case with the preposition *na* ‘on, to, for ...’). To encode the reciprocal meaning on these verbs, only *edin drug* with the relevant preposition between the components is used:

- (2) a. *Te gledat kām Petār.* ‘They look at Peter.’
 b. *Te gledat edin kām drug.* ‘They look at each other.’

but not:

- c. **Te se gledat edin kām drug.* ‘They look at each other.’

The expression *edin drug* ‘each other’ is the unmarked form; if both reciprocal arguments are feminine or neuter the forms *edna druga* and *edno drugo* are used respectively.

It should be stressed that the reciprocal meaning is only one of the meanings of the highly polysemous clitic *se*, its other meanings (besides the reflexive already mentioned) being anticausative, reflexive-causative, passive, etc. (see 4.2). To a lesser degree this holds for the clitic *si* (see 3.2; see Andreičin 1956: 107–8; Penchev 1965: 249–54, 1972: 245–77;

Scatton 1993:235–7). It should be specially pointed out that there is a group of *se* verbs with a “competitive” meaning closely related to the reciprocal.

2. Grammatical notes

2.1 Some peculiarities of Bulgarian

There are grammatical categories and constructions in Bulgarian that are not attested in other Slavic languages.

A Balkan feature of Bulgarian is the morphologically marked definiteness: the post-posed definite article *-ta/-ăt*, etc. is incorporated in the first adjective (if there are any) or in the head noun of a noun phrase. Indefiniteness can be marked by the word *edin* lit. ‘one’ preposed to a noun group. Both articles agree in gender (masculine, feminine, neuter) and number (singular, plural) with the head noun.

Another Balkan feature is the doubling of some syntactic categories, namely, the subject, direct or indirect object, possessive attribute, etc, e.g.:

- (3) *Na Ivan mu kazax novini-te.*
 to Ivan he.DAT told.1SG news-DEF.PL
 ‘I told the news to Ivan’ (see also (4)).

Bulgarian belongs to the type of languages with extensive use of subject pro-drop (dropping an unstressed subject pronoun; see (3)).

Nouns and adjectives have lost all case forms (except the vocative).

The verb has a rich morphology, but no infinitive. In fact, the infinitive has developed into a subordinate predicate in *da*-clauses. Finite verb forms are marked for tense, person and number, and voice.

There are the perfective and the imperfective aspect. From every perfective verb, an imperfective form can be derived.

The tense system in the verb is highly developed, with as many as nine simple and periphrastic tenses distinguished in grammars: Present, Past Imperfect, Past Aorist, Future, Present Perfect, Past Perfect, Future Perfect, Past Future, Past Future Perfect. Both aspects of any verb can be used in each tense form.

There is at least one mood more in Bulgarian, viz. the renarrated, than in other Slavic languages.

Word order is relatively free despite the absence of cases (except in some pronominal classes).

2.2 Personal pronouns and position of clitics

Personal non-possessive pronouns have nominative, accusative and dative forms. Non-nominative (reflexive and non-reflexive) personal pronouns appear in two forms, long and

short (clitics). Enclitic pronouns are customary direct and indirect objects. The reflexive forms function as objects, like non-reflexive pronouns.

The personal non-possessive long and short forms of the same pronoun can co-occur in the same sentence, as a kind of object doubling:

- (4) *Mene me vidjaha.*
 I.ACC 1SG.ACC see.3PL.AOR
 ‘[They] saw me.’ (cf. (3)).

The long possessive forms are inflected like adjectives. The short possessive forms appear in definite noun phrases only:

- (5) a. *Te gledat kniga-ta mi.*
 they watch.3PL.PRES book-DEF my
 ‘They look at my book.’
 b. **Te gledat kniga mi* (see also (10)).

As is shown in Table 1, the short possessive non-reflexive and reflexive forms are identical with the short dative non-possessive forms. One might say the latter forms function as possessive pronouns.

Table 1. Personal pronouns

	Personal non-reflexive			Possessive non-reflexive		
	Nominative	Accusative	Dative			
1SG	<i>az</i>	<i>mene – me</i>	<i>na mene – mi</i>	<i>moj – mi</i>		
2SG	<i>ti</i>	<i>tebe – te</i>	<i>na tebe – ti</i>	<i>tvoj – ti</i>		
3SG	<i>toj, M; to, N</i> <i>ja, F</i>	<i>nego – go</i> <i>neja – ja</i>	<i>na nego – mu</i> <i>na neja – i</i>	<i>negov – mu</i> <i>nein – i</i>		
1PL	<i>nie</i>	<i>nas – ni</i>	<i>na nas – ni</i>	<i>nas – ni</i>		
2PL	<i>vie</i>	<i>vas – vi</i>	<i>na vas – vi</i>	<i>vas – vi</i>		
3PL	<i>te</i>	<i>ijax – gi</i>	<i>na tjax – im</i>	<i>texen – im</i>		
	Reflexive non-possessive			Possessive reflexive		
For all persons, genders and numbers		Accusative	Dative			
		<i>sebe si – se</i>	<i>na sebe – si</i>	<i>svoj – si</i>		

3. Grammatical status of the clitics *se* and *si*

3.1 The accusative clitic *se*

It has three functions:

A. The function of a reflexive pronoun as a direct object, when it is interchangeable with the proper reflexive object *sebe si* (see the relevant long form in Table 1). This sort of substitution is impossible for the other two functions. Compare:

- (6) a. *Tja mie deteto.* 'She washes the child.'
 b. *Tja mie nego. = Tja go mie.* 'She washes him.'
 c. *Tja mie sebe si. = Tja se mie.* 'She washes herself.'

The long reflexive pronoun can be coordinated with a noun object, while the short form cannot:

- d. *Tja mie sebe si i deteto.* 'She washes herself and the child.'
 e. **Tja se mie i deteto.*

B. The function of a derivational marker with a number of meanings, e.g. reciprocal, autocausative, anticausative, reflexive-causative, etc. (see 4.2); e.g.:

- (7) a. *Baštata sčupi präckata.* 'The father broke the stick.'
 b. *Präckata se sčupi.* 'The stick broke' (anticausative).

C. The function of an inflectional marker of the passive voice, both personal and impersonal; cf. (8d).

There seems to be no clear-cut borderline between **A** and **B**, as in both cases the clitic *se* is unstressed. Moreover, in the context of numerous derivatives of the **B** type, verbs with the clitic *se* of type **A** tend to be perceived as derivatives with the reflexive meaning proper, especially if we take into account the polysemy of concrete *se* verbs; cf.:

- (8) a. *Te me lekuvat.* 'They treat me (for an illness).'
 b. *Te se lekuvat sami.* 'They treat themselves.' (reflexive proper)
 c. *Te se lekuvat v bolnica* lit. 'They let themselves be treated (undergo treatment) in a hospital.' (reflexive-causative)
 d. *Te se lekuvat ot dobär lekar.* 'They are treated by a good doctor.' (passive)
 e. *Te se lekuvat vzaimno* 'They treat each other.'

As we see, the clitic *se* is a direct object in (8b), a derivational marker in (8c, 8e) and an inflectional marker in (8d). The latter two functions can be jointly referred to as middle.

3.2 The dative clitic *si*

It has four principal functions:

A. It may be a reflexive pronoun functioning as an indirect object (cf. **A** under 3.1).

B. It is used as a derivational marker of reciprocal verbs (cf. **B** in 3.1); it is much less productive in this function than *se*.

C. It functions as an emphatic particle, cf.:

- (9) *Peja si.* 'I am just singing (for myself, for my own pleasure).'

D. It is also used as a possessive pronoun in attributive function:

- (10) *Te tärsjat knjigata si.* 'They look for their own book' (cf. (5a)).

See also Tagamlicka (1970: 177–87); Norman (1971: 179–93).

4. Reciprocal constructions with the accusative clitic *se*

4.1 Diathesis types of reciprocal constructions

4.1.1 Subject-oriented constructions. “Canonical” reciprocals only

4.1.1.1 *Derived from two-place transitives.* All reciprocals of this (“canonical”) type are intransitive. This is the most common type among reciprocals. The referent of the underlying object is included in the subject of the reciprocal construction as is the referent of the reflexive object. This is why constructions with these reciprocals look like those with a reflexive object expressed by *se*. If it is possible for a given underlying verb to occur with a proper reflexive object, i.e. *sebe si*, nothing should prevent forming a reciprocal from it, it seems. Intuitively, if one can perform an action upon oneself or another person, there may be a respective reciprocal situation. The constraints have to be external for such a reciprocal situation to not occur - when the reciprocal interpretation is subnormal or physically impossible. A situation like

- (11) *Te se mijat vzaimno.* ‘They wash each other.’

is rather unlikely though possible. On the other hand, reciprocals are much less likely to have a reflexive interpretation, for which reason a syntactic marker of reciprocity is redundant, although it is often added. In other words, a derived construction without a syntactic marker may have both a reflexive and a reciprocal reading. In order to disambiguate it, one of the meanings has to be suppressed. In most cases it is reciprocity that is marked syntactically, the reflexive meaning being thus suppressed. Reciprocal constructions with a syntactic marker (*edin drug* ‘one another’, *vzaimno* ‘mutually’, etc.) are therefore quite common.

4.1.1.1.1 *Reciprocals which do not need a syntactic marker (edin drug ‘each other’, etc.).* Thus, reflexive reading of the verb in (12b) is rather unlikely, unless in a very special context:

- (12) a. *Te go razljubixa.* ‘They fell out of love with him.’
 b. *Te se razljubixa.* ‘They fell out of love with each other.’

Here is a list of reciprocals that belong to this type:

- (13) *Te se izpokaraxa.* ‘They have quarrelled with one another (all of them).’
Te se ritat. ‘They kick each other.’
Te se pozdravjavat. ‘They congratulate each other.’
Te se razglezdat. ‘They stare at each other.’
Te se rugajat. ‘They scold each other.’
Te se slušat. ‘They listen to each other.’
Te se tãrsjat. ‘They look for each other.’
Te se kãlvat. ‘They peck each other.’
Te se obiçat. ‘They love each other.’
Te se opipvat. ‘They touch/feel each other.’
Te se agitirat. ‘They agitate each other.’
Te se bodat. ‘They butt each other.’ (cf. (17a))

<i>Te se bijat.</i>	‘They beat each other.’
<i>Te se sreštnaxa.</i>	‘They met (each other).’
<i>Te se čakat.</i>	‘They wait for each other.’
<i>Te se poznavat.</i>	‘They know each other.’
<i>Te se celuvat.</i>	‘They kiss each other.’
<i>Te se gādeličkat.</i>	‘They tickle each other.’
<i>Te se štīpījat.</i>	‘They pinch each other’, etc.

4.1.1.1.2 *Reciprocals which usually need a syntactic marker.* Without a syntactic marker, these verbs may have either a reflexive, or anticausative, or absolutive, etc. reading (cf. (8)).

The polysemy “reciprocal – reflexive” holds in the case of the following *se* verbs if they are used without a syntactic marker of reciprocity:

(14) <i>Te se xvaljāt vzaimno.</i>	‘They praise each other.’
<i>Te se ubodoxa edin drug.</i>	‘They pricked each other.’
<i>Te se sresaxa edna druga.</i>	‘They combed each other.’
<i>Te se risuvat vzaimno.</i>	‘They draw (make drawings of) each other.’
<i>Te se ubivat vzaimno.</i>	‘They kill each other.’
<i>Te se otrovixa vzaimno.</i>	‘They poisoned each other.’

The polysemy “reciprocal – anticausative” is suppressed by syntactic markers in the following *se* verbs:

(15) <i>Te se bezpokojāt vzaimno.</i>	‘They bother each other.’
<i>Te se vāzmuštavat vzaimno.</i>	‘They are indignant at each other.’
<i>Te se plašāt edin drug.</i>	‘They scare each other.’
<i>Te se radvat edin drug.</i>	‘They make each other glad.’
<i>Te se sābuždat edin drug.</i>	‘They awaken each other.’
<i>Te se jadosvat edin drug.</i>	‘They make each other angry’, etc.

The polysemy “reciprocal – autocausative” is characteristic of the following verbs (derived mostly from verbs of motion) when they are used without a syntactic marker:

(16) a. <i>Te se povozixa edin drug.</i>	‘They gave a ride to each other.’
b. <i>Te se izpravjāt vzaimno.</i>	‘They set each other upright’, etc.

The polysemy “reciprocal – absolutive” is characteristic of verbs like the following:

(17) a. <i>Te se bijāt.</i>	i. ‘They fight’; ii. ‘They are pugnacious.’
b. <i>Te se zakačāt.</i>	i. ‘They tease each other’; ii. ‘They (like to) tease.’

Needless to say, polysemy of verbs with the reciprocal meaning is only possible if the subject is plural.

4.1.1.2 *Derived from three-place transitives.* This type is limited to a few verbs. Compare:

(18) a. <i>Te gi predstavixa na direktora.</i>	‘They introduced them to the director.’
b. <i>Te se predstavixa edin drug na direktora.</i>	‘They introduced each other to the director.’

4.1.2 *Object-oriented constructions*

These are periphrastic causative constructions derived from subject-oriented reciprocals.

All the reciprocals under 4.1.1 can occur as subordinate constructions with their subject co-referential with the object of the main clause:

- (19) a. *Te se razljubvat.*
 ‘They fall out of love with each other.’
 b. *Toj gi nakara (te ‘they’ = gi) da se razljubjat.*
 ‘He made them fall out of love with each other.’

4.2 Non-reciprocal meanings of the clitic *se*

I have shown above that the marker of reciprocity *se* is a highly polysemous clitic. It is expedient to list all its meanings together, in order to show the semantic system the reciprocal meaning belongs to and interacts with. As can be seen from this list, the range of semantic variation of the clitic *se* basically coincides with that of polysemous markers genetically descended from markers with the initial reflexive meaning (see, for instance, Löttsch et al. 1976:63–94; Geniušienė 1987; Kemmer 1993; Wehr 1995). These functions are subdivided into two syntactic types according to the correlation of the derived subject with the subject or with the object of the underlying verb.

4.2.1 *Subject-oriented meanings*

Here belong the following meanings:

1. Reflexive proper, see (8b), (1b).
2. Autocausative, cf.:
 (20) a. *Tja go izpravi.* ‘She set him upright (straightened him up).’
 b. *Tja se izpravi.* ‘She set herself upright (straightened herself up).’ (cf. (16b)).
3. Reflexive-causative, see (8c).
4. Absolutive, see (17).

The reciprocal meaning is also of this syntactic type.

4.2.2 *Object-oriented meanings*

These are the following meanings:

1. Anticausative, see (7b).
2. Converse, cf.:
 (21) a. *Vodata predava zvuka.* ‘Water carries sound.’
 b. *Zvukāt se predava po vodata.* ‘Sound carries in water.’
3. Modal-potential meaning:
 - i. With respect to the subject (propensity), e.g.:
 (22) a. *Az jam čereši.* ‘I eat cherries.’
 b. *Jadat mi se čereši.* ‘I feel like eating cherries.’
 - ii. With respect to the object (necessity or possibility), e.g.:

- (23) a. *Toj ogležda cvetjata na toplo.* ‘He keeps flowers in a warm place.’
 b. *Cvetjata se ogleždat na toplo.* ‘Flowers must be kept in warmth.’

4. Passive proper, see (8d).

Some of the less prominent meanings are omitted here.

4.3 The use of *edin drug*, etc. with rare monosemous reciprocals

I have in mind reciprocals denoting pragmatically rare situations. Thus cases like *Te se agitirat* in (13) are more common with *edin drug*, etc., although even without it they can be interpreted as reciprocals only.

5. Reciprocal constructions with the dative clitic *si*

5.1 Diathesis types of reciprocal constructions

5.1.1 Subject-oriented constructions

Reciprocals with the dative *si* have all the three diathesis types, in contrast to *se* reciprocals.

5.1.1.1 “Canonical” reciprocals. These derive from two-place intransitives only; e.g.:

- (24) a. *Te im pomagat.* ‘They help them.’
 b. *Te si pomagat.* ‘They help each other.’
- (25) a. *Te si xodjat na gosti.* ‘They visit each other.’
 b. *Te si prostixa [edin na drug].* ‘They forgave each other.’
 c. *Bratjata si govorjat.* ‘The brothers talk to each other.’
 d. *Te si otmaštavat [edin na drug].* ‘They revenge on each other.’

5.1.1.2 “Indirect” reciprocals. They derive from three-place transitives and retain their transitivity. It is easy to see that in the following cases the reflexive reading ‘for themselves’ is also possible:

- (26) a. *Te im pravjat podarāci.* ‘They give them presents.’
 b. *Te si pravjat podarāci.* i. ‘They give presents to each other.’
 ii. ‘They give themselves presents.’
- (27) a. *Te predstavixa bratjata si na tjax.*
 ‘They introduced their brothers to them.’
 b. *Te si predstavixa bratjata [edin na drug].*
 ‘They introduced their brothers to each other.’

Constructions with possessive clitics, both non-reflexive and reflexive (appearing, as was indicated above, in definite noun phrases only) are ambiguous, which can be resolved by means of syntactic markers or by the long possessive forms (*svoj* ‘one’s own’, etc.).

- (28) a. *Te im kupixa kartinite.* i. ‘They bought them the pictures.’
 ii. ‘They bought their pictures.’
 b. *Te si kupixa kartinite.* i. ‘They bought the pictures *for each other*.’
 (also if *edin na drug* or *vzaimno* is added)
 ii. ‘They bought the pictures *for themselves*.’
 iii. ‘They bought *their own* pictures’ (this requires a special context or situation).

5.1.1.3 “Possessive” reciprocals. They derive from two-place transitives on condition that the direct object of the underlying construction has a possessive attribute. In the reciprocal construction the possessive *si* substitutes for the possessive attribute, and the syntactic structure is retained:

- (29) a. *Te im zapalixa kăštite.* ‘They set their (not their own) houses on fire.’
 b. *Te si zapalixa kăštite.* i. ‘They set their own houses on fire.’
 ii. ‘They set each other’s houses on fire.’
 (30) a. *Te im prostreljaxa răcete.* ‘They shot through *their* (not own) hands.’
 b. *Te si prostreljaxa răcete.* i. ‘They shot through *their own* hands.’
 ii. ‘They shot through *each other’s* hands.’
 (also, if *edin na drug* or *vzaimno* is added).

I stress again the formal identity of “indirect” and “possessive” reciprocal constructions.

5.1.2 Object-oriented constructions

To save space, we give no examples, since these constructions are formed in the same way as those in 4.1.2.

5.2 Non-reciprocal meanings of the clitic *si*

They are listed in Section 3.2.

6. Means of marking reciprocal arguments

6.1 Simple reciprocal constructions

In this case both arguments are expressed by the subject in one of the two principal ways: (a) homogeneously, by the plural number of a noun or pronoun, or (b) heterogeneously, by a coordinated group (like ‘Ivan and Peter’), i.e. in the same ways as the plural subject in non-reciprocal constructions. In simple constructions, reciprocals have three forms only: 1st, 2nd and 3rd person plural. Here are examples with the verbs ‘to kiss [each other]’ and ‘to cure each other’:

- (31) a. *Nie se celuvame.* ‘We kiss each other.’
 b. *Vie se celuvate.* ‘You kiss each other.’
 c. *Te se celuvat.* ‘They kiss each other.’

- (32) a. *Nie se lekuvame [vzaimno].* 'We cure each other.'
 b. *Vie se lekuvate [vzaimno].* 'You cure each other.'
 c. *Te se lekuvat [vzaimno].* 'They cure each other.'

It is in these *se* forms that polysemy of the reciprocal and a non-reciprocal meaning can be observed (see (8) and 4.1.1.1.2).

6.2 Discontinuous reciprocal constructions. Comitative constructions only

Only a very limited number of non-lexical reciprocals (about lexical reciprocals see 9.1, 9.2.2), namely about 10 to 20 items out of more than 550 of the types discussed above, can be used in comitative constructions with a singular subject while retaining their reciprocal meaning, although the functional sentence perspective changes, of course. These verbs are lexicalized, to a certain degree. In this case the reciprocals have six (both singular and plural) personal forms in each tense. This is possible for the reciprocal in (33):

- (33) a. *Az se celuvam s nego.* 'I and he kiss', lit. 'I kiss with him.'
 b. *Ti se celuvaš s nego.* 'You and he kiss', lit. 'You kiss with him.'
 c. *Tja se celuva s nego.* 'She and he kiss', lit. 'She kisses with him.'
 d. *Nie se celuvame s nego.* 'We and he kiss', lit. 'We kiss with him', etc.

Here belong reciprocals like *sreštam se* 'meet', *bija se* 'fight', and the like.

In type (33) constructions, the syntactic reciprocal markers *edin drug*, *vzaimno*, etc. are ungrammatical.

In constructions of the (33a–c) type, a comitative group, which is a prepositional object, is obligatory, while in type (34) constructions it is an optional adverbial:

- (34) *Az se razxoždam s drugarja si.* 'I stroll with my friend.'

(For other meanings see (8c–d).)

6.3 Comitative preposition in the subject

There are some (non-rigid) restrictions which are characteristic not only of reciprocal constructions, it seems. Thus (33e) is quite acceptable, (33f) is questionable (more rare?) and (33g) is ungrammatical (K. Ivanova, p.c.):

- (33) e. *Nie s nego/s Ivan se celuvame.* lit. 'We with him/with Ivan are kissing.'
 f. *Az s nego/s Ivan se celuvame.* lit. 'I with him/with Ivan are kissing.'
 g. **Ivan sās Sofia se celuvat.* lit. 'Ivan with Sofia are kissing.'

7. Syntactic reciprocal markers

7.1 Syntactic markers with derived reciprocals

As noted above, the syntactic markers of reciprocity resolve the ambiguity of some cliticized forms. It has also been shown that this problem arises in the plural form only and it does not concern some groups of *se* verbs which commonly have a reciprocal reading (see 4.1.1.1.1).

7.1.1 Intonational characteristics of the markers *edin drug* ‘one another’ and *vzaimno* ‘mutually’

There is an intonational difference between these two markers: the former is usually unstressed or has a weak stress, it is pronounced at a low pitch and at a faster tempo, and it cannot receive sentential stress. As often as not, it occurs in pre-final position, being followed by a prepositional noun phrase or an adverb (most of the relevant examples above are given without the latter for the sake of brevity). Thus, (35a) is more natural than (35b):

- (35) a. *Te se gledat edin drug s ljubov.* ‘They look at each other with love.’
 b. *Te se gledat edin drug.* ‘They look at each other.’

The marker *vzaimno* ‘mutually’ is usually rhematic and heavily stressed:

- c. *Te se gledat vzaimno.* lit. ‘They look at each other mutually.’

7.1.2 Syntactic status of *edin drug* and *vzaimno*

The marker *edin drug* is of pronominal origin and is inflected for gender and number. In the above examples, both components occur in the masculine singular form, while in (36) below they acquire a different form, to agree with the subject in number and gender:

- (36) a. *Student-i-te se gledaxa edn-i drug-i.*
 student-PL-DEF.PL REFL looked one-PL another-PL
 ‘The students looked at one another.’
 b. *Dve-te student-k-i se gledaxa edn-a drug-a.*
 two.F-DEF student-F-PL REFL looked one-F.SG another-F.SG
 ‘Two girl-students looked at each other.’
 c. *Vsički-te student-k-i se gledaxa edn-i drug-i.*
 all-DEF.PL student-F-PL REFL looked one-PL another-PL
 ‘All the girl-students looked at each other.’

The marker *edin drug* behaves like a predicative attribute that can be compared to the function of *sama* ‘alone’ in (37):

- (37) *Tja dojde sama.* ‘She came alone,’

but it refers to both reciprocal arguments. Besides, it is never used as a nominal modifier. Thus one cannot translate ‘They love each other’s children’ into Bulgarian as (38a), but only as (38b):

- (38) a. **Te obiçat decata edin na drug.*

- b. *Vseki [ot tjax] običa decata na drugite.*
lit. 'Everyone loves the children of the other(s).'

The marker *vzaimno* 'mutually' is clearly an adverb functioning as an adverbial adjunct.

7.1.3 The phrase *pomeždu si* 'between/among oneself'

It occurs as a syntactic marker of reciprocity with certain *se* and *si* verbs, usually when the participants are thought of as a group. It is much less common than the other two syntactic markers although it is interchangeable with them. I shall confine myself to a few examples.

- (39) a. *Te se podozirat pomeždu si/edin drug.* 'They suspect each other.'
b. *Te se uprekvat pomeždu si/vzaimno.* 'They reproach each other.'
c. *Te se plašat pomeždu si/edin drug/vzaimno.* 'They scare each other.'
d. *Te se okradoxa pomeždu si/edin drug.* 'They robbed each other.'
- (40) *Te si razmenjat knigi pomeždu si.* 'They exchange books with each other.'

7.2 Syntactic reciprocal markers with non-reciprocal verbs

7.2.1 With two-place reflexiva tantum

Since these verbs have no direct object but only a prepositional one, they cannot take the second accusative clitic *se*; in this case a syntactic marker is the only means of expressing reciprocity, if necessary. The preposition of the underlying object is always placed between the components of the marker *edin drug*:

- (41) a. *Ivan se straxuva ot Sofia.*
'Ivan is afraid of Sofia.'
b. *Ivan i Sofia [*se] se straxuvat edin ot drug.*
'Ivan and Sofia are afraid of each other.'

Other syntactic reciprocal markers cannot be used here:

- c. **Ivan i Sofia se straxuvat vzaimno.*
lit. 'Ivan and Sofia are mutually afraid.'
d. **Ivan i Sofia se straxuvat pomeždu si.*
lit. 'Ivan and Sofia are afraid between themselves.'

7.2.2 With two-place derived non-reciprocal *se* verbs

I have in mind some anticausative (or converse) *se* verbs (cf. 4.2.2). In this case the latter may be synonymous to the underlying transitive constructions (cf. (42a) and (43a)).

- (42) a. *Sofia se razočarova ot Ivan.*
'Sofia got disappointed in Ivan.'
b. *Sofia i Ivan se razočarovaxa edin ot drug.*
'Sofia and Ivan got disappointed in each other.'

In (41) and (42) we find "canonical" reciprocal constructions derived from two-place intransitives. They differ from those of 5.1.1.1 in that they are formed without the clitic *si*.

The type illustrated by (42) has a parallel synonymous reciprocal construction derived from the respective transitive verb:

- (43) a. *Ivan razočarova Sofia.* 'Ivan disappointed Sofia.'
 b. *Ivan i Sofia se razočarovaxa edin drug.* 'Ivan and Sofia disappointed each other.'

7.2.3 Subject-oriented and object-oriented reciprocal constructions derived from three-place transitives of motion

The following two sentences are parallel to (41) and (42):

- (44) a. *Marko se izpravi do Ivan.*
 'Mark stood up next to Ivan.'
 b. *Marko i Ivan se izpravixa edin do drug.*
 'Mark and Ivan stood up one beside the other.'

But they are not synonymous with type (45) constructions:

- (45) a. *Stojan izpravi Ivan [do prozoreca].*
 'Stojan set Ivan upright [by the window].'
 b. *Petăr i Stojan se izpravixa edin drug.*
 'Stojan and Ivan set each other upright.'

An object-oriented reciprocal construction can be formed from a three-place transitive of motion by means of a syntactic reciprocal marker only, namely, by means of *edin drug*:

- (46) a. *Stojan izpravi Ivan do Sofia.*
 'Stojan set Ivan upright next to Sofia.'
 b. *Stojan izpravi stolovete edin do drug.*
 'Stojan set the chairs upright next to each other.'
 b'. *Stojan izpravi butilkite edna do druga.*
 'Stojan set the bottles upright one beside the other.'

7.2.4 Syntactic reciprocal markers with verbs without *se*. Adverbial reciprocal constructions

Here, as well as in the above cases, we have in mind reciprocal constructions formed from verbs with prepositional phrases in the function of an object or an adverbial. Reciprocal formation in this case is no different from all the above cases, i.e. a syntactic marker of reciprocity can replace any prepositional object or adverbial on condition that the lexical meaning of the verb allows it. But *se* verbs are considered separately above in order to show that the clitic *se* has nothing to do with reciprocity.

- (47) a. *Te stojat do tjax.* 'They stand beside them.'
 b. *Te stojat edin do drug.* 'They stand one beside the other/next to each other.'

7.3 Indefinite-personal reciprocal constructions

This term is used here to refer to constructions like (48c) which, as well as (48b), are syntactic reciprocals from (48a):

- (48) a. *Te gi udovletvorjavat [tjax].*
‘They satisfy them.’
- b. *Te se udovletvorjavat vzaimno.*
lit. ‘They satisfy each other mutually.’
- c. *Vsek-i [ot tjax] udovletvorjava drugi-ja.*
each-M.SG from them satisfies other-DEF.M
‘They satisfy each other’, lit. ‘Each [of them] satisfies the other.’
- d. *Edin [ot tjax] udovletvorjava drugi-ja.*
one from them satisfies other-DEF.M
‘They satisfy each other’, lit. ‘One satisfies the other.’

In sentences of the type under consideration, the first component of the reciprocal phrase *edin/vseki ... drug* is in subject position (the second component being in object position), therefore its use is likely to be restricted to the indefinite-personal meaning. The subject referent may be implied in the context. A few more examples:

- (49) a. *Te se predpočetoxa edin drug/vzaimno.*
‘They have preferred each other.’
- b. *Vseki ot tjax predpočete drugija.*
(same translation) lit. ‘Each of them has preferred the other.’

Variant (49b) is noted as the more common one (but it also has an elliptic interpretation, e.g. ‘Each of them has preferred the other [chair].’).

- (50) *Te se spomenavat edin drug v pismata si.*
‘They mentioned each other in their letters.’

In the following instance this construction is the only one possible:

- (51) *Vseki ot tjax zapoznava drugija säs svoite prijateli.*
‘They introduced each other to their friends.’
lit. ‘Each of them acquainted the other with their friends.’

In (52d) this construction functions as a synonym of (52c), i.e. of the type discussed in Section 7.2.2:

- (52) a. *Toj ja udivljava [neja].*
‘He surprises her’ (cf. with (43a)).
- b. *Tja se udivljava ot nego / Tja mu se udivljava.*
‘She is surprised at him’ (cf. (42a)).
- c. *Te se udivljavat edin ot drug.*
‘They are surprised at each other’ (cf. (42b)).
- d. *Vseki udivljava drugija.*
lit. ‘Each surprises the other.’
- e. *Tja se väzxištava ot nego/Tja mu se väzxištava [na nego].*
‘She admires him.’

7.4 Non-reciprocal contextual means of supporting reciprocal meaning

For this purpose, various non-specialized means can be used instead of the syntactic markers of reciprocity; thus substitution of *v očite* ‘in (their) eyes’ for *edin drug* in (1d) helps to retain the reciprocal interpretation (K. Ivanova, p.c.).

8. Simultaneity and succession of reciprocal events

8.1 Obligatory simultaneity: ‘to kiss each other’

Some reciprocal verbs imply simultaneous participation of their argument referents in the situation described, while other reciprocals do not. This is not language dependent but is determined by the extra-lingual possibility of simultaneity. A classic and most frequently cited example is:

- | | | | |
|------|----|-----------------------|-------------------------|
| (53) | a. | <i>Toj ja celuva.</i> | ‘He kisses her.’ |
| | b. | <i>Tja go celuva.</i> | ‘She kisses him.’ |
| | c. | <i>Te se celuvat.</i> | ‘They kiss each other.’ |

In (53c), the actions described by (53a–b) commonly take place simultaneously for purely “technical” reasons, although in many other actions it is not necessarily so.

8.2 Optional simultaneity: ‘to fire at each other’

In this case, depending on the situation the actions of the argument referents within one event may be interpreted as either simultaneous or successive; moreover, both types of temporal sequence may occur within one event.

- | | | | |
|------|----|------------------------------------|------------------------------------|
| (54) | a. | <i>Te ni obstreljaxa.</i> | ‘They fired at us.’ |
| | b. | <i>Nie gi obstreljaxme.</i> | ‘We fired at them.’ |
| | c. | <i>Nie s tjax se obstreljaxme.</i> | ‘We and they fired at each other.’ |

8.3 Obligatory non-simultaneity: ‘to shave each other’

In some reciprocal events, the actions of the argument referents are necessarily successive:

- | | | | |
|------|----|--|-------------------------------------|
| (55) | a. | <i>Ivan bräsne Stojan.</i> | ‘Ivan shaves Stojan.’ |
| | b. | <i>Stojan bräsne Ivan.</i> | ‘Stojan shaves Ivan.’ |
| | c. | <i>Ivan i Stojan se bräsnať vzaimno.</i> | ‘Ivan and Stojan shave each other.’ |

Two persons cannot shave each other simultaneously, therefore reciprocity does not always bear upon the physical time. Reciprocal construction (55c) cannot refer to the real present moment: it necessarily refers to a habitual or iterative action.

It follows from (54) and (55) that simultaneity is of little importance for reciprocity. The meaning of (55c) covers the meanings of (55a) and (55b), which is also the case

in ((53) and (54). All the (c) examples meet the requirements of the diagnostic test for reciprocity.

8.4 Quasi-simultaneity: ‘to follow each other’

This concerns a small lexical set of reciprocals of the type mentioned:

- | | | | |
|------|----|---|---|
| (56) | a. | <i>Stojan goni Ivan.</i> | ‘Stojan runs after Ivan.’ |
| | b. | <i>Ivan goni Stojan.</i> | ‘Ivan runs after Stojan.’ |
| | c. | <i>Stojan i Ivan se gonjat [po livadata].</i> | ‘Stojan and Ivan run after each other [in the meadow].’ |

The actions described in (56a) and (56b) are not simultaneous with respect to the mutual position of both subject referents to each other. Therefore (56c) might be expected to be like (55c), but this is not the case, because in (56c) as well as in (56a–b) both participants are acting (i.e. running) simultaneously. Nevertheless, (56c) implies a succession of actions (56a) and (56b).

A different case is illustrated by (57c), where a change of relative position of the participants is not implied, it seems:

- | | | | |
|------|----|--|--|
| (57) | a. | <i>Stojan sledva Ivan na razstojanie.</i> | ‘Stojan follows Ivan at a distance.’ |
| | b. | <i>Ivan sledva Stojan na razstojanie.</i> | ‘Ivan follows Stojan at a distance.’ |
| | c. | <i>Stojan i Ivan se sledvaxa edin drug na razstojanie.</i> | ‘Stojan and Ivan followed behind one another at a distance.’ |

Sentence (57c) allows to avoid indicating the order in which one or the other participant follows the other if it is irrelevant. There is no reciprocity proper if the event is observed at a single moment of time. In such a case the verb cannot occur in Aorist (simple past) of the perfective aspect (it should be noted that in (57) the Imperfect of the imperfective aspect is used); cf.:

- | | | | |
|--|----|--|--|
| | d. | <i>*Stojan i Ivan se posledvaxa edin drug.</i> | lit. ‘Stojan and Ivan started following behind one another.’ |
|--|----|--|--|

9. Lexical reciprocals

In lexical reciprocals, reciprocity is part of their lexical meaning, which is to say that they are not related to any underlying non-reciprocal verbs, although they may contain a clitic which in other verbs may add the reciprocal meaning.

9.1 Two-place intransitives with a reflexive clitic. *Reciproca tantum*

The number of reciprocals of this type may exceed 100. These reciprocals either do not have respective underlying verbs without a clitic, or they are not related to them semantically in any standard way. This may be due to the loss of the underlying verb, or semantic deviation, or denominal origin, etc. This distinguishes them from regular reciprocals discussed in Sections 4, 5 and 6. Needless to say, deponential *se* verbs may also have other meanings, and they are even more numerous than those with the reciprocal meaning (e.g. *smeja se* ‘laugh’, *vgleždam se* ‘gaze’, etc.; see also 7.2.1). The reciprocals in question usually occur with a comitative object, when used in discontinuous constructions (see 6.2). Here are diagnostic examples to specify this type of reciprocals in which all the three sentences are synonymous, the difference being purely communicative:

- (58) a. *Stojan se rākuva s Ivan.* ‘Stojan shakes hands with Ivan.’
 b. *Ivan se rākuva s Stojan.* ‘Ivan shakes hands with Stojan.’
 c. *Stojan i Ivan se rākuvat.* ‘Stojan and Ivan shake hands.’
- (59) a. *Az se ugovorix s nego.* ‘I came to an agreement with him.’
 b. *Toj se ugovori s mene.* ‘He came to an agreement with him.’
 c. *Az i toj se ugovorixme.* ‘I and he came to an agreement.’
 d. *Nie se ugovorixme edin s drug/pomeždu si.*
 ‘We came to an agreement with each other/between ourselves.’

Here belong the following verbs:

- (60) *Te se džavkat.* ‘They yap at each other.’
Te se dogovarjat. ‘They come to an agreement.’
Te se dublirat. ‘They duplicate each other.’
Te se konkurirat. ‘They compete with each other.’
Te se sbivat. ‘They get into a fight with each other.’
Te se prepirat. ‘They argue [with each other].’
Te se spogaždat. ‘They come to terms with each other.’
Te se sporazumjavat. ‘They strike a bargain with each other.’
Te se sāveštavat. ‘They confer with each other.’
Te se spobutvat. ‘They nudge each other.’
Te se spogleždat. ‘They glance at each other.’
Te se borjat. ‘They fight.’
Te se obzalagat. ‘They argue.’
Te se pazarjat. ‘They bargain with each other.’
Te se sražavat. ‘They fight/struggle.’
Te se karat. ‘They quarrel’, etc.

So far, I have found only one lexical reciprocal with the clitic *si*:

- Te si vzaimodejstvat.* ‘They interact with each other.’

The following verbs can be added to the list of lexical reciprocals with the clitic *se*: *zdrav-
isvam se* ‘greet each other’, *sboguvam se* ‘say good-bye to each other’, *rodeja se* ‘be related’,
sdumam se ‘come to an agreement’, *sdārpvam se* ‘come to loggerheads’, *srobotvam se*

‘achieve harmony in work (with)’, *izprovārvjam se* ‘walk in file one after another’, *sgleždam se* ‘catch sight of each other’, etc.

9.2 Cliticized reciprocals derived from lexical reciprocals

Two subtypes can be distinguished here.

9.2.1 *Reciprocals used in comitative constructions*

They differ from reciprocals discussed in Sections 4 and 5 in that they satisfy the test exemplified by (58)–(59) where all the three constructions are synonymous and imply each other, but they are analogous to standard reciprocals under 5.1.1.1 in that the reflexive clitic is obligatory in the simple (non-discontinuous) constructions (see 6.1):

- | | | | |
|------|----|--|---|
| (61) | a. | <i>Bratāt priliča na sestra si.</i> | ‘The brother resembles his sister.’ |
| | = | b. <i>Sestrata priliča na brat si.</i> | ‘The sister resembles her brother.’ |
| | = | c. <i>Bratāt i sestrata si priličat.</i> | ‘The brother and sister resemble each other.’ |
| (62) | a. | <i>A protivoreči na B.</i> | ‘A is contrary to B.’ |
| | = | b. <i>B protivoreči na A.</i> | ‘B is contrary to A.’ |
| | = | c. <i>A i B si protivorečat.</i> | ‘A and B are contrary to one another.’ |
| (63) | a. | <i>A podxožda na B.</i> | ‘A corresponds to B.’ |
| | = | b. <i>B podxožda na A.</i> | ‘B corresponds to A.’ |
| | = | c. <i>A i B si podxoždat [edin na drug].</i> | ‘A and B correspond to each other.’ |

9.2.2 *Reciprocals used in comitative constructions*

In this type a reciprocal verb can be used in both sets of constructions in which each sentence implies, as is noted above, the other. Here is an example parallel to (61):

- | | | | |
|------|----|---------------------------------------|------------------------|
| (64) | a. | <i>Stojan sreštna Ivan.</i> | ‘Stojan met Ivan.’ |
| | = | b. <i>Ivan sreštna Stojan.</i> | ‘Ivan met Stojan.’ |
| | = | c. <i>Stojan i Ivan se sreštnaxa.</i> | ‘Stojan and Ivan met.’ |

Verbs of this type are a semantic subtype of reciprocals considered in 4.1.1, where this verb is also mentioned.

The second set of constructions is analogous to that illustrated by (58):

- | | | | |
|------|----|---------------------------------------|----------------------------------|
| (65) | a. | <i>Stojan se sreštna s Ivan.</i> | lit. ‘Stojan met with Ivan.’ |
| | = | b. <i>Ivan se sreštna sās Stojan.</i> | lit. ‘Ivan met with Peter.’ |
| | = | c. <i>Stojan i Ivan se sreštnaxa.</i> | ‘Stojan and Ivan met’ (= (64c)). |

The reciprocal in (65a–b) also belongs to the group discussed in 6.2.

9.3 Three-place lexical object-oriented reciprocals (of connecting and separating) and anticausatives derived from them

These lexical reciprocals seem to be able to combine with syntactic reciprocal markers:

- (66) a. *Stojan ženi Sofia za Ivan.*
 ‘Stojan married Sofia to Ivan.’
 = b. *Stojan ženi Ivan za Sofia.*
 ‘Stojan married Ivan to Sofia.’
 c. *Stojan ženi Ivan i Sofia [edin za drug].*
 ‘Stojan married Ivan and Sofia [to each other].’
 d. *Stojan gi ženi edin za drug.*
 ‘Stojan married them to each other.’

With the help of the accusative *se*, we can form an anticausative verb from a lexical reciprocal like (66): the derived anticausative “inherits” the reciprocal meaning from the latter and the clitic marks the anticausative derivation only. The resultant anticausative reciprocal can be used in a set of synonymous constructions like (58) and (65) above:

- (67) a. *Sofia se oženi za Ivan.* ‘Sofia (got) married (to) Ivan.’
 b. *Ivan se oženi za Sofia.* ‘Ivan married Sofia.’
 c. *Ivan i Sofia se oženixa edin za drug.* ‘Ivan and Sofia married [each other].’
 c’. *Te se oženixa edin za drug.* ‘They married each other.’

A few more examples:

- (68) a. *Te pomirjavat Ivan sās Stojan.* ‘They reconcile Ivan and Stojan.’
 b. *Ivan i Stojan se pomirjavat.* ‘Ivan and Stojan get reconciled.’
 (69) a. *Te zapoznavat Ivan sās Stojan.* ‘They introduce Ivan and Stojan to each other.’
 b. *Ivan i Stojan se zapoznavat.* ‘Ivan and Stojan get acquainted.’
 (70) a. *Toj oplete koncite.* ‘He entwined the ends together.’
 b. *Koncite se opletoxa.* ‘The ends got entwined.’
 (71) a. *Toj različava X i Y.* ‘He distinguishes between X and Y.’
 b. *X i Y se različavat.* ‘X and Y differ from each other.’
 (72) a. *Toj smesva X i Y.* ‘He mixes X and Y.’
 b. *X i Y se smesvat.* ‘X and Y mix [with one another].’

10. Verbs of competition derived from transitives of “outdoing”

This is a meaning closely related to the reciprocal and obligatorily presupposing at least two contestants. The meaning of competition itself is reciprocal, and the Bulgarian verb *sāstezavam se* ‘compete’ is a lexical reciprocal (*reciproca tantum*) that satisfies the diagnostic test under (58) and (59):

- (73) a. *Stojan se sāstezava s Ivan.* ‘Stojan competes with Ivan.’
 = b. *Ivan se sāstezava sās Stojan.* ‘Ivan competes with Stojan.’
 = c. *Stojan i Ivan se sāstezavat.* ‘Stojan and Ivan compete [with each other].’

The meaning of the verbs of competition does not meet the requirements of the diagnostic test for the standard reciprocal meaning, as has been pointed out in specialist literature (Ivanova 1973:172–3); cf.:

- (74) a. *A nadbjagva B.* 'A outruns B.'
 # b. *B nadbjagva A.* 'B outruns A.'
 # c. *A i B se nadbjagvat.* 'A and B compete in running.'

If a *se* verb of this type can be used in a comitative construction, a set of constructions of type (73) seems possible;

- (75) a. *A se nadbjagva s B.* 'A competes in running with B.'
 = b. *B se nadbjagva s A.* 'B competes in running with A.'
 = c. *A i B se nadbjagvat.* 'A and B compete in running' (= (74c)).

The meaning of type (74a–b) and (75a–b) constructions probably differs from that of (74c) and (75c) respectively not only pragmatically. This requires verification for all the *se* verbs of competition.

The meaning 'to surpass, to outdo in the activity denoted by the root' of the underlying transitive verbs seems to be ousted by the meaning of competition in some (probably as many as half) of the "competition" verbs listed below (in the *Bălgarsko-ruski rečnik* (Bernštein 1975), about 25 verbs of this type are registered). Therefore, the Aorist of the perfective aspect of some verbs of this type may sound somewhat unnatural, as both contestants cannot win in the same event. But sentences denoting uncompleted actions and sentences like 'They wanted to surpass each other' may be more natural. Below, *se* verbs of competition are listed. Nearly all of them contain the prefix *nad-* 'out(do)'. Most of the verbs denote activities in which sporting events are held, such as wrestling, running, jumping, swimming, etc., and a few denote other kinds of activities, such as outdoing somebody in working, arguing, shouting, playing a musical instrument, and the like.

Verbs of sporting activities (to save space, the cliticized verbs alone are given):

- (76) *Te se nadbjagvat.* 'They compete in running.'
Te se nadvärvat. (dial.) 'They compete in wrestling.'
Te se nadborvat. 'They compete in wrestling.'
Te se nadbärzvat. 'They compete in speed.'
Te se nadskačvat. 'They compete in jumping.'
Te se nadtičvat. 'They compete in running.'
Te se nadxvärljat. 'They compete in throwing.'
Te se nadprepuskvat. 'They compete in horse-racing.'
Te se nadprevarvat. 'They compete in running.'
Te se nadpripkvat. 'They compete in running.'
Te se nadmjatvat. 'They compete in throwing.'
Te se nadpluvvat. 'They compete in swimming.'
Te se nadborvat. 'They compete in wrestling.'

There are no cliticized verbs of competition from the following transitives, although the latter are semantically similar to the underlying verbs of the derivatives in (76):

(77) <i>Te go izprevarvat.</i>	‘They outrun him.’
<i>Te go nadminavat.</i>	‘They outdistance him.’
<i>Te go nadvivat.</i>	‘They overcome him.’
<i>Te go nadxoždat.</i>	‘They outwalk him.’
<i>Te go nadstrelvat.</i> (rare)	‘They outshoot him.’

The following are *se* verbs of other than sporting activities:

(78) <i>Te se nadxitrjat.</i>	‘They compete in cunning.’
<i>Te se nadlāgvat.</i>	‘They compete in telling lies.’
<i>Te se naddumvat.</i>	‘They compete in debating.’
<i>Te se nadigravat.</i>	‘They compete in dancing, playing.’
<i>Te se nadvikvat.</i>	‘They compete in shouting.’
<i>Te se nadsvirvat.</i>	‘They compete in playing (a musical instrument).’
<i>Te se nadrabotvat.</i>	‘They compete in work.’
<i>Te se nadžānvat.</i>	‘They compete in reaping.’
<i>Te se nadpivat.</i>	‘They compete in drinking.’
<i>Te se nadpjavat.</i>	‘They compete in singing.’

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Reciprocal and reflexive constructions in Lithuanian (with references to Latvian)

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Acknowledgments

Sources

References

1. Introduction

1.1 Lithuanian and Latvian

Lithuanian is one of the two surviving Baltic languages, the other language being Latvian. Lithuanian is the state language of the Republic of Lithuania spoken natively by 83.4 per cent of the population (2,907,293 out of 3,483,972; census of 2001). Latvian is the native language of 54 per cent (1,390,000) of the population of Latvia. There are also large communities of Lithuanians and Latvians in the U.S.A., Australia, etc., with an ever decreasing number of native speakers.

Another known Baltic language is Prussian, extinct since ca. 1700. It occupied the territory of the former East Prussia (at present the Kaliningrad region of Russia) and adjacent territories. The most representative remaining texts are translations of passages from the Catechism.

Lithuanian is one of the most archaic Indo-European languages. It retains more archaic features than Latvian. In fact, it is the closest to the “classical” reconstructed Indo-European language. There is evidence, such as place names and other substratum phenomena, that a now-extinct Baltic language occupied territories as far east as Moscow (see IEL, Vol. 1: 155).

1.2 Overview

In Lithuanian, reciprocity is expressed either morphologically by the reflexive morpheme *-si/-s* on the verb, as in

- (1) a. *Petr-as bučiuoja On-q.*
 Peter-NOM kisses Ann-ACC
 ‘Peter kisses Ann.’
 b. *Petr-as ir On-a bučiuoja-si.*
 Peter-NOM and Ann-NOM kiss-REC¹
 ‘Peter and Ann kiss each other’,

or syntactically by the phrase *vien-as* (NOM) *kit-q* (ACC) lit. ‘one another’, as in:

- (2) a. *Petr-as gerbia On-q.*
 P.-NOM respects A.-ACC
 ‘Peter respects Ann.’
 b. *Petr-as ir On-a gerbia vien-as kit-q.*
 P.-NOM and A.-NOM respect one-NOM.M other-ACC
 ‘Peter and Ann respect each other.’

The latter reciprocal phrase may co-occur with a (very limited) number of reflexively marked reciprocals (henceforth reflexive reciprocals) for disambiguation or emphasis (see 8.6.1), e.g.:

1. The reflexive marker is glossed as REC when used in the reciprocal meaning, and as REFL in other cases.

- (3) *Jie vien-as kit-q erzina-si.*
 they.NOM.M. one-NOM.M other-ACC tease-REFL
 ‘They tease each other.’

The reflexive morpheme *-si/-s* is traditionally called a particle in Baltic linguistics and here it is termed a reflexive-middle marker due to its origin and range of functions (see Nedjalkov, Ch. 3, §1.1). This marker is highly polysemous in Lithuanian, its wide range of semantic functions including the reflexive proper, autocausative, anticausative, potential-passive, etc. (see 3.2). It is worth stressing that Lithuanian differs from other languages which use the same formal marker to express the reflexive and the reciprocal senses in that it displays practically no verbs with *-si/-s* that might have both meanings (see 4.3).

Although reflexively marked reciprocals are quite numerous (about 255 verbs in my verb-list), their reflexive derivation is not an active process in contemporary Lithuanian.

Reciprocity is also encoded by the complex *su-si-* comprised of a prefix with the meaning ‘together (with)’ and obligatory reflexive-middle marker, on a limited number of derived verbs, cf.:

- (4) *žvelgti* ‘to glance’ → *su-si-žvelgti* ‘to exchange glances/glance at each other’
švilpti ‘to whistle’ → *su-si-švilpti* ‘to exchange whistles/whistle to each other’
šnekėti ‘to talk’ → *su-si-šnekėti* ‘to (begin to) understand each other.’

The prefix *su-* (with an optional reflexive-middle marker) is also used to derive verbs denoting convergent motion (from different directions to the same point) from a number of intransitive verbs of motion, e.g.:

- (5) *bėgti* ‘to run’ → *su[-si]-bėgti* ‘to come together/to gather running.’

The sociative sense is expressed exclusively by the adverbs *kartu* ‘together, jointly’ and *drauge* with the same meaning.

Alongside marked reciprocals, Lithuanian displays a variety of lexical reciprocals, i.e. verbs with an inherent reciprocal meaning; e.g.:

- (6) a. *Petr-as draugauja su Jon-u.* (INST) ‘Peter is friends with John.’
 = b. *Jon-as draugauja su Petr-u.* ‘John is friends with Peter.’
 = c. *Petr-as ir Jon-as draugauja.* ‘Peter and John are friends.’

Lexical reciprocals may contain the reflexive-middle marker, but it does not mark reciprocity since this sense is inherent in the base word; cf. (7), where the reciprocal is derived from the reciprocal noun *broli-is* ‘brother’:

- (7) a. *Petr-as broliuoja-si su Jon-u.* (INST) ‘Peter fraternizes with John.’
 b. *Jon-as broliuoja-si su Petr-u.* ‘John fraternizes with Peter.’
 c. *Petr-as ir Jon-as broliuoja-si.* ‘Peter and John are fraternizing.’

Both reflexive and lexical reciprocals can be used in the simple as well as in the discontinuous construction without restrictions.

Explicit expressions of the reciprocal meaning are the phrases *tarpusavyje/tarp savęs* lit. ‘between selves’ containing the reflexive pronoun *savo* (see 2.1), and *savo tarpe* lit. ‘in our/your/their own midst’, but they can be used with reciprocal verbs (formally reflexive and lexical) exclusively, to intensify or specify the reciprocal meaning (see Section 9); e.g.

- (8) a. *Mes baramė-s tarpusavyje.* lit. 'We quarrel between ourselves.'
 b. *Jie draugauja tarpusavyje.* lit. 'They are friends between themselves.'

Lithuanian reciprocals occupy an intermediate position among reciprocals of areally more or less contiguous languages (see Section 10). To complete the picture, the entire lists of reciprocal verbs registered in Kruopas (1972) (excepting their affixed derivatives) are given in this chapter.

1.3 Database

The data on Lithuanian are drawn from the *Dictionary of Contemporary Lithuanian* (Kruopas (ed.) 1972; about 60,000 entries; the total number of verb entries is approximately 19,000), in which about 480 verbs with the reciprocal meaning are registered. The quantitative characteristics in this chapter are based on this verb list. Additional data have been drawn from a number of other dictionaries and from present-day written texts. Valuable information on the use of reciprocals and restrictions has been obtained from native informants.

The data on Latvian are drawn from the *Latvian-Lithuanian Dictionary* (Balkevičius & Kabelka 1977; about 42,000 entries). In this dictionary, about 260 verbs with the reciprocal meaning are registered.

The system of reciprocals in Latvian is essentially no different from that in Lithuanian, the only perceptible difference being the quantitative characteristics of various subtypes of reciprocals. The system of reflexives, i.e. verbs with the reflexive-middle marker, however differs with regard to the class of transitive reflexives: it is extremely numerous in Lithuanian and almost non-existent in Latvian. To show Lithuanian reflexives and reciprocals in relief, quantitative characteristics below are given for both languages.

2. Grammatical notes

2.1 The noun and pronoun

Nouns have gender (masculine or feminine) and they are inflected for number (singular and plural) and case (nominative, genitive, dative, accusative, instrumental, locative). There are five declensions (12 paradigms) in the noun.

Personal pronouns are differentiated for number in the 1st and 2nd persons and for number and gender in the 3rd person. Lithuanian also retains dual pronouns which are marked for gender.

(9)		Singular	Plural	Dual
	1 p. M	<i>aš</i> 'I'	<i>mes</i> 'we'	<i>mudu</i> 'we.two'
	F			<i>mudvi</i> 'we.two'
	2 p. M	<i>tu</i> 'thou'	<i>jūs</i> 'you'	<i>judu</i> 'you.two'
	F			<i>judvi</i> 'you.two'
	3 p. M	<i>jis</i> 'he'	<i>jie</i> 'they'	<i>juodu/jiedu</i> 'they.two'
	F	<i>ji</i> 'she'	<i>jos</i> 'they'	<i>jiedvi</i> 'they.two'

Dual pronouns are comparatively rarely used in Standard Lithuanian. With reciprocal verbs, they seem to be more common than generally.

Lithuanian also has a reflexive pronoun *savo* (ACC) 'oneself, myself, yourself ... themselves' (analogous to the Russian *sebjā*) used to refer reflexively to all the three persons, both singular and plural. It has all the case forms except the nominative. The possessive reflexive pronoun is *savo* 'one's (my, your, ... their)'.

2.2 The verb

2.2.1 Aspect and tense

Two aspects are distinguished, perfective and imperfective. Each verb is either perfective, or imperfective, or of dual aspectual nature. Imperfective verbs are commonly perfectivized by prefixes (the latter may at the same time modify or change the lexical meaning of the verb).

There are four tenses: present, simple past, frequentative past and future, each represented by a non-perfect (simple) and perfect (periphrastic) form. Any verb of either aspect can assume all these eight forms.

The predicate verb agrees with the subject in number in the 1st and 2nd persons. In the 3rd person the verb is not marked for number:

- (10) a. *Jis / ji rašo* 'He / she writes.' – b. *Jie / jos rašo*. 'They(M) / they(F) write.'

The infinitive marker is the suffix *-ti* often abbreviated to *-t* in colloquial Lithuanian.

2.2.2 Verb classes

The relevant syntactic verb classes are one-place and two-place intransitives, the latter taking a non-direct object with or without a preposition, and two-place and three-place transitives, the latter usually taking an indirect dative object. A direct object is expressed by the accusative or genitive, in the case of indefiniteness.

2.2.3 Valency changing categories

2.2.3.1 Means of valency increase: The causative suffix *-(d)in-* and vowel alternation. The only regular process of increasing verbal valency is the highly productive causative derivation by means of the suffix *-(d)in-*, vowel alternation, or both; cf. respectively:

- (11) *aug-ti* 'to grow' → *aug-in-ti* 'to cause to grow'
trump-ė-ti 'to become short(er)' → *trump-in-ti* 'to make short(er).'

- (12) *kis-ti* ‘to change’ → *keis-ti* ‘to cause to change’
link-ti ‘to bend, to stoop’ → *lenk-ti* ‘to cause to bend.’
- (13) *grįž-ti* ‘to return’ → *graž-in-ti* ‘to cause to return, to give back’
būg-ti ‘to get scared’ → *baug-in-ti* ‘to scare.’

2.2.3.2 *Means of valency decrease: The reflexive-middle marker and passive marker.* They are:

1. The marker *-si/-s*, being highly polysemous, changes verbal valency in a number of ways, or the valency may be retained (see Section 3.1); cf.:

- (14) a. *Petr-as prausia veid-q.* (ACC) ‘Petras washes (his) face.’
 b. *Petr-as prausia-si.* ‘Peter washes (himself).’

The meaning in (14b) is reflexive proper. In the case of the possessive-reflexive meaning the object is retained:

- c. *Petr-as prausia-si veid-q.* ‘Peter washes *his* face.’

The reflexive-middle can derive reflexive verbs from marked causatives (e.g. *baug-in-ti* ‘to scare (sb)’ → *baug-in-ti-s* ‘to be/get scared’), but causatives cannot be derived from verbs with *-si/-s*.

2. The passive voice form, composed of the auxiliary *bū-ti* ‘to be’ assuming all the four tense forms, and present passive participle (marked with the suffix *-m-*) or past passive participle (marked with the suffix *-t-*), decreases valency in the following way:

- (15) a. *Petr-as raš-ė laišk-q.*
 P.-M.NOM write-PAST.3 letter-ACC.SG
 ‘Petras wrote/was writing a letter.’
- b. *Laišk-as buvo rašo-m-as [Petr-o].*
 letter-NOM.M.SG be.PAST.3 write-PRES.PASS-NOM.M.SG P.-GEN
 ‘The letter was being written [by Peter].’
- c. *Laišk-as buvo rašy-t-as Petr-o.*
 letter-NOM.M.SG be.PAST.3 write-PAST.PASS-NOM.M.SG P.-GEN
 ‘The letter was written by Peter.’

The agentive object in passive constructions is expressed by the genitive case form. (On the verbal categories in the passive voice see Geniušienė 1974: 252–62.)

2.2.4 *The place of the reflexive-middle marker -si/-s*

It takes the final position after inflection on unprefixed verbs, in which case it has two allomorphs *-si-* and *-s*, their choice being governed by rather complicated rules (see Geniušienė 1987: 19); cf.:

- (16) *muš-ti-s* ‘to fight’
muš-a-si ‘(he) fights’
muš-ė-si ‘(he) fought’
muš-i-s ‘(he) will fight’
muš-ki-s ‘fight!’ (IMP).’

On prefixed verbs the full form *-si-* alone is used, and it is placed between the prefix and root:

- (17) *su-si-muš-ti* ‘to have / begin a fight’
pa-si-muš-ti ‘to fight for a while.’

If an unprefixed verb occurs with the negative particle *ne-* the reflexive-middle marker is placed between the negation and root:

- (18) *ne-si-muš-a* ‘(he) does not fight.’

In Latvian, the reflexive marker *-s* is always placed finally after inflection on the verb.

2.3 Word order

Word order is free, the syntactic functions of noun phrases being case marked. The basic word order is however SVO.

3. Polysemy of the reflexive-middle marker

Marking reciprocity is one of the many functions of the marker *-si-/s* in Lithuanian. To show the place of reflexive reciprocals which form the core of the class of reciprocal verbs in Lithuanian (and in Latvian), I will begin with a survey of the main syntactic and semantic functions of *formally* reflexive verbs, i.e. verbs containing the reflexive-middle marker.

Reflexive derivation is highly productive both in Lithuanian and in Latvian: in Kruopas (1972) about 5,700 verbs with the reflexive-middle marker are registered, and Balkevičius & Kabelka (1977) register 3,560 reflexive verbs. This covers all formal types of reflexives: those derived from verbs by means of the reflexive-middle marker alone or by means of a prefix and this marker, denominal reflexives, cases of intra-class derivation (affixation of formally reflexive verbs), and *reflexiva tantum*. Of further interest are deverbal reflexives derived by attaching the reflexive marker alone and characterized by regular semantic relations with the underlying verb: they comprise 65% (3,680 items) of the Lithuanian list and 55% (1,960 items) of the Latvian list of formal reflexives.

The dictionaries mentioned differ in the number of entries and in the number of registered reflexives, but it may be assumed that the ratio of different types of reflexives (as well as reciprocals) reflects their actual ratio in the two languages.

3.1 Syntactic classes of formal reflexives

The latter term applies here to verbs derived from underlying non-reflexive verbs by attaching the reflexive marker *-si-/s*, as in (19a), and their prefixed counterparts, as in (19b):

- (19) a. *reng-ti* ‘to dress sb’ (IPFV) → *reng-ti-s* ‘to dress oneself’
 b. *ap-reng-ti* ‘to dress sb’ (PFV) → *ap-si-reng-ti* ‘to dress oneself’

The reflexive-middle marker decreases verbal valency in three principal ways, or it may not change it, thus yielding four syntactic classes of formal reflexives.

1. Subject-oriented intransitive reflexives, with object deletion or demotion, the subject of the derived construction being identical with the subject of the underlying (base) construction; cf. (14a–b) above. Reflexive reciprocals belong in this syntactic class.

2. Object-oriented intransitive reflexives, with subject deletion or demotion resulting in direct object promotion to subject position in the derived construction; cf.:

- (20) a. *Petras atī-darė duris.* ‘Peter opened the door.’
 b. *Durys at-sī-darė.* ‘The door opened.’

3. Subject-oriented transitive reflexives, with indirect (dative) object deletion, the subject of the derived construction subsuming the indirect object of the underlying construction; they may acquire a possessive-reflexive (see (14c)), benefactive-reflexive (cf. (21b–c)) and other meanings; cf.:

- (21) a. *Petr-as nupirko On-ai (DAT) knyg-q (ACC).* ‘Peter bought Ann a book.’
 b. *Petr-as nu-si-pirko knyg-q.* ‘Peter bought himself a book.’
 c. *Jie nu-si-pirko knyg-q.* ‘They bought themselves a book.’

Note that the reciprocal interpretation of (21c) is not possible, in contrast to other languages with analogous constructions.

4. Reflexives with retained valency: on a number of verbs (both transitive and intransitive) the reflexive-middle marker does not change their syntactic valency: It is optional and adds the semantic component ‘for one’s own benefit/advantage/pleasure, in one’s own interests’ or it carries no meaning; e.g.:

- (22) a. *Petr-as [ī-si-]kvėpė oro.* ‘Peter inhaled some air.’
 b. *Petr-as at[-si-]keršijo Jon-ui (DAT).* ‘Peter revenged [himself] on John.’

Table 1 summarizes quantitative characteristics of the syntactic classes in question.

Table 1.

Syntactic type	Lithuanian	Latvian
1. Subject-oriented intransitive	26.9% (990)	41.5% (810)
2. Object-oriented intransitive	31.2% (1,150)	49.0% (960)
3. Subject-oriented transitive	28.5% (1,050)	0.7% (14)
4. Reflexives with optional <i>-si-</i>	13.1% (480)	7.1% (140)
5. Residual reflexives	0.3% (10)	1.7% (30)
Total	100% (3,680)	100% (1,960)

3.2 Semantic classes of reflexive verbs

The first two syntactic classes of formal reflexives fall into a number of semantic classes distinguished according to the semantic relation between the underlying and derived verb.

3.2.1 Subject-oriented intransitive reflexives

These split into the following semantic types:

1. Reciprocal reflexives (or reflexive reciprocals); cf. (1).
2. Reflexives proper, or semantic reflexives, with agent-patient coreference, cf. (19).
3. “Partitive” reflexives, typically with a body-part object included in the meaning of the derivative; they are synonymous with the base verb; cf.:

- (23) a. *Petras už-merk-ė akis.*
 P. PREF-close-3.PAST eyes
 ‘Peter closed his eyes.’
 b. *Petras už-si-merk-ė.*
 P. PREF-REFL-close-3.PAST
 ‘Peter closed his eyes.’

4. “Absolutive” reflexives denoting habitual activity or a particular characteristic of the subject referent, due to generalization (usually) of the deleted object referent; e.g.:

- (24) a. *Petras keikia visus.* ‘Peter curses everyone.’
 b. *Petras keikia-si.* ‘Peter uses bad language.’

5. Autocausative, or body-move reflexives, with the subject referent causing its own motion or change of posture, e.g.:

- (25) a. *Ona supa vaiką.* ‘Ann is rocking the child.’
 b. *Ona supa-si.* ‘Ann is rocking [herself].’

6. Deaccusative reflexives, with direct object demotion to the status of a non-direct object with or without a preposition; e.g.:

- (26) a. *Petras lanko draugą.* ‘Peter visits his friend.’
 b. *Petras lanko-si pas draugą.* ‘Peter calls on his friend.’

Table 2 shows the quantitative characteristics of the semantic sets of subject-oriented reflexives in my verb list (residual reflexives are excluded from their total number).

Table 2.

Semantic classes	Lithuanian	Latvian
1. Reciprocals	17.4% (160)	10.8% (80)
2. Reflexives proper	31.5% (290)	25.7% (190)
3. “Partitive” reflexives	18.5% (170)	20.3% (150)
4. “Absolutives”	9.8% (90)	10.8% (80)
5. Autocausatives	15.2% (140)	28.3% (210)
6. Deaccusatives	7.6% (70)	4.1% (30)
Total	100.0% (920)	100.0% (740)

3.2.2 Object-oriented intransitive reflexives

In a construction with a formally reflexive verb, the underlying object is promoted to subject position, the underlying subject being deleted or, sometimes, demoted to an oblique object position. They fall into six semantic types.

1. Anticausative (or decausative) reflexives, which conspicuously lose the causative sense; cf. (20) and the following:

- (27) a. *Vejas sklaido rūką.* 'The wind disperses the fog.'
 b. *Rūkas sklaido-si.* 'The fog lifts/disperses.'

2. Autocausative reflexives, the referent of the underlying object acquiring the role of agent (causing a change in its own state) in subject position (cf. type 5) in 3.2.1):

- (28) a. *Petras at-rišo arklį.* 'Peter untied the horse.'
 b. *Arkllys at-si-rišo.* 'The horse got untied' (due to its own efforts).

3. Potential-passive reflexives, implying a human agent in the role structure, with the modal meaning, as in (29b) where the modifier cannot be omitted:

- (29) a. *Ona rakina duris.* 'Ann locks the door.'
 b. *Durys lengvai rakina-si.* 'The door locks easily.'

4. Perfective-passive reflexives, also with an implied human agent, derived from prefixed perfective verbs and commonly used in the simple past tense, as in

- (30) a. *Jis iš-eikvojo daug pinigų.* 'He spent a lot of money.'
 b. *Daug pinigų iš-si-eikvojo.* 'A lot of money got spent.'

5. Converse formal reflexives with demoted underlying subject, e.g.:

- (31) a. *Petras sapnavo keista sapną.*
 'Peter had (lit. 'dreamed') a strange dream.'
 b. *Petr-ui (DAT) sapnavo-si keistas sapn-as (NOM).*
 (same translation) lit. 'A strange dream dreamed itself to Peter.'

6. Reflexive-causative verbs, with the derived subject referent acquiring the role of causer, cf.:

- (32) a. *Kirpėjas ap-kirpo Petrą.* 'The barber gave Peter a hair-cut.'
 b. *Petras ap-si-kirpo [pas kirpėją].* 'Peter had his hair cut [at the barber's].'

The quantitative characteristics of the semantic classes of object-oriented reflexives (minus residual verbs) are shown in Table 3.

Table 3.

Semantic classes	Lithuanian	Latvian
1. Anticausatives	71.4% (800)	87.0% (810)
2. Autocausatives	4.5% (50)	2.2% (20)
3. Potential-passives	8% (90)	1.6% (15)
4. Perfective-passives	9% (100)	3.8% (35)
5. Converse reflexives	4.5% (50)	3.2% (30)
6. Reflexive-causative verbs	2.6% (30)	2.2% (20)
Total	100.0% (1120)	100.0% (930)

4. Reflexive reciprocals

As was mentioned above, this term is used here to refer to morphologically marked reciprocals derived from non-reciprocal verbs by means of the reflexive-middle marker alone, as in (1); cf. also:

- | | | | |
|------|--|---|--|
| (33) | <i>sveikinti</i> ‘to greet sb’ | → | <i>sveikinti-s</i> ‘to greet each other’ |
| | <i>pra-vardžiuoti</i> ‘to nickname sb’ | → | <i>pra-si-vardžiuoti</i> ‘to nickname each other.’ |

Prefixed reciprocals are included in the list of 160 reciprocals (see Table 2) if only they have no unprefixated correlates, like (33b). These reciprocals together with their affixed (“intra-class”) derivatives account for 53% (255 items) in my list of 480 reciprocal verbs of all types. The respective figures for Latvian are 42% (80 units, or about 110 with their affixed derivatives) of the entire number (260 reciprocals).

Reflexive reciprocals are much more numerous in Lithuanian than, for instance, in Russian (see Knjazev, Ch. 15). There are few, if any, *reciproca tantum* in Lithuanian. As often as not, the Russian equivalent of a Lithuanian reflexive reciprocal is a *reciprocum tantum*.

4.1 Diathesis types of reciprocal constructions: Subject-oriented “canonical” type only

Though quite numerous, Lithuanian reflexive reciprocals are rather homogeneous syntactically and the overwhelming majority are of the subject-oriented “canonical” type.

Most of the reciprocals in question derive from two-place transitives, and a few from two-place intransitives and three-place transitives.

4.1.1 Derived from two-place transitives

In this case, the underlying direct object is either deleted, its referent being included in the subject, or it is demoted to a comitative object. Thus all “canonical” reciprocals occur in two types of constructions, one-place intransitive (cf. (34b) and two-place intransitive comitative (cf. (34c) where *su* means ‘with’):

- | | | | |
|------|----|---|---|
| (34) | a. | <i>Petr-as stumdo Jon-q.</i> | ‘Peter pushes John.’ |
| | b. | <i>Petr-as ir Jon-as stumdo-si.</i> | ‘Peter and John push each other.’ |
| | c. | <i>Petr-as stumdo-si su Jon-u (INST).</i> | lit. ‘Peter pushes each other with John.’ |

4.1.2 Derived from two-place intransitives

These reciprocals, though far from numerous (only 11 items), fall into three groups.

1. Reciprocals derived from intransitives with a prepositionless object which happens to be in the dative case, including:

1a. Three synonyms with the meaning ‘to help each other’:

- | | | | |
|------|----|-------------------------------------|---|
| (35) | a. | <i>Mes talkinėjame jiems (DAT).</i> | ‘We help <i>them</i> .’ |
| | b. | <i>Jie talkinėja mums (DAT).</i> | ‘They help <i>us</i> .’ |
| | c. | <i>Mes su jais talkinėjamė-s.</i> | ‘We (lit. ‘we with <i>them</i> ’) help <i>each other</i> .’ |

- (36) *padėti* ‘to help sb’ → *pa-si-dėti* ‘to help each other’
pagelbėti ‘to help/aid sb’ → *pa-si-gelbėti* ‘to help/aid each other.’²

Note that the latter two reciprocals commonly occur with the reciprocal phrase *vien-as kit-am* (DAT) ‘to each other’ (see 8.5.2); moreover, with *pa-si-dėti* ‘to help each other’ this phrase seems to be obligatory.

1b. Two synonyms with the meaning ‘to beat/hit each other’:

- (37) a. *pilti* ‘to beat/whip sb’ → *pilti-s* ‘to beat each other’
 b. *smūgiuoti* ‘to deliver blows’ → *smūgiuoti-s* ‘to exchange blows.’

2. Assorted reciprocals derived from intransitives with a prepositional object; cf. (the preposition *ant* = ‘at’):

- (38) a. *Jis pyksta ant manęs* (GEN). ‘He is angry with me.’
 b. *Aš pykstu ant jo* (GEN). ‘I am angry with him.’
 c. *Mes pykstamės*. ‘We are angry with each other.’

The following reciprocals also belong here (*ko* = GEN and *ką* = ACC of *kas* ‘somebody, something’; *į* = ‘at’):

- (39) a. *kivirčyti ant ko* ‘to reproach’ → *kivirčyti-s* ‘to quarrel, abuse each other’
 b. *pa-žvilgčioti į ką* ‘to cast a glance at sb’ → *pa-si-žvilgčioti* ‘to cast glances at each other’
 c. *rėkti ant ko* ‘to shout at sb’ → *rėkti-s* ‘to shout at each other’
 d. *šaudyti į ką* ‘to shoot/fire at sb’ → *šaudyti-s* ‘to fire at each other’
 e. *žvairuoti į ką* ‘to look sideways at sb’ → *žvairuoti-s* ‘to look sideways at each other.’

4.1.3 Derived from three-place transitives. “Quasi-indirect” reciprocals

The resultant constructions correspond semantically to those with “indirect” reciprocals in some other languages, but they differ from the latter in that the direct object is deleted or demoted. Another restriction is that three-place verbs like ‘to give’, ‘to send’ with an indirect dative object do not yield reciprocals, the reciprocal meaning with the latter verbs being expressed syntactically by the phrase *vien-as kit-am* (DAT) ‘to each other’ (see 8.3.2). These reciprocals fall into three groups.

1. Reciprocals derived from verbs of speech (10 items). The underlying verbs take a dative object of human addressee and a direct object of the content of speech. In the reciprocal construction, the direct object is deleted or demoted to a prepositional object, and the subject subsumes the indirect object:

- (40) a. *Petr-as šnibžd-a kažk-ą On-ai*.
 P.-NOM whisper-PRES.3 something-ACC O.-DAT
 ‘Peter whispers something to Ann.’

2. Both verbs in (36) are prefixed and in the given meanings are not used without the prefixes; the unprefixed bases are *dėti* ‘to put’ and *gelbėti* ‘to save’ respectively.

- b. *Petras ir Ona šnibžda-si [apie kažką].*
 ‘Peter and Ann are whispering [about something].’

Here belong the synonyms of (40) given under (41) and also the verbs under (42) with the underlying prepositional object instead of the direct object of content which is optionally retained in the derived construction:

- (41) a. *ku(g)ždėti* → *ku(g)ždėti-s* c. *šnabždėti* → *šnabždėti-s*
 b. *čiučenti* → *čiučenti-s* d. *švagždėti* → *švagždėti-s*.
- (42) a. *kalbėti apie ką* ‘to speak/talk about sth’ → *kalbėti-s [apie ką]* ‘to talk to each other [about sth]’
 b. *šnekėti* ‘to talk’ → *šnekėti-s* ‘to talk to each other’
 c. *čiulbėti* ‘to chirp, (fig.) talk with love’ → *čiulbėti-s* ‘to talk to each other with love (like birds).’

This type also subsumes a number of dialectal reciprocals, like *kepešyti-s* ‘to quarrel, abuse each other’, *kerežyti-s* with the same meaning, etc.

2. Reciprocals derived from verbs of replacing and changing. Here belong verbs derived from the underlying verbs *keisti* ‘to change/replace’ and *mainyti* ‘to exchange’ taking an optional comitative human object along with a direct object (together with affixed derivatives this group comprises about 9 verbs). The syntactic structure undergoes a complex change in the process of reciprocal derivation; cf.:

- (43) a. *Petras ir Jonas pakeitė mažą lemputę (ACC) didelę (INST).*
 ‘Peter and John replaced a small electric bulb with (a) large (one).’
 b. *Petras ir Jonas pa-si-keit-ė lemput-ėmis.*
 P. and J. PREF-REFL-change-3.PAST bulb-INST.PL
 ‘Peter and John exchanged electric bulbs.’

In (43a) Peter and John perform together the same action of replacing one object with another, while in (43b) each of them is both agent and recipient of exchange. In (43b) the object must be necessarily plural.

As we see, the underlying verb is an object-oriented lexical reciprocal. The derived construction is a “double” reciprocal, relative to the human agents and the objects of exchange which have to be in possessive relation to the agents.

3. Reciprocals derived from three-place iterative verbs of throwing, viz. from transitives *mėtyti* ‘to throw’ (and its suffixed derivatives *mėtlioti* and *mėčioti* with the same meaning), *svaidyti* ‘to throw’, *blaškyti* ‘to throw’, *taškyti* ‘to splash (water)’ and their prefixed derivatives (10 items all in all) undergo the following syntactic changes:

- (44) a. *Petras mėtò akmen-is į Jon-ą.*
 Peter throws stone-ACC.PL at John-ACC
 ‘Peter throws stones at John.’
 b. *Petras ir Jonas mėtò-si akmen-imis.*
 Peter and John throw-REC stone-INST.PL
 ‘Peter and John throw stones at each other.’

4.2 Lexical range of reciprocals derived from two-place transitives

As this is the most numerous group of reciprocals discussed in 4.1, the range of their lexical meanings deserves special consideration. In fact, derivation of reciprocals from two-place transitives is limited to a number of lexical groups denoting situations that are likely to be reciprocal pragmatically. Some of the lexical groups include reciprocals with a slight shift of lexical meaning and those used figuratively; they are considered in 4.2.1 as cases of lexicalization, although the borderline between “regular” and lexicalized reciprocals is sometimes rather vague.

4.2.1 *Reciprocals with a standard change of meaning*

In this case the reciprocal marker, i.e. the reflexive-middle marker *-si/-s*, adds the meaning ‘each other’ to the lexical meaning of the underlying verb without modifying it in any other way (therefore the latter verb is not given below). There are 8 main groups. The lists contain practically all unprefixed and those prefixed reciprocals which do not occur without a prefix in the given meaning.

1. Reciprocals with the typical meanings ‘to beat each other’, ‘to fight’. They denote physical aggressive actions. This group contains about 90 items (including those listed in (45) and their prefixed (intra-class) derivatives, like *mušti-s* ‘to fight’ → *pa-si-mušti* ‘to fight for a while’, *su-si-mušti* ‘to start/have a fight’).

In fact, practically all transitive verbs with the meaning ‘to beat’ yield reciprocals on condition they are durative or iterative. The only exception found so far is the transitive verb *perti* ‘to beat/thrash/ flog’, probably due to the fact that it yields a reflexive proper, namely *perti-s* ‘to beat oneself (with a bundle of twigs in a bath house)’. Reciprocal actions tend to be repeated acts, therefore they do not derive from semelfactive verbs of beating, such as *smogti* ‘to deliver a blow’, *spirti* ‘to give a kick’, *stumti* ‘to push/give a push’, *žnybti* ‘to pinch/give a pinch’, etc., while their iterative derivatives do yield reciprocals.

The reciprocals below are grouped according to proximity of their lexical meanings:

- | | | |
|---------|-----------------------|---|
| (45) a. | <i>mušti-s</i> | ‘to beat each other/fight’ |
| | <i>lupti-s</i> | (same meaning) |
| | <i>kulti-s</i> | (same meaning) |
| | <i>kutuoti-s</i> | (same meaning; usu. about cocks, etc.) |
| | <i>kapoti-s</i> | (same meaning; often about birds) |
| | <i>plunkti-s</i> | fig. ‘to fight/beat each other’ |
| | <i>plunksnuoti-s</i> | ‘to fight’ (about cocks) |
| | <i>engti-s</i> | ‘to thrash each other/scuffle’ |
| | <i>ap-si-skaldyti</i> | ‘to have a fight/hit each other’ |
| | <i>smugiuoti-s</i> | ‘to hit each other/exchange blows’ |
| b. | <i>daužyti-s</i> | ‘to beat/thrash each other’ (with sticks, etc.) |
| | <i>pliekti-s</i> | ‘to beat/flog/thrash each other’ (with whips, etc.) |
| | <i>paivyti-s</i> | ‘to flog/thrash each other’ (with whips, etc.) |
| | <i>talžyti-s</i> | ‘to lash/flog/whip each other’ |
| | <i>kirsti-s</i> | ‘to hit each other/fight’ (with swords, etc.) |
| | <i>smaigstyti-s</i> | ‘to fight’ (with spears) |

c.	<i>kauti-s</i>	‘to fight/struggle’
	<i>grumti-s</i>	(same meaning)
d.	<i>rungti-s</i>	‘to wrestle/contend’
	<i>galuoti-s</i>	‘to wrestle’
	<i>maigyti-s</i>	‘to grapple with each other’
	<i>minkyti-s</i>	(same meaning)
	<i>niurkyti-s</i>	(same meaning)
	<i>kardyti-s</i>	(same meaning)
	<i>boksuoti-s</i>	‘to box/wrestle with fists’
e.	<i>grūsti-s</i>	‘to push/jostle one another’
	<i>stumdyti-s</i>	‘to push each other’
	<i>alkūniuoti-s</i>	‘to push each other with elbows’
	<i>badyti-s</i>	‘to butt each other’
	<i>baksnoti-s</i>	‘to punch/poke each other (usu. with fists)’
	<i>bakinti-s</i>	(same meaning)
	<i>baksėti-s</i>	(same meaning)
	<i>basčioti-s</i>	(same meaning)
	<i>gnaibyti-s</i>	‘to pinch each other’
	<i>kumščioti-s</i>	‘to punch/strike each other with fists’
	<i>nykščioti-s</i>	‘to jab each other with thumbs’
	<i>niukinti-s</i>	‘to punch each other’
	<i>spardyti-s</i>	‘to kick each other’
	<i>žnaibyti-s</i>	‘to pinch each other’
f.	<i>ausuoti-s</i>	‘to hit each other on the ear’
	<i>snukiuoti-s</i>	‘to hit/beat each other on the face.’

2. Reciprocals with typical meanings ‘to abuse each other’, ‘to quarrel’. They denote aggressive verbal behaviour. This group contains at least 55 verbs (including those listed in (46) and their affixed derivatives). Subgroup (46b) are prefixed perfective verbs with a reciprocal meaning which have no unprefixed counterparts, or the latter are not used reciprocally.

(46) a.	<i>barti-s</i>	‘to abuse each other/quarrel’
	<i>plūsti-s</i>	‘to abuse/curse each other’
	<i>koneveikti-s</i>	‘to scold/abuse each other’
	<i>keikti-s</i>	‘to curse each other’
	<i>rieti-s</i>	‘to bicker/scold each other’
	<i>pravardžiuoti-s</i>	‘to nickname each other’
	<i>graužti-s</i>	‘to abuse each other/quarrel’
	<i>vainoti-s</i>	‘to curse/abuse each other’
	<i>žodžiuoti-s</i>	‘to exchange words/abuse each other’
b.	<i>ap-si-skųsti</i>	‘to complain about each other’
	<i>ap-si-šnekėti</i>	‘to slander each other’
	<i>iš-si-bjauroti</i>	‘to abuse/curse at each other’
	<i>iš-si-darkyti</i>	‘to abuse/swear at each other’
	<i>iš-si-dergti</i>	‘to curse/swear at each other’
	<i>iš-si-dirbti</i>	‘to scold/abuse each other’
	<i>iš-si-vadinti</i>	‘to call each other names’

	<i>iš-si-kvailinti</i>	‘to call each other a fool’
c.	<i>erzinti-s</i>	‘to tease/annoy each other’
	<i>kirkinti-s</i>	‘to tease each other’
	<i>cyptinti-s</i>	‘to make each other squeak/scream’
	<i>rėkinti-s/rėkdyti-s/rikdyti-s</i>	‘to make each other cry’
	<i>siundyti-s</i>	‘to make each other cry, egg each other on.’

3. Reciprocals with the general meaning ‘to caress/hug each other’. They denote manifestations of love and friendly feelings (15 items including intra-class derivatives).

(47)	<i>bučiuoti-s</i>	‘to kiss each other’
	<i>mylėti-s</i>	‘to love/make love to each other’
	<i>myluoti-s</i>	‘to caress each other’
	<i>malonėti-s</i>	‘to caress/hug each other’
	<i>glamonėti-s</i>	‘to hug/caress each other’
	<i>glėbiuoti-s</i>	‘to hug/caress each other’
	<i>ap-si-imti</i>	‘to hug/embrace each other’
	<i>ap-si-kabinti</i>	‘to hug/embrace each other’
	<i>pa-si-raginti</i>	‘to urge each other on.’

4. Reciprocals with the typical meanings ‘to greet each other’, ‘to meet’, ‘to invite each other’ and the like (15 items all in all). They denote social contacts, i.e. meeting and greeting each other, being acquainted, parting and taking leave. The second reciprocal in the list under (48a) is a prefixed derivative of the first verb of the list, included here because of antonymous change of lexical meaning.

(48)	a.	<i>sveikinti-s</i>	‘to greet each other’
		<i>at-si-sveikinti</i>	‘to say goodbye to each other’
		<i>labinti-s</i>	‘to say hello to each other’
		<i>matyti-s</i>	‘to see/meet (each other)’
		<i>su-si-tikti</i>	‘to meet’
		<i>pa-si-žinti</i>	‘to keep in touch with each other’
		<i>pa-si-žinoti</i>	‘to be acquainted with each other’
		<i>pa-si-mesti</i>	‘to part/leave each other’
	b.	<i>prašyti-s</i>	‘to invite each other (to one’s place)’
		<i>vadinėti-s</i>	(same meaning)
		<i>už-si-prašyti</i>	‘to invite each other in advance.’

Compare:

- (49) a. *Kad ir giminės, bet nebe-si-praš-o.*
 although and relatives but not-REC-ask-3.PRES
 ‘Although they are relatives, they do not visit (lit. ‘invite’) each other.’
- b. *Jie vadinėja-si savo tarp-e.*
 they invite-REC their midst-LOC
 ‘They invite each other to pay visits *mutually*.’

5. Reciprocals with the general meaning ‘to stand in for each other’ (in situations of doing something alternately, by turns) (5 verbs), which are typically prefixed, their unpre-

8. Reciprocals denoting contiguous position or intersection of typically inanimate objects (13 derivatives all in all). They occur in constructions like (56):

- (56) a. *Vien-as keli-as kerta kit-q.*
 one-NOM.SG.M road-NOM.M cut.3.PRES other-ACC.M.SG
 ‘One road intersects another.’
- b. *Čia keliai kerta-si.*
 here road.NOM.PL cut.3.PRES-REC
 ‘The roads intersect here.’
- c. *Vienas kelias kerta-si su kit-u.*
 one road.NOM.M.SG cut.3.PRES-REC with other-INST.M.SG
 lit. ‘One road intersects with another.’
- (57) *siekti-s* ‘to touch/reach each other’
riboti-s ‘to adjoin each other/be contiguous’
siekti-s ‘to touch (each other)’
liesti-s ‘to be contiguous/touch’
kirsti-s ‘to cross/intersect (about roads, etc.)’
skersuoti-s (same meaning).

In fact, the underlying verbs are lexical reciprocals (because if *A kerta B* ‘A intersects B’ then *B kerta A* ‘B intersects A’), but the derivatives are entered here because their use in the simple as well as in the discontinuous comitative construction (cf. (56b) and (56c) respectively) requires *-si/-s* on the verb, which distinguishes them from other two-place lexical reciprocals and makes them similar to reflexive reciprocals.

4.2.2 Lexicalized reciprocals

Two cases can be distinguished here:

- lexicalization occurs in the process of derivation resulting in a reciprocal verb;
- a reciprocal verb is further lexicalized due to figurative use.

4.2.2.1 *Lexicalization in the process of reciprocal derivation.* This is characteristic of reciprocals denoting fighting and verbal quarrelling (groups 1 and 2 in 4.2.1). In this case reciprocal derivation is combined with a shift in the lexical meaning of the root verb and/or figurative use. The following are regarded here as lexicalized reciprocals. It should be noted that the two subgroups partly overlap, due to proximity of their lexical meaning. Thus, the reciprocals *kapoti-s*, *kirsti-s*, *ravėti-s* and *regzti-s* (included in the second subgroup below) may denote both physical and verbal fighting.

1. Reciprocals with the resultant meanings ‘to beat each other’, ‘to fight’ (12 items):

- (58) *pešti* ‘to pluck/pull’ → *pešti-s* ‘to fight/scuffle’
rauti ‘to pull with roots’, coll. ‘to do sth (run, drink, etc.) with all one’s might’ → *rauti-s* coll. ‘to fight/scuffle’
tąsyti ‘to pull/tug’ → *tąsyti-s* ‘to fight/scuffle’
imti ‘to grasp/clutch’ → *imti-s* ‘to wrestle/grapple’
minti ‘to knead/work up’ → *minti-s* ‘to wrestle/grapple’
risti ‘to push, to roll’ → *risti-s* ‘to wrestle/grapple.’

2. Reciprocals with the meanings ‘to abuse each other’, ‘to quarrel’ (20 items):

(59) <i>pjauti</i> ‘to cut’	→ <i>pjauti-s</i> ‘to squabble/bicker’
<i>kirsti</i> ‘to sting/peck’	→ <i>kirsti-s</i> fig. ‘to abuse each other’
<i>ėsti</i> ‘to eat/guzzle’	→ <i>ėsti-s</i> ‘to quarrel/bicker’
<i>draskyti</i> ‘to tear/scratch’	→ <i>draskyti-s</i> fig. ‘to quarrel/bicker’
<i>kapoti</i> ‘to hack/peck’	→ <i>kapoti-s</i> ‘to quarrel/abuse each other’
<i>ardyti</i> ‘to rip up’	→ <i>ardyti-s</i> ‘to squabble/quarrel’
<i>ravėti</i> ‘to weed’	→ <i>ravėti-s</i> coll. ‘to quarrel/abuse each other’
<i>regzti</i> fig. ‘to talk nonsense’	→ <i>regzti-s</i> ‘to quarrel/squabble’
<i>smaugti</i> ‘to strangle’	→ <i>smaugti-s</i> ‘be angry with each other/bicker’

4.2.2.2 *Lexicalization of reciprocals.* The following reciprocals undergo further lexicalization through expansion when used figuratively with an inanimate object in the instrumental case with the preposition *su* ‘with’: the latter constructions may be tentatively termed *discontinuous tantum*. Compare:

(60) <i>grumti-s</i> ‘to fight’	→ <i>grumti-s su gyvenimu</i> ‘to struggle with life’
<i>galuoti-s</i> ‘to wrestle’	→ <i>galuoti-s su liga</i> ‘to struggle with an illness’
<i>su-si-durti</i> ‘to collide’	→ <i>su-si-durti su sunkumais</i> ‘to meet with difficulties’
<i>su-si-pažinti</i> ‘to get acquainted’	→ <i>su-si-pažinti su literatūra</i> ‘to get acquainted with literature.’

4.3 Overlapping of reflexive reciprocals with other semantic types of reflexive verbs

The overwhelming majority of reflexive reciprocals have no homonyms. Overlapping with other semantic types of reflexives is rather insignificant and mostly individual.

Characteristically, *reciprocals do not overlap with semantic reflexives*: although both types are derived from transitives with two animate (typically human) actants, each derives from a distinct set of lexical groups.

The only systemic case is the overlapping with “absolute” reflexives. The following reflexive is (a) reciprocal when used in a comitative construction, as in (61a), (b) “absolute” when used with a singular subject, as in (61b), and (c) ambiguous when used with a plural subject, as in (61c), unless there is contextual indication of one or the other meaning:

(61) a.	<i>Vaikas muša-si su draugu.</i>	‘The boy fights with his friend.’	(reciprocal)
b.	<i>Vaikas muša-si.</i>	‘The boy likes to fight/is pugnacious.’	(“absolute”)
c.	<i>Vaikai muša-si.</i>	i. ‘The boys are fighting <i>with each other</i> .’	
		ii. ‘Boys like to fight/ <i>are pugnacious</i> .’	

Here belong:

(62) a.	<i>mušti-s</i>	i. ‘to fight’	ii. ‘to be pugnacious’
	<i>badyti-s</i>	i. ‘to butt each other’	ii. ‘to butt/be in the habit of butting’
	<i>spardyti-s</i>	i. ‘to kick each other’	ii. ‘to kick/be in the habit of kicking’
	<i>kandžioti-s</i>	i. ‘to bite each other’	ii. ‘to bite’
	<i>stumdyti-s</i>	i. ‘to push each other’	ii. ‘to push/be in the habit of pushing’
	<i>alkūniuoti-s</i>	i. ‘to elbow each other’	ii. ‘to elbow (other people)’

	<i>gnaibyti-s</i>	i. 'to pinch each other'	ii. 'to pinch (other people)'
	<i>žnaibyti-s</i>	i. 'to pinch each other'	ii. 'to pinch (other people)'
b.	<i>barti-s</i>	i. 'to abuse each other'	ii. 'to swear/curse'
	<i>keikti-s</i>	i. 'to abuse each other'	ii. 'to curse/use bad language'
	<i>plūsti-s</i>	i. 'to abuse each other'	ii. 'to curse/use bad language'
c.	<i>ardyti-s</i>	i. 'to squabble/quarrel'	ii. 'to bawl/exert oneself'
	<i>draskyti-s</i>	i. 'to quarrel/bicker'	ii. 'to rave/rage.'

In most other cases homonymy is due to the polysemy of the underlying verb, the reciprocal and the other reflexive verb(s) being derived from its different meanings; cf.:

(63)	a.	<i>graužti</i> 'to torment'	→	<i>graužti-s</i> 'to grieve'	(anticausative)
		<i>graužti</i> coll. 'to scold/abuse'	→	<i>graužti-s</i> 'to abuse each other'	(reciprocal)
	b.	<i>lupti</i> 'to skin/peel'	→	<i>lupti-s</i> 'to peel/come off'	(anticausative)
		<i>lupti</i> 'to beat/flog'	→	<i>lupti-s</i> 'to beat each other'	(reciprocal)

5. Reciprocals with the prefix *su-* and complex *su-si-*

5.1 Introductory

The prefix *su-* which contributes to derivation of reciprocals is highly polysemous. It may be useful to list some of its principal meanings. It may denote:

- (a) joining or placing two or more things together (see 5.2.1);
- (b) moving from different directions to one place (see 5.2.3);
- (c) the inchoative meaning (e.g. *sirgti* 'to be ill' → *su-sirgti* 'to fall ill'; see also 5.3.2);
- (d) a momentary action (cf. *cypti* 'to squeak' → *su-cypti* 'to give a squeak');
- (e) a completed action (cf. *valgyti* 'to eat' → *su-valgyti* 'to eat up'); etc.

The first two meanings can yield reciprocals from verbs of the lexical types discussed below.

The Latvian counterpart of *su-* is the prefix *sa-*.

The data are considered here along a continuum from reciprocals formed by the prefix *su-* alone (see 5.2.1) to reciprocals formed by means of the complex *su-si-* (see 5.3). The cases considered in 5.2.2 (where *su-* is attached to *-si-* verbs) and 5.2.3 (where the prefix *su-* combines with an optional *-si-*) can be regarded as intermediate. These derivational types account for 20% (95 items) in the Lithuanian list of reciprocals. Their Latvian counterparts derived by means of the complex *sa-...-s* or the prefix *sa-* alone comprise 21% (about 55 verbs).

The most generalized meaning of reciprocals may be said to be spatial contact and convergence of entities (often connected with the diminishing of the space taken up by these entities; this spatial contiguity or proximity takes form of "ideal" proximity in verbs that denote non-physical actions).

5.2 Reciprocals with the prefix *su-*5.2.1 *The prefix su- without -si-. Object-oriented reciprocals with the general meaning 'to bring/place sth together'*

The prefix *su-* is attached to three-place transitive verbs of moving objects to render the meaning of putting a number of objects together with each other in one place, gathering or moving them to one place, or joining them together; the object-oriented derivatives are transitive analogues of intransitives under (69); cf.:

- (64) a. *Ona dėjo knyg-q* (ACC.SG) *ant stalo.*
'Ann put the book on the table.'
b. *Ona su-dėjo knyg-as* (ACC.PL) / **knyg-q* (ACC.SG) *ant stalo.*
'Ann put the books/*the book together on the table.'

The following list of 20 reciprocals is far from exhaustive:

- | | | |
|---------|--|---|
| (65) a. | <i>dėti</i> 'to put/place sth' | → <i>su-dėti</i> 'to put/place sth together' |
| | <i>artinti</i> 'to bring nearer' | → <i>su-artinti</i> 'to bring/draw together' |
| | <i>krauti</i> 'to load/ put/pile' | → <i>su-krauti</i> 'to load/put/pile together' |
| | <i>ginti</i> 'to drive (cattle)' | → <i>su-ginti</i> 'to drive together (into one place)' |
| | <i>kloti</i> 'to put/lay' | → <i>su-kloti</i> 'to put/lay together' |
| | <i>mesti</i> 'to throw' | → <i>su-mesti</i> 'to throw together into a heap' |
| | <i>nešti</i> 'to carry' | → <i>su-nešti</i> 'to bring (in) to one place' |
| | <i>sodinti</i> 'to make sit down' | → <i>su-sodinti</i> 'to make sit down all the persons' |
| | <i>statyti</i> 'make stand (up)/place' | → <i>su-statyti</i> 'to put/place together' |
| | <i>varyti</i> 'to drive (e.g. cattle)' | → <i>su-varyti</i> 'to drive together to one place' |
| | <i>vesti</i> 'to lead' | → <i>su-vesti</i> 'take/bring/lead (many) to one place' |
| | <i>vežti</i> 'to transport/cart' | → <i>su-vežti</i> 'to bring (many/much) to one place' |
| b. | <i>durti</i> 'to put/add on' | → <i>su-durti</i> 'to put together/join/connect' |
| | <i>nerti</i> 'to knit/weave' | → <i>su-nerti</i> 'to knit together/join/interlock' |
| | <i>jungti</i> 'to join' | → <i>su-jungti</i> 'to connect/link (up)/couple' |
| | <i>kalti</i> 'to hammer' | → <i>su-kalti</i> 'to knock/hammer together' |
| | <i>pinti</i> 'to weave/twine/tangle' | → <i>su-pinti</i> 'to intertwine/entangle' |
| | <i>siūti</i> 'to sew' | → <i>su-siūti</i> 'to sew sth and sth together' |
| | <i>kabinti</i> 'to hook/fasten' | → <i>su-kabinti</i> 'to hook together/couple' |
| | <i>rišti</i> 'to tie/bind' | → <i>su-rišti</i> 'to tie/bind together', etc. |

5.2.2 *The prefix su- added to -si- verbs. Subject-oriented reciprocals with the meaning 'to crowd/huddle together'*

In this case the prefix *su-* is added to *-si-* verbs (a) of motion or (b) of joint action, with the same resultant meaning as in (69), the reflexive-middle marker being obligatory in the derivative. These *-si-* verbs are autocausatives which are in their turn derived from transitives denoting concrete physical actions involving motion or change of position of the object (the verb *brauti-s* in (67a) is an exception in that is reflexive *tantum*, but in meaning it meets the description of this group). A typical derivational chain:

- (66) *glausti* [kə priə ko] 'to clasp/press [sth to sth]'
 → *glausti-s* [priə ko] 'to press oneself [to sth/sb]'
 → *su-si-glausti* 'to cuddle up to each other/together.'

The following 9 verbs are meant to give an idea of the range of this type (the first transitive verb in the derivational chain is omitted):

- (67) a. *brauti-s* 'to squeeze/force one's way through' → *su-si-brauti* 'to force one's way into one place (of many), huddle together'
brukti-s 'to force one's way through' → *su-si-brukti* 'to huddle up/together'
grūsti-s 'to force one's way through' → *su-si-grūsti* 'to crowd into a place, to huddle together'
mesti-s 'to rush, to throw oneself' → *su-si-mesti* 'to huddle together'
sprausti-s 'to squeeze oneself (in(to))' → *su-si-sprausti* 'to crowd together'
- b. *burti-s* 'to unite/rally' → *su-si-burti* 'unite/rally, crowd/gather'
glausti-s 'to press oneself (to)' → *su-si-glausti* 'cuddle up to each other'
spausti-s 'press/squeeze oneself (into)' → *su-si-spausti* 'to squeeze together'
spiesti-s 'to swarm/crowd' → *su-si-spiesti* 'swarm/flock together', etc.

5.2.3 The prefix *su-* with optional *-si-*. Subject-oriented reciprocals with the meaning 'to come together'

They are derived exclusively from intransitive verbs of motion or change of position and they denote convergent action of a multiple agent (all agents or many gathering to one point by coming from different directions); the reflexive-middle marker is attached to prefixed verbs for emphasis or to render the sense 'for their own purposes'. Compare:

- (68) *Su[-si]-važiavo visi giminės.* 'All the relatives gathered from far and wide.'

There are at least 10 derivatives of this type in my verb-list.

- (69) *bėgti* 'to run' → *su-[si-]bėgti* 'come running together/gather running'
eiti 'to go, to walk' → *su-[si-]eiti* 'to come together', 'to meet/converge'
lėkti 'to fly', 'to run' → *su-[si-]lėkti* 'to come flying/running together'
skristi 'to fly' → *su-[si-]skristi* 'to come flying together'
lipti 'to climb (up, into)' → *su-[si-]lipti* 'to climb (up, into) together'
slinkti 'to sneak/creep' → *su-[si-]slinkti* 'to gather sneaking'
gulti 'to lie down' → *su-[si-]gulti* 'to lie down (of all the persons)'
sėsti[-s] 'to sit down' → *su-[si-]sėsti* 'to sit down (of all the persons)'
šokti 'to jump/leap' → *su-[si-]šokti* 'to jump/leap into one place'
važiuoti 'to go/drive/ride' → *su-[si-]važiuoti* 'to come together, to gather.'

5.3 Reciprocals with the complex *su-si-*. Subject-oriented reciprocals only

This complex, comprised of the prefix *su-* and reflexive-middle marker, sometimes adds either a reciprocal or contiguous meaning to the underlying verb, depending on the lexical meaning of the latter and that of the prefix. There are about 30 derivatives with this complex that may be regarded as reciprocals.

This complex may serve as a single derivational element in such cases as the following where intermediate derivatives with the reflexive marker alone or with the prefix are non-existent:

- (70) a. *žvelgti* 'to glance'
 b. **su-žvelgti*
 c. **žvelgti-s*
 d. *su-si-žvelgti* 'to exchange glances.'

Some verbs with this complex may have correspondences of the (70b) or (70c) type, and they may be related or not related to them semantically, e.g.:

- (71) a. *šnairuoti* 'to look at sb sideways'
 b. *su-šnairuoti* 'to cast a look sideways at sb'
 c. ?*šnairuoti-s*
 d. *su-si-šnairuoti* 'to exchange glances sideways.'

Two semantic subtypes can be distinguished here, without a clear-cut borderline between them, since both meanings can be combined in one verb (in such cases a verb is entered twice according to each meaning in the respective groups); e.g.:

- (72) a. *kalbėti* 'to talk' (→ *kalbėti-s* 'to talk with each other')
 b. *su-si-kalbėti* i. 'to understand each other' (see 5.3.1)
 ii. 'to come to an understanding/agreement' (see 5.3.2).

As we see, this type of derivation may involve a degree of predictable lexicalization (cf. Russian *govorit* 'to talk' → *s-govorit'-sja* 'to come to an agreement').

Further below, a number of small groups of verbs are included that formally belong to the previous cases but in meaning they are closer to those under discussion.

5.3.1 Reciprocals with the meaning 'to communicate with each other'

Most of the derivatives acquire the meaning of communication, usually in the manner specified by the underlying verb which may be a one- or two-place intransitive or, rarely, a two- or three-place transitive. In the latter case a direct object is omitted; cf.:

- (73) a. *Petr-as rašo [laišk-us] Jon-ui.*
 P.-NOM writes letter-ACC.PL J.-DAT
 'Peter writes [letters] to John.'
 b. *Jon-as rašo [laišk-us] Petr-ui.*
 J.-NOM writes letter-ACC.PL P.-DAT
 'John writes [letters] to Peter.'
 c. *Petr-as ir Jon-as su-si-rašo [*laiškus].*
 P.-NOM and J.-NOM write letter-ACC-PL
 'Peter and John correspond with each other.'

A more common predicate used instead of (73c) is same stem with the iterative suffix *-inè-*:

- d. *Petr-as ir Jon-as su-si-raš-inè-ja.*
 (same translation).

Here is a list of this type of reciprocals (13 items):

(74) <i>žvelgti</i> ‘to glance’	→	<i>su-si-žvelgti</i> ‘to exchange glances’
<i>rašinėti</i> ‘to write’	→	<i>su-si-rašinėti</i> ‘to correspond/exchange letters’
<i>šnekėti</i> ‘to talk’	→	<i>su-si-šnekėti</i> ‘to understand each other’
<i>kalbėti</i> ‘to talk’	→	<i>su-si-kalbėti</i> ‘to understand each other’
<i>žinoti</i> ‘to know’	→	<i>su-si-žinoti</i> ‘communicate/get in touch with each other’
<i>šaukti</i> ‘to shout’	→	<i>su-si-šaukti</i> ‘to communicate by shouting to each other’
<i>ūkauti</i> ‘to halloo’	→	<i>su-si-ūkauti</i> ‘to communicate by hallooming’
<i>švilpti</i> ‘to whistle’	→	<i>su-si-švilpti</i> ‘communicate by whistling to each other’
<i>rodyti</i> ‘to make signs’	→	<i>su-si-rodyti</i> ‘to communicate by signs’
<i>skambinti</i> ‘to phone’	→	<i>su-si-skambinti</i> ‘to communicate by phone’
<i>siekti</i> ‘to try to reach’	→	<i>su-si-siekti</i> ‘to communicate (with each other)’
<i>šnairuoti</i> ‘to look side-ways’	→	<i>su-si-šnairuoti</i> ‘to exchange angry glances’
<i>merkti</i> ‘to wink’	→	<i>su-si-merkti</i> ‘to communicate by winking.’

The following reciprocal is also of this formal type, but it differs from the verbs under (74) semantically (cf. the analogous place of the Russian derivative *pere-strelivat’-sja* ‘to exchange fire’ (← *streljat’* ‘to shoot’) among reciprocals denoting communication of the type *pere-gljadjvat’-sja* ‘to exchange glances’; see Knjazev, Ch. 15):

(75) <i>šaudyti</i> ‘to shoot/fire’	→	<i>su-si-šaudyti</i> ‘to exchange fire/shots.’
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5.3.2 *Reciprocals with the inchoative meaning*

The derivatives denote coming to an understanding or agreement, usually in the manner described by the underlying verb, this meaning being in some cases contiguous to that of the group discussed in 5.3.1. This group is rather heterogeneous lexically, and some of the verbs are lexicalized. Thus reciprocals under (77) denote concerted actions but they are given here because they are close to (76) with regard to the inchoative meaning.

(76) <i>kalbėti</i> ‘to talk’ (→ <i>kalbėti-s</i> ‘to talk with each other’)	→	<i>su-si-kalbėti</i> ‘to come to an understanding’
<i>šnekėti</i> ‘to talk’ (→ <i>šnekėti-s</i> ‘to talk to each other’)	→	<i>su-si-šnekėti</i> ‘to come to an understanding’
<i>šnibždėti</i> ‘to whisper’ (→ <i>šnibždėti-s</i> ‘to whisper to each other’)	→	<i>su-si-šnibždėti</i> ‘to come to an understanding by whispering to each other’
<i>ku(g)ždėti</i> ‘to whisper’ (→ <i>ku(g)ždėti-s</i> ‘to whisper to each other’)	→	<i>su-si-ku(g)ždėti</i> (same as in (c))
<i>čiulbėti</i> fig. ‘to bill and coo’	→	<i>su-si-čiulbėti</i> ‘to come to an understanding’
<i>burkuoti</i> ‘to bill and coo’	→	<i>su-si-burkuoti</i> fam. ‘to fall in love with each other’
<i>uostyti</i> ‘to sniff at, smell’	→	<i>su-si-uostyti</i> coll. fig. ‘to become friends.’

- | | |
|--|---|
| (77) <i>žaisti</i> ‘to play’ | → <i>su-si-žaisti</i> ‘to start playing in harmony’ (of a team) |
| <i>dainuoti</i> ‘to sing’ | → <i>su-si-dainuoti</i> ‘to start singing in unison’ |
| <i>giedoti</i> ‘to sing/chant’ | → <i>su-si-giedoti</i> ‘to begin to sing/chant in unison’ |
| <i>groti</i> ‘to play (musical instruments)’ | → <i>su-si-groti</i> ‘to start playing in unison.’ |

The following 4 verbs with the complex *su-si-* are related to lexical reciprocals with an optional reflexive marker (which thus becomes obligatory):

- | | |
|--|--|
| (78) <i>bendrauti[-s]</i> ‘to be friends’ | → <i>su-si-bendrauti</i> ‘to become friends’ |
| <i>broliauti[-s]</i> ‘to be like brothers’ | → <i>su-si-broliauti</i> ‘to become like brothers’ |
| <i>bičiuliauti[-s]</i> ‘to be close friends’ | → <i>su-si-bičiuliauti</i> ‘to become close friends’ |
| <i>draugauti[-s]</i> ‘to be friends’ | → <i>su-si-draugauti</i> ‘to become friends’ |

6. Lexical reciprocals

This term is used here to refer to verbs with an inherent reciprocal meaning not marked by any derivational means, i.e. to semantically reciprocal verbs without the marker *-si-/-s* (cf. *kovoti* ‘to struggle/fight (with each other)’, *sąveikauti* ‘to interact, to influence each other’) and verbs with the reflexive-middle marker which does not mark the reciprocal meaning (cf. *giminiuoti-s* ‘to be relatives (with each other)’). With regard to their lexical meanings, they only slightly overlap with *-si-* reciprocals denoting fighting.

Formally, lexical reciprocals can be simple (underived) and derived, in which case they may be denominal or deverbal derivatives. Contrary to reciprocals derived by means of the marker *-si-/-s*, they are of two syntactic types: simple lexical reciprocals happen to be mostly object-oriented (see 6.1), while derived verbs happen to be mostly subject-oriented (see 6.2).

The list of 480 reciprocals registered in Kruopas (1972) contains about 27% lexical reciprocals (130 verbs, including 58 items listed below and about 70 affixed intra-class derivatives); for comparison, the Latvian list of 260 reciprocals contains 37% (97) lexical reciprocals.

6.1 Object-oriented lexical reciprocals

They are causative transitive verbs taking an object that names the reciprocal arguments, i.e. two or more (usually) identical or similar entities in reciprocal relation. The reciprocal arguments can be expressed (a) homogeneously by a plural nominal, as in (79a), or (b) heterogeneously, either by a conjoined noun group, both components in the accusative case, as in (79b), or (c) by a comitative group comprised of a nominal in the accusative and the second nominal in the instrumental case with the preposition *su* ‘with’, as in (79c–d) (the prefix *su-* in the verb here and in (83) has perfectivizing force only):

- (79) a. *Kunigas sutuokė juos.* 'The priest married them.'
 b. *Kunigas sutuokė Petrą ir Oną.* 'The priest married Peter and Ann.'
 c. *Kunigas sutuokė Petrą su Ona.* lit. 'The priest married Peter with Ann.'
 d. *Kunigas sutuokė Oną su Petru.* lit. 'The priest married Ann to Peter.'

Most of these verbs denote connecting or joining together, sometimes disconnecting two or more entities (cf. 5.2.1). Here belong the underived lexical reciprocals (13 unprefixed items) under (80) and two denominal derivatives under (81):

- (80) *jungti* 'to join/connect (two or more entities)'
derinti 'to match', 'to co-ordinate'
burti 'to unite/rally'
kaityti 'to change/alternate'
maišyti 'to mix (sth with sth)'
rišti 'to bind/connect'
sieti 'to link/bind'
skirti 'to separate/distinguish', 'to divorce'
spiesti 'to concentrate/assemble'
tuokti 'to marry (sb to sb)'
taikinti 'to reconcile'
telkti 'to assemble/rally'
piršti 'to propose (sb and/to sb).'
- (81) *kryži-us* 'a cross' → *kryži-uo-ti* 'to cross (e.g. one's arms)'
por-a 'a pair' → *por-uo-ti* 'to pair sb off, to couple.'

6.2 Subject-oriented lexical reciprocals: "Canonical" type only

These are verbs that can be used in simple and discontinuous constructions; cf. (82b–c), (83c–d) and (82a), (83a–b) respectively:

- (82) a. *Petras rungtyniauja su Jon-u (INST).* 'Peter competes with John.'
 b. *Petras ir Jonas rungtyniauja.* 'Peter and John compete with each other.'
 c. *Petras su Jon-u (INST) rungtyniauja.* lit. 'Peter with John compete with each other.'
- (83) a. *Jon-as su-si-tuokė su On-a (INST).* 'John married Ann.'
 b. *On-a su-si-tuokė su Jon-u (INST).* 'Ann married John.'
 c. *Jon-as ir On-a (NOM) su-si-tuokė.* 'John and Ann got married.'
 d. *Jon-as su On-a (INST) su-si-tuokė.* lit. 'John with Ann got married.'

With only one exception, all subject-oriented lexical reciprocals in my verb-list are derived either from nouns (and one adjective) or from object-oriented lexical reciprocals, the means of derivation being suffixation alone or with the reflexive marker.

1. *Denominal derivatives* (26 items listed below). In this case lexical reciprocals are relatable to nouns which are also lexical reciprocals, viz. names of reciprocal situations (cf. (84)), or names of participants in a reciprocal situation (cf. (85)). Two derivational patterns are employed.

1a. A verbal suffix alone:

- | | | | |
|---------|---|---|---|
| (84) a. | <i>kov-a</i> ‘struggle, a fight’ | → | <i>kov-o-ti</i> ‘to struggle, to fight’ |
| | <i>kar-as</i> ‘war’ | → | <i>kar-i-au-ti</i> ‘to be at war’ |
| | <i>lenktyn-ės</i> ‘races/competition’ | → | <i>lenktyn-i-au-ti</i> ‘to compete’ |
| | <i>rungtyn-ės</i> ‘contest/competition’ | → | <i>rungtyn-i-au-ti</i> ‘to contend, to compete’ |
| | <i>santyk-is</i> ‘relation(ship)’ | → | <i>santyk-i-au-ti</i> ‘to be related/correlate’ |
| | <i>sąveik-a</i> ‘interaction’ | → | <i>sąveik-au-ti</i> ‘to interact, influence each other’ |
| | <i>panaš-us</i> ‘alike/similar’ | → | <i>panaš-au-ti</i> ‘to be alike/similar’ |
| | | → | <i>panaš-ė-ti</i> ‘to become alike/similar.’ |

The following two borrowed pairs can be added to this list:

- | | | | |
|------|---|---|--|
| b. | <i>konkur-encija</i> ‘competition’ | → | <i>konkur-uo-ti</i> ‘to compete, to rival’ |
| | <i>polemik-a</i> ‘polemics, dispute’ | → | <i>polemiz-uo-ti</i> ‘to dispute/hold an argument.’ |
| (85) | <i>bendradarb-is</i> ‘colleague/collaborator’ | → | <i>bendradarb-i-au-ti</i> ‘to be colleagues, collaborate’ |
| | <i>bendrinink-as</i> ‘participant, accomplice’ | → | <i>bendrinink-au-ti</i> ‘to participate, be an accomplice/accomplices’ |
| | <i>sėbr-as</i> coll. pej. ‘accomplice, partner’ | → | <i>sėbr-au-ti</i> ‘to be an accomplice/ accomplices, a partner/partners’ |
| | <i>kaimyn-as</i> ‘neighbour’ | → | <i>kaimyn-au-ti</i> ‘to be neighbours.’ |

1b. A suffix and reflexive-middle marker which is obligatory in (86a–b) and optional in (86c):

- | | | | |
|---------|---------------------------------------|---|--|
| (86) a. | <i>byl-a</i> ‘a (legal) case’ | → | <i>byl-inė-ti-s</i> ‘to litigate, be at law (with)’ |
| | <i>ginč-as</i> ‘dispute/argument’ | → | <i>ginč-y-ti-s</i> ‘to argue/dispute’ |
| | <i>galyn-ės</i> ‘wrestling’ | → | <i>galyn-ė-ti-s</i> ‘to wrestle’ |
| | <i>rungči-os</i> ‘contest, wrestling’ | → | <i>rungči-o-ti-s</i> ‘to compete, wrestle’ |
| | <i>vaid-as</i> ‘quarrel, squabbles’ | → | <i>vaid-y-ti-s</i> ‘to quarrel/squabble’ |
| | | → | <i>vaid-ėlio-ti-s</i> coll. ‘to quarrel/fall out (with)’ |
| | <i>vaizd-as</i> dial. ‘image, sight’ | → | <i>vaizd-au-ti-s</i> dial. ‘to love each other/meet, look at each other’ |
| b. | <i>brol-is</i> ‘brother’ | → | <i>brol-i-uo-ti-s</i> ‘to fraternize, be like brothers’ |
| | <i>gimin-ė</i> ‘kin, relatives’ | → | <i>gimin-i-uo-ti-s</i> ‘to be relatives’ |
| | <i>svain-is</i> ‘brother-in-law’ | → | <i>svaini-uo-ti-s</i> ‘to be relatives by marriage’ |
| | <i>žied-as</i> ‘a ring’ | → | <i>žied-uo-ti-s</i> ‘to exchange rings in betrothal’ |
| c. | <i>bičiul-is</i> ‘friend’ | → | <i>bičiul-i-au-ti[-s]</i> ‘to be friends’ |
| | <i>brol-is</i> ‘brother’ | → | <i>brol-i-au-ti[-s]</i> ‘treat each other like brothers’ |
| | <i>bendr-as</i> ‘friend, accomplice’ | → | <i>bendr-au-ti[-s]</i> ‘to be friends, to associate.’ |

The only underived subject-oriented lexical reciprocal in my verb-list is:

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|------|---------------|---------------------------|
| (87) | <i>syjėti</i> | ‘to be linked/connected.’ |
|------|---------------|---------------------------|

2. *Deverbal derivatives* (17 items in the list below). This case is represented by anticausative derivatives from object-oriented causative lexical reciprocals (see 6.1), anti-

causativization being marked by the reflexive-middle marker. As it happens, these derivatives are subject-oriented reciprocals (both participants are named by the subject), but at the same time they belong to the syntactic class of object-oriented reflexive verbs with underlying object promotion to subject position (see 3.1). Here belong:

(88) <i>jungti</i> ‘to join, connect’	→	<i>jungti-s</i> ‘to unite, get united/connected’
<i>derinti</i> ‘to match, co-ordinate’	→	<i>derinti-s</i> ‘to be matched/ co-ordinated’
<i>burti</i> ‘to unite, rally’	→	<i>burti-s</i> ‘to gather together/rally’
<i>maišyti</i> ‘to mix’	→	<i>maišyti-s</i> ‘to get mixed up’
<i>kaityti</i> ‘to change, alternate’	→	<i>kaityti-s</i> ‘to alternate (with each other)’
<i>kaitalioti</i> ‘to alternate’	→	<i>kaitalioti-s</i> ‘to take turns/alternate’
<i>kryžiuoti</i> ‘to cross’	→	<i>kryžiuoti-s</i> ‘to intersect/cut across each other’
<i>poruoti</i> ‘to pair off/couple’	→	<i>poruoti-s</i> ‘to mate/copulate’
<i>rišti</i> ‘to tie/bind, connect’	→	<i>rišti-s</i> ‘to be bound/connected’
<i>sieti</i> ‘to link, bind’	→	<i>sieti-s</i> ‘to be linked/bound, touch each other’
<i>skirti</i> ‘to separate’, ‘to divorce’	→	<i>skirti-s</i> ‘to be distinct’, ‘to get divorced’
<i>taikinti</i> ‘to reconcile’	→	<i>taikinti-s</i> ‘to be/become reconciled’
<i>tuokti</i> ‘to marry (sb to sb)’	→	<i>tuokti-s</i> ‘to get married/marry each other’
<i>teisti</i> ‘to try (in court)’	→	<i>teisti-s</i> ‘to be at law (with sb)’
<i>spiesti</i> ‘to bring together’	→	<i>spiesti-s</i> ‘to crowd/throng (together)’
<i>telkti</i> ‘to assemble, rally’	→	<i>telkti-s</i> ‘to come/flock together.’

7. Expression of reciprocal arguments

In Lithuanian, reciprocal arguments can be expressed by the subject alone in the simple and by subject and comitative object in the discontinuous subject-oriented construction. In object-oriented constructions the reciprocal arguments are named by an object (see 6.1 above).

Practically all subject-oriented reciprocals, both reflexively marked and lexical and those with the complex *su-si-*, can be used without restrictions in the discontinuous as well as in the simple construction.

7.1 The simple reciprocal construction

The subject names both reciprocal arguments and it can be expressed in the same ways as in any construction:

- homogeneously, by the plural number of a noun or pronoun, cf. (3), (49), etc.;
- heterogeneously, in which case it is either (a) a coordinated nominative noun group, as in (1b), etc.; or (b) a comitative noun group comprised of a noun in the nominative case and a noun in the instrumental case with the preposition *su* ‘with’, as in (35c), etc.

7.2 The discontinuous reciprocal construction. The status of a preposed comitative noun phrase

Commonly, in discontinuous constructions one of the reciprocal arguments is expressed by the subject and the other by a comitative object (a noun or its substitute in the instrumental case with the preposition *su* ‘with’), the only exception being discontinuous constructions with a direct object of type (56a) (see 4.2.1). A comitative object typically follows the predicate:

- (89) a. *Petr-as stumdo-si su Jon-u.*
 P.-NOM push.3.PRES-REC with J.-INST
 lit. ‘Peter is pushing [each other] with John.’
 b. *Jon-as stumdo-si su Petr-u.*
 lit. ‘John is pushing [each other] with Peter.’

If the noun phrase with *su* is preposed to the predicate, it is usually the second part of a comitative subject group, the sentence being interpreted as a simple reciprocal construction. But it is not always as straightforward as that. If the first argument is a 1st or 2nd person singular pronoun and the verb agrees with it in number, as in (90a), the construction has to be interpreted as discontinuous with a preposed comitative object:

- (90) a. *Aš su Petr-u stumd-au-si.*
 I with Peter-INST push-1SG.PRES-REC
 lit. ‘I with Peter push [each other].’

In the case of a comitative subject group the predicate has to agree in number with the plural subject and the first component of the subject group has to be a plural pronoun:

- b. *Mes su Petr-u stumdo-mė-s.*
 we with Peter-INST push.PRES-1PL-REC
 ‘Peter and I push each other’, lit. ‘We with Peter push each other.’

The matter is somewhat more complicated if the first component is a 3rd person pronoun, as in this case the verb is not inflected for number:

- c. *Jis su Petr-u stumdo-si.* lit. ‘He with Peter push each other.’
 d. *Jie su Petr-u stumdo-si.* lit. ‘They with Peter push each other.’

I prefer to interpret (90c) as discontinuous, by analogy with (90a), and to translate it as ‘He is pushing [each other] with Peter’, and (90d) as ambiguous with two meanings:

- i. discontinuous: ‘He is pushing [each other] with Peter’,
 ii. simple: ‘They and Peter are pushing each other’, by analogy with (90b).

8. The syntactic reciprocal marker *vienas kitą* ‘each other’

8.1 Introductory

The marker *-si-/-s* is not used to express reciprocity on all the verbs that semantically allow reciprocal use. Formation of reflexive reciprocals is limited to the lexical groups discussed in Section 4, and within those groups there seem to be only individual exceptions. As has been mentioned, reflexive derivation of reciprocals is not an active process in Lithuanian in the sense that no new reflexive reciprocals are formed.

According to my estimates, in Kruopas (1972) at least 300 more two-place transitives and 100 two-place intransitives are registered that meet the principal semantic requirement for reciprocal derivation (that both actants should belong to the same semantic class, usually of humans) but do not form reflexive reciprocals. This must be due to the decline of the activity of the reciprocal function of the reflexive-middle marker.

If the reciprocal sense cannot be expressed by the marker *-si-/-s* with a given verb, the reciprocal phrase *vien-as* (NOM) *kit-ą* (ACC) lit. ‘one another’ (and its rarely used colloquial synonyms *vienas antrą* lit. ‘one (the) second’ and *kitas kitą* lit. ‘other another’) serves as an alternative device. This phrase has no lexical restrictions on its use; it occurs with two-place transitives and intransitives and with three-place transitives and intransitives. It can be used with a broader range and larger number of verbs than *-si-/-s* in the reciprocal sense, but in fact the actions these verbs express seldom happen to be reciprocal, while reciprocals with the reflexive-middle marker denote actions that are often reciprocal: they belong to the basic word stock and are much more frequent in texts.

Reflexive reciprocals and verbs with the phrase *vienas kitą* can enter into the following relations:

1. A reflexive reciprocal alone is used in speech.
2. There is no reflexive reciprocal and a base verb with the syntactic marker alone is used (see 8.3 and 8.4).
3. There are both a reflexive reciprocal and the underlying verb with the phrase *vienas kitą* in parallel use (see 8.5).

Thus both markers of reciprocity are in overlapping distribution.

8.2 Morphology of the phrase *vienas kitą*

The syntactic marker *vienas kitą* ‘each other’ is inflected for case, number and gender: (a) the first component is nominative and the second acquires the case form of the object whose position the phrase takes (e.g., accusative with transitive verbs); (b) each component agrees in gender with the subject, and (c) the number is determined by the situation denoted: if the subject refers to two persons (entities), each component of the phrase is singular, and if it refers to more than two participants each component is plural; cf.:

- (91) a. *Jie mato vien-as kit-ą.*
 they.M see one-NOM.M.SG another-ACC.M.SG
 ‘They see each other.’

- b. *Jos mato vien-a kit-q.*
 they.F see one-NOM.F.SG another-ACC.F.SG
 ‘They see each other.’
- c. *Jie mato vien-i kit-us.*
 they.M see one-NOM.M.PL other-ACC.M.PL
 ‘They see each other.’
- d. *Jos mato vien-os kit-as.*
 they.F see one-NOM.F.PL other-ACC.F.PL
 ‘They see each other.’

If the subject is a dual pronoun, the reciprocal phrase is in the singular, each component referring to one of the two participants:

- (92) a. *Juodu (M) mato vienas kitą (SG)/*vieni kitus (PL).* ‘They.two see each other.’
 b. *Jiedvi (F) mato viena kitą (SG)/*vienos kitas (PL).* ‘They.two see each other.’

The syntactic marker of reciprocity is used in two ways: (a) as the only marker of reciprocity with non-reciprocal verbs; (b) as a second marker with reciprocal verbs.

8.3 The phrase *vienas kitą* with non-reciprocal verbs. Diathesis types

The syntactic marker of reciprocity may replace a direct object of transitive verbs, a non-direct object of intransitives and the indirect dative object of three-place (mostly transitive) verbs. It can also be used attributively.

8.3.1 “Canonical” diathesis

8.3.1.1 *With two-place transitives.* The syntactic marker of reciprocity is used in the following cases:

1. If a given verb does not have a reflexive reciprocal counterpart due to lexical restrictions, e.g.:

- (93) a. *Jis mane aprėkė.* ‘He shouted at me.’
 b. **Mes ap-si-rėkėme.* ‘We shouted at each other (= quarrelled).’
 c. *Mes aprėkėme vienas kitą.* ‘We shouted at each other.’

2. If the base verb has a reflexive derivative with a non-reciprocal meaning, cf.:

- (94) a. *Jis gina mane.* ‘He defends me.’
 b. *Mes ginamė-s.* ‘We defend *ourselves*’ (reflexive proper)
 c. *Mes giname vienas kitą.* ‘We defend *each other*.’

3. If the base transitive verb is formally reflexive, i.e. it contains the marker *-si/-s*:

- (95) a. *Jis veja-si mane.* ‘He chases me.’
 b. *Mes vejamė-s vienas kitą.* ‘We chase *each other*.’

These restrictions also apply to two-place intransitives considered in 8.3.1.2.

8.3.1.2 *With two-place intransitives.* The second component of the syntactic marker assumes the case form required by the verb; e.g.:

- (96) a. *Petras įgriso Jon-ui* (DAT). 'Peter bores John.'
 b. *Jie įgriso vienas kit-am* (DAT). 'They bore each other.'
- (97) a. *Petras bodi-si Jon-u* (INST). 'Peter loathes John.'
 b. *Jie bodi-si vienas kit-u* (INST). 'They loathe each other.'

8.3.2 *“Indirect” diathesis. With three-place transitives (and intransitives)*

These are verbs that take an indirect object in the dative case denoting a human addressee or beneficiary. Three-place transitives, both with an obligatory and optional indirect object, are extremely numerous, while three-place intransitives are few in number; the subject and indirect object may enter into reciprocal relations practically in all these verbs. In this case the syntactic marker is the only means of expressing reciprocity, the second component assuming the dative case form; e.g.:

- (98) a. *Petras nupirko Jon-ui* (DAT) *dovaną*. 'Peter bought John a gift.'
 b. *Jie nupirko vienas kit-am* (DAT) *dovanas*. 'They bought each other gifts.'
- (99) a. *Petras paspaudė Jon-ui* (DAT) *ranką*. 'Peter pressed John's hand.'
 b. *Jie paspaudė vienas kit-am* (DAT) *rankas*. 'They shook hands.'
 lit. 'They pressed hands to each other.'

8.3.3 *“Indirect-possessive” diathesis*

If a two-place verb takes an object denoting a body part or alienable possession, the possessor is often expressed by an indirect dative object which is semantically determined by the direct (or non-direct) object while syntactically it is dependent on the predicate. To express reciprocal relations between subject and dative object referents, both in possessive relation to the object referent, the phrase *vienas kita* with the second component in the dative case is used. Thus the resultant construction is of the “indirect” diathesis type formally and “possessive” semantically; cf.:

- (100) a. *Petras išmušė Jon-ui* (DAT) *dantį*.
 lit. 'Peter knocked out a tooth to John.'
 b. *Jie išmušė vienas kit-am* (DAT) *dantis*.
 lit. 'They knocked out teeth to each other.'
- (101) a. *Tėvas pažvelgė sūn-ui* (DAT) *į akis*.
 lit. 'Father looked his son in the eyes.'
 b. *Jie pažvelgė vienas kit-am* (DAT) *į akis*.
 lit. 'They looked each other in the eyes.'
- (102) *Žmonės amžiau amžiais vienas kitam gerklės plėšė*.
 lit. 'For ages people cut throats to each other' (= 'cut each other's throats').

8.3.4 *“Possessive” diathesis. Attributive use of the syntactic marker*

An alternative way of expressing possessive relations is the attributive use of a noun (denoting possessor) in the genitive case on an object. The phrase *vienas kita* can be used attributively in order to express reciprocal possessive relations. Thus a construction with

this phrase replacing a possessive attribute to an object, its second component assuming the (possessive-)genitive case form, represents a “possessive” diathesis:

- (103) a. *Petras klausėsi Jon-o* (GEN) *kalbų.* ‘Peter listened to John’s talk.’
 b. *Jie klausėsi vienas kit-o* (GEN) *kalbų.* ‘They listened to each other’s talk.’

Compare also textual examples:

- (104) *Žmonės padeginėjo vienas kito namus.* ‘People set each other’s houses on fire.’
 (105) *Jos* (F) *prižiūrėjo viena kitos* (F) *vaikus.* ‘They looked after each other’s children.’

8.4 Verbs used with *vienas kitą* only. Restrictions on formation of reflexive reciprocals

As is mentioned above in 8.1, a large number of two-place transitives and intransitives can be used reciprocally with the syntactic marker *vienas kitą* only. In other words, there are restrictions on the formation of reflexive reciprocals imposed by lexical and pragmatic factors. To give an idea of the verbs and their lexical types that do not form reflexive reciprocals, it may be expedient to list all the verbs that have occurred in my corpus reciprocally with the syntactic marker.

1. Two-place transitives (note that only 6 of these verbs form reflexives proper with *-si/-s*, the reflexive pronoun *save* ‘oneself’ being used for this purpose with the other verbs; the verbs yielding reflexives proper are marked with two asterisks, and those taking *-si/-s* with other meanings with one asterisk):

- | | |
|--|--|
| (106) <i>apgauđinėti</i> ‘to deceive (repeatedly)’ | <i>neapkęsti*</i> ‘to hate’ |
| <i>apgauti*</i> ‘to deceive’ | <i>neigti</i> ‘to deny’ |
| <i>apkalbėti</i> ‘to slander’ | <i>nekęsti</i> ‘to hate’ |
| <i>aplenkti</i> ‘to overtake’ | <i>niekinti</i> ‘to ignore/disdain’ |
| <i>apžiūrėti*</i> ‘to look over’ | <i>paleisti*</i> ‘to let go’ |
| <i>apžiūrinėti</i> ‘to look over’ (iter.) | <i>pamilti</i> ‘to fall in love’ |
| <i>apžvelgti</i> ‘to look over’ | <i>pardavinėti</i> ‘to sell’ (iter.) |
| <i>atitikti</i> ‘to correspond’ | <i>parduoti**</i> ‘to sell’ |
| <i>atstumti</i> ‘to alienate/push away’ | <i>pa-si-laikyti</i> ‘to stick (to)’ |
| <i>gąsdinti*</i> ‘to scare’ | <i>pastebėti</i> ‘to notice’ |
| <i>gelbėti**</i> ‘to save’ | <i>pjaustyti*</i> ‘to cut/chop’ |
| <i>gerbti</i> ‘to respect’ | <i>saugoti*</i> ‘to protect’ |
| <i>ginti**</i> ‘to defend/protect’ | <i>skersti</i> ‘to slaughter/kill’ |
| <i>girdėti*</i> ‘to hear’ | <i>smerkti</i> ‘to condemn’ |
| <i>griebti*</i> ‘to seize’ | <i>sprogdinti**</i> ‘to explode’ |
| <i>guosti*</i> ‘to comfort/console’ | <i>stebėti*</i> ‘to watch’ |
| <i>išdavinėti</i> ‘to betray’ (iter.) | <i>suprasti*</i> ‘to understand’ |
| <i>išduoti*</i> ‘to betray’ | <i>surasti*</i> ‘to find’ |
| <i>išgelbėti**</i> ‘to save’ | <i>šaukti*</i> ‘to call/shout’ |
| <i>išgirsti</i> ‘to hear’ | <i>šmeižti</i> ‘to slander’ |
| <i>įtarinėti</i> ‘to suspect’ (iter.) | <i>tausoti</i> ‘to take care (of)’ |
| <i>įtarti</i> ‘to suspect’ | <i>užjausti</i> ‘to sympathize’ |
| <i>įtikinti*</i> ‘to persuade’ | <i>užkliudyti</i> ‘to knock (against)’ |
| <i>išvyti</i> ‘to drive/turn out’ | <i>užstoti*</i> ‘to stand up (for)’ |

*jausti** ‘to feel’
*kankinti** ‘to torture/torment’
*karti*** ‘to hang’
klausyti-s ‘to listen (to)’
*laikyti** ‘to hold’

*vadinti** ‘to call’
vaikyti-s ‘to pursue/run after’
*vyti** ‘to chase/drive away’
vyti-s ‘to pursue/chase.’

2. Two-place intransitives:

(107) *bodėti-s* (INST) ‘to loathe’
įgristi (DAT) ‘to bore’
įkyrėti (DAT) ‘to pester/bother’
laikytis (GEN) ‘to stick (to)’

pa-si-kliauti (INST) ‘to rely (on)’
priekaištauti (DAT) ‘to reproach’
priešinti-s (DAT) ‘to resist’
prieštarauti (DAT) ‘to contradict.’

8.5 Alternative use of the marker *-si/-s* and reciprocal phrase *vienas kitą*

With a number of verbs (for instance, those listed below), the reciprocal sense can be expressed either morphologically or syntactically. In most cases both expressions are entirely synonymous, the syntactic marker being more emphatic. Sometimes they differ slightly in the lexical meaning, as is shown in the translations (see (109)). The following expressions have been encountered in dictionaries and texts:

- | | | | | |
|-------|--|---|---|-------------------------------------|
| (108) | <i>ap-si-kabinti</i> | = | <i>apkabinti vieną kitą</i> | ‘to embrace/hug each other’ |
| | <i>barti-s</i> | = | <i>barti vieną kitą</i> | ‘to scold each other/quarrel’ |
| | <i>daužyti-s</i> | = | <i>daužyti vieną kitą</i> | ‘to beat/thrash each other’ |
| | <i>ėsti-s</i> | = | <i>ėsti vieną kitą</i> | ‘to quarrel/abuse each other’ |
| | <i>graužti-s</i> | = | <i>graužti vieną kitą</i> | ‘to abuse each other/quarrel’ |
| | <i>iš-si-plūsti</i> | = | <i>išplūsti vieną kitą</i> | ‘to scold each other’ |
| | <i>kandžioti-s</i> | = | <i>kandžioti vieną kitą</i> | ‘to bite each other’ |
| | <i>kapoti-s</i> | = | <i>kapoti vieną kitą</i> | ‘to fight/beat each other/quarrel’ |
| | <i>keisti-s</i> | = | <i>keisti vieną kitą</i> | ‘to take place of each other’ |
| | <i>kumščioti-s</i> | = | <i>kumščioti vieną kitą</i> | ‘to punch each other’ |
| | <i>pa-si-keisti</i> | = | <i>pakeisti vieną kitą</i> | ‘to stand in for each other’ |
| | <i>pa-si-plūsti</i> | = | <i>paplūsti vieną kitą</i> | ‘to scold each other (for a while)’ |
| | <i>pa-si-raginti</i> | = | <i>paraginti vieną kitą</i> | ‘to urge each other on’ |
| | <i>pjauti-s</i> | = | <i>pjauti vieną kitą</i> | ‘to squabble/bicker’ |
| | <i>plūsti-s</i> | = | <i>plūsti vieną kitą</i> | ‘to abuse/curse each other’ |
| | <i>rieti-s</i> | = | <i>rieti vieną kitą</i> | ‘to scold each other/bicker’ |
| | <i>spardyti-s</i> | = | <i>spardyti vieną kitą</i> | ‘to kick each other’ |
| | <i>stumdyti-s</i> | = | <i>stumdyti vieną kitą</i> | ‘to push each other’ |
| | <i>šaudyti-s</i> | = | <i>šaudyti vieną į kitą</i> | ‘to shoot/fire at each other.’ |
| (109) | <i>matyti-s</i> ‘to see each other/meet’ | – | <i>matyti vieną kitą</i> ‘to see each other’ | |
| | <i>mylėti-s</i> ‘to make love to each other’ | – | <i>mylėti vieną kitą</i> ‘to love each other’ | |
| | <i>pa-si-žinti</i> ‘to know/keep in touch with each other’ | – | <i>pažinti vieną kitą</i> ‘to know each other/be acquainted’ | |
| | <i>sveikinti-s</i> ‘to greet each other’ | – | <i>sveikinti vieną kitą</i> ‘to congratulate/greet each other.’ | |

In the latter case the parallel expressions may require different contexts; e.g.:

- | | | | |
|-------|----|--|--|
| (110) | a. | <i>Mes dažnai matèmè-s.</i> | ‘We often saw each other (= met).’ |
| | b. | <i>Mes matème vienas kitą iš tolo.</i> | ‘We saw (could see) each other from afar,’ |
| but: | c. | <i>Mes matèmè-s iš tolo.</i> | ‘One could see us from a distance.’ |

8.6 The phrase *vienas kitą* with reflexive reciprocals

This reciprocal marker does occur with some reflexive reciprocals and very seldom with lexical reciprocals, for disambiguation or emphasis. The second component may take either the accusative (or another case form depending on the case of the underlying object) or the comitative form, i.e. the instrumental case with the preposition *su* ‘with’.

8.6.1 *With the accusative case of the second component. “Canonical” diathesis*

It should be noted in the first place that this phrase occurs in very short sentences with omitted subjects, sometimes comprised of the predicate alone. Compare the following sentences collected from texts and dictionaries:

- | | | | |
|-------|----|---|--|
| (111) | a. | <i>Vienas kitą ap-si-skundè.</i> | ‘They made complaints against each other.’ |
| | b. | <i>Erzina-si vienas kitą.</i> | ‘They tease each other.’ |
| | c. | <i>Kam gi reikia vienas kitą už-si-gaudinèti?</i> | ‘Why humiliate each other?’ |
| | d. | <i>Kits kitą už-si-prašo į svečius.</i> | ‘They invite each other home.’ |
| | e. | <i>Iš-si-plūdo, iš-si-keikè vienas kitą.</i> | ‘They abused and cursed each other.’ |
| | f. | <i>Iš-si-ėdè vienas kitą.</i> | ‘They had a bitter squabble.’ |
| | g. | <i>Iš-si-dergè vieni kitus.</i> | ‘They abused one another.’ |
| | h. | <i>Iš-si-kvailino vienas kitą.</i> | ‘They called each other a fool.’ |

There may be a number of reasons behind the use of the phrase *vienas kitą* here:

1. It may be added for “weight”, thus it makes (111a–b, f–g) balanced enough for them to be able to function as completed sentences.

2. All these verbs are ambiguous semantically: for instance, the verbs in (111a, c, e) may have an “absolutive” reading and (111b) may be anticausative (see 4.3), etc.; therefore at least in some of these sentences, e.g. in (111c, e), the phrase *vienas kitą* may also serve as a means of disambiguation.

3. This phrase serves to indicate the number of participants: two, as in most of the examples, or more than two, as in (111g).

4. The accusative form of the second component of the phrase in question is not however explained by the above reasons: it may be due to the fact that all the *-si-* verbs in (111) are in fact interpreted as transitive reflexives and behave as such, the reflexive-middle marker being added for emphasis. This usage is practically identical with the use of non-reflexive transitives with *vienas kitą* discussed above, and it is facilitated by perfectivization, as Lithuanian prefixed verbs easily take on the marker *-si-* for emphasizing the sense ‘for one’s own pleasure/advantage/benefit’ (see 3.1).

However, in most cases with prototypical reflexive reciprocals, the form *vienas kitą* with the accusative second component is hardly acceptable, or it is at least redundant:

- (112) a. [?]*Bučiuoja-si vienas kita.* ‘They kiss each other.’
 b. [?]*Stumdo-si vienas kita.* ‘They push each other.’

But these reciprocals may acquire a comitative form of this phrase (see 8.6.3).

8.6.2 *With the dative case of the second component*

It should be noted that the verb *pa-si-dėti* ‘to help each other’ derived from a two-place intransitive with a dative object always occurs with this case form of the syntactic marker, most likely due to the fact that the underlying verb is highly polysemous and some of its meanings also yield derivatives with the reflexive-middle marker but distinct meanings; therefore these derivatives require contextual indication of the particular meaning they are used in, a sentence without such indication being incomplete; cf.:

- (113) a. *Broliai vienas kitam pa-si-deda.*
 ‘The brothers help each other.’
 b. **Broliai pa-si-deda.*
 c. *Broliai pa-si-deda* (← *padeda* ‘put’) *pinigus į banką.*
 ‘The brothers deposit their money in a bank.’

The synonymous reciprocal in (114), though monosemous, also always occurs with the phrase in question, probably by analogy with (113a):

- (114) a. *Juodu visados vienas kitam pa-si-gelbsti.* ‘They always help each other.’
 b. [?]*Juodu visados pa-si-gelbsti.* (same intended meaning).

8.6.3 *The comitative form vienas su kit-u ‘with each other’*

This comitative form for two participants, or plural *vieni su kitais* for more than two, is possible practically with all reflexive reciprocals, but it is very uncommon and hardly necessary: it may be added for emphasis, but for this purpose a combination of the underlying verb with *vienas kita*, or the marker *tarpusavyje* ‘between selves’ (see Section 9) is preferable, since the form *vienas su kitu* emphasizes the comitative rather than the reciprocal component of meaning; cf.:

- (115) a. *Seserys pa-si-bučiavo.* ‘The sisters kissed [each other].’
 b. *Seserys pabučiavo viena kita.* ‘The sisters kissed each other.’
 c. *Seserys pa-si-bučiavo viena su kita.* lit. ‘The sisters kissed with each other.’

The comitative form seems to be more acceptable with lexical reciprocals, especially if it is necessary to indicate the number of participants (two or more than two); cf.:

- (116) a. *Jie draugauja.* ‘They are friends.’
 b. *Jie draugauja vienas su kitu/vieni su kitais.* ‘They are friends with each other (of two persons)/among themselves (of many).’

The comitative reciprocal phrase is redundant and therefore not used with lexical reciprocals which imply either two participants only (cf. (117a)) or more than two (usually a considerable number of) participants only (cf. (117b)):

- (117) a. *tuokti-s* ‘to marry (each other)’
skirti-s ‘to divorce (each other)’
su-si-žieduoti ‘to be betrothed’
- b. *burti-s* ‘to gather together’
spiesti-s ‘to crowd/throng’
telkti-s ‘to come/flock together.’

With the following and similar lexical reciprocals this phrase, either in the singular or in the plural form, is quite acceptable as a specifier of the number of participants:

- (118) a. *bendrauti* ‘to associate/keep company’
draugauti ‘to be friends’
giminiuoti-s ‘to be relatives’
kaimynauti ‘to be neighbours’
poruoti-s ‘to pair off/couple’
- b. *galyñeti-s* ‘to wrestle’
lenkyniauti ‘to compete’
rungtyniauti ‘to compete/contend’
vaidyti-s ‘to quarrel/squabble’
kovoti ‘to fight/struggle’
kariauti ‘to be at war’
- c. *jungti-s* ‘to be joined/connected’
sąveikauti ‘to interact’
santykiauti ‘to correlate’
sieti-s ‘to be linked/bound’
- d. *derinti-s* ‘to match/be matched’
kaitalioti-s ‘to alternate’
maišyti-s ‘to get mixed’
su-si-pinti ‘to intertwine’; etc.

9. The reciprocal marker *tarpusavyje* ‘between/among ourselves/.../themselves’

This reciprocal adverb and its paraphrases *tarp savęs* with the same meaning and *savo tarpe* lit. ‘in our/your/their midst’ are never used with non-reciprocal verbs to express reciprocity. They can occur with reciprocals only. Contrary to the phrase *vienas kitą* ‘each other’, these phrases are used mostly for emphasis. They may refer to many as well as to two participants, cf.:

- (119) a. *Visi suėję giminiuoja-si tarpusavyje.*
 lit. ‘All those gathered are relatives between themselves.’
- b. *Jiedvi (F) bara-si tarp savęs.*
 lit. ‘They.two are abusing each other between themselves.’

These phrases are most common with reflexive reciprocals with the meaning ‘to scold each other’, ‘to quarrel’, ‘to fight’ and ‘to talk/whisper to each other’; here are a few typical examples from texts:

- (120) a. *Žmonės rieja-si, pjauna-si tarp savęs.* ‘People bicker, squabble among themselves.’
- b. *Muša-si tarpusavy.* ‘They fight between/among themselves.’
- c. *Graužia-si tarpusavyje.* ‘They bicker between/among themselves.’
- d. *Vyrai tarp savęs su-si-mušė.* ‘The men got into a fight among themselves.’
- e. *Jie vadinėja-si savo tarpe.* ‘They invite each other home between themselves.’
- f. *Moterys kalba-si tarpusavy.* ‘The women are talking among themselves.’
- g. *Jie pa-si-šnibždėjo tarp savęs.* ‘They whispered between/among themselves.’

However, straightforward reciprocals like the following do not as a rule accept this phrase and its paraphrases, especially if only two participants are involved; cf.:

- (121) a. **Jie myli-si tarpusavyje.* ‘They make love to each other between themselves.’
 b. **Jie pa-si-bučiaavo tarp savęs.* ‘They kissed between themselves.’

These phrases are common with reciprocals with the complex *su-si-*; e.g.:

- (122) a. *Juodu su-si-žvalgė tarpusavyje.* ‘They exchanged glances between themselves.’
 b. *Vyrai su-si-merkė tarp savęs.* lit. ‘The men winked to each other between themselves.’

As for lexical reciprocals, most of them accept these phrases with ease, excepting the following verbs which denote reciprocal actions presupposing two participants only:

- (123) a. **Jie su-si-tuokė tarpusavyje.* ‘They got married between themselves.’
 b. **Jie iš-si-skyrė tarpusavyje.* ‘They parted/got divorced between themselves.’
 c. **Jie su-si-žiedavo tarp savęs.* ‘They exchanged rings (got betrothed) between themselves.’

This restriction does not hold in generic sentences, of course; cf.:

- (124) *Giminės retai tuokia-si tarpusavyje.*
 ‘Relatives seldom intermarry’ (lit. ‘marry between themselves’).

Lexical reciprocals of concerted motion do not seem to combine with this adverb either:

- (125) a. **Paukščiai buria-si tarpusavyje.*
 ‘Birds are flocking together between themselves.’
 b. **Žmonės telkia-si tarp savęs į būrius.*
 ‘People gather into groups between themselves.’

As we see, the same rules seem to apply to the use of the adverbial *tarpusavyje* with reflexive as well as with lexical reciprocals.

10. Areal characteristics of Lithuanian reciprocals

With respect to the productivity of the morphological marker of reciprocal meaning (a reflexive-middle marker or an affix with the reflexive proper as one of its meanings), Lithuanian occupies an intermediate position among the geographically adjacent languages. In the languages to the south-east (Belorussian and genetically related Russian and Ukrainian) the number of reciprocals with a reflexive marker does not exceed 20–25 items. On the whole, productivity of reciprocals decreases to the north as well. Thus, in Latvian their number is smaller, they are not registered in Estonian and Finnish, and there are 15 reciprocals at the most in Swedish. In the south-western direction, productivity of the analogous type of reciprocals seems to have no restrictions: this concerns Polish and German (see Wiemer, Ch. 11; Wiemer & Nedjalkov, Ch. 10; cf. also Ureland 1977: 311–2; Dahl & Koptjevskaja-Tamm 1992: 17–24).

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Reciprocal constructions in Russian

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1. Introduction

1.1 Russian

Russian is the most widespread Slavic language belonging (alongside closely related Ukrainian and Belorussian) to the East Slavic subgroup. Russian is the native language of 137 million (in the 1979 census) ethnic Russians in the former USSR. Besides, according to this census, almost 80 million people of other ethnic groups either claimed Russian as their first language or declared themselves to be functional in Russian (Timberlake 1993:827). The total number of Russian speaking people all over the world is considered to exceed 250 million (Plungian 1996:233).

As regards the marking of reciprocity, the East Slavic languages show great similarity, whereas there is a striking contrast between these and other Slavic languages.

1.2 Overview

In the Russian language, the meaning of reciprocity is expressed in a variety of ways both related and unrelated to reflexive markers. These include the following marking patterns:

1. Reciprocals marked by the reflexive postfix *-sja* (see Section 3); cf.:

- (1) a. *On celu-et rebenk-a.*
 he.NOM kiss.IPFV-3SG.PRES child.M-SG.ACC
 ‘He kisses a child.’
- b. *Oni celu-jut-sja.*
 they.NOM kiss.IPFV-3PL.PRES-REFL
 ‘They kiss each other.’

2. Reciprocals with complex markers composed of the reflexive postfix *-sja* and a number of affixes (see Sections 4 and 6); cf.:

- (2) *kidat* ‘to throw’ – *pere-kid-yva-t’-sja* ‘to throw sth to each other (repeatedly)’
 (3) *zvonit* ‘to ring’ – *so-zvonit’-sja* ‘to get in touch on the telephone.’

3. The autonomous reflexive pronoun *sebjja* in the collocation *meždu soboj* lit. ‘between selves’ (see Section 5); cf.:

- (4) a. *On ne razgovariva-et s brat-om.*
 he.NOM not talk.IPFV-3SG.PRES with brother.M-SG.INST
 ‘He does not talk to his brother.’
- b. *Oni ne razgovariva-jut meždu sob-oj.*
 they.NOM not talk.IPFV-3PL.PRES between self-INST
 ‘They do not talk to each other.’

4. Two non-reflexive pronominal collocations with the reciprocal meaning *drug druga* lit. ‘other other’ and *odin drugogo* ‘one another’ similar both in form and in meaning to the English *each other* and *one another* (see Section 7); cf.:

- (5) a. *On ljub-it syn-a.*
 he.NOM love.IPFV-3SG.PRES son-SG.ACC
 ‘He loves his son.’
- b. *Oni ljub-jat drug drug-a.*
 they.NOM love.IPFV-3PL.PRES each.NOM other-ACC
 ‘They love each other.’

5. The comitative-sociative prefix *so-* alone or in combination with other affixes (see Section 8); cf.:

- (6) *besedovat* ‘to converse/have a talk’ – *so-besed-nik* ‘interlocutor.’

6. The adjectives *vzaimnyj* and *obojudnyj* both meaning ‘mutual, reciprocal’ used autonomously or in compounds (see Section 9):

- (7) *pomošč* ‘assistance’ – *vzaimo-pomošč* ‘mutual assistance.’

As will be shown below, neither of these means can be regarded as a universal way of expressing reciprocity. The occurrence of each of them in a sentence has to meet certain specific conditions. Nevertheless, on the whole, Russian (in contrast to South and West Slavic languages) demonstrates absolute predominance of the pronoun *drug druga* over all other markers for reciprocity.

2. Grammatical notes

2.1 Some morphological features of Russian

Like other Slavic languages, Russian has two verbal aspects: the perfective and the imperfective. The overall tense-aspect system is rather reduced. There are five tense-aspect forms only: three for imperfective verbs; e.g. *pisat* ‘to write’, *pisa-l* (PAST), *piš-u* (PRES), *budu pisat* (FUT), and two for the corresponding perfective verbs; e.g. *napisat* ‘to write’, *napisa-l* (PAST), *napiš-u* (FUT). As regards the active/passive voice distinction, Russian uses two forms to express the passive voice depending on the verbal aspect. Imperfective passive forms are marked by the reflexive postfix while perfective passive forms are analytical being composed of the auxiliary verb *byt* ‘to be’ (in the appropriate tense and mood; omitted in the present tense) and the *-n/-t* passive participle of a main verb; cf.:

- (8) a. *Knig-a piš-et-sja.*
 book.F-SG.NOM write.IPFV-3SG.PRES-REFL
 '[The] book is being written.'
- b. *Knig-a napis-an-a.*
 book.F-SG.NOM write.PFV-PASS-F.SG
 '[The] book [is] written.'

Nouns have gender (M, F or N) and are inflected for number (SG or PL) and case.

2.2 Reflexive markers *sebja* and *-sja*

Russian has two etymologically related reflexive markers: the syntactically autonomous reflexive pronoun *sebja* and the postfix *-sja* which occupies the final position in a verb after inflexion. In terms of J. Haiman (1983:781–819), who suggested distinguishing between concurrent grammatical markers with regard to their relative physical length and degree of boundness to neighboring morphemes, these markers may be called “heavy” and “light” respectively.

The “heavy” reflexive marker *sebja* takes nominal case endings (excepting the nominative case form) but does not change for gender and number. It is nearly monosemous with the main function of marking the true reflexive sense, i.e. that of co-reference of two participants of a situation.¹ There are, however, a few exceptions provided by certain fixed collocations with *sebja* including the reciprocal collocation *meždu soboj* (see Section 5; cf. Knjazev 1998:185–93, 2001:67–77).

The invariable “light” marker *-sja*² displays a broad range of functions briefly discussed in this volume (Knjazev, Ch. 2, §4.2.1). Its general syntactic function is valency decrease that manifests various semantic changes. These include, among others, reference to reciprocal situations (Knjazev 1996).

Having taken into consideration the type of reciprocal marker and its semantic contribution to the meaning of a predicate or a sentence as a whole, one should distinguish between the variants of employment of reflexive markers in reciprocal constructions which were mentioned above in 1.2 and in the following two cases:

- deponent and “semideponent” reflexive verbs with reciprocal meaning which either lack counterparts without the reflexive marker or deviate from them semantically in an individual way;³ e.g.: *rubit'sja* ‘to fight (with cold steel)’ ← *rubit'* ‘to chop’;
- reflexive anticausative verbs derived from three-place lexical reciprocals; e.g. *ssorit'* ‘to cause sb to quarrel’ → *ssorit'sja* ‘to quarrel’.

1. A detailed analysis of reflexivization in Russian is presented in Paducheva (1985:180–209).

2. In fact, the postfix *-sja* occurs in two forms, viz. *-sja* and *-s'*, but these variants are determined morphologically: the latter is used if a stem ends in a vowel.

3. These terms influenced by Kemmer (1988) are discussed in this volume (Ch. 2, §2.1).

2.2.1 Deponent and “semideponent” reflexive verbs

As can be seen from Knjazev (Ch. 2, §§3.3.1.2, 3.3.2.3, 3.3.3), deponent and semideponent reflexive verbs with reciprocal meanings in Russian can be, on the whole, subdivided into the following three lexical groups:

1. Verbs that denote establishing, breaking off or maintenance of kinship and companionship relations; cf.:

- | | | |
|-----|---------------------|--------------------------------------|
| (9) | <i>videt'sja</i> | ‘to meet’ (lit. ‘to see each other’) |
| | <i>rasstat'sja</i> | ‘to part with each other’ |
| | <i>zdorovat'sja</i> | ‘to greet each other’ |
| | <i>proščat'sja</i> | ‘to say goodbye to each other.’ |

2. Verbs denoting various kinds of rivalry and competition; cf.:

- | | | |
|------|-----------------------|-----------------------------|
| (10) | <i>drat'sja</i> | ‘to fight’ |
| | <i>borot'sja</i> | ‘to struggle’ |
| | <i>sorevnovat'sja</i> | ‘to compete’ |
| | <i>torgovat'sja</i> | ‘to haggle over the price.’ |

3. Verbs denoting verbal communication; cf.:

- | | | |
|------|---------------------|-------------------|
| (11) | <i>uslovit'sja</i> | ‘to agree upon’ |
| | <i>soveščat'sja</i> | ‘to confer with’ |
| | <i>prepirat'sja</i> | coll. ‘to argue.’ |

2.2.2 Reflexive anticausatives

In Russian, reflexive anticausatives derived from lexical reciprocals cover, mainly, the semantic scope of joining and separating either in physical space, as in (12), (13), or in social “space”, as in (14), (15):

- | | | |
|------|--|---|
| (12) | <i>sobrat'</i> (vt) | – <i>sobrat'sja</i> (vi) ‘to collect, gather’ |
| | <i>soedinjat'</i> (vt) | – <i>soedinjat'sja</i> (vi) ‘to join, connect’ |
| | <i>raz"edinjat'</i> (vt) | – <i>raz"edinjat'sja</i> (vi) ‘to separate, disconnect’ |
| | <i>skleivat'</i> (vt) | – <i>skleivat'sja</i> (vi) ‘to glue together.’ |
| (13) | a. <i>On klei-l list-y bumag-i.</i>
he.NOM glue.PFV-M.SG.PAST sheet-PL.ACC paper.F-SG.GEN
‘He glued the sheets of paper together.’ | |
| | b. <i>List-y bumag-i klei-l-i-s'.</i>
sheet-PL.NOM paper.F-SG.GEN glue.PFV-PAST-PL-REFL
‘The sheets of paper [have] glued together.’ | |
| (14) | <i>znakomit'</i> ‘to acquaint’ | – <i>znakomit'sja</i> ‘to get acquainted’ |
| | <i>mirit'</i> ‘to reconcile’ | – <i>mirit'sja</i> ‘to get reconciled’ |
| | <i>sdužit'</i> ‘to make sb friends’ | – <i>sdužit'sja</i> ‘to become friends.’ |
| (15) | a. <i>Nas sduži-l-a nevol-ja.</i>
we.ACC make.friends.PFV-PAST-F.SG captivity.F-SG.NOM
‘Captivity made us friends.’ | |
| | b. <i>My sduži-l-i-s'.</i>
we.NOM make.friends.PFV-PAST-PL-REFL
‘We became friends.’ | |

Irrespective of the type of usage, verbs with the “light” reciprocal marker *-sja* are syntactically intransitive and occur in subject-oriented constructions only.

2.3 Affixation and verbal aspect

The perfective aspect in Slavic languages has no unequivocal markers. Generally speaking, affixation of almost any prefix or the semelfactive suffix *-nu-* on an imperfective verb (besides its possible semantic input to the meaning of the verb) automatically results in perfectivization. The interesting thing is that one of the few exceptions to the rule is the prefix *so-* employed in derivation of a productive subclass of reciprocals with the comitative-sociative meaning (see Section 8).

In its turn, the imperfective aspect is commonly distinguished either by the absence of a prefix or by the presence of the suffix *-va-* (allomorphs *-iva-*, *-yva-*, *-va-*, *-a-*). Note that simultaneous affixation of both a prefix and the suffix *-va-* to an imperfective verb does not affect its aspect. This type of derivation may be again exemplified by a subtype of reciprocals, namely, by multiplicative reciprocals derived by means of a complex formant comprised of three components: the reflexive postfix *-sja*, prefix *pere-* and imperfectivizing suffix *-(y)va-*; e.g. *šeptat'* (1PFV) ‘to whisper’ – *pere-šept-yva-t'-sja* (1PFV) ‘to whisper’ to one another’ (see Section 4).

3. Reciprocals marked by the reflexive postfix *-sja*

Verbs in which the reciprocal component is expressed by the reflexive postfix are very scanty in Russian. Short lists presented below are nearly exhaustive with the exception, however, of a few substandard or coarse verbs. They are not uniform in respect of their diathesis type.

3.1 “Canonical” reciprocals

3.1.1 *Semantic groups*

“Canonical” reciprocals derived from transitive verbs fall into the following three semantic groups.

1. Verbs referring to elementary concrete physical actions that cause or can cause damage to their objects. These actions are performed either by animals only or by both humans and animals to the same extent; there are no actions characteristic of humans only among them:

- | | |
|-----------------------------------|--|
| (16) <i>bodat'</i> ‘to butt’ (vt) | – <i>bodat'sja</i> ‘to butt each other’ |
| <i>klevat'</i> ‘to peck’ (vt) | – <i>klevat'sja</i> ‘to peck each other’ |
| <i>kusat'</i> ‘to bite’ (vt) | – <i>kusat'sja</i> ‘to bite each other’ |
| <i>ljagat'</i> ‘to kick’ (vt) | – <i>ljagat'sja</i> ‘to kick each other’ (of horses) |
| <i>pinat'</i> ‘to kick’ (vt) | – <i>pinat'sja</i> ‘to kick each other’ (of humans) |
| <i>oblivat'</i> ‘to sluice’ (vt) | – <i>oblivat'sja</i> ‘to sluice each other’ |

<i>tolkat'</i> 'to push' (vt)	– <i>tolkat'sja</i> 'to push each other'
<i>carapat'</i> 'to scratch' (vt)	– <i>carapat'sja</i> 'to scratch each other'
<i>ščipat'</i> 'to pinch' (vt)	– <i>ščipat'sja</i> 'to pinch each other.'

These verbs typically designate multidirectional unordered actions that lack a predetermined endpoint and involuntarily turn out to be reciprocal; cf.:

- (17) *Oni stoja-l-i rjadom, na tramvajn-oj ostanovk-e,*
 they.NOM stand.IPFV-PAST-PL beside at tram-F.SG.LOC stop.M-F.LOC
proxoži-e tolka-l-i-s', zadeva-l-i ix
 passer.by-SG.NOM push.IPFV-PAST-PL-REFL brush.IPFV-PAST-PL they.ACC
pleč-ami. (M. Roščin)
 shoulder-PL.INST
 'They stood side by side at the tram stop, passers-by were pushing *one another* and brush-
 ing against them with shoulders.'

2. Verbs referring to certain unfriendly actions such as:

- (18) *rugat'* 'to abuse' (vt) – *rugat'sja* 'to abuse each other'
branit' 'to scold' (vt) – *branit'sja* 'to scold each other.'

Reflexive derivatives of verbs denoting more complicated speech acts such as *proklinat'* 'to curse', *oskorbljat'* 'to insult, offend', *osuždat'* 'to condemn', etc. rule out the reciprocal reading. It is worth noting that formerly reflexive reciprocals of this semantic class were far more numerous in Russian (Knjazev & Nedjalkov 1985:23–4).

3. Verbs referring to actions that can be regarded as visible manifestations of friendly or passionate feelings; e.g.:

- (19) *obnimat'* (vt) 'to hug/embrace' – *obnimat'sja* 'to hug/embrace each other'
celovat' (vt) 'to kiss' – *celovat'sja* 'to kiss each other.'

Note that reflexive reciprocals in modern Russian cannot denote love as an emotional state or attitude, although they can easily denote various stages of "physical" love-making; cf.:

- (20) [Donat] *probira-l-sja čerez okn-o v ee*
 D.M.NOM steal.IPFV-M.SG.PAST-REFL through window-SG.ACC into her
spal'n-ju, v dvuspal'n-uju postel'. Ljubi-l-i-s'
 bedroom.F-SG.ACC into double-SG.F.ACC bed.SG.ACC love.IPFV-PAST-PL-REFL
strastno, šeptal-i-s' – govori-l-i – nenavide-l-i –
 passionately whisper.IPFV-PAST-PL-REFL talk.IPFV-PAST-PL hate.IPFV-PAST-PL
proklina-l-i. (B. Pil'njak)
 curse.IPFV-PAST-PL
 'Donat used to steal into her bedroom, into her double bed. They made love (lit. loved
each other) passionately, whispered to *each other*, talked, hated, cursed *each other*.'

Interestingly enough, a century ago there were no such restrictions, it seems. For instance, the verb *ljubit'sja* derived from *ljubit'* 'to love' could easily appear in the meaning 'to have a mutual feeling of love'; cf.:

- (21) *Svad'b-a!* *Eto poetičesk-ij* *mig* *v žizn-i*
 wedding.F-SG.NOM it poetical-M.SG.NOM moment.SG.NOM in life.F-SG.LOC
ljubj-ašč-ix-sja, *venec* *ščast'-ja.* (I. Gončarov)
 love.IPFV-ACT-PL.GEN-REFL crown.SG.NOM happiness.N-SG.GEN
 'Wedding! That is a poetical moment in the life of those loving *each other*, the crowning
 point of happiness.'

In present-day Russian, we should use *ljubjaščix drug druga* instead of *ljubj-ašč-ix-sja* in (21) to render the same meaning.

3.1.2 Polysemy of direct reflexive reciprocals. Reflexive and absolutive meanings

Russian belongs to a numerous set of languages in which both reflexive and reciprocal meanings may be expressed by the same marker. Nevertheless, in contrast to many other languages sharing this marking property, the reflexive/reciprocal polysemy of the Russian postfix *-sja* does not entail the polysemy of verbs with this marker.

In its true reflexive use, this marker appears mostly on verbs indicating body care actions, as in (22), (23), and, by way of exception, a few more complicated actions, as in (24):

- (22) *myt'* 'to wash' (vt) – *myt'sja* 'to wash oneself'
odevat' 'to dress' (vt) – *odevat'sja* 'to dress oneself'
- (23) a. *On umy-l reben-ka.*
 he.NOM wash.PFV-M.SG.PAST baby.M-SG.ACC
 'He washed the baby.'
 b. *On umy-l-sja.*
 he.NOM wash.PFV-M.SG.PAST-REFL
 'He washed [himself].'
- (24) a. *On podgotovi-l drug-a k sorevnovani-jam.*
 he.NOM prepare.PFV-PAST friend.M-SG.ACC for contest.N-PL.DAT
 'He prepared his friend for the contest.'
 b. *On podgotovi-l-sja k sorevnovani-jam.*
 he prepare.PFV-M.SG.PAST-REFL for contest.N-PL.DAT
 'He prepared himself for the contest.'

As for the Russian verbs in *-sja* indicating reciprocal situations, they are very limited in number and meaning, being restricted either to affectionate actions such as *obnimat'sja* 'to embrace each other' and *celovat'sja* 'to kiss each other', or to a number of antagonistic actions such as *tolkat'sja* 'to push each other', *rugat'sja* 'to abuse each other'. There seems to be only one point of overlapping between the two underlying verb classes, namely, the verb *oblivat'* 'to sluice' referring to an event that may be treated either as an unpleasant (unfriendly) action or as a body care action. Consequently, its reflexive counterpart *oblivat'sja*, as an exception, combines both the reciprocal and the reflexive meanings; cf.:

- (25) a. *V rečk-e tolka-l-i-s' i obliva-l-i-s'*
 in river.F-SG.LOC push.IPFV-PAST-PL-REFL and sluice.IPFV-PAST-PL-REFL
det-i.
 child.PL-NOM
 'On the river children were pushing and sluicing *each other*.'

- b. *Po utr-am on obliva-et-sja xolodn-oj*
 in morning-PL.DAT he.NOM sluice.IPFV-3SG.PRES-REFL cold-F.SG.INST
vod-oj.
 water.F-SG.INST
 'In the mornings he sluices *himself* with cold water.'

Generally speaking, within the scope of meanings subsumed under the reflexive marker, semantic contiguity of the reciprocal meaning and the true reflexive meaning seems to be the most evident. In both instances, "the set designated by the subject is the same as (co-referential to) the set designated by the object" (Langacker 1977:69), the distinction being that the reciprocal relation pairs different individuals, while in the reflexive relation the two roles are assigned to the same entity.

Russian demonstrates another possibility, viz. a direct semantic relationship between reciprocals and so-called "absolutive" ("object-deletion" or "antipassive") uses of reflexives referring to situations with two participants, agent and patient, the latter being, however, only implied. It appears that almost all Russian reflexive reciprocals allow the absolutive use as well; cf.:

- (26) a. *Posmotr-i, dv-e korov-y boda-jut-sja*
 look.PFV-IMP two-F.NOM cow-PL.NOM butt-3PL.PRES-REFL
 'Look, two cows are butting *each other*.' (reciprocal)
- b. *Bud' ostorozhen, korov-y boda-jut-sja.*
 be.IMP careful.SG.M cow-PL.NOM butt.IPFV-3PL.PRES-REFL
 'Be careful, cows butt.' (absolutive)

In absolutive uses of type (26b), the patient is understood as generic or indefinite and, in any case, as pragmatically non-prominent. Semantic contiguity of the reciprocal and the absolutive uses seems to be due to the following fact: if the patient of an action is of no importance to its agent (as it is in the case of the "absolutive" use), it may easily turn out that the set of patients is the same as the set of agents (as it is with the reciprocal proper).

An intermediate link between the two meanings may be seen in denotation of a set of multidirectional unordered actions located in a concrete temporal interval, as in (17).

It is worth noting that, in contrast to their English counterparts, reflexive reciprocals belonging to this group do not collocate with the reciprocal pronoun *drug druga* or any other explicit markers of reciprocity, e.g. the adverbial *vzaimno* 'mutually, reciprocally'. As soon as such markers are inserted in a sentence like (26a), it becomes ungrammatical.

Hence, there is no easy way to distinguish between the absolutive ("object-deletion") and the reciprocal reading of these verbs.

3.2 "Indirect" reciprocals

This group of reciprocals includes the following three verbs designating some special kinds of speech acts:

- (27) *šeptat'* 'to whisper' – *šeptat'sja* 'to talk in whispers, whisper to one another'
šušukat' 'to whisper' – *šušukat'sja* 'to talk in whispers privately or secretly'
aukat' 'to shout "a-oo"' – *aukat'sja* 'to shout "a-oo" to each other.'

The most common of them is the verb *šeptat'sja* referring to situations with an addressee coreferential with the agent. The meaning of (28a) is thus expressed explicitly by (28b), the difference being that the direct object of *šeptat'* in (28b) corresponds to the indirect object of *šeptat'sja* in (28a):

- (28) a. *Oni o čem-to šepč-ut-sja.*
 they.NOM about something.LOC whisper.IPFV-3PL.PRES-REFL
 'They are talking in whispers.'
- b. *Ona čto-to šepč-et emu, a on čto-to*
 she.NOM something.ACC whisper.IPFV-3SG.PRES he.DAT and he.NOM something
šepč-et ej.
 whisper.IPFV-3SG.PRES she.DAT
 'She is whispering something to him and he is whispering back.'

The other two pairs of verbs are not widely used and thus the diathesis correlations between their constituents are far less evident.

Other speech verbs such as *govorit'* 'to speak', *kričat'* 'to cry/shout' or *bormotat'* 'to mutter' cannot take the reflexive postfix *-sja* in the reciprocal meaning. Nevertheless, some of them serve as base verbs for derived multiplicative reflexive reciprocals (see Section 4 below).

3.3 "Possessive" reciprocals

In Russian there are two reflexive constructions which seem to share some properties of "possessive" reciprocals.

The first to be mentioned is the collocation *brat'sja* (*deržat'sja*, *xvatat'sja*) *za ruki* 'to join hands, take each other's hand' with the base transitives *brat'* 'to take', *deržat'* 'to hold', *xvatat'* 'to grasp'.⁴ Sentence (29a) can be roughly re-worded as (29b) in which two pairs of symmetric arguments, i.e. "I" – "you", "my hand" – "your hand", are expressed explicitly:

- (29) a. *Voz'm-em-sja za ruk-i, druž'-ja.*
 take.PFV-IMP-REFL at hand-PL.ACC friend-PL.NOM
 'Let's join hands, my friends.'
- b. *Ty voz'm-i mo-ju ruk-u, a ja*
 you.NOM take.PFV-IMP my-F.SG.ACC hand-F-SG.ACC and I.NOM
voz'm-u tvo-ju.
 take.PFV-1SG.FUT your-F.SG.ACC
 'Take my hand and I'll take yours.'

4. Similar reciprocal collocations recur across languages; cf. the Icelandic reflexive form in *-st* in *haldast i hendur* 'they hold hands', the Latin passive form in *copulantur dexteras* 'they shake each other's right hands' (Baldi 1974: 17) or English unmarked intransitive verbs with the reciprocal meaning like *They hold/shake hands* mentioned in Wierzbicka (1980: 258).

The partitive object *za ruki* is a semantically and syntactically obligatory actant. Its deletion or replacement by the name of another body part rules out the reciprocal reading of a sentence. Thus, a sentence like (30) is understood in the true reflexive meaning only:

- (30) *Miš-a i Griš-a svvati-l-i-s' za golov-y (za
 M.-SG.NOM and G.-SG.NOM grasp.PFV-PAST-PL-REFL at head.F-PL.ACC at
 nog -i).
 leg.F-PL.ACC
 'Misha and Grisha each grasped his own head (leg).'*

Secondly, the properties of “possessive” reciprocals seem to be characteristic of collocations with the verb *obmenivat'sja* (*menjat'sja*, *obmenjat'sja*) ‘to exchange’ mentioned in this volume (Knjazev, Ch. 2, §3.2.2.3.). They refer to a symmetric situation in which there are two pairs of participants: (a) a recipient co-referential with the agent and (b) possessed entities changing their possessors; cf.:

- (31) *Miš-a s Griš-ej obmenja-l-i-s' fotografi-jami.
 M.-SG.NOM with G.-SG.INST exchange.PFV-PAST-PL-REFL photo-PL.INST
 'Misha and Grisha exchanged photos.'*

The meaning of this sentence can be rendered by a combination of two sentences with the non-reflexive base verb *obmenjat'* ‘to give and receive in return’:

- (32) a. *Miš-a obmenja-l svo-ju fotografi-ju na
 M.-SG.NOM exchange.PFV-PAST OWN-F.SG.ACC photo.F-SG.ACC for
 Griš-in-u.
 G.-POSS-F.SG.ACC
 'Misha exchanged his photo for Grisha's one.'*
- b. *Griš-a obmenja-l svo-ju fotografi-ju na
 G.-SG.NOM exchange.PFV-PAST OWN-F.SG.ACC photo.F-SG.ACC for
 Miš-in-u.
 M.-POSS-F.SG.ACC
 'Grisha exchanged his photo for Misha's.'*

The Russian non-reflexive verb *obmenjat'*, unlike its nearest English counterpart *to exchange*, does not permit overt designation of the second possessor and, besides, the names of possessed entities are not interchangeable. Thus there are no arguments linked by the symmetric relation in constructions such as (32).

The verb *obmenivat'sja* ‘to exchange’ easily combines with abstract nouns, too. Such collocations appear to be similar in meaning to corresponding reciprocal constructions of various diathesis types; cf.:

- (33) a. *Oni obmenja-l-i-s' pocelu-jami.
 they.NOM exchange.PFV-PAST-PL-REFL kiss-PL.INST
 lit. 'They exchanged kisses.'*
- b. *Oni pocelova-l-i drug drug-a
 they.NOM kiss.PFV-PAST-PL each.NOM other-ACC
 'They kissed each other.'*

- (34) a. *Oni obmenja-l-i-s' ulybk-ami.*
 they.NOM exchange.PFV-PAST-PL-REFL smile-PL.INST
 lit. 'They exchanged smiles.'
- b. *Oni ulybnu-l-i-s' drug drug-u.*
 they.NOM smile.PFV-PAST-PL-REFL each-NOM other-DAT
 'They smiled at each other.'
- (35) a. *Oni obmenja-l-i-s' podark-ami.*
 they.NOM exchange.PFV-PAST-PL-REFL present-PL.INST
 lit. 'They exchanged presents.'
- b. *Oni sdela-l-i drug drug-u podark-i.*
 they.NOM make.PFV-PAST-PL each other-DAT present-PL.ACC
 'They gave presents to each other.'

4. Multiplicative reciprocals marked by the confix *pere...-sja*

4.1 General characteristics

The term "multiplicative reciprocals" refers to a group of reflexive reciprocals (mentioned in 2.3) which are formed with the help a complex marker composed, apart from the reflexive postfix *-sja*, of the prefix *pere-* and the suffix *-(y)va-*; cf.:

- (36) *gljadet'* 'to look' – *pere-gljad-yva-t'-sja* 'to exchange glances.'

Derived multiplicative reciprocals designate actions composed of an indefinite number of uniform (micro)actions associated with (at least) two participants, each playing two roles in the event: each participant is both an agent of the (micro)action and also its addressee.⁵ These derivatives, thus, combine the reciprocal and the multiplicative meanings; cf.:

- (37) *Soldat-y korotko pere-govar-iva-l-i-s'.*
 soldier-PL.NOM briefly PREF-speak-IPFV-PAST-PL-REFL
 'The soldiers were exchanging brief remarks.'

As for the input of the prefix *pere-* in the meaning of multiplicative reciprocals, it should be noted that there are some similarities between the latter and the other two meanings: (a) the basic spatial meaning of the prefix *pere-*, which is to signal a change of position in space, e.g. *brošit'* 'to throw' – *pere-brošit'* 'to throw over sth' and (b) the distributive meaning, when an action is presented as a single whole but with an internal structuring, i.e. it either affects several objects one after another or is performed by several agents one after another. The meanings of reciprocity and distributiveness easily combine with each other; cf.:

5. Multiplicative reciprocals are a subtype of a wider class of Russian grammatical multiplicatives with complex formants comprised of various prefixes (*po-*, *na-*, *vy-*, etc.) and the suffix *-va-*. These verbs express the multiplicative meaning accompanied by a number of additional semantic features (see Knjazev 1989b: 134–5). The reflexive postfix *-sja* takes part in derivation of multiplicative reciprocals only.

- (38) *Pap-a pere-celova-l nas tro-ix, potom*
 daddy-SG.NOM DISTR-kiss-PAST.SG.M WE.ACC three-GEN then
objna-l mam-u. (V. Belov)
 embrace.PFV-PAST.SG.M mummy-SG.ACC
 ‘Daddy kissed the three of us and then hugged mummy.’

4.2 Diathesis types

In Russian there are about 20 reciprocals of this type. Verbs which permit derivation of multiplicative reciprocals are varied both in syntax and semantics. They are:

(a) Transitive verbs:

- (39) *branit’* ‘to scold’ – *pere-bran-iva-t’-sja* ‘to squabble’
brostat’ ‘to throw’ – *pere-bras-yva-t’-sja* ‘to throw to one another repeatedly’
govorit’ ‘to speak’ – *pere-govar-iva-t’-sja* ‘to exchange words’
kidat’ ‘to throw’ – *pere-kid-yva-t’-sja* ‘to throw to one another’
kričat’ ‘to shout’ – *pere-krik-iva-t’-sja* ‘to shout to one another’
pisat’ ‘to write’ – *pere-pis-yva-t’-sja* ‘to exchange letters’
rugat’ ‘to abuse’ – *pere-rug-iva-t’-sja* ‘to hurl abuse at each other.’

(b) Intransitive two-place verbs:

- (40) *gljadet’* ‘to look’ – *pere-gljad-yva-t’-sja* ‘to exchange glances’
šeptat’ ‘to whisper’ – *pere-šept-yva-t’-sja* ‘to whisper to each other’
zvonit’ ‘to phone’ – *pere-zvan-iva-t’-sja* ‘to phone each other from time to time’
migat’ ‘to wink’ – *pere-mig-iva-t’-sja* ‘to exchange winks’
streljat’ ‘to fire’ – *pere-strel-iva-t’-sja* ‘to exchange fire’
stučat’ ‘to tap’ – *pere-stuk-iva-t’-sja* ‘to communicate by tapping’
svistet’ ‘to whistle’ – *pere-svist-yva-t’-sja* ‘to whistle to each other.’

(c) Intransitive one-place verbs:

- (41) *smejat’sja* ‘to laugh’ – *pere-sme-iva-t’-sja* ‘to glance at each other and chuckle’
šutit’ ‘joke’ – *pere-šuč-iva-t’-sja* ‘to exchange jokes.’

From the lists presented above it can be seen that derived multiplicative reciprocals undoubtedly imply the presence of an addressee and convey the idea of an exchange of things or information.

Taking into account the correlations between the arguments of multiplicative reciprocals (which turn out to be cross-coreferential) and of their base verbs, we may regard reciprocals of groups (b) and (c) as indirect reciprocals; cf.:

- (42) a. *On často zvon-it podrug-e.*
 he.NOM often phone.IPFV-3SG.PRES girl-friend.F-SG.DAT
 ‘He often phones his girl-friend.’
 b. *Oni často pere-zvan-iva-jut-sja.*
 they.NOM often PREF-phone-IPFV-3PL.PRES-REFL
 ‘They often phone up *each other*.’

As for group (a), it includes both indirect, as in (37), and direct reciprocals, as in (43):

- (43) a. *Ona bran-it sosed-a.*
 she.NOM scold.IPFV-3SG.PRES neighbour.M-SG.ACC
 ‘She is scolding her neighbour.’
- b. *Ona pere-bran-iva-et-sja s sosed-om.*
 she PREF-SCOLD-IPFV-3SG.PRES-REFL with neighbour-SG.INST
 ‘She is squabbling with her neighbour.’

4.3 Comparison with other multiplicatives

Multiplicative reciprocals may be subdivided into two groups: (a) those derived from lexical multiplicatives, e.g. *stučat* ‘to tap’ – *perestukivat’sja* ‘to communicate by tapping’, and (b) those in whose meaning the multiplicative semantic component is gained due to the change of roles between the participants, e.g. *gljadet* ‘to look’ – *peregljadyvat’sja* ‘to exchange glances repeatedly’, *šutit* ‘to joke’ – *perešučivat’sja* ‘to exchange jokes’. Almost all multiplicative reciprocals (as is characteristic of multiplicatives in general) refer to easily perceptible situations that take place at relatively narrow temporal intervals. An exception are the verbs *perepisyvat’sja* ‘to exchange letters’ and *perezvanivat’sja* ‘to phone each other from time to time’ referring to habitual actions over an extended period of time.

An overwhelming majority of underived lexical multiplicatives in Russian (including those of the type *migat*’ or *stučat*’, which permit derivation of multiplicative reciprocals) have semelfactive counterparts with the suffix *-nu-* referring to a single event:

- (44) a. *mig-a-t’* ‘to wink (repeatedly)’ – b. *mig-nu-t’* ‘to wink (once).’

As well as underived multiplicatives, some multiplicative reciprocals may also have counterparts with the suffix *-nu-*; e.g.:

- (45) a. *peremig-iva-t’sja* ‘to wink at each other (repeatedly)’
 b. *peremig-nu-t’sja* ‘to wink at each other (once).’

The verb under (45a) refers to a temporally unrestricted sequential interchange of winks while the verb under (45b) refers to a single interchange. Consequently, the meaning of (46a) with the semelfactive reciprocal verb is semantically equivalent to the pair of sentences (b) and (c) containing non-reciprocal semelfactive verbs:

- (46) a. *On pere-mig-nu-l-sja s sosed-om.*
 he PREF-wink-PFV-PAST-REFL with neighbour-SG.INST
 lit. ‘He exchanged winks his neighbour.’
- b. *On mig-nu-l sosed-u.*
 he wink-PFV-SG.M.PAST neighbour.M-SG.DAT
 ‘He winked at his neighbour.’
- c. *Sosed mig-nu-l emu.*
 neighbour.M.SG.NOM wink-PFV-SG.M.PAST he.DAT
 ‘His neighbour winked at him.’

Since the suffix *-va-* is, in principle, a replaceable constituent part of this complex formant and is often interchangeable with the semelfactive suffix *-nu-*, derivation of these verbs may be seen as a two-stage process: the combination *pere-...-sja* contributes the reciprocal

component of their meaning while the suffix (*-va-* or *-nu-*) adds either the multiplicative or semelfactive aspectual component.

4.4 Comparison with other reflexive reciprocals

It is worth noting that multiplicative reciprocals unequivocally express the reciprocal meaning only, whereas reciprocals marked by the reflexive postfix alone easily appear in the absolutive use (see 3.1.2).

Thus sentence (47) with a plain reflexive reciprocal permits two readings depending on whether the carpenters are both agents and patients of abusing (reciprocal reading) or they serve as patients only (anti-accusative “object-demotion” reading); cf.:

- (47) *On ruga-l-sja s plotnik-ami.*
 he.NOM swear.IPFV-PAST-REFL with carpenter-PL.INST
 i. ‘He and the carpenters were swearing at *each other*’ (reciprocal)
 ii. ‘He was swearing at the carpenters’ (deaccusative)

Meanwhile, the only possible interpretation for (48) with the corresponding derived multiplicative reciprocal is reciprocal:

- (48) *On pere-rug-iva-l-sja s plotnik-ami.*
 he PREF-SWEAR-IPFV-PAST-REFL with carpenter-PL.INST
 ‘He and the carpenters were swearing at *each other*.’
 or: ‘He exchanged abuses with the carpenters.’

5. The reflexive pronoun *sebjja* in the reciprocal collocation *meždu soboj* lit. ‘between selves’

The autonomous (“heavy”) reflexive pronoun *sebjja* ‘oneself’ is only used to signal reciprocity in the fixed collocation *meždu soboj* lit. ‘between [our-/your-/them]selves’ and in its shortened form *mež soboj*. It should be noted that similar collocations repeatedly occur across languages and that the preposition *meždu* ‘between’ in itself is a lexical reciprocal (this vol., Ch 2, §3.2.2.2).

In comparison with the reciprocal pronoun *drug druga* (see Section 7 below), the collocation *meždu soboj* displays a number of peculiarities. There are several notable distinctions between them.

5.1 Type of reciprocal construction

The pronoun *drug druga* ‘each other’ is not compatible with predicates that occur in simple reciprocal constructions only, such as *različat’* ‘to distinguish’ (vt), *raz”edinjat’* ‘to disconnect’ (vt), *razdeljat’* ‘to divide’ (vt) and their reflexive anticausative counterparts *različat’ sja* ‘to distinguish’ (vi), *raz”edinjat’ sja* ‘to disconnect’ (vi), *razdeljat’ sja* ‘to divide’ (vi) (see also 7.1.3). The collocation *meždu soboj* does not share this feature. Its occur-

rence, on the opposite, tends to be confined to predicates allowed in simple reciprocal constructions.

As a consequence, the collocation *mež soboj* in the following fragment of Pushkin's "Jevgenij Onegin" is not interchangeable with *drug druga*:

- (49) a. *Voln-a i kamen', stix-i i proz-a,*
 wave.F-SG.NOM and stone.M.SG.NOM verse-PL.NOM and prose.F-SG.NOM
led i plamen' ne stol' različn-y mež sob-oj.
 ice.M.SG.NOM and fire.M.SG.NOM not so different-PL between self-INST
 lit. 'Wave and stone, verse and prose, ice and fire are not so different between themselves.'
- b. ... **različn-y drug ot drug-a.*
 different-PL each from other-GEN
 lit. '... *different from each other.'

And on the contrary, the verbs *otličat'* 'to distinguish' (vt) and *otličat'sja* 'to differ from' (vi) that are used in discontinuous reciprocal constructions only do not permit *meždu soboj* instead of *drug druga*, as in the following example (see also Knjazev, Ch 2, §4.1.3.):

- (50) *On ne otliča-et zolot-o i med' drug*
 he.NOM not distinguish.IPFV-3SG.PRES gold.N-SG.ACC and copper.F.SG.ACC each
ot drug-a.
 from other-GEN
 lit. 'He does not distinguish gold and copper from each other.'

Predicates which can be used in reciprocal constructions of both types are compatible with both pronominal reciprocal collocations; cf.:

- (51) *Oni poxož-i drug na drug-a (= meždu sob-oj).*
 they.NOM similar-PL each at other-ACC between self-INST
 lit. 'They look like each other.'

5.2 Meaning of the predicate

It seems that the occurrence of *meždu soboj* is mostly, if not always, confined to lexical reciprocals and their derivatives (see Yomdin 1981:103–4). Sentences (49) and (51) contain lexical reciprocals; sentence (52) allows inclusion of either the plain reflexive reciprocal *rugat'sja* 'to abuse each other' (see 3.1.1) or the reflexive anticausative *ssorit'sja* 'to quarrel' derived from the lexical reciprocal *ssorit'* 'to cause sb to quarrel' which is used in (53).

- (52) *Oni postojanno ruga-jut-sja i ssor-jat-sja*
 they.NOM always abuse.IPFV-3PL.PRES-REFL and quarrel.IPFV-3PL.PRES-REFL
meždu sob-oj.
 between self-INST
 'They are always swearing and quarrelling between themselves.'
- (53) *Ix peressori-l-i meždu sob-oj.*
 they.ACC make.quarrel.PFV-PAST-PL between self-INST
 'They were set at variance between themselves.'

These examples show, also, that *meždu soboj* occurs both in subject-oriented and object-oriented reciprocal constructions.

It seems reasonable to assume that the primary function of the collocation *meždu soboj* is to fill up the syntactic position of the second participant of a reciprocal situation described and thus to indicate that there are no other implied uncoded participants. In fact, the collocation *meždu soboj* is sometimes employed to emphasize this sense as opposed to “with someone else”; cf.:

- (54) *Kazaxsk-ij jazyk sta-l gosudarstvenn-ym, no*
 K.-M.SG.NOM language.SG.NOM become.PFV-SG.PAST state-SG.INST but
kazax-i, živ-ušč-ie v gorod-e, počti vs-e daže
 Kazakh-PL.NOM live.IPFV-ACT-PL.NOM in town.M-SG.LOC almost all-PL.NOM even
meždu sob-oj gov-or-jat po-russki. (Argumenty i fakty, 1996, 3)
 between self-INST speak.IPFV-3PL.PRES Russian
 ‘The Kazakh language has become the state language but almost all Kazakhs living in towns speak Russian to each other’ (lit. ‘between themselves’).

In this case, semantic restrictions on the use of *meždu soboj* seem to be somewhat less rigid: the verb *govorit* ‘to speak’, in contrast to *razgovarivat* ‘to talk’ can hardly be regarded as a lexical reciprocal.

5.3 Number of participants

The use of *meždu soboj* is sensitive to the number of participants of a reciprocal situation. Generally speaking, this collocation can refer to situations associated with both two participants and multiple participants; cf.:

- (55) a. *Et-i dv-a ugl-a ravn-y meždu sob-oj.*
 this-PL.NOM two-M.PL.NOM angle-SG.GEN equal-PL.NOM between self-INST
 ‘These two angles are equal to each other.’
 b. *Vs-e prjam-ye ugl-y ravn-y meždu sob-oj.*
 all-PL.NOM right-PL.NOM angle.M-PL.NOM equal-PL.NOM between self-INST
 ‘All right angles are equal to each other’ (lit. ‘between themselves’).

If, however, the predicate is predisposed to denote situations with only two participants, its co-occurrence with *meždu soboj* apparently turns out to be awkward; cf.:

- (56) **Oni pocelova-l-i-s’ (poznakomi-l-i-s’, poženi-l-i-s’)*
 they.NOM kiss.PFV-PAST-PL-REFL acquaint.PFV-PAST-PL-REFL marry.PFV-PAST-PL-REFL
meždu soboj.
 between self-INST
 lit. ‘*They kissed (got acquainted, married) between themselves.’

Elimination of such quantitative restrictions (for example, by virtue of the addition of a distributive sense) would make these combinations quite possible; cf.:

- (57) *Oni vs-e pere-celova-l-i-s' (pere-znakomi-l-i-s',*
 they.NOM all-PL.NOM DISTR-KISS-PAST-PL-REFL DISTR-acquaint-PAST-PL-REFL
pere-ženi-l-i-s') *među soboj.*
 DISTR-marry-PAST-PL-REFL between self-INST
 'They all kissed (got acquainted, intermarried) *between themselves*.'

6. Verbs of joining and separating

6.1 General characteristics

The meanings of joining and separating are inherently reciprocal and are expressed, in the first place, by a number of lexical reciprocals (see Knjazev, Ch. 2, §3.2.1.). Besides, in Russian (like in all other Slavic languages) there exist two antonymous prefixes *s-* (*so-*) and *raz-* (*razo-*, *ras-*) whose primary function is to indicate these two meanings, respectively. A distinctive feature of prefixed verbs of joining and separating is that their marking pattern depends on whether the base verb is transitive or not. Intransitive verbs take the prefix combined with the reflexive postfix *-sja*, while transitive verbs take the prefix without *-sja* and retain their transitivity; cf.:

- (58) a. *polzti* (vi) 'to crawl'
 → i. *s-polzti-s'* (vi) 'crawl to one point from different points'
 → ii. *ras-polzti-s'* (vi) 'to crawl away from one point in many directions.'
 b. *gnat'* (vt) 'to drive'
 → i. *so-gnat'* (vt) 'to drive to one point from different points'
 → ii. *razo-gnat'* (vt) 'to drive away from one point in many directions.'

Other prefixes, for example *vy-* 'out', do not cause such an effect; cf.:

- (59) a. *polzti* (vi) 'to crawl' – *vy-polzti* (vi) 'to crawl out'
 b. *gnat'* (vt) 'to drive away' – *vy-gnat'* (vt) 'to turn out.'

6.2 Spatial joining and separating

Derived prefixed verbs designating spatial joining and separating occur in two semantic subtypes.

6.2.1 "Free" ("non-fixed") adjoining

This is a label denoting the subtype of joining or separating in which the participants retain their autonomy; cf.:

- (60) a. *Polici-ja razo-gna-l-a tolp-u.*
 police-SG.NOM DVRS-drive-PAST-F.SG crowd.F-SG.ACC
 'The police dispersed the crowd.'

- b. *Vorob'-i s-leta-l-i-s' sjuda každyj večer.*
 sparrow-PL.NOM CISL-fly.IPFV-PAST-PL-REFL here every-M.SG.ACC
 evening.M.SG.ACC
 'Sparrows used to gather here every evening.'

These verbs denote situations associated with indefinitely multiple participants and thus are hardly compatible with the enumeration or exact numerical specification. This is illustrated by ungrammaticality of (61b) in contrast to the quite acceptable (61a):

- (61) a. *On raz-brosa-l igrušk-i.*
 he.NOM DVRS-throw-M.SG.PAST toy-PL.ACC
 'He scattered the toys.'
 b. [?]*On raz-brosa-l pjat' igrušek.*
 he.NOM DVRS-throw-PAST five toy.PL.GEN
 lit. 'He scattered five toys.'

6.2.2 "Fixed" adjoining

This is the case of correlations such as given below where (62) contains transitive verbs:

- (62) *kovat'* 'to forge' (vt) → i. *s-kovat'* 'to forge together' (vt)
 → ii. *ras-kovat'* 'to unforge' (vt)
plesti 'to weave' (vt) → i. *s-plesti* 'to weave together' (vt)
 → ii. *ras-plesti* 'to unweave' (vt)
kleit' 'to glue, stick' (vt) → i. *s-kleit'* 'to glue/stick together' (vt)
 → ii. *ras-kleit'* 'to unstick' (vt)

and (63) includes intransitives:

- (63) *rasti* 'to grow' (vi) → *s-rasti-s'* 'to grow into one' (vi)
merznut' 'to freeze' (vi) → *s-merznut'-sja* 'to freeze into a lump' (vi).

Strictly speaking, what these verbs signal is not simply a movement but rather a physical action accompanied by movement resulting in fixed and stable joining of entities or in breaking off of the latter. Unlike the previous group, they are typically associated with two participants that easily permit enumeration; cf.:

- (64) *Et-i dv-a derev-a s-ros-l-i-s'.*
 these two-N.NOM tree.N-SG.GEN CISL-grow-PAST-PL-REFL
 'These two trees have grown into one.'

As is shown in this volume (Knjazev, Ch. 2, §3.2.1), the prefixes *s-* and *raz-* are commonly attached to verbs that designate spatial joining and separating by themselves. Prefixed forms of these verbs, in which the meaning of a prefix parallels the sense of the base verb are far more commonly used than prefixless ones; cf.:

- (65) a. *vjazat'* (IPFV) 'to tie/bind' → *s-vjazat'* (PFV) → *s-vjaz-yva-t'* (PFV) 'to tie/bind together'
 b. *mešat'* (IPFV) 'to mix' → *s-mešat'* (PFV) → *s-meš-iva-t'* (IPFV) 'to mix together'
 c. *delit'* (IPFV) 'to divide' → *raz-delit'* (PFV) → *raz-del-ja-t'* (IPFV) 'to divide up.'

It should be added that a number of widely used verbs either lack prefixless counterparts or diverge from them in meaning (Ch. 2, §3.2.1.3).

6.3 Inter-personal relations

Russian also has a specific group of verbs derived by means of the confix *s-...-sja* and referring to certain kinds of interpersonal relations implying achievement of mutual consent; cf.:

- | | | | |
|------|---------------------------|---|--|
| (66) | <i>govorit'</i> 'to talk' | → | <i>s-govorit'-sja</i> 'to reach an understanding by talking' |
| | <i>zvonit'</i> 'to phone' | → | <i>so-zvonit'-sja</i> 'to get in touch over the telephone' |
| | <i>pisat'</i> 'to write' | → | <i>s-pisat'-sja</i> 'to get in touch by correspondence' |
| | <i>rabotat'</i> 'to work' | → | <i>s-rabotat'-sja</i> 'to achieve harmony in joint work' |
| | <i>igrat'</i> 'to play' | → | <i>s-ygrat'-sja</i> 'to make a good ensemble' |
| | <i>pet'</i> 'to sing' | → | <i>s-pet'-sja</i> 'to achieve harmony in singing together.' |

- (67) *My sume-l-i s-pisa-t'-sja, so-zvoni-t'-sja i*
 we.NOM manage.PFV-PAST-PL CISEL-write-INF-REFL CISEL-phone-INF-REFL and
reši-l-i sobra-t'-sja u nas na Issyk-Kul-e. (Č. Ajtmatov)
 decide-PAST-PL gather-INF-REFL at we.LOC on I.-K.-SG.LOC
 'We managed to *get in touch by correspondence and phone* and decided to gather at our place at the Issyk-Kul.'

What these verbs denote is a complex joint activity of a number of persons resulting in establishing or keeping up their contacts. It is worth noting that the most abstract verbs of motion, viz. *sojtis'* 'to come to one point from various points' and *razojtis'* 'to go away from one point in various directions, disperse', follow this metaphorical pattern, too (see Knjazev, Ch 2, §§3.1.1.1, 3.3.1.1). In addition to the cases demonstrated for lexical reciprocals, the following line from a song may be cited in which the verb *razojtis'* is used in both senses:

- (68) *My razo-š-l-i-s', kak v mor-e korabl-i.*
 we DVRS-go-PAST-PL-REFL as in sea.N-SG.LOC ship.M-PL.NOM
 'We have parted *from each other* like ships at sea.'

6.4 Relationship with reflexive anticausatives

By virtue of the additional marking of derivatives from intransitive verbs by the reflexive postfix *-sja*, one would not hesitate to distinguish between verbs derived from transitives and from intransitives. Nevertheless, it is not always easy to draw a borderline between them. This is due to the fact that transitive causative verbs of joining and separating themselves easily attach the reflexive postfix functioning in that case as an anticausative (or autocausative) marker; cf.:

- | | | | |
|------|--|---|--|
| (69) | <i>s-plesti</i> (vt) 'to weave <i>together</i> ' | → | <i>s-plesti-s'</i> (vi) 'to become interwoven' |
| | <i>s-tolknut'</i> (vt) 'to bring into contact' | → | <i>s-tolknut'-sja</i> (vi) 'to collide' |
| | <i>raz-vjazat'</i> (vt) 'to untie/undo' | → | <i>raz-vjazat'-sja</i> (vi) 'to come undone.' |

Since in derivatives in *-sja* such as these the causative component in the meaning of the base verb is eliminated or somehow altered (Knjazev, Ch. 2, §4.2.1.1), they turn out to be very close semantically to the verbs of joining and separating derived immediately from intransitive verbs by attaching a complex marker containing *-sja*. Both types of derivatives may be used to designate the same situation as in the following example where *sobrat'sja* 'to gather/assemble' (vi) is the intransitive reflexive counterpart to the transitive verb *sobrat* 'to gather/assemble (vt)' whereas *s'exat'sja* is derived by adding the complex marker *s-...-sja* to the intransitive verb *exat* 'to come/go (by conveyance)'; cf.:

- (70) *V izb-e sobra-l-i-s' bratc-y,*
 in cottage.F-SG.LOC gather.PFV-PAST-PL-REFL brother-PL.NOM
s'exa-l-i-s' s xutor-ov. (B. Pil'njak)
 CISL-go.PFV-PAST-PL-REFL from farmstead-PL.GEN
 'Brothers have gathered in the cottage, they have come *together* from their farmsteads.'

6.5 Relationship with reciprocals and sociatives

The position of verbs of joining and separating following this marking pattern with respect to reciprocals and sociatives is far from being clear. Mrázek (1988: 115) regards them as a peculiar sort of reciprocity going over to denoting collective actions, whereas Sheljakin (1991: 322) unreservedly calls them a particular variant of reflexive reciprocals.

Without getting into a discussion of the borderline between reciprocal and collective (sociative) situations, I shall proceed from Kemmer's (1988: 133) proposal according to which the most important difference between the two is that "the two roles played by each participant in the collective event are both Initiator roles: each participant is an Agent and also a "companion" of the other participant (or participants, in the case of the collective). None of the participants serve as an Endpoint; thus affectedness is not relevant as it is with situation types falling under the reciprocal proper".⁶

From this point of view, the verbs of joining and separating denoting spatial relatedness should be regarded as collective (sociative) predicates, while those denoting interpersonal relations appear as reciprocals proper.

We may, therefore, assume that the reflexive verbs of joining and separating demonstrate an exceptional case of a marker morphologically related to reflexives which is used to designate both reciprocal and collective situations.

These verbs, besides (or may be in the first place), are involved in the area of verbal plurality (see Dressler 1968), being the means of expression of diversative and cislocative situations similar to distributive situations (Xrakovskij 1989: 34–40; Knjazev 1989b: 137–8). The two meanings are repeatedly combined in a sentence; cf.:

6. Kemmer (1988: 58–65) uses the terms Initiator and Endpoint as generalizations over the cases of Agent-Patient and Experiencer-Stimulus co-reference in both cases of two-participant relations.

- (71) *Mužik-i po-raz”exa-l-i-s’, kto v Novosibirsk,*
 peasant-SG.NOM DISTR-DVRS-go-PAST-PL-REFL who.NOM to Novosibirsk.ACC
kto v Kuzneck, kto v Prokop’evsk. (I. Erenburg)
 who.NOM to Kuzneck.ACC who.NOM to Prokop’evsk.ACC
 ‘The peasants went away, some to Novosibirsk, some to Kuzneck, others to Prokopjevsk.’

7. Reciprocal pronouns *drug druga* ‘each other’ and *odin drugogo* ‘one another’

In Russian, there are two pronominal collocations functioning as anaphoric reciprocal pronouns, viz. *drug druga* lit. ‘other [the] other’ and *odin drugogo* lit. ‘one another’ (see Buslaev 1958 (1881):400–2; Roslovec 1964:179–89; Janko-Trinickaja 1975:68–71). The latter is far less common than the former.

7.1 The pronoun *drug druga* ‘each other’

The anaphoric reciprocal pronoun *drug druga* is the main and, in most cases, the only possible way of signalling the reciprocal reading of a sentence. It is employed as an indivisible collocation whose elements coincide with the case forms of the word *drug* ‘friend’ but are traced historically (just as the latter noun itself) to the so called “short” forms of the adjectival pronoun *drugoj* ‘other, another’ which have gradually fallen out of use. Native speakers of Russian interpret this collocation as a reduplication of the noun *drug* ‘friend’.

This pronoun has oblique case forms concurring with those of the word *drug* ‘friend’ but lacks the nominative case form and all plural forms being in this respect similar to the reflexive pronoun *sebjā* (see Section 3.1.); cf. *drug druga-a* (ACC) in (5), (21), (31), *drug druga-u* (DAT) in (34), (35), (72), *drug drugom* (INST) in (31), *drug o druga-e* (LOC) in (73).

- (72) a. *On pomoga-et syn-u.*
 he.NOM help.IPFV-3SG.PRES SON.M-SG.DAT
 ‘He helps his son.’
 b. *Oni pomoga-jut drug druga-u*
 they.NOM help.IPFV-3PL.PRES each other-DAT
 ‘They help *each other*.’
- (73) a. *On дума-et tol’ko o seb-e.*
 he.NOM think.IPFV-3SG.PRES only of self-LOC
 ‘He thinks only of himself.’
 b. *Oni vseгда дума-jut drug o druga-e.*
 they.NOM always think.IPFV-3SG.PRES each of other-LOC
 ‘They always think *of each other*.’
- (74) a. *On доволен svo-im syn-om.*
 he.NOM pleased.SG.M OWN-M.SG.INST SON-SG.INST
 ‘He is pleased with his son.’
 b. *Oni доволен-y drug drug-om.*
 they.NOM pleased-PL each other-INST
 ‘They are pleased *with each other*.’

These examples show that, firstly, both the preposition and the case inflexion are attached to the second part of the collocation, while its first part remains invariable, and, besides, the form of the pronoun *drug druga* duplicates the form which would be assumed by the object naming the second participant of the relationship described.

It should be added that in informal speech there occurs an expressive form of the reciprocal pronoun with the suffix *-k-* used to derive diminutive or hypocoristic nouns (e.g. *svin'ja* 'pig' – *svin-k-a* 'piggy'), which confirms the re-interpretation of the collocation as a denominal derivative from the noun *drug* 'friend'; cf.;

- (75) *Vne detdom-a oni vseгда prixod-jat drug druž-k-e na*
 outside orphanage-SG.GEN they.NOM always come-3PL.PRES each other-DIM-DAT to
pomošč. (V. Šefner)
 aid.F.SG.ACC
 'Outside the orphanage, they always come to *each other's* aid.'

This form in *-k-* is only employed in the reciprocal pronoun. The noun *drug* assumes a slightly different diminutive form: *družok* (NOM), *družku* (DAT), etc. (cf., however, *druž-k-a* 'best man' (at a traditional wedding)).

7.1.1 Diathesis types

There seem to be no restrictions on occurrence of the pronoun *drug druga* in reciprocal constructions of various diathesis types. It can be used in reciprocal constructions of all the basic types. They may be both subject-oriented, as in the examples given above, and object-oriented, as in (76):

- (76) a. *On postavi-l jaščik na pol.*
 he put.PFV-3SG.PAST box.M.SG.ACC on floor.SG.ACC
 'He put the box on the floor.'
 b. *On postavi-l jaščik-i drug na drug-a.*
 he put.PFV-3SG.PAST box.M-PL.ACC each on other-ACC
 'He put the boxes *one upon another*.'

Subject-oriented reciprocal constructions with the pronoun *drug druga* may be either of the direct ("canonical") type, as in (5), or of the indirect ("indirect") type, as in (72)–(75), depending on whether the second cross-coreferential actant is a direct or an indirect object.

The pronoun *drug druga* also occurs in "possessive" reciprocal constructions to describe situations in which there are two pairs of arguments cross-coreferential to each other: (a) a subject and an object, the latter covering the roles of patient, recipient or beneficiary; and (b) two "possessed" entities (in the broad sense), which may be regarded as inalienable or alienable property, i.e. body parts, something in contact with or on its "possessor", etc. "Possessive" reciprocal constructions can also be subdivided into the direct and indirect subtypes on the same grounds as simple subject-oriented constructions, cf. (77) and (78) respectively:

- (77) *Oni podelova-l-i-s', a potom kartinn-o, krest-nakrest podelova-l-i*
 they kiss.PFV-PAST-PL-REFL and then picture-ADV cross-wise kiss.PFV-PAST-PL
drug drug-u ruk-i. (V. Kaverin)
 each other-DAT hand-PL.ACC
 'They kissed *each other* and then kissed *each other's* hands like in a picture.'
- (78) *Gost-i, stara-ja-s' ne tolka-t'-sja i ne nastupi-t' drug*
 guest-PL.NOM try-CONV-REFL not push-INF-REFL and not tread.PFV-INF each
drug-u na nog-i, speš-at v stolovu-ju. (A. Čexov)
 other-DAT on foot-PL.ACC hurry-3PL.PRES to dining-room-SG.ACC
 'The guests hurry into the dining-room, trying not to push *one another* and not to tread
 on *each other's* toes.'

7.1.2 The pronoun *drug druga* 'each other' in deagentive constructions

The term "deagentive constructions" was introduced by Grepl (1973: 143) to refer to constructions of which the common syntactic feature is the removal (deletion or demotion) of the surface subject resulting either in a number of subjectless constructions or in passive constructions. The pronoun *drug druga* occurs in subjectless constructions of all types characteristic of Russian,⁷ i.e. impersonal, as in (79), "indefinite-personal" as in (80), and "generalized-personal", as in (81):

- (79) a. *Mne xorošo s nim.*
 I.DAT well with he.INST
 'I am happy with him.'
- b. *Im xorošo drug s drug-om.*
 they-DAT well each with other-INST
 'They are happy with *each other*.'
- (80) a. *Ego obmanyva-jut.*
 he.ACC deceive.IPFV-3.PL.PRES
 lit. '[They] are deceiving him.'
- b. *Neprijatno, kogda drug drug-a obmanyva-jut.*
 unpleasant when each other-ACC deceive.IPFV-3PL.PRES
 lit. 'It is unpleasant when [people] deceive *each other*.'
- (81) a. *On mne nra-v-it-sja.*
 he.NOM I.DAT like.IPFV-3SG.PRES-REFL
 'I like him.'
- b. *Kogda drug drug-u nra-v-iš'-sja, xod-iš' vsjudu*
 when each other-DAT like.IPFV-2SG.PRES-REFL walk.IPFV-2SG.PRES everywhere
vmeste. (Ružička 1978:22)
 together
 'When [you] like *each other* you go everywhere together.'

7. These constructions have been discussed repeatedly; see, among others, Knjazev (1978); Bulygina & Shmelev (1990); Mel'čuk (1995 [1974]). They are so widely used in Russian that Babby (1975: 186) assumes "that the subject NP in the phrase-structure rules of Russian is optional, i.e. S → (NP) VP, as opposed to S → NP VP for English".

Irrespective of the form of the predicate, all these sentences denote events performed by implied personal subjects. In their reciprocal variants, inverse relations link the constituents of the implied group subject. In this respect, the reciprocal pronoun is similar to the Russian reflexive pronoun *sebjā* which can also be used in such constructions. In the course of discussing the syntactic properties of reflexivization in Russian, Paduceva (1985:195–7) included the above mentioned subjectless sentences into a wider group of constructions with “implied controllers” (Russian “podrazumevaemye”) which includes, besides, various infinitival and imperative constructions. The latter allow insertion of the pronoun *drug druga*, too; cf.:

- (82) *Dlja nas bol'sha-ja radost' snova vide-t' drug druga-a.*
 for we.GEN great-F.SG.NOM joy.F.SG.NOM again see.IPFV-INF each other-ACC
 ‘It’s a great joy for us to see *each other* again.’
- (83) *Ljub-ite drug druga-a.*
 love.IPFV-IMP.2PL each other-ACC
 ‘Love *each other*.’

As regards passive constructions, occurrence of the pronoun *drug druga* in a sentence seems to be governed, in the first place, by the syntactic position of the antecedent. In almost every case it is a subject noun phrase alone which is cross-coreferential with the pronoun;⁸ cf.:

- (84) *Tol'ko čto vs-jo by-l-o svjaz-an-o, prikov-an-o drug k drug-u.* (V. Kaverin)
 moment.ago all-N.SG.NOM be-PAST-N.SG bind-PASS-N.SG chain-PASS-N.SG each to other-DAT
 ‘Just a moment ago everything was bound, chained *together*.’
- (85) *Jaščik-ov mnogo, oni naval-en-y drug na drug-a.* (V. Kaverin)
 box-PL.GEN many they heap-PASS-PL each on other-ACC
 ‘There are many boxes here, they are heaped up *one upon another*.’

On the other hand, it is usually awkward to employ the pronoun in the position of an agentive complement of a passive construction. Sentence (86b) is ungrammatical or at least far less acceptable than its active counterpart under (86a):

- (86) a. *Oni rani-l-i drug druga-a.*
 they.NOM wound.PFV-PAST-PL each other-ACC
 ‘They wounded *each other*.’
- b. *?Oni by-l-i ran-en-y drug drug-om.*
 they be-PAST-PL wound.PFV-PASS-PL each other-INST
 lit. ‘They were wounded *by each other*.’

8. Russian constructions with *-n/-t* participles combine the functions of passive and resultative, the latter indicating states that result from a previous action (see Nedjalkov (ed.) 1988; Knjazev 1989a). The ambiguity of a participle does not affect its ability to collocate with the pronoun *drug druga* ‘each other’.

Nevertheless, the reciprocal pronoun is sometimes employed in this position when, for instance, the verb denotes an emotional attitude; cf.:

- (87) a. *Ona očarova-l-a mal'čik-a.*
 she.NOM charm.PFV-PAST-F.SG boy.M-SG.ACC
 'She charmed the boy.'
- b. *Oni očarova-l-i drug drug-a.*
 they.NOM charm.PFV-PAST-PL each other-ACC
 'They charmed *each other*.'
- c. *Oni by-l-i očarova-n-γ drug drug-om.*
 they be-PAST-PL charm.PFV-PASS-PL each other-INST
 lit. 'They were charmed *by each other*.'

7.1.3 Restrictions on usage

In addition to the above mentioned restrictions on the use in passive constructions, the reciprocal pronoun *drug druga* is subject to a number of other restrictions.

First, as is mentioned in 5.1 above, its occurrence is confined to predicates that can be used in discontinuous reciprocal constructions in which symmetric arguments differ in morphological coding. Predicates which lack this property and are thus only used in simple constructions, such as *razlišat'* (vt) 'to distinguish', *raz"edinjat'* (vt) 'to disconnect', *razdeljat'* (vt) 'to divide' do not occur with *drug druga*. Instead, they easily combine with another pronominal reciprocal collocation, viz. *među soboj*.

Besides, due to the lack of the nominative case form, *drug druga* cannot be employed either as a surface subject or as a predicative and, therefore, cannot serve as an equivalent of the English *each other* in sentences such as (88) from Lebeaux (1983:724) or (89) from Langendoen & Battistella (1982:172):

(88) *John and Bill were deciding what each other should do.*

(89) *The only people that the men recognized were each other.*

Finally, as it is shown in 3.2.3.1, the pronoun *drug druga* and the reflexive postfix *-sja* in the reciprocal meaning, are, as a rule, mutually exclusive in a sentence.

7.2 The pronoun *odin drugogo* 'one another'

In contrast to the pronoun *drug druga*, the pronominal collocation *odin drugogo* lit. 'one another', where the second component retains its full form (while in *drug druga* both components are 'short' forms of the same adjectival pronoun) has distinct plural and gender forms identical to those of the lexemes *odin* 'one' and *drugoj* 'another'; e.g. *odin drugogo* (M.SG.ACC), *odna druguju* (F.SG.ACC), *odni drugix* (PL.ACC), etc.

The pronouns *drug druga* and *odin drugogo* are regarded as synonymous (see Roslovec 1964:183). Nevertheless, the latter is most commonly used to describe non-prototypical reciprocal situations. The first to be mentioned are "chaining situations" (Lichtenberk 1985:24–28) or "linear configurations" (Fiengo & Lasnik 1973:453–5) de-

scribing situations that involve a kind of a chain of paired relations in an ordered series of participants (Kemmer 1988: 135); cf.:

- (90) *Po vs-em komnat-am čas-y odn-i za drug-imi*
 in all-PL.DAT room.F-PL.DAT clock-PL.NOM one-PL.NOM after another-PL.INST
prozvoni-l-i dvenadcat' i vs-jo umolk-l-o
 strike-PAST-PL twelve and all-N.SG.NOM be.silent.PFV-PAST-N.SG
opjat'. (A. Puškin)

again

'In all the room, the clocks struck twelve *one after another*, and everything lapsed into silence again.'

The interesting thing is that Mel'čuk (1995: 130) favours the rarely used *odin drugogo* over *drug druga* to designate a sequence of sounds; cf.:

- (91) *Poslyša-l-i-s' odin za drug-im tri krik-a.*
 hear.PFV-PAST-PL-REFL one.M.SG.NOM after another-SG.INST three shout.M-SG.GEN
 'Three shouts were heard *one after another*.'

Another frequently attested use of *odin drugogo* is for designating sets of situations emerging independently of each other, despite the fact that their participants are linked by inverse relations. This case may be exemplified by the following slightly adapted sentence from Roslovec (1964):

- (92) *Oni poklja-l-i-s' pogubi-t' odin drug-ogo.*
 they swear.PFV-PAST-PL-REFL ruin.PFV-INF one.M.SG.NOM another-M.SG.ACC
 'They swore to ruin *one another*.'

8. Sociative-comitative prefix *so-*

8.1 General characteristics

The sociative-comitative prefix *so-* has been inherited from Old Church Slavonic in which it was used to translate Greek words with the prefix *συν-* 'together, with', e.g. Russian *sočuvstvie* 'sympathy' – Greek *συμπαθεια*.

It differs from the overwhelming majority of Russian prefixes in some respects. Its most outstanding feature is that it does not affect verbal aspect: imperfective verbs are not perfectivized as is the case with the other prefixes (see Section 2.3); e.g. *upravljat'* (IPFV) 'to govern' – *so-upravljat'* (IPFV) 'to govern jointly'.⁹ It is noteworthy that the etymologically related prefix *s-* (see numerous examples in Section 6) does not share this peculiarity; e.g. *rezat'* (IPFV) 'to cut' – *s-rezat'* (PFV) 'to cut off'. In addition to this, the prefix *so-* freely combines not only with verbs, as is typical of Russian prefixes, but also with nouns

9. There is only one more prefix that shares this property, namely, *pred-* meaning 'in advance'; e.g.: *videt'* 'to see' – *pred-videt'* 'to foresee', *čuvstvoval'* 'to feel' – *pred-čuvstvoval'* 'to have a presentiment'.

and adjectives. In spite of being a loan translation, the prefix *so-* is still used to derive innovations and nonce words. A lot of old words with this prefix are current even now.

This prefix follows two main derivational patterns. First, it often combines, like an agglunative affix, with a word without affecting its grammatical properties. This is illustrated by the following examples:¹⁰

- | | | |
|---------------------------------------|---|---|
| (93) <i>razmyšlenie</i> ‘meditation’ | → | <i>so-razmyšlenie</i> ‘joint meditation’ |
| <i>pečalit’sja</i> ‘to be distressed’ | → | <i>so-pečalit’sja</i> ‘to be distressed together with sb’ |
| <i>avtor</i> ‘author’ | → | <i>so-avtor</i> ‘co-author.’ |

Words following this pattern sometimes have unpredictable restrictions on usage; thus the derivative from *graždanin* ‘citizen’ occurs, as E.Raxilina (p.c.) remarked, in plural form only, viz. *sograždane* ‘fellow citizens’, while its synonym *so-otečestvennik* (< *otečestvo* ‘fatherland’) is used freely in either number.

Further, the prefix *so-* together with a number of suffixes occurs as a part of certain complex formants; cf.:

- | | | |
|---|---|--|
| (94) <i>besed-ovat</i> ‘to have a talk’ | → | <i>so-besed-nik</i> ‘interlocutor’ |
| <i>služ-it</i> ‘to work’ | → | <i>so-služ-i-vec</i> ‘colleague’ |
| <i>kurs</i> ‘academic year’ | → | <i>so-kurs-nik</i> ‘fellow student’ |
| <i>butyl-ka</i> ‘bottle’ | → | <i>so-butyl’-nik</i> ‘drinking companion.’ |

These examples show that words in *so-* may be stylistically neutral or colloquial. Nevertheless, verbs denoting situations of everyday life such as *guljat* ‘to stroll’, *čitat* ‘to read’, *spat* ‘to sleep’, *igrat* ‘to play’ and the like do not take this prefix.

8.2 Semantic properties

Depending on the meaning of the base word, derivatives in *so-* designate either joint participation in an activity or the presence of a common feature in two or more participants.

Semantically, words in *so-* are as a rule subject-oriented, because the participants that carry out the same type of action or share the same property are the deep subjects in a situation. For example, the noun *soavtor* ‘co-author’ (← *avtor* ‘author’) implies that a book (or an article) has two or more authors but does not refer to an author of two or more books. There are, however, some exceptions. Thus, the syntactic term *sopodčinenie* ‘joint subordination’ (derived from *podčinenie* ‘subordination’) implies several items governed by one item and, thus, may be regarded as object-oriented.

Another semantic feature of a number words in *so-* is expression of the idea of disparity between the participants. The noun *součastnik* ‘accomplice’ (from *učastie* ‘participation’) is usually conceived as referring to a helper (in doing something illegal) and not to the main participant. An example of another variant of semantic shift is provided by verbs denoting emotional states; cf.:

10. The first two examples are borrowed from Uluxanov (1980:371).

- (95) *pereživat'* 'to take to one's heart' → *so-pereživat'* 'to take to one's heart someone else's troubles'
stradat' 'to suffer' → *so-stradat'* 'to have compassion'
čuvstvovat' 'to feel' → *so-čuvstvovat'* 'to sympathize.'

Besides, there is a lot of verbs with the prefix *so-* that could be treated as lexical reciprocals due to the fact that they are deponents or semi-deponents (see Ch. 2); cf. some of them:

- (96) *sovpadat'* 'to coincide with'
sootvetstvovat' 'to correspond/conform to, be in accordance'
soprikasat'sja 'to be contiguous, border on'
sosredotočivat' 'to concentrate'
sočetat', sovmeščat' 'to combine.'

9. Adjectives *vzaimnyj*, *obojudnyj* 'mutual, reciprocal' and their derivatives

This group of reciprocals comprises three types of items:

- the adjective *vzaimnyj* and its synonym *obojudnyj* both meaning 'mutual, reciprocal';
- their adverbial counterparts *vzaimno* and *obojudno* 'mutually, reciprocally';
- numerous compounds with the components *vzaimo-* and *obojudo-*; compare respectively:

- (97) a. *vzaimnoe uvaženie* 'mutual respect'
vzaimnye priglašenija 'mutual invitations'
 b. *vzaimno neperevodimyj* 'mutually untranslatable'
 c. *obojudovyygodnyj* 'mutually advantageous'
vzaimozamenjaemyj 'interchangeable'
vzaimosvjaz' 'interconnection, interrelation.'

Reciprocals of this group are often used in clusters of two or more, accompanied by reciprocals of other types; e.g.:

- (98) "Neposredstvenn-ye" *antonim-y* *vsegda vystupa-jut* *kak*
 immediate-PL.NOM antonym-PL.NOM always appear-3PL.PRES as
vzaimo-obuslovl-enn-ye *i* *vzaimo-zavisim-ye*
 mutually-determine-PASS-PL.NOM and mutually-dependent-PL.NOM
edinic-y. (D. Šmelev)
 unit-PL.NOM
 'The "immediate" antonyms always appear as units determined by *one another* and dependent on *one another*.'
- (99) *Takim obrazom, my stanov-im-sja* *svidetel-jami* *ne*
 thus we.NOM become.IPFV-1PL.PRES-REFL witness-PL.INST not
konflikt-a *meždu dobrot-oj* *i zlob-oj,* *a*
 conflict-SG.GEN between kindness-SG.INST and malice.F-SG.INST but
vzaimn-oj *slepot-y* *protivopoložn-yx kul'tur.*
 mutual-F.SG.GEN blindness.F-SG.GEN opposite-PL.GEN culture.F.PL.GEN

Dramatizm situaci-i usugublja-et-sja tem, što
 drama.M.SG.NOM situation.F-SG.GEN intensify.IPFV-3SG.PRES-REFL that.INST what
eti dva človek-a, govori-vš-ie na vzaimno
 these two person-SG.GEN speak.IPFV-ACT-PL.NOM on mutually
neperevodim-yx jazyk-ax i razgorož-enn-ye sten-oj
 untranslatable-PL.LOC language-PL.LOC and divide.PFV-PASS-PL wall.F-SG.INST
obojudno-go neponimani-ja, opredelenn-oe vrem-ja
 mutual-F.SG.GEN misunderstanding-F.SG.GEN definite-N.SG.ACC time.N-SG.ACC
ljubi-l-i drug drug-a i pričinja-l-i vzaimn-uju
 love.IPFV-PAST-PL each other-ACC and cause.IPFV-PAST-PL mutual.F-SG.ACC
bol', iskrenne žela-ja drug drug-u dobr-a. (Ju. Lotman)
 pain.ACC sincerely wish.IPFV-CONV each other-DAT good.N-SG.GEN
 ‘Thus, what we become witnesses to, is not a conflict between kindness and malice but
mutual blindness of opposite cultures. The drama of the situation is intensified due to
 these two persons, who were speaking *mutually* untranslatable languages and were divided
 from *each other* by a wall of *mutual* misunderstanding, loved *each other* for some time and
 caused pain to *each other* although they sincerely wished *each other* well.’

All these words are far more likely to occur in formal than in informal style. Unlike in other Slavic languages, it seems impossible to say in Russian something like the following (Mrázek 1988: 128):

- (100) **Oni vzaimno ruga-jut-sja* (pere-gljad-yva-jut-sja).
 they mutually abuse.IPFV-3PL.PRES-REFL PREF-look-IPFV-3PL.PRES-REFL
 lit. *‘They are *mutually* scolding *each other* (exchanging glances).’

10. Russian reciprocals in comparison with other Slavic languages

As regards expression of reciprocity, the Slavic languages share two basic common properties. First, all of them use two kinds of means for this purpose, namely: (a) polysemous reflexive pronouns, clitics or affixes, and (b) a number of markers from *non-reflexive sources* such as the Polish adverbs *nawzajem* and *wzajemnie* ‘mutually’ or pronominal constructions of the type *jeden drugiego* ‘one another’; cf.:

- Polish (Macjusiović 1975: 143)
 (101) *Rozplącz-en-i lecz jedno o drug-im*
 separate.PFV-PASS-M.PL but one.N.SG.NOM about another-N.SG.LOC
pamięt-a.
 remember.IPFV-PRES.3PL
 ‘They are separated but remember *each other*.’

Secondly, in all the Slavic languages reflexive markers occur in two types of form that may be labelled “light” and “heavy” (Haiman 1983: 781–819), e.g. the Russian suffix *-sja* and the autonomous reflexive pronoun *sebjja* respectively, or the Polish reflexive clitic *się* (ACC-GEN) and its orthotonic variant *siebie*.

The main difference between Slavic languages lies in the “relative weight” of these three ways of expressing reciprocal semantics, viz. (a) reciprocal markers of non-reflexive origin, (b) “light” reflexive markers, and (c) “heavy” reflexive markers. From this viewpoint, we may distinguish between at least five different systems of marking the reciprocal meaning attested in the Slavic languages.

1. The first to be mentioned is the *Russian type* presented in this paper, whose peculiar feature is the absolute predominance of the non-reflexive means of rendering reciprocity. For the most part, this function is taken over by the pronominal collocation *drug druga* ‘each other’, whereas the set of reciprocals with the “light” reflexive marker is very limited in number (see 3.1.1). In its turn, the autonomous reflexive pronoun *sebja* cannot indicate reciprocity excepting its use in the fixed collocation *meždu soboj* lit. ‘between themselves’ (see Section 5).

This type is also characteristic of the other East Slavic languages, although they have retained a somewhat larger number of reflexive reciprocals in comparison with Russian; cf. Ukrainian *koxaty* ‘to love’ → *koxaty-sja* ‘to love each other’, Belorussian *vedati* ‘to know’ → *vedati-sja* ‘to know each other’, as in the following example:

- (102) *Pracava-l-i nu adn-ym zavodz-e, a ot že ne*
 work.IPFV-PAST-PL at one-M.SG.LOC factory.N-SG.LOC but not
veda-l-i-sja. (Kovaleva 1965:97)
 know.IPFV-PAST-PL-REFL
 ‘We worked at the same factory but did not know *each other*.’

In contrast to the East Slavic languages, the South and West Slavic languages seem to have no appreciable lexical restrictions on the reciprocal use of the “light” reflexive marker. This distinction is associated with a striking difference in the degree of structural separateness of these markers: while the East Slavic “light” reflexive markers have turned into verbal affixes occupying a fixed final position on a verb, in the other Slavic languages they have retained their original status of moveable clitics. Apart from this common feature, the latter group of Slavic languages is not uniform in respect of denoting reciprocal situations.

2. The exact opposite of the Russian type is the *Czech type* of correlation between reflexives and reciprocals which is characteristic of Czech and Slovak (see Mrázek 1988; Oravec 1982). Here the use of the reflexive markers for denoting reciprocity has been carried through almost completely. On the one hand, Czech (as well as most of the South and West Slavic languages) distinguishes between two case forms of the “light” reflexive/reciprocal marker, viz. between its direct (accusative) form *se* and its indirect (dative) form *si*. The choice between them depends on whether the subject is co-referential with a direct object, as in *praštit se* ‘to hit *oneself* / *each other*’ (Lichtenberk 1985:27), *milovat se* ‘to love *oneself* / *each other*’, *navštěvovat se* ‘to visit *each other*’, or with an indirect object, as in *říkat si* ‘to speak to *oneself* / *each other*’, *říkat si* ‘to hinder *oneself* / *each other*’. Compare two Russian sentences (a) and their translations into Czech (b):

- (103) a. *Nado poes-t’, – reši-l Zaxar.*
 necessary eat.PFV-INF decide.PFV-PAST.SG.M Z.NOM
 ‘I have to eat, Zaxar decided.’

- b. *Mě-l bych se najít-t, řek-l si*
 have-PAST.SG.M COND.1SG REFL.ACC eat.PFV-INF say.PFV-PAST.SG.M REFL.DAT
Zaxar.
 Z.NOM
 ‘I have to eat, Zaxar said to himself.’
- (104) a. *Vstřeti-l-i-s’ dva člověk-a i ne mog-ut ničeho drug*
 meet-PAST-PL-REFL two person.SG-GEN and not can-PRES.3PL nothing one
drug-u skaza-t’.
 one-DAT say.PFV-INF
 ‘Two persons (have) met and cannot say anything to each other.’
- b. *[...] a slov-o ne-můž-ou si řík-t.*
 ... but word.N-ACC not-can-PRES.3PL REFL.DAT say.PFV-INF
 ‘[...] but cannot say a word to each other.’

On the other hand, in Czech the autonomous (“heavy”) reflexive pronoun can render reciprocal semantics as well. It is used to mark co-reference with a prepositional object; cf.:

- (105) *Sěde-l-i jsme proti sobě.*
 sit.IPFV-PAST-PL be.1PL opposite self.DAT
 ‘We were sitting opposite each other.’
- (106) *Ne-moh-l-i by bez sebe žít-t.*
 not-can.IPFV-PAST-PL COND.3PL without self.GEN live.IPFV-INF
 ‘They could not live without each other.’

Other South and West Slavic languages may be treated as occupying various intermediate positions between Russian and Czech.

3. A different type to be distinguished is observed in *Polish* (see Wiemer, Ch. 11). Polish has a single accusative “light” reflexive/reciprocal marker *się* and lacks a dative marker. At the same time, the reciprocal cross-reference with both dative and prepositional objects is indicated by the “heavy” pronominal reflexive/reciprocal marker in the proper case form; cf.:

- (107) *X i Y daj-q sobie książk-i.*
 X and Y give.IPFV-PRES.3PL self.DAT book-ACC.PL
 ‘X and Y give books to each other.’
- (108) *X i Y pisz-q do siebie.*
 X and Y write.IPFV-PRES.3PL to self.GEN
 ‘X and Y write to each other.’

4. A different combination of features is characteristic of the *Bulgarian type*. This type shares some common features with the Czech type and differs from it in some respects. Like Czech, Bulgarian distinguishes between the accusative “light” marker *se* and the dative *si* both of them used reflexively and reciprocally, among a number of other functions (see Penchev, Ch. 13, §3); cf.:

- (109) *Nie se mie-m.*
 we.NOM REFL.ACC wash.IPFV-PRES.1PL
 ‘We wash ourselves/each other.’

- (110) a. *Kupava-m si edn-a knig-a.*
 buy.IPFV-PRES.1SG REFL.DAT one-F.SG book-F.SG
 'I buy a book for myself.'
- b. *Nie si kupava-me knig-i.*
 we.NOM REFL.DAT buy-1PL book-PL
 'We buy books for ourselves/each other.'

But in contrast to Czech, the Bulgarian "heavy" reflexive marker *sebe si* has not developed into a reciprocal marker. As a result, in combination with a prepositional object, the non-reflexive reciprocal pronominal collocation *edin drug* lit. 'one another' is used (an exception is the collocation *pomeždu si* 'between themselves'). In this respect Bulgarian is similar to Russian.

5. Finally, a separate type may be exemplified by literary Serbian, the nearest to the Russian type. In respect of the reflexive markers, Serbian has but one (accusative) "light" clitic form *se* and does not use its "heavy" form *sebe* as a reciprocal marker (with the exception of the collocation *među sobom* lit. 'between selves' common to all Slavic languages). At the same time, restrictions on derivation of reciprocals by means of *se* are not rigid, as can be seen from the list of this kind of verbs in the *Serbo-Croatian-Russian dictionary* (Tolstoy 1970); cf., among others:

- | | | |
|---|---|---|
| (111) <i>dariti</i> 'to give a present' | → | <i>dariti se</i> 'to give presents to each other' |
| <i>dozivati</i> 'to call' | → | <i>dozivati se</i> 'to call each other' |
| <i>vijati</i> 'to chase' | → | <i>vijati se</i> 'to chase each other' |
| <i>voleti</i> 'to love' | → | <i>voleti se</i> 'to love each other' |
| <i>vrehati</i> 'to offend' | → | <i>vrehati se</i> 'to offend each other' |
| <i>zagonetati</i> 'to ask riddles' | → | <i>zagonetati se</i> 'to ask each other riddles' |
| <i>z gledati</i> 'to see' | → | <i>z gledati se</i> 'to exchange glances.' |

To sum up, with regard to the correlation between reciprocals and reflexives in the Slavic languages, we may distinguish, first, between those languages where it seems possible to give an exhaustive or nearly exhaustive list of reflexive reciprocals (such as the East Slavic languages) and those where restrictions on formation of reflexive reciprocals are lax (if they exist at all). The latter languages can again be subdivided into (i) those which possess a distinct "light" dative form of the reflexive/reciprocal marker and those which lack this form (cf. Bulgarian and Czech vs. Polish and Serbian), and (ii) those in which the "heavy" reflexive pronoun is regularly used to express reciprocity and those in which this usage is

Table 1.

	Rigid lexical restrictions	Two case forms of light reflexive marker	Reflexive marking of prepositional object
Russian	+	–	–
Serbian	–	–	–
Bulgarian	–	+	–
Polish	–	–	+
Czech	–	+	+

limited to collocations of the type *meždu soboj* ‘between selves’ (cf. Czech and Polish vs. Bulgarian and Serbian).

For the reader’s convenience, the relevant features are summarized in Table 1.

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Reciprocal constructions in Vedic

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1. Introduction

1.1 Vedic Sanskrit: Corpus of texts and chronological periods

Vedic Sanskrit (dating from the 2nd millennium BC onwards) is the earliest attested language of the Indo-Aryan group of the Indo-European language family and one of the most ancient attested Indo-European languages. Chronologically, Vedic can be divided into two main periods: early Vedic (also called ‘mantra language’, i.e. the language of the hymns addressed to the Vedic gods, mantras and magic spells), and middle / late Vedic (also called ‘the language of the Vedic prose’). The oldest layer of Vedic is attested in the language of the Ṛgveda (RV), which can approximately be dated to the second half of the second millennium BC. Within the RV, we can distinguish between the early RV (‘family books’, or maṇḍalas, which include books II–VII) and the late RV (encompassing, above all, maṇḍalas I and X, as well as a part of book VIII, Vāḷakhilya). The language of the second most ancient text, the Atharvaveda (AV), resembles in many respects – and is essentially synchronic with – the language of the late RV. Early Vedic is followed by middle and late Vedic (= the language attested in the Brāhmaṇas, Āraṇyakas, the oldest Upaniṣads and Sūtras). The post-Vedic period includes the younger Upaniṣads and Sūtras, as well as Epic and Classical Sanskrit.

The absolute chronology of these periods poses serious problems (see e.g. Witzel 1995: 97f.), thus only very rough approximation can be given for various periods: the early Vedic period cannot be dated earlier than to 1500 BC (and hardly begins much later than 1200 BC); the middle Vedic period probably starts after 800 BC; and the post-Vedic period must have started somewhere in the second half of the first millennium BC, hardly much earlier than 300 BC.

The most important evidence for Indo-European comparative studies and for typological observations is furnished by early Vedic. Already by the middle Vedic period, Sanskrit was no longer a spoken language, co-existing as a sacral language alongside the Middle Indo-Aryan vernaculars. The prose texts, however, may also retain a number of archaic forms and constructions unattested in earlier texts. Of still lesser linguistic rele-

vance, in general, are Epic and Classical Sanskrit, which, however, may attest a number of interesting diachronic developments.

The term ‘Sanskrit’ is sometimes used to refer to both forms of the language, i.e. Vedic Sanskrit proper and post-Vedic (Epic, Classical) Sanskrit.

1.2 Overview

As in many other ancient Indo-European languages, the reciprocal meaning is either expressed periphrastically (by means of constructions with *anyó (a)nyám* ‘each other’ and, in post-Vedic Sanskrit, with some other reciprocal pronouns, as well as with the adverb *mithás* ‘mutually’), or morphologically, by means of (1) the middle type of inflexion (middle diathesis; see below), a morpheme which expresses a number of other intransitive derivations, such as reflexive and passive; and (2) two preverbs/prefixes (see Section 2.3) which participate in the expression of the reciprocal and sociative meanings, *ví-* (with the sandhi variant *vy-*) ‘asunder’ and *sám-* (*/sám-*) ‘together’ (free or bound in early Vedic; mostly bound prefixes from middle Vedic onwards). Cf. *dviṣ* ‘hate’ – *ví-dviṣ-ate* ‘they hate each other’; *vac* ‘speak’ – *ví ... avoca-nta* ‘they argued with each other’; the preverb *sám-* is a productive morpheme deriving spatial reciprocals, cf. *i* ‘go’ – *sám-ayanta* (RV 6.21.1) ‘they come together’, *gam* ‘go’ – *sám-gam* ‘meet together, unite’.

There are also a number of symmetric predicates (mostly *media tantum*), where the reciprocal meaning is built into the verbal semantics, such as *spṛdh* ‘compete’.

2. Grammatical notes¹

2.1 The morphological structure of the verbal form

The verbal form can have the following maximal morphemic structure: (preverb(s) / prefix(es)) .../(augment *a-*)-(reduplication syllable)-root-(derivational stem suffix)-(thematic vowel *a*²)-(mood)-inflexion. Below, a few examples are given:

- (1) *vi-jí-gī-ṣā-mahai* (cf. (8))

PREV-RED-OVERCOME-DES-1 PL.SUBJ.MED

(preverb + reduplication syllable + root + thematic suffix of desiderative + ending of the 1st person plural middle subjunctive form = 1st person plural middle subjunctive form of the desiderative of the verb *ji* ‘overcome’)

‘we desire to overcome one another, we will try to overcome one another.’

1. The best surveys of the Vedic and/or Sanskrit grammar are: Whitney (1889); Macdonell (1910) and (1916) (a shorter and very convenient version of the former); and Elizarenkova (1982) (for Vedic); Renou (1930/1960) (for post-Vedic / Classical Sanskrit). The reader is also recommended to consult the short but well-organized sketch presented in Zaliznjak (1976).

2. In the case of thematic and thematicized suffixes such as *-ya-*, *-sa-*, *-nva-*, etc., the thematic vowel (*a*) is traditionally regarded as a part of the suffix; the suffixes “properly speaking” are *-y-*, *-s-*, *-nv-*.

(2) *vy-a-di-dviṣ-a-h* (cf. (24))

PREV-AUG-RED/CAUS-hate-THEM.VOWEL-2SG.AOR.ACT

(preverb + augment + reduplication syllable + root + thematic vowel + secondary

(= aorist/imperfect) ending of the 2nd person singular active form = 2nd person singular active form of the reduplicated (causative) aorist of the verb *dviṣ* 'hate')

'you have made [them] hate each other.'

There is a rich system of both vocalic and consonant alternations (ablaut, palatalization, etc.), as well as morphophonemic changes at morphemic and word boundaries (sandhi), which often make these boundaries opaque. In the text examples below the symbol \cup indicates that a sandhi has been undone.

2.2 Preverbs

The class of semi-autonomous morphemes, traditionally called preverbs, includes *ádhi* 'above, over, on', *ánu* 'along, after', *abhí* 'to(wards), over, against', *á* 'to(wards), at', *úpa* 'to, near', *pári* '(a)round, about', *ví* 'apart, asunder', *sám* 'together' and others. The majority of them can also be used as adpositions (prepositions or postpositions). Exceptions include, in particular, *úd* 'up', *ní* 'down', *párā* 'away' and *ví* 'apart, asunder'. In early Vedic, preverbs commonly behave as free morphemes; in middle and late Vedic the autonomy of preverbs constantly decreases and tmesis (i.e., the separation of preverbs from verbal forms) becomes rare.

2.3 The grammatical categories of the verb

The Vedic verbal paradigm includes three main classes of forms, called present, aorist and perfect systems (forms of the future system are rare in early Vedic). Within each of these sub-sets, forms are built on the same stem, i.e., on present, aorist and perfect stems respectively. There are several sets of personal endings: 'primary' (used foremost in the present tense), 'secondary' (endings used in the imperfect, aorist and some non-indicative moods), perfect, imperative, and subjunctive. Each tense system includes a number of finite forms and a pair of participles, active and middle.

The inventory of the grammatical categories of the verb includes person (1st, 2nd and 3rd) and number (singular, dual and plural); diathesis, or voice³ (active and middle); tense (present, imperfect, perfect, aorist, future, periphrastic future); and mood (indicative, imperative, injunctive, subjunctive, optative, conditional). The non-finite forms include two

3. These are traditional terms used in Sanskrit and Indo-European linguistics, referring to two types of inflexion (e.g., in the present: 2sg. *-sí*, 3sg. *-tí* in the active ~ 2sg. *-se*, 3sg. *-te* in the middle; in the perfect: 3sg. *-a*, 3du. *-átur*, 3pl. *-úr* in the active ~ 3sg. *-é*, 3du. *-átur*, 3pl. *-úr* in the middle; etc.). Both have certain shortcomings: the former is not to be confused with the 'diathesis' in the sense of the Leningrad Typological Group (referring to the type of syntactic construction, or valency pattern); the latter may also refer to the opposition between the passive and non-passive (transitive) construction.

participles (active and middle) for each tense, converbs (traditionally called ‘absolutives’ or ‘gerunds’), infinitives, gerundives, and some others categories.

2.4 Valence-changing derivations

2.4.1 *The middle and its functions*

The range of the functions rendered by the middle type of inflexion (= middle diathesis) is typical of the ancient Indo-European linguistic type as attested in “Classic” languages (Ancient Greek, Latin). Here belong the self-beneficent meaning with no valence change (‘to do sth for oneself’, as in the handbook example *yájati* ‘sacrifices’ ~ *yájate* ‘sacrifices for oneself’), as well as a number of intransitivizing derivations, such as passive, reflexive, and anticausative (decausative). The choice of the function(s) idiosyncratically depends on the base verb. However, already in the language of the earliest text, the RV, we observe the loss of several grammatical functions of the ancient Indo-European middle, and the intransitivizing functions are largely taken over by special productive markers, such as the passive suffix *-yá-* and the reflexive pronouns *tanú-* and *ātmán-* (for details, see Kulikov 2006, 2007).

2.4.2 *Causative oppositions*

The most regular and productive causative marker in the present system is the suffix *-(p)áya-*, cf. *vṛdh* ‘grow, increase’ – *vardháyati* ‘makes grow, increases’, *cit* ‘appear, perceive’ – *cetáyati* ‘shows (= makes appear), makes perceive’ (~ *citáyati* ‘appears’). In addition to *-(p)áya-*causatives, in early Vedic we find a few other (non-productive) formal types of present causative oppositions. In particular, the causative member is commonly expressed by a present with the nasal suffix *-nó-/ -nu-* (present V), *-nā-/ -nī-* (present IX) or nasal infix *-ná-/ -n-* (present VII), often opposed to an intransitive (anticausative) present with the suffix *-ya-* (present IV) or a root present with a thematic vowel (present I). Causative oppositions of other types are less common.⁴ The intransitive (anticausative) member of the opposition is typically inflected in the middle, whilst the transitive-causative is inflected in the active; cf.: *kṣi* ‘perish, destroy’: *kṣíyate* (present IV) ‘perishes’ ~ *kṣināti* (present IX) ‘destroys’; *jan* ‘be born, arise’: *jáyate* (present IV) ‘is born’ ~ *jānati* (present I), *janáyati* ‘begets’; *pū* ‘purify’: *pávate* (present I) ‘becomes clean, purifies oneself’ ~ *punāti* (present IX) ‘purifies’. With some presents, the causative opposition is only marked by the diathesis (middle/active), as in *námate* ‘bends’ (intr.) ~ *námati* ‘bends’ (tr.); *svádate* ‘is sweet’ ~ *svádati* ‘makes sweet’. In the aorist system, the causative meaning is typically expressed by the reduplicated aorist, cf. *vṛdh* ‘grow, increase’ – *ávīrvṛdhat* ‘made grow’. There are also labile forms that can be used both transitively and intransitively, cf. 3sg.pf.med. *vāvṛdhé*, 3sg.pf.act. *vavárdha* ‘he has grown (intr.)’ ~ 3sg.pf.act. *vavárdha* ‘has increased (tr.)’ (see Kulikov 2003).

4. See e.g. Joachim (1978:21ff.).

2.4.3 *Passive*

There are several verbal formations in Vedic which can be employed in passive constructions. Non-finite passives include passive perfect participles with the suffix *-tá-/-ná-* and gerundives, or future passive participles, with the suffixes *-ya-*, *-tavya-* and *-anīya-*. Finite passive formations include the following (for details, see Kulikov 2006):

(1) presents with the suffix *-yá-* (derived from the root by means of the suffix *-y(á)-*, which can only take middle endings; e.g. *han* ‘to kill’: 1sg. *han-yé*, 2sg. *han-yá-se*, 3sg. *han-yá-te*, etc.);

(2) medio-passive *i*-aorists (with a defective paradigm: only 3sg. in *-i*, 3pl. in *-ran/-ram* and participle; e.g. *yuj* ‘yoke, join’: 3sg. *áyoji*, 3pl. *áyujran*, part. *yujāná-*);

(3) middle perfect/statives (which supply passive perfects for some verbal roots; also with a defective paradigm: 3sg. in *-e*, 3pl. in *-re* and participle; e.g. *hi* ‘impel’: 3sg. *hinvé* ‘(it) is impelled’, 3pl. *hinviré* ‘(they) are impelled’; part. *hinvāná-*);

(4) some (isolated) middle forms.

2.5 Syntactic notes

As most other ancient Indo-European languages, Vedic is a nominative-accusative language. Normally, the subject surfaces in the nominative, the direct object in the accusative, and the second object in the accusative or dative. The instrumental case has its usual functions (comitative, instrument, passive agent). The word order is mostly free, but the neutral word order (which is prevalent, especially in prose texts) is SOV.

3. Morphological (synthetic) reciprocals

3.1 The reciprocal meaning is expressed by the middle inflexion only

3.1.1 *Middle reciprocals opposed to active non-reciprocals*

In early Vedic (particularly, in the RV), the middle inflexion (middle diathesis) still plays a rather important role as a marker of some intransitivizing derivations, thus inheriting the functions of the (Proto-)Indo-European middle. We find several verbs whose middle forms are employed in the reciprocal usage. However, there are not very many occurrences of middle forms which can be unambiguously interpreted as reciprocals (opposed to non-reciprocal active forms). A few clear instances of middle reciprocals without preverbs represent Ṛgvedic hapaxes (i.e., forms which are attested only once and only in the RV). These include, in particular:

mith ‘be inimical’ – *na methete* ‘(the day and night) are not inimical to one another’ (in RV 1.113.3; see Gotō 1987:244);

tṛ ‘surpass, overrun’ – *tarete* ‘overrun one another’ in (3):

- (3) (RV 1.140.3)
ubhá tarete abhí mātārā śśum
 both:NOM.DU overrun:PRES:3DU.MED towards mother:NOM.DU child:ACC.SG
 ‘Both parents overrun one another towards the child (sc. Agni, fire).’⁵

Quite often, a reciprocal interpretation is possible for some (but not all) middle forms, so that we are dealing with ‘weak’ morphological oppositions of the type ‘Active: non-reciprocal ~ Middle: non-reciprocal/reciprocal’, as is the case of the verb *yudh* ‘fight’. Active forms of *yudh* are employed either intransitively (‘X_{NOM} fights (for Z_{LOC})’) or, more rarely, transitively (‘X_{NOM} fights against Y_{ACC}, attacks Y_{ACC}’). Middle forms are only attested in intransitive constructions, some of which refer to reciprocal situations: ‘X^(non-SG)_{NOM} fight against each other’, as in (4):

- (4) (KSP 29.5:173.14-15 = KpSP 45.6:272.21)
yad vai putrau yudhyete pitā tābhyāṃ kalpayati
 when son:NOM.DU fight:PRES:3DU.MED father:NOM.SG them reconciles
 ‘When two sons fight against each other, the father reconciles them.’

In some cases the reciprocal interpretation is only one of possible analyses. For instance, we find examples which are ambiguous between reciprocal and anticausative and/or reflexive interpretations. This yields a ‘weak’ morphological opposition of another type: Act.: non-reciprocal ~ Med.: non-reciprocal / reciprocal / anticausative / reflexive. The choice between the different interpretations may require a special philological study. Examples of this type are attested, for instance, for some occurrences of middle forms of the verbs *bhr̥* ‘carry’ (cf. (5)) and *ukṣ̣* ‘(be)sprinkle’ (in (6)); note the difference between analyses suggested by several Sanskritists:

- (5) (RV 10.31.6)
samāná ā bhāraṇe bībhramāṇāḥ
 same:LOC in carrying:LOC carry:PRES:PART.MED:NOM.PL.M
 ‘[The gods] carrying each other (?) / being carried / moving in the same (act of) carrying.’

The passive translation of (5) suggested by most scholars⁶ is less likely for system-related reasons: passive usages are very rare for middle presents other than *-yá*-passives. More probable is a non-passive, anticausative (‘moving [repeatedly]’) or reciprocal (Gotō 1987:227: ‘sich gegenseitig tragend’) interpretation; see also Kulikov (2001:132).

5. See Gotō (1987:161); cf. also the compound *mīthas-tūr-* ‘surpassing each other’ derived from the same root (see Section 5).

6. Delbrück (1888:264); Wackernagel/Debrunner (1954:774, §619dβ); Geldner (1951:III, 178) (‘in gleicher Tragung getragen’); Renou (EVP XVI, 130).

(6) (RV 4.56.2)

devī... ukṣámāṇe

goddess:NOM.DU sprinkle:PRES:PART.MED:NOM.DU.F

‘The two goddesses sprinkling [ghee] / besprinkling each other.’⁷

We still await, among the desiderata for Vedic grammar, a comprehensive study of the Vedic middle, which would include an exhaustive catalogue of the attested functions of the middle forms.

3.1.2 Middle reciprocals without active counterparts: *Reciproca media tantum and symmetric predicates*

There is a group of reciprocals with the middle inflexion which are not opposed to non-reciprocal verbs with the active inflexion. This small class (mostly) consists of a few lexical reciprocals (symmetric predicates), where the reciprocal meaning is incorporated into the verbal semantics, such as *spr̥dh* ‘compete’ (cf. (7), (8), (15)) and *yād* ‘unite’ (attested only in the RV, in the present participle *yādamāna-* ‘uniting with sb.’) (see Gotō 1987:255f.):

(7) (RV 6.14.3)

spārdhante rāyaḥ

compete:PRES:3PL.MED rich:NOM.PL

‘The riches (of the Lord) compete (with each other).’

3.2 *vī*-reciprocals: The reciprocal meaning is expressed by the preverb *vī* and middle inflexion⁸

3.2.1 General remarks

More commonly (particularly in early Vedic), morphological reciprocals are derived by means of the preverb/prefix *vī* (with the sandhi variant *vy-*) added to forms with middle inflexion. This type seems to represent a new model, rather than the vestige of an old, formerly (in the proto-language?) productive, formation. *vī*-reciprocals are attested for some 20 verbs, mostly for the verbs of (i) hostile activities and (ii) communication/speech. Verbs which do not belong to these classes are listed under (iii):

- | | | |
|------------------------------|---|---|
| (i) <i>dviṣ</i> ‘hate’ | – | <i>vī-dviṣ</i> _{MED} ‘hate each other, be inimical’ (RV+) |
| <i>ji</i> ‘win, overcome’ | – | <i>vī-ji</i> _{MED} ‘overcome each other’ (ŚB) |
| <i>han</i> ‘kill, destroy’ | – | <i>vī-han</i> _{MED} ‘kill, destroy each other’ (AV+) |
| <i>tr̥h</i> ‘crush, destroy’ | – | <i>vī-tr̥h</i> _{MED} ‘crush, shatter, destroy each other’ (AV, TS) |
| <i>abhi-car</i> ‘bewitch’ | – | <i>vy-abhi-car</i> _{MED} ‘bewitch each other’ (YV) |
| <i>śap</i> ‘curse’ | – | <i>vī-śap</i> _{MED} ‘curse each other, quarrel’ (or ‘swear?’). |

7. As in the case of (5), the passive interpretation as suggested for this passage by Haudry (1977:395) (‘arrosé’) is unlikely. The sentence should rather be translated either as an absolute transitive (‘the two goddesses ... sprinkling [ghee]’; thus Grassmann (1873:244), Geldner (1951:I, 486); cf. also Geldner’s (1951:I, 474) note ad 4.42.4a) or as a reciprocal construction (‘besprinkling each other’; cf. Gotō 1993:122f.). See also Kulikov (2001:346).

8. See, in particular, Delbrück (1888: 243; 1897: 431f.); Gotō (1987:134, 294 et passim; 1989:283; 1996:7); Kulikov (2002).

- (ii) *vac* ‘speak’ – *vi-vac*_{MED} ‘discuss with each other, contest on sth, argue for sth (LOC)’
brū ‘speak’ – *vi-brū*_{MED} ‘discuss with each other, contest, argue’
vad ‘speak’ – (*vi-*)*vad*_{MED} ‘discuss with each other, contest, argue’
bhaj ‘make share, distribute, give sth (ACC) to sb (DAT) as a share’ –
*vi-bhaj*_{MED} ‘distribute sth (ACC) among each other, share with each other’.
- (iii) *añj* ‘anoint’ – *vy-añj*_{MED} ‘anoint each other’ (?) (RV)
dīv ‘play’ – *vi-dīv*_{MED} ‘play for sth with each other’ (YV+)
mi ‘(ex)change, alternate’ – *vi-mi*_{MED} ‘alternate with each other’ (?) (RV).

Next to these three small groups of reciprocals proper, *vi* is employed as a marker of spatial reciprocals of disjoining. This productive class will be briefly discussed in 3.3.

3.2.2 The main syntactic types of *vi*-reciprocals

3.2.2.1 “Canonical” (intransitive) reciprocals. These suggest a symmetric relation between the subject and direct object. Usually, this type is constructed with the non-singular (dual or plural) verbal form, as in (8)–(14):

- (8) (ŚB 1.5.4.6)
devās ca vā āsurās ca ... paspṛdhire. té
 god:NOM.PL and verily Asura:NOM.PL and compete:PERF:3PL.MED they:NOM.PL
daṇḍāir dhānubhir nā vy-ājayanta. té ha
 stave:INST.PL bow:INST.PL not *vi*-overcome:IMPF:3PL.MED they:NOM.PL PRTL
ā-vi-jaya-mānā ūcur. hānta vācy
 not-*vi*-overcome:PRES-PART.MED:NOM.PL.M say:PERF:3PL.ACT well speech:LOC.SG
ēvā brāhman vi-jigīṣāmahai
 PRTL sacred.formula:LOC.SG *vi*-overcome:DES:PRES:1PL.SUBJ.MED
 ‘The gods and the Asuras (demons) . . . were [once] competing. With staves and bows they did not overcome one another. [Neither of] them gaining victory over one another, they (the Asuras) said: “Well, we will try to overcome one another by means of speech, by means of sacred formula!”’
- (9) (TS 5.2.4.1)
vi vā etāu dviṣ-āte yās ca purā
vi PRTL this:NOM.DU.M hate:PRES-3DU.MED which:NOM.SG.M and earlier
agnir yās ca ukhāyām
 fire:NOM.SG which:NOM.SG.M and vessel:LOC.SG
 ‘The fire which [was] earlier and the one which is in the vessel are enemies (lit. hate each other).’
- (10) (TS 2.2.6.2)
 ... *yō vi-dviṣ-ānāyor ānam ātti*
 who *vi*-hate:PRES-PART.MED:GEN.DU.M food:ACC.SG eats
 ‘... who eats the food of two enemies.’⁹

9. Note that the lexicalized participle of the reciprocal *vi-dviṣ*_{MED} functions here as a substantive meaning ‘enemy’.

- (11) (KS 10.7:131.19)
abhicára-n *vā* *abhicar-yá-māṇo* *vā*
 bewitch:PRES-PART.ACT:NOM.SG.M or bewitch-PRES.PASS-PART.MED.NOM.SG.M or
devás ca vā ásurās ca vy-abhyácara-nta
 god:NOM.PL and ASURA:NOM.PL and vi-bewitch:IMPF-3PL.MED
 ‘Bewitching or being bewitched, the gods and the Asuras (demons) bewitched each other.’
- (12) (RV 9.86.43)
añj-áte vy añj-ate sám añj-ate
 anoint:PRES-3PL.MED vi anoint:PRES-3PL.MED together anoint:PRES-3PL.MED
krátum rih-anti mádhunā abhy añj-ate
 mental.power:ACC.SG lick:PRES-3PL.MED sweetness:INST.SG on anoint:PRES-3PL.MED
 ‘They (= waters) anoint themselves (with Soma), anoint each other (?), mix together with each other (?), lick (Soma’s) mental power, anoint themselves with (his) sweetness.’¹⁰

In some cases the reciprocal meaning is expressed both morphologically (with the preverb *ví* + middle inflexion) and periphrastically, by means of the adverb *mithás* ‘mutually’ (see Section 4.1):

- (13) (AV 3.30.4)
yéna devá ná vi-y-ánti ná u ca vi-dviṣ-áte
 which:INST.SG god:NOM.PL not vi-go:PRES-3PL.ACT not and vi-hate:PRES-3PL.MED
mitháh / tát kṛṇ-mo bráhma vo gṛhé
 mutually that make:PRES-1PL.ACT incantation:ACC.SG your house:LOC.SG
 ‘We perform in your house that incantation by virtue of which the gods do not go apart, do not hate one another (mutually).’
- (14) (AV 6.32.3 = 8.8.21)
mithó vi-ghn-āná úpa y-antu mṛtyúm
 mutually vi-kill:PRES-PART.MED:NOM.PL.M to go:PRES-3PL.IMP.ACT death:ACC.SG
 ‘Mutually crushing each other, let them (sc. our enemies) go to their death.’

Alongside ‘symmetric’ constructions with non-singular verbal forms we also find a ‘non-symmetric’ pattern with the verb in the singular constructed with the subject in the nominative and an oblique object in the instrumental referring to another participant of the reciprocal situation (cf. Russian *Ivan celuetsja s Annoj*, German *Hans küsst sich mit Anna*), as in (15):

- (15) (MS 1.5.11:80.7–8)
yéna spárdha-te yéna vā vy-abhicára-te ...
 who:INST.SG compete:PRES-3SG.MED who:INST.SG or vi-bewitch-PRES:3SG.MED

10. Example (12) is taken from a hymn describing the process of mixing Soma (sacral sap) with waters. Although most translators do not interpret *ví* as a reciprocal marker (Grassmann (1873: 24f.): ‘durchsalben’; Geldner (1951: III, 83–4): ‘sie salben sich, sie salben sich *bunt*, sie salben sich gleich ...’; explaining further: ‘*añj*, *vi-añj* und *sam-añj* wohl drei verschiedene Arten der Salbung’; Renou (EVP IX, 36): ‘(Les eaux) s’oignent, s’oignent *d’outré en outré* ...’; likewise Elizarenkova (1999: 81): ‘Oni umaščajutsja, umaščajutsja *naskvoz*’, umaščajutsja osnovatel’no ...’), the meaning ‘mutually, each other’ seems quite appropriate in the context.

‘With whom he competes or (lit.) with whom he bewitches [i.e. with whom he brings about the mutual bewitching], (that one ...).’

3.2.2.2 “Indirect” (transitive) reciprocals. These denote a symmetric relation between the subject and non-direct (typically, indirect) object, which surfaces either as a second accusative argument, or as a dative argument. Here belong a number of reciprocals derived from verbs of speech. Compare the non-reciprocal construction with the verb *vac* ‘speak’ constructed with the accusative of speech and the dative of the addressee (16) and the reciprocal construction (17):

(16) (RV 1.129.3)

indra⊃ *utá túbhyaṃ tád ... voc-a-m*

Indra:VOC and YOU:DAT that:ACC speak:AOR-SUBJ-1SG.ACT

‘And I will tell it to you, oh Indra ...’

(17) (RV 6.31.1)

ví toké apsú tánaye ca sūre⊃ *ávoc-anta*

vi seed:LOC.SG water:LOC.PL offspring:LOC.SG and sun.LOC.SG speak:AOR-3PL.MED

carṣaṇáyo vívāc-aḥ

tribe:NOM.PL contest-ACC.PL

‘The tribes contested (lit. contested contests) on seed, waters and offspring, on the sun.’¹¹

The middle forms with the preverb *ví* of two other verbs of speech, *brū* and *vad*, are employed in similar usages (the latter ousts *ví-vac*_{MED} in late Vedic texts, from the Brāhmaṇas onwards), cf.:

(18) (RV 6.25.4cd)

toké vā gōṣu tánaye yád apsú ví krā́ndas-ī

seed:LOC.SG OR COW:LOC.PL offspring:LOC.SG when water:LOC.PL *vi* army-NOM.DU

urvárāsu bráv-aite

field:LOC.PL speak:PRES-3DU.SUBJ.MED

‘... or when two armies contest on seed, on cows, on offspring, on waters, on fields.’

(19) (ŚĀ 4.14 = KauṣU 2.14)

etā ha vai devatā ahaṃ-śreyase ví-vada-mānā

this:NOM.PL.F deity:NOM.PL I-superior:LOC *vi*-speak:PRES-PART.MED:NOM.PL.M

asmāc charīrād uc-cakram-uḥ

this:ABL body:ABL out-go:PERF-3PL.ACT

‘Once these deities, each arguing for its own preeminence, departed from this body.’

Note that the middle forms without the preverb *ví* are attested in the same usage (see Delbrück 1888: 246), which must be due to the symmetric character of the verb, as in (20):

(20) (MS 4.4.1:41.19)

tásmín vā avadetām

that:LOC speak:IMPF:3DU.MED

‘They both discussed / argued for that.’

11. For the corresponding root noun *vívāc*- ‘(verbal) contest, competition’, see Section 5.

“Indirect” reciprocals can also be made from the verb *bhaj* ‘make share, distribute’. The base (non-reciprocal) construction of *bhaj* ‘make share, distribute, give sth (ACC) to sb (DAT) as a share’ is attested with the active forms (usually with the preverb *vi*), with the accusative or genitive of shared goods and with the dative of the recipient of distribution (see Jamison 1983: 129, Gotō 1987: 221f.): ‘X_{NOM} apportions Y^{goods}_{ACC/GEN} to Z^{recipient}_{DAT}’, as in (21). Accordingly, the corresponding reciprocal, *vi-bhaj*_{MED}, means ‘distribute sth (ACC) among each other, share with each other’, as in (22):

(21) (RV 10.48.1)

ahám dāśús-e ví bhajāmi bhójanam
 I:NOM worshipper-DAT.SG *vi* distribute:PRES:1SG.ACT food:ACC.SG
 ‘I (= Indra) apportion food to the one who worships [me].’

(22) (RV 10.108.8)

tá etám ūrvám ví bhajanta gónām
 they:NOM.PL this herd:ACC.SG *vi* distribute:PRES:3PL.MED.SUBJ cow:GEN.PL
 ‘They will share with each other this herd of cows.’

Another verb which forms non-direct object reciprocals is *dīv* ‘play’. Middle forms with the preverb *vi* are employed in constructions where the stake (i.e. that which is played/gambled for) is expressed by an accusative direct object, meaning ‘X^(non-SG)_{NOM} play for Y_{ACC} with each other’,¹² as in (23); some late texts also attest active forms with the preverb *vi* in the same usage:¹³

(23) (MS 4.4.6:57.10 ~ ĀpŚS 18.19.2 ~ VārŚS 3.3.3.24 ~ HirŚS 13.6.29)

tátra paṣṭhauhīm ví dīvya-nte [HirŚS *dīvya-nti*]
 there young.cow:ACC.SG *vi* play:PRES-3PL.MED play:PRES-3PL.ACT
 ‘There they play for a young cow.’

3.2.3 *vi*-reciprocals combined with other valence-changing categories

Unlike many Western Indo-European languages, Indo-Aryan has developed productive morphological causatives (present with the suffix *-āya-* and reduplicated aorist) and passives (present with the suffix *-yá-*); see Sections 2.4.2–3. All these derivatives can be made from *vi*-reciprocals.

3.2.3.1 Causatives derived from reciprocals. They are attested for the verb *dviṣ* ‘hate’. It is important to note that causatives are normally inflected in the active, and thus the causative derivation “absorbs” the middle diathesis, so that the preverb *vi* remains the only reciprocal marker:

12. The translation ‘verspielen’ (Böhtlingk & Roth, PW III, 617) is erroneous. For a comprehensive description of the play, see Falk (1986: 134ff. et passim).

13. The active inflexion attested in the HirŚS (23) must be secondary; see Schroeder (1883–84:7); Oertel (1934: 66f.) [= Kl. Schr. I, 697f.].

- (24) (AVP 2.58.1)
vi-dveṣ-anaṃ *kila*_U *āsitha* ⁺*yathā*_U *enau*
vi-hate-NR:NOM.SG verily be:PERF:2SG.ACT since he:ACC.DU
vy-adidviṣaḥ
vi-hate:CAUS.AOR:2SG.ACT
 ‘Verily, you are causing (mutual) hostility, for you have made them (both) inimical to each other (lit. made hate each other).’ (a verse addressed to a magic amulet)¹⁴

Note that the *nomen actionis vi-dveṣana-* is derived from the causative reciprocal (‘causing (mutual) hostility’), not from the reciprocal proper (‘(mutual) hostility’).

3.2.3.2 Passives derived from reciprocals

3.2.3.2.1 *Passives derived from “indirect” reciprocals* are attested for *vi-bhaj*_{MED} ‘share sth (ACC) with each other’ (cf. (21)–(22)). The main problem is distinguishing between reciprocal passives and passives of the non-reciprocal verbs, which are also quite common with the preverb *vi-*: since the *-yá-*passive is always inflected in the middle, the morphological opposition ‘Active ~ Middle’ is neutralized, so that the passive *vi-bhājyāte* may represent either a non-reciprocal passive (‘be shared, be distributed’) or a reciprocal passive (‘be distributed [by sb. among each other], be shared [by sb. with each other]’). By definition, the subject of a reciprocal construction can only be non-singular (plural or dual): ‘X’s / X and Y share sth. with each other’. Accordingly, the presence of a non-singular agent makes possible a reciprocal interpretation.

Thus, for instance, in the context of the plural subject *sátvāno* ‘the warriors’, a reciprocal interpretation is very likely:

- (25) (MS 2.2.13:25.13)
sátvāno *gā* *ichanti* *yád* *eté* *taṇḍulá*
 warrior:NOM.PL cow:ACC.PL seek:PRES:3PL.ACT when this:NOM.PL.M grain:NOM.PL
vi-bhāj-yá-nte
vi-distribute-PRES.PASS-3PL.MED
 ‘The warriors seek for cows, when these grains are distributed [by warriors among each other (?)] ...’

In (26), the reciprocal interpretation of *vi* is supported by the reciprocal adverb *mithas* ‘mutually’ (see Section 4.1) and by the commentator’s gloss *parasparam* ‘each other’:

- (26) (HirŚS 3.8.66)
adhīśrayaṇa-kāle *mitho* *vi-bhaj-yeran*
 putting.on.fire-time:LOC.SG mutually *vi-distribute-PRES.PASS:3PL.OPT.MED*
 ‘When one puts [the oblation] on [fire], [the rice grains] should be (mutually) distributed (among each other).’

14. Cf. Hoffmann’s (1976:567) translation: ‘weil du die beiden hast sich verfeinden lassen’.

3.2.3.2.2 *Passive derived from a “canonical” reciprocal* is attested for at least one Vedic verb, *tr̥h* ‘crush, destroy’. An example of the reciprocal of this verb occurs in the TS:

- (27) (TS 2.2.11.2)
vi-tr̥h-ānās *tiṣṭhanti*
vi-crush:PRES-PART.MED:NOM.SG.M stand:PRES:3PL.ACT
 ‘[They] keep crushing each other.’

The passive *tr̥hyá-^{te}* occurs 3 times, only in the AV. Two of these attestations instantiate a reciprocal construction, as in (28):

- (28) (AV 1.28.4)
ádhā mithó vikeśyò ví ghn-atām yātudhānyò
 then mutually hairless *vi* kill:PRES-3PL.IMP.MED sorceress:NOM.PL
vi tr̥h-ya-ntām arāyyàḥ
vi crush-PRES.PASS-3PL.IMP hag:NOM.PL
 ‘... then let the hairless sorceresses (mutually) kill each other; let the hags be crushed (killed) by each other.’

This translation seems more adequate than the non-reciprocal one suggested by Whitney & Lanman (1905:I, 29): ‘... then let the horrid-haired sorceresses mutually crush one another; let the hags *be shattered asunder*.’ The reciprocal interpretation (‘let the hags be shattered (killed) by each other’) is supported (i) by the reciprocal construction (*vi ghnatām* ‘let (them) kill each other’) in the preceding clause, and (ii) by another attestation of the passive *tr̥hyá-^{te}* (29), where the reciprocal meaning is expressed by the reciprocal adverb *mithás* ‘mutually’:

- (29) (AVŚ 5.17.7 ~ AVP 9.15.7)
vīrā yé tr̥h-yá-nte (AVŚ) / han-ya-nte (AVP) mithó
 hero:NOM.PL who:NOM.PL.M crush-PRES.PASS-3PL kill-PRES.PASS-3PL mutually
brahmajāyā hīnas-ti tān
 Brahman’s.wife:NOM.SG hurt:PRES-3SG.ACT they:ACC.PL.M
 ‘When heroes are mutually crushed it is the Brahman’s wife who hurts them.’

Passives of “canonical” reciprocals, albeit very rare, are worthy of special discussion. From the typological point of view, this syntactic type is extremely rare. While the indirect reciprocal derivation retains the initial direct object, so that passivization remains possible, a canonical reciprocal must be intransitive by definition, which, at first glance, rules out passivization. In the case of the periphrastic reciprocal construction (cf. English *each other*, German *einander*), at least a formal possibility of passivization exists due to the presence of a pronominal direct object (*each other*, *einander*) in the syntactic structure (*they crush each other* → *they are crushed by each other*). In the case of a morphological reciprocal (as in Vedic), the syntactic aspects of this derivation remain unclear. It may be the case that this peculiar construction was brought to life by some particular stylistic technique found in poetic texts.

3.2.4 *The polysemy and etymology of ví*

The range of meanings expressed by *ví* includes:

(i) splitting into parts, transformation of one single object into a group of objects or change of state resulting in certain autonomy of the parts of the object (cf. the case of the open gate¹⁵), cf. *bhid* ‘break, split’ – *ví-bhid* ‘break, split (asunder)’, *jñā* ‘know’ – *ví-jñā* ‘discern’, *śri* ‘adhere’ – *ví-śri* ‘open’;

(ii) spreading, expanding, cf. *bhr̥* ‘bring’ – *ví-bhr̥* ‘spread’, *sṛ̥* ‘run’ – *ví-sṛ̥* ‘run in several directions’;

(iii) distributive, cf. *dhā* ‘put, place’ – *ví-dhā* ‘distribute, arrange’;

(iv) reversive, cf. *vṛ̥* ‘close’ – *ví-vṛ̥* ‘open (doors)’, *sā* ‘tie’ – *ví-śā* ‘untie’;

(v) removing, leaving some space, cf. *nī* ‘carry’ – *ví-nī* ‘take away’, *tṛ̥* ‘(over)pass; bring, carry over’ – *ví-tṛ̥* ‘bring away, carry off’, *tap* ‘warm’ – *ví-tap* ‘give out heat’;

(vi) change, cf. *kr̥* ‘make’ – *ví-kr̥* ‘shape (up), change, disfigure’;¹⁶ cf. also *rūpā-* ‘form, appearance’ – *ví-rūpā-* ‘variegated, multiform’.

The set of functions attested for *ví* is quite unusual for the reciprocal morphemes in Indo-European languages, but is in line with its etymology. Already in the early Indo-European studies *ví* is traced back to the PIE adverb **dvis* ‘in two’ (**dvi-* in compounds) derived from the numeral ‘two’ (see, e.g., Pott 1859:705ff.), thus being genetically related to Ancient Greek *δια-*, Lat. *dis-*, Old High German *ze(r)-*, for which similar meanings are attested. Although Mayrhofer (EWAia II, 550) evaluates this etymology with skepticism, it is convincing both from the phonological¹⁷ and semantic point of view. The most remarkable parallel to the Vedic *ví* is the Ancient Greek prefix *δια-*, which also may render the reciprocal meaning; to mention just a few examples taken from Pott’s study (Pott 1859:733): *διά-λογος* ‘Unterredung’, *δια-ειπεῖν* ‘mit einander sprechen’ (the exact etymological cognate of Ved. *ví-vaC_{MED}*), *δια-κυνέω* ‘sich gegenseitig küssen’, *δια-κυρίττομαι* ‘sich unter einander stoßen’, *δια-πειλέω* ‘sich gegenseitig bedrohen’, *δια-μάχομαι* ‘fight against each other’. Note that, in some of these Greek examples, the reciprocal meaning is expressed by forms with the active inflexion.

3.3 Spatial reciprocals with the preverbs *ví* and *sám* and sociatives with *sám*

Spatial reciprocals with the preverbs *ví* ‘apart’ and *sám* ‘together’ denoting separating and joining, respectively, are much more productive than reciprocals proper with the middle inflexion and preverb *ví*. Unlike reciprocals proper, they can take both middle and active endings. Middle forms are typically employed as subject-oriented reciprocals (i.e. refer to separating/joining of the participants denoted by the subject: ‘come together’, etc.), while active forms can be employed either as subject-oriented reciprocals (cf. *ví-yánti* ‘(they)

15. For this meaning, see, in particular, Elizarenkova (2001:120ff.).

16. This semantics may result from the development of the following implicatures: ‘make in parts, asunder’ → ‘disintegrate’ → ‘disfigure’ → ‘change’.

17. See especially the convincing argumentation in Lubotsky (1994:202ff.).

Table 1.

	ACTIVE	MIDDLE
(Ø)	transitives (e.g. <i>bharati</i> 'X brings Y'); intransitives (e.g. <i>gacchati</i> 'X goes'); etc.	many symmetric predicates (including some lexical reciprocals), reflexives, ... (<i>bharate</i> 'Y brings oneself, moves' (ref.); 'X brings Y for oneself' (self-benef.))
<i>sám</i>	object-oriented spatial reciprocals of joining (e.g. <i>sám bharati</i> 'X brings Ys together'); (sociatives)	subject-oriented spatial reciprocals of joining (e.g. <i>sám gacchante</i> 'Xs come together'); sociatives (e.g. <i>sám pibante</i> 'Xs drink together')
<i>ví</i>	object-oriented spatial reciprocals of separating (e.g. <i>ví bharati</i> 'X spreads Ys asunder, distributes Ys'); (subject-oriented spatial reciprocals of separating [e.g. <i>ví-yánti</i> '(they) go apart'])	subject-oriented spatial reciprocals of separating (e.g. <i>ví gacchante</i> 'Xs go asunder, separate'); reciprocals proper (e.g. <i>ví jayante</i> 'Xs overcome each other')

go apart' in (13)), or, more commonly, as object-oriented reciprocals (i.e. referring to separating/joining of the participants denoted by the object: 'bring together', etc.). Some of the middle (and, more rarely, active) forms with *sám* should be qualified as sociatives, meaning 'perform the activity expressed by the base verb together', rather than spatial reciprocals (e.g. 'come together'). In some cases, the distinction between these two types cannot be drawn with accuracy.

The system of meanings expressed by the preverbs *ví* and *sám* is schematically represented in Table 1.

A detailed study of spatial reciprocals and sociatives remains a desideratum; below I confine myself to a few examples:

(i) (spatial) reciprocals:

- i* 'go' – *sám-i*_{MED} 'come together' – *ví-i* 'go apart', cf. (13)
- kram* 'step' – *sám-kram*_{MED} 'come together, meet' (AV, ŚB)
- gam* 'go' – *sám-gam*_{MED} 'meet together, unite; meet for fighting, fight with each other', cf. (30)
- car* 'move, walk' – *sám-car*_{MED} 'meet' (RV+)
- jñā* 'know' – *sám-jñā*_{MED} 'agree (with each other)' (cf. (49)) – *ví-jñā* 'distinguish (from each other)'
- dā* 'tie' – *sám-dā* 'tie together' – *ví-dā* 'untie', cf. (34)
- dhṛ* 'keep, hold' – *sám-dhṛ* 'keep together' – *ví-dhṛ* 'keep apart', cf. (31, 49)
- bhāṣ* 'talk, speak' – *sám-bhāṣ*_{MED} 'converse (with each other)', cf. (54).

(ii) sociatives:

- kamp* 'tremble' – *sám-kamp* 'tremble together', cf. (31)
- kruś* 'shout' – *sám-kruś* 'shout together'
- trp* 'rejoice' – *sám-trp* 'rejoice together', cf. (32).

Examples of constructions with spatial reciprocals and *sám* sociatives are:

- (30) (ŚBM 1.8.3.6 ~ ŚBK 2.8.1.5)
caturthé púruṣe tṛtīye sám gacchāmahe
 fourth:LOC generation:LOC.SG third:LOC together go:PRES:3PL.SUBJ.MED
 ‘In the fourth, in the third generation we will meet together [as enemies].’¹⁸
- (31) (KS 25.6:110.18f. ~ KpS 39.4:253.14f.)
ime vai lokā a-vi-dhṛtā āsāms.
 this:NOM.PL.M verily world:NOM.PL not-apart-kept:NOM.PL.M be:IMPF:3PL.ACT
te sam-prākampanta. tān devā etair
 they:NOM.PL together-tremble:IMPF:3PL.MED they:ACC.PL god:NOM.PL these:INST
yajurbhir vy-aṣṭabhnuvan
 sacrificial.formula:INST.PL apart-set:IMPF:3PL.ACT
 ‘Verily, these worlds were not kept apart. They were trembling together.’¹⁹ The gods set them apart by means of these sacrificial formulae.’
- (32) (KB 12.5 [ed. Sarma 12.6.16])
*prātāḥ sarvā devatāḥ sam tṛpyante*²⁰
 in.the.morning all:NOM.PL.F deity:NOM.PL together rejoice:PRES:3PL.MED
 ‘In the morning all deities rejoice together.’
- (33) (JB 1.155:8–10)
ta ime lokā vy-avr̥hyanta, vi yajño
 this:NOM.PL.M world:NOM.PL apart-break:PASS.IMPF:3PL apart sacrifice:NOM.SG
 ‘vr̥hyata. te devā akāmayanta: sam imān
 break:PASS.IMPF:3SG those god:NOM.PL wished together this:ACC.PL.M
lokān dadhyāma, sam yajñam dadhyāma
 world:ACC.PL put:PRES:1PL.OPT.ACT together sacrifice:ACC.SG put:PRES:1PL.OPT.ACT
iti
 thus
 ‘These worlds broke apart, the sacrifice broke apart. The gods wished: “Let us put together these worlds, let us put together the sacrifice”’
- (34) (TB 3.10.9.1–3)
prajāpatir devān asṛjata. té pāpmānā
 Prajāpati:NOM god:ACC.PL created they:NOM.PL.M evil:INST.SG
sām-dītā ajāyanta. tān vy ādyat
 together-tied:NOM.PL.M were.born they:ACC.PL.M apart tie:IMPF:3SG.ACT
 ‘Prajāpati created the gods. When they were born, they were tied together with evil. He untied them.’

18. Geldner (1889:281): ‘... im vierten, im dritten Gliede (der Verwandtschaft) dürfen wir uns geschlechtlich vereinigen.’ Explaining this passage, Weber-Brosamer (1988:86f., with fn. 195) rightly points out that *sám gacchāmahe* refers to fighting, not to sexual intercourse (as Geldner, and, subsequently, Rau (1957:40), understood it).

19. Gotō (1987:110) erroneously translates this form as a non-sociative, taking *sam*_(c) as the marker of completive actionality: ‘Sie waren in völlig (*sam*) erregter Bewegung.’

20. Some manuscripts attest variant readings with the active inflexion: *tṛpyanti*.

By the end of the Vedic period, (spatial) reciprocals/sociatives with *sám* and reciprocals of separating with *vi* reach an absolute productivity and cover the major part of the verbal dictionary (cf. the situation with the Latin prefixes *con-* and *dis-* of similar semantics).

4. Constructions with reciprocal pronouns and adverbs

Analytic markers of reciprocity show higher degree of productivity and regularity than morphological reciprocals with *vi* (which can only be made from a rather limited class of verbs) and *sám* (which cover only a part of the semantic domain of reciprocals). A more common reciprocal marker is the adverb *mithás* ‘mutually’; from middle Vedic onwards, it cedes to the polyptotic reciprocal pronoun *anyó* (*a*)*nyá-*.²¹

4.1 Reciprocals with the adverb *mithás*

The reciprocal adverb *mithás* (with the sandhi variants *mitháh*, *mithó*) ‘mutually’ is almost exclusively used with middle verbal forms. In the RV, *mithás*-reciprocals are attested with some 15 verbs and can form reciprocals of different syntactic types.

(i) “Canonical” reciprocals:

- | | | |
|------------------------------------|---|--|
| <i>vap</i> ‘scatter, (be)sprinkle’ | – | <i>mithó vapanta</i> ‘they (= the Maruts) besprinkle each other’ |
| <i>hi</i> ‘urge, impel’ | – | <i>mithó hinvāná</i> ‘impelling each other’ (cf. (35)) |
| <i>pū</i> ‘purify’ | – | <i>punāné mitháh</i> ‘purifying each other [of earth and heaven]’. |

(ii) “Possessive” reciprocals:

- | | | |
|-------------------|---|---|
| <i>rih</i> ‘lick’ | – | <i>rihaté kakúbho mitháh</i> ‘they lick each other’s backs’ (as bulls do) (cf. (36)). |
|-------------------|---|---|

(iii) It can also be (pleonastically) used with symmetric predicates and morphological middle reciprocals (including reciprocals with *sám*):

- | | | |
|--|---|---|
| <i>nas</i> ‘(happily) unite, approach’ | – | <i>sám ... mithó nasanta</i> ‘they mutually happily unite (with their relatives)’ (RV 8.72.14; see Gotō 1987:200) |
| <i>yat</i> ‘be in place, arranged’ | – | <i>ná yatante mithás</i> ‘they are not in competition with each other’ |
| <i>spṛdh</i> ‘compete’ | – | <i>sám ... mitháh pasṛdhānāsah</i> ‘competing with each other’. |

21. For a general survey of the reciprocal pronouns and constructions in Indo-European, see, in particular, Krisch (1999).

Note that *mithás* does not occur in constructions with “indirect” reciprocals.

Examples are:

- (35) (RV 10.65.2)
indrāgní... mithó hinv-āná tanvā
 Indra-Agni:NOM.DU mutually impel:PRES-PART.MED:NOM-ACC.DU.M REFL:NOM-ACC.DU
sámokasā
 having.same.abode:NOM-ACC.DU.M
 ‘Indra and Agni, ... mutually impelling each other themselves, having same abode ...’

Note that in (35) the reciprocal adverb *mithás* co-occurs with the emphatic reflexive pronoun *tanú-* ‘(one)self’ (on which see Kulikov 2007).

- (36) (RV 8.20.21)
rihaté kakúbho mitháh
 lick:PRES:3PL.MED back:ACC.PL mutually
 ‘They lick each other’s backs.’
- (37) (RV 10.68.10)
yát súryā-māsā mithá uccárātaḥ
 while sun-moon:NOM.DU mutually rise:PRES:2.DU.SUBJ.ACT
 ‘... while the sun and moon will rise one after another.’

mithás can also be employed with nominal forms, adjectives (as in (38)) and substantives:

- (38) (RV 7.38.5)
yé mithó vanúṣaḥ sápane
 who:NOM.PL.M mutually competing:NOM.PL take.care:PRES:3PL.MED
 ‘... who, competing with each other, take care ...’ (see Gotō 1987: 323, fn. 783)

Furthermore, *mithás-* appears as the first element of some compounds (see Section 5).

The adverb *mithás* becomes less frequent after the RV. It is interesting to note that all its attestations in the AV occur in pleonastic usages, in the compound *mitho-yodhá-* ‘battle, fight’ in AV 12.5.24 (see Section 5), i.e., with a verbal noun derived from a symmetric predicate, and in constructions with *ví-*reciprocals, cf. (13, 14, 28). Likewise, in later texts (in particular, in post-Vedic), it is often (mostly?), used pleonastically, as in (39), where it co-occurs with the reciprocal pronoun *anyonyam* ‘each other’:

- (39) (ManuSmṛ. 7.89)
āhaveṣu mitho anyonyam jighāmsanto mahikṣitaḥ
 battle:LOC.PL mutually each.other kill:DES:PART.ACT:NOM.PL.M king:NOM.PL
 ‘The kings who, seeking to kill each other in battles ...’

4.2 Reciprocal constructions with the pronoun *anyó (a)nyá-*

Reciprocal constructions with the reciprocal pronoun *anyó (a)nyá-* represent the most frequent type of the Sanskrit reciprocals. The polyptotic reciprocal marker (RM) *anyó ... anyá-* (*anyò’nyá-*, *anyonya-*) represents the iteration of the pronominal adjective *anyá-* ‘another, one of a number, the other’ (for its usages, see, in particular, Jamison 1997), thus literally meaning ‘another ... another’; cf. English reciprocal *one another*, Latvian *cits*

citū lit. ‘another (NOM) another (ACC)’. The first component (*anyó-*) is the sandhi form of the singular masculine nominative *anyás* (*anyáh*) before voiced consonants and *a*; the accent on *-ò-* and the loss of the following *a* also result from the sandhi. In contrast to the reciprocal adverb *mithás*, which occurs with middle verbal forms, *anyó (a)nyá-* typically combines with active forms.

4.2.1 *The main syntactic types of reciprocal constructions with anyó (a)nyá-*

The pronoun *anyó (a)nyá-* can express reciprocal relations between the subject and any other argument, including the direct object, indirect object, possessor noun, etc. Accordingly, the second part may appear in different case forms: accusative (= “canonical” reciprocals, cf. (40, 42, 44–5, 49)), dative (= “indirect” reciprocals, cf. (47)), genitive (= “possessive” reciprocals, cf. (50–51)), locative (cf. (53)), or instrumental (cf. (46)).

4.2.2 *The historical development of reciprocal constructions with anyó (a)nyá-*

From the early Vedic period onwards, we observe both an increase of productivity of *anyó (a)nyá-* and its morphological evolution from a free combination of words into a grammaticalized pronoun (see, in particular, Wackernagel 1905:322f.). This section offers a brief survey of the history of constructions with *anyó (a)nyá-*.

4.2.2.1 *Early Vedic (the early R̥gveda)*. In the earliest documented period, i.e. in the RV, reciprocal constructions with *anyó ... anyá-* are still rare. As mentioned above, reciprocity is more often expressed by other markers: middle endings, the preverbs *ví* and *sám*, and the adverb *mithás*. In the RV, we find as few as five attestations of the reciprocal proto-pronoun *anyó(-)(a)nyá-*. It is not yet grammaticalized as a single reciprocal marker, its constituent parts being essentially autonomous lexical units, which can be separated by other word(s). Both parts of the ‘quasi-pronoun’ agree in number and gender with the antecedent noun. The verbal form agrees with the first part of the reciprocal pronoun, and thus appears in the singular, as in (40):

- (40) (RV 7.103.3–4)
- | | | | |
|----------------|----------------|--------------------------------|-----------------|
| <i>anyó</i> | <i>anyám</i> | <i>úpa vādantam</i> | <i>eti</i> |
| other:NOM.SG.M | other:ACC.SG.M | to call:PRES:PART.ACT:ACC.SG.M | go:PRES:3SG.ACT |
| <i>anyó</i> | <i>anyám</i> | <i>ánu gr̥bhñāty</i> | <i>enor</i> |
| other:NOM.SG.M | other:ACC.SG.M | support:PRES:3SG.ACT | they:GEN.DU |
- ‘One (frog) goes to the call of another; one of the two supports another.’

The syntactic pattern attested with *anyá- ... anyá-* in early Vedic is schematically represented in (41):

- (41) RM1:NOM S:GEN.non-SG RM2:ACC V:SG
 (RM1 and RM2 stand for the first and second part of the reciprocal pronoun, S stands for the noun denoting the group of participants of the reciprocal situation, i.e. the antecedent of the reciprocal pronoun).

The only instance of the reciprocal proto-pronoun *anyá-* ... *anyá-* with a plural verbal form (in a construction where the second part of the reciprocal pronoun appears in a non-accusative (genitive) case) is attested in the late book 10 of the RV, cf. (42b):

- (42) (RV 10.97.14)
- a. *anyá* *vo* *anyám* *avatu*ᵛ
 other:NOM.SG.F you:GEN.PL other:ACC.SG.F help:PRES:3SG.IMP.ACT
- b. *anyá*ᵛ *anyásyā* *úpāvata*
 other:NOM.SG.F other:GEN.SG.F stand.by:PRES:2PL.IMP.ACT
 ‘Let one of you (medical plants) help another; stand one by another.’

4.2.2.2 Late early Vedic (late books of the R̥gveda, Atharvaveda). At the end of the early Vedic period, in the late R̥gveda and Atharvaveda, pattern (41) yields to the structure (43), with the verb in the non-singular (plural or dual) form, as illustrated in (44):

- (43) S:NOM.non-SG RM1:NOM (...) RM2:ACC V:non-SG
- (44) (AVŚ 12.3.50)
- sám* *agnáyo* *vid-ur* *anyó* ^a*nyám*
 together fire:NOM.PL know:PERF-3PL.ACT other:NOM.SG.M other:ACC.SG.M
 ‘The fires know *each other*.’

Reciprocal constructions with the singular verbal forms virtually disappear after the RV. The constituent parts of the reciprocal pronoun normally occur adjacent to each other, as in (44), but they can still be separated by other word(s), as in (45). The singular form of RM1 and RM2 is not yet completely generalized. Thus, in the Paippalāda recension of the Atharvaveda, we find a rare example (45), where both parts of the pronoun *anyó* ... *anyá-* appear in the plural:

- (45) (AVP 5.10.7)
- hatāso* *anye* *yodhayanty* ⁺*anyāms*
 hit:PART.PERF.PASS:NOM.PL.M other:NOM.PL.M fight:PRES.CAUS:3PL.ACT other:ACC.PL.M
 ‘Those which are hit incite one another to fighting.’ (lit. ‘make fight one another’; said of alcohol-drinkers)

4.2.2.3 Middle and late Vedic. The language of the Vedic prose (foremost, Brāhmaṇas) displays a number of features that testify to a further grammaticalization of *anyò’nyá-*:

(i) *Inseparability.*

The parts of the reciprocal pronoun *anyò’nyá-* cannot be separated by other words.

(ii) *Accentuation.*

Although in most accentuated texts (in particular, in Taittirīya-Saṃhitā, Maitrāyaṇī Saṃhitā, Śatapatha-Brāhmaṇa), both parts of the reciprocal pronoun bear accents (*anyò-^anyá-*; see Wackernagel 1905:322f.), as, for instance, in (46, 50, 51, 53), we also find an example of a single accent (in this case, on the first component of the pronoun), attested in the Taittirīya-Brāhmaṇa (cf. (47); see Debrunner 1957:89):

- (46) (ŚB 14.4.3.30 = BĀUK 1.5.23)
*tāni sṛṣṭāny anyò-nyéna*_U
 that:NOM.PL.N created:NOM.PL.N other:NOM.SG.M-other:INST.SG.M/N
asparḍhanta
 compete:IMPF:3PL.MED
 ‘Those created (active functions) competed with each other.’
- (47) (TB 1.3.2.1)
té anyò-nyasmai ná *atiṣṭhanta*
 they:NOM.PL.M other:NOM.SG.M-other:DAT.SG.M not stand:IMPF:3PL.MED
 ‘They (the gods) did not adhere to each other.’

Unfortunately, this is the only example of *anyò-nya-* found in the TB, so that we cannot be sure whether this was a feature of the dialect of the TB, or just a minor lapsus of the scribe.

(iii) *Number and gender agreement.*

The reciprocal pronoun generalizes the singular form for both of its parts, so that examples such as (45) become impossible. The gender agreement of the constituent parts of the reciprocal pronoun follows one of the following two patterns: (a) *anya*-[M/N/F]-*anya*-[M/N/F] or (b) *anyó*[M]-*anyá*-[M/N/F]. In constructions of type (a), both parts of the reciprocal pronoun agree in gender with the nominal antecedent. This pattern is attested only in very few texts, in particular, in the relatively late Jaiminiya-Brāhmaṇa. Cf. (48), where the feminine substantive *prajā*[ḥ] ‘creatures’ triggers the feminine gender on both RM1 (*anyā*) and RM2 (*anyām*):

- (48) (JB 1.117:1–2)
prajāpatiḥ prajā asṛjata. ... tā aśanānyantīr
 P. creature:ACC.PL created they:NOM.PL.F being.hungry:NOM.PL.F
anyā-nyām ādan
 other:NOM.SG.F-other:ACC.SG.F eat:IMPF:3PL.ACT
 ‘Prajāpati created the creatures. [...] Being hungry, they ate each other.’

Most texts have generalized the masculine form of the first part of the reciprocal pronoun (*anyo-*) and thus follow the agreement pattern (b). Consequently, we observe in (49) (a passage from the Pañcaviṃśa-Brāhmaṇa parallel to (48)) and in (50) that the feminine gender is only marked on the second element of the reciprocal pronoun, whereas the first component is in the masculine (*anyo-*, not ***anyā-*). In (51), the masculine (*anyo-*) is used instead of the neuter form (***anyad-*) according to the same pattern:

- (49) (PB 24.11.2)
prajāpatiḥ prajā asṛjata. tā a-vidhṛtā
 P.:NOM creature:ACC.PL created they:NOM.PL.F not-kept.apart:NOM.PL.F
a-sañjānānā anyo-nyām ādan
 not-agree:PRES:PART.MED:NOM.PL.F other:NOM.SG.M-other:ACC.SG.F eat:IMPF:3PL.ACT
 ‘Prajāpati created the creatures. They, not being kept apart, not agreeing (with each other), ate each other.’

- (50) (ŚB 5.3.4.21)
anyò-nyásyā (**anyānyásyā*) *evàitác chriyá-*
 other:NOM.SG.M-other:GEN.SG.F (other:NOM.SG.F-...) PRTL superiority
á-tiṣṭhamānā ... yanti
 not-standing:NOM.PL.F go:PRES:3PL.ACT
 ‘... (The waters [F.]) are flowing ..., not yielding to one another’s superiority.’
- (51) (TS 7.2.8.6)
chándāṃsy anyò-nyásya
 metre:NOM.PL [N.] other:NOM.SG.M-other:GEN.SG.M/N
 (**anyád-anyásya*) *lokám abhy ádhyāyan*
 other:NOM.SG.M-other:GEN.SG.M/N place:ACC.SG be.eager:IMPF:3PL.ACT
 ‘The (poetic) metres were eager for each other’s place.’

4.2.2.4 *Further grammaticalization of anyo’nya- in late Vedic and post-Vedic Sanskrit.* In late Vedic and post-Vedic Sanskrit *anyo’nya-* is further grammaticalized. The following phenomena clearly show that its constituent parts, RM1 and RM2, lose the last features of independent forms, and the reciprocal pronoun becomes completely fossilized as a single lexical unit:

(i) Neither part of the reciprocal pronoun agrees in gender or number with the antecedent; the masculine singular form (nominative *anyo-*, accusative *anyam*, etc.) becomes generalized, cf. (52):

- (52) (Rām. 2.53.10)
anyo-nyam (**anyānyām = anyā-anyām*) *abhivikṣante ...*
 other:NOM.SG.M-other:ACC.SG.M other:NOM.SG.F-other:ACC.SG.F look.at:PRES:3PL.MED
ārtatarāḥ striyaḥ
 confused:NOM.PL.F woman:NOM.PL
 ‘The confused women look at each other.’

(ii) *anyo’nya-* can be used with non-subject antecedents, in particular, in object-oriented reciprocal constructions. Thus, in (53), RM2 receives the locative case as the oblique argument of the verb *juhomi* ‘(I) pour into’, but RM1 does not agree in case with its accusative antecedent *gharmāu* ‘oblations’:

- (53) (ŚB 11.6.2.2)
gharmāv evá ... anyò-’nyásmín
 gharma:ACC.DU PRTL other:NOM.SG.M-other:LOC.SG.M
 (**anyām-anyásmín*) *juhomi*
 other:ACC.SG.M-other:LOC.SG.M pour:PRES:1SG.ACT
 ‘I pour both gharma-oblations, one into another.’

(iii) In the post-Vedic period (in particular, in Epic Sanskrit), we also find the fossilized (adverbial) form *anyonyam* employed in constructions where the grammatical case of the second constituent of the reciprocal pronoun (i.e. accusative) does not correspond to the case pattern of the verb. Cf. (54), where we might expect RM2 to appear in the instrumental case, in accordance with the case pattern of the verb *saṃ-bhāṣ* ‘converse’:

- (54) (Rām. 5.89.52)
teṣāṃ saṃbhāṣa-māñānām anyo-nyam ...
 they:GEN.PL.M converse:PRES-PART.MED:GEN.PL other:NOM.SG.M-other:ACC.SG.M
 (**anyasyānyena* = *anyasya-anyena*)
 other:GEN.SG.M-other:INST.SG.M
 ‘... of them, conversing with each other ...’

(iv) In post-Vedic Sanskrit, where nominal composition becomes very productive, the stem *anyonya-* can also appear as the first member of a compound (meaning ‘mutual, reciprocal’); see Section 5.

4.3 Other polyptotic reciprocal pronouns

Alongside *anyó (a)nyá-*, there exist two other reciprocal pronouns with a similar structure (and probably built on its model), namely *itaretara-* and *paras-para-*. They are first attested at the end of the Vedic period and, consequently, should be qualified as essentially post-Vedic forms.

4.3.1 The reciprocal pronoun *itaretara-*

The form *itaretara-* is derived from the pronominal adjective *itara-* ‘(an)other’. It appears at the very end of the Vedic period and remains less common than *anyonya-*. Its inner structure is less clear than that of *anyonya-*. It might be based either on the bare stem (*itara-itara-*), or on the nom.sg.f. form (*itarā-itara-*). The only example of the first component in the masculine form (and one of the earliest attestations of this reciprocal pronoun) is found in a late Vedic text, Bṛhad-Āraṇyaka-Upaniṣad:

- (55) (ŚB 14.5.4.15 = BĀU 2.4.15)
yātra hí dvaitām iva bhāvati, tād itara
 where since duality:NOM.SG as become:PRES:3SG.ACT then other:NOM.SG.M
itaram paśyati
 other:ACC.SG.M look:PRES:3SG.ACT
 ‘For where there is a duality, there one sees another ...’

4.3.2 The reciprocal pronoun *paras-para-*

Like *itaretara-*, the pronoun *paras-para-* is a post-Vedic form (one of its earliest occurrences being found in the Śrauta-Sūtras, VaikhŚS 8.7:84.12). It represents the iteration of the pronominal adjective *para-* ‘far, other, different, alien, foreign’. Cf. (56):

- (56) (KA 1.13.18)
paras-parād vā bhedayed enān
 other:NOM.SG.M-other:ABL.SG.M OR split:PRES.CAUS:3SG.OPT.ACT they:ACC.PL.M
 ‘Or, he should divide them from each other ...’

As in the case of *anyonyam*, the accusative form *paras-param* can be used adverbially, as in (57):

- (57) (MBh. 1.194.6)
paras-pareṇa *bhedaś ca na ādhātuṃ teṣu*
 other:NOM.SG.M-other:INST.SG.M split:NOM.SG and not establish:INF they:LOC.PL
śakyate ekasyāṃ ye ratāḥ patnyāṃ
 be.able:PASS:3SG one:LOC.SG.F who:NOM.PL.M being.in.love:NOM.PL.M wife:LOC.SG
na bhidyante paras-param
 not split:PRES:3PL.MED other:NOM.SG.M-other:ACC.SG.M
 ‘And they cannot be alienated from one another (lit. ‘for them, the split from one another cannot be established’). [Men] who are in love with the same wife are not split (mutually).’

Generally, no difference in meaning between reciprocals with *anyonya-* and *paraspara-* can be observed. Neither European nor Indian grammarians make a distinction between them.²² However, at least in one Classical Sanskrit text, Kauṭīliya’s “Arthaśāstra” [KA] (a treatise on governing the state, written between the 4th and 2nd centuries BC), *anyonya-* and *paraspara-* seem to be semantically distinguished. *paraspara-* is used in contexts dealing with reciprocal hostile activities, while *anyonya-* is employed in other contexts, dealing with friendly or neutral activities. Cf. a few contexts and compounds which clearly demonstrate this semantic opposition:

anyonya-:

- na ... anyonyam ... vidyuh* (KA 1.12.12) ‘they should not know each other’
vāsayeyuh ... anyonyam (KA 2.36.6) ‘they should lodge each other’ (lit. ‘make live, stay’)
adoṣas tyaktum anyonyam (KA 3.14.38) ‘[in these cases] there is no harm in abandoning each other’
anyonyārakṣa- (KA 2.1.2) ‘mutual protection’

paraspara-:

- parasparam abādhamānā vaseyuh* (KA 3.16.33) ‘may they live without troubling each other’
parasparam ... tyajataḥ (KA 3.20.18) ‘abandoning each other’
parasparād ... bhedayet (KA 1.13.18) ‘he should divide them from each other’ (see (56))
parasparasyāveśanikān (KA 5.1.47) ‘guests of each other’ (said of secret agents, spies)
parasparadveṣa- (KA 9.6.26) ‘mutual hatred’
parasparahiṃsā- (KA 3.9.28) ‘mutual damage’
parasparam ... vikramayet (KA 5.6.25) ‘(he) should make (them) fight against each other’; cf. (58):

- (58) (KA 5.6.25)
amātyaḥ kulya-kumāra-mukhyān
 minister:NOM.SG royal.family-prince-principal.officer:ACC.PL
paras-param mukhyeṣu vā
 other:NOM.SG.M-other:ACC.SG.M principal.officer:LOC.PL or
vikramayet
 fight:PRES.CAUS:3SG.OPT.ACT

22. According to Richter (1898: 49), *parasparam* is mostly used with two reciprocants. Textual evidence does not support his assumption, however.

‘The minister should make the members of the royal family, princes and principal officers fight against each other or against (other) principal officers.’

I have not come across this opposition elsewhere, although it cannot be ruled out that some other texts make a similar distinction. It may be an invention of Kauṭīliya, the author of the text, probably based on the above-mentioned semantic difference between *anya-* ‘(an)other’ and *para-* ‘other, foreign, alien’.

5. Nominal derivatives and compounds with the reciprocal meaning

All reciprocal markers discussed in Sections 3–4, including both the preverbs/prefixes *vi* and *sám* and free forms (the adverb *mithás* and the polyptotic reciprocal pronouns *anyonya-*, *itaretara-* and *paraspara-*), can be employed to form nominal derivatives with a reciprocal meaning.

Reciprocal nouns with the prefixes *vi-* and *sám-* and compounds with the first element *mithás-* are attested from early Vedic onwards; cf. the two nouns derived from the verb *dviṣ* ‘hate’: action nominals in *-ana-* *vi-dvéṣana-* (RV 8.1.2) and in *-as-* *vi-dveṣas-* (RV 8.22.2), both meaning ‘(mutual) hate, hostility’; and the root noun *vi-vāc-* ‘(verbal) contest, competition’ derived from the verbal root *vac* ‘speak’.²³

Compounds with *mithás-* as the first element are derived from the following verbal roots and nominal stems:

<i>tṛ</i> (<i>tūr</i>) ‘surpass’	– <i>mithas-túr-</i> (e.g. in RV 6.49.3 <i>mithas-tūrā</i> ‘(day and night), surpassing each other’)
<i>pā</i> ‘protect’	– <i>mithó-avadya-pa-</i> (in RV 10.67.8 <i>mithó-avadya-pebhiḥ</i>) ‘those who protect each other from blame’
<i>yudh</i> ‘fight’	– <i>mitho-yodhá-</i> (AV 12.5.24) ‘battle, fight’.

Compounds with *anyonya-* become productive in the post-Vedic period. These include, for instance:

<i>yoga-</i> ‘union’	– <i>anyonya-yoga</i> (ManuSmṛ. 3.32) ‘mutual union (of a girl and her lover)’
<i>śreṣṭhya-</i> ‘superiority’	– <i>anyonya-śreṣṭhyāya</i> (KpS 38.2:206.1) ²⁴ ‘for superiority to each other’
<i>sakta-</i> ‘connected’	– <i>anyonya-sakta-</i> (Prašna-Upaniṣad 5.6) ‘connected with each other’
<i>anna-bhojana-</i> ‘food-eating’	– <i>anyonyāna-bhojana-</i> (= <i>anyonya-anna-</i>) (Āgñiveśya-Gr̥hya-Sūtra 3.10.3:4) ‘eating each other’s food’
<i>tyāgin-</i> ‘abandoning’	– <i>anyonya-tyāgin-</i> (YājñSmṛ. 2.237) ‘abandoning each other’.

23. See Kuiper (1960: 268–273).

24. This is the earliest and the only Vedic example of a compound built with *anyonya-* (see Debrunner 1957: 89); the parallel passages of the other Saṃhitās of the Yajurveda (MS, KS, TS) have reciprocal constructions with the reciprocal pronoun used as a free form in the genitive (*anyònyāsya* in KS 24.9:100.3 and MS 3.7.10:90.1), or the dative (*anyònyāsmāi* in TS 6.2.2.1).

Examples of compounds made with the two other reciprocal pronouns, *itaretara-* and *paraspara-*, also first appear in post-Vedic texts:

- (i) *itaretara-*
yājaka- ‘sacrificer’ – *itaretara-yājaka-* (ĀpDhS 1.29.8) ‘officiating at each other’s sacrifices’
adhyāpaka- ‘teacher’ – *itaretarādhyāpaka-* (ĀpDhS 1.29.8) ‘teaching each other’
janman- ‘birth, origin’ – *itaretara-janman-* (Vārtt. on Pāṇ.) ‘originating from each other’
āśraya- ‘attachment’ – *itaretarāśraya-* (Vārtt. on Pāṇ.) ‘attachment to each other’.
- (ii) *paraspara-*
vyapekṣā- ‘relation’ – *paraspara-vyapekṣā-* (Vārtt. on Pāṇ. 2.1.1) ‘mutual relation’ (gramm. term)
adin- ‘consuming, eating’ – *parasparādin-* (= *paras-para-adin-*) (ManuSmṛ. 12.59) ‘consuming, eating one another’
jighāmsu- ‘desiring to kill’ (nominal derivative of the desiderative of the verb *han* ‘kill’) – *paraspara-jighāmsavaḥ* (Atharvaveda-Pariśiṣṭa 61.1.23) ‘desiring to kill each other’.

From the early Vedic period onwards, spatial reciprocals (and sociatives) can also be easily derived from nominal stems by means of the prefixes *sam-* (mostly in action nominals), *sa-*, which represents the zero grade allomorph of *sam-* (in adjectives), and *vi-*. The prefixes can be added to various nominal stems. Many of these formations show different degrees of lexicalization. Note the following examples, mostly from early Vedic (RV):

<i>sad</i> ‘sit’	<i>sam-sād-</i> ‘sitting together, assembly’
<i>dhā</i> ‘put’	<i>sam-dhā-</i> ‘union, agreement’
	<i>sam-dhī-</i> ‘junction, connection, combination, sandhi’
	<i>vi-dhā-</i> ‘division, part’
<i>dṛś-</i> ‘view, look’	<i>sa-dṛś-</i> ‘looking alike, of the same form’
<i>yuj</i> ‘yoke, join’	<i>sam-yúj-</i> ‘joining together’
	<i>sa-yúj-</i> ‘yoked together; companion’ (cf. (59))
	<i>vi-yoga-</i> (post-Vedic) ‘disjunction’
<i>ókas-</i> ‘abode’	<i>sám-okas-</i> ‘having same abode’ (cf. (35))
<i>rátha-</i> ‘chariot’	<i>sa-rátha-</i> ‘on the same chariot’ (cf. (59)).

Like their verbal counterparts, reciprocal/sociative nouns with *sam-* and *sa-* are commonly constructed with the instrumental of the second reciprocant, as in (59):

- (59) (RV 10.168.2)
tābhiḥ *sa-yúk* *sa-ráthaṃ* *devá*
 that:INST.PL.F SOC-join:NOM.SG.M SOC-chariot:ACC.SG.M god:NOM.SG
ṛyate
 drive:PRES:3SG.MED
 ‘United with those [young women], the god drives on the same chariot (with them).’

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ĀpDhS	Āpastamba-Dharma-Sūtra	Pāṇ.	Pāṇini (Aṣṭādhyāyī)
ĀpŚS	Āpastamba-Śrauta-Sūtra	PB	Pañcaviṃśa-Brāhmaṇa
AV(Ś)	Atharvaveda (Śaunakīya recension)	Rām. RV	Rāmāyaṇa Ṛgveda
AVP	AV, Paippalāda recension	ŚĀ	Śāṅkhāyana-Āraṇyaka
BĀU(K)	Bṛhad-Āraṇyaka-Upaniṣad (Kāṇva recension)	ŚBK	Śatapatha-Brāhmaṇa, Kāṇva recension
HirŚS	Hiranyakeśi-Śrauta-Sūtra	ŚB(M)	Śatapatha-Brāhmaṇa (Mādhyandina recension)
JB	Jaiminīya-Brāhmaṇa		
KA	Kauṭīliya's Arthaśāstra	TB	Taittirīya-Brāhmaṇa
KauṣU	Kauṣītaki-Upaniṣad	TS	Taittirīya-Saṃhitā
KB	Kauṣītaki-Brāhmaṇa	VaikhŚS	Vaikhānasa-Śrauta-Sūtra
KpS	Kapiṣṭhala-Kaṭha-Saṃhitā	VārŚS	Vārāha-Śrauta-Sūtra
KS	Kāṭhaka(-Saṃhitā)	Vārtt. on Pāṇ.	Vārttika (commentary) on Pāṇini's Aṣṭādhyāyī
MaitrU	Maitrāyaṇa-Upaniṣad		
ManuSmṛ.	Manu-Smṛti	YājñSmṛ.	Yājñavalkya-Smṛti
MBh.	Mahā-Bhārata	YV	Yajurveda(-Saṃhitā)
MS	Maitrāyaṇī Saṃhitā		

^P after the abbreviation of a Vedic text (e.g. YV^P) indicates that the passage in question occurs in the prose portion of this text.

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Reciprocals, comitatives, sociatives, and reflexives in Kabardian

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1. Introductory notes

1.1 Kabardian

Kabardian (Circassian) belongs to the Adyghe group of the Abkhaz-Adyghe family. Nearly 370,000 native speakers of Kabardian live in the Western part of the North Caucasus. Kabardian is rather closely related to Adyghean (about 100,000 speakers), another major language of the Adyghe group. Kabardian has the status of a literary language since 1920s, when the first Kabardian alphabet was devised. For a detailed account of Kabardian grammar see Jakovlev (1948), Abitov et al. (1957).

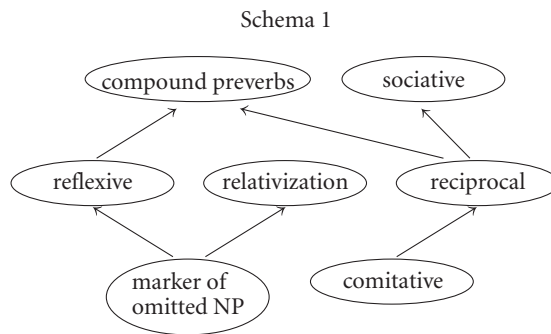
The specific feature of Kabardian and other Abkhaz-Adyghe languages is their high synthetism. A verb normally agrees with all the subordinated NPs. Most of the derivative categories also normally have synthetic expression. Therefore a Kabardian verb may contain 10 and even more grammatical markers. The verbal form in (1) (from Kumaxov 1971:319) is by far not the longest one:

- (1) *f-a: -x^o -ja-d-γa-s^α -a: -s:*
 2SG-3PL-BEN-3SG/PL-1PL-CAUS-lead-PAST-ASS
 ‘We caused them/him to lead you for them.’

1.2 Means of expression for reciprocity, reflexivity, comitativity and sociativity

Kabardian reciprocals are treated here together with comitatives, sociatives and reflexives because of the related derivation of these categories. *Reciprocal* and *reflexive* derivation is marked with the same affix *-z-*, with possible positional variants (*-za-*, *-zarə-*, *-zə-*). The same marker is used in *relativization*. Thus the prototypical function of *-z-* is to mark deletion of an NP dependent upon a verb, be that deletion of a coreferential NP in a reciprocal or reflexive construction or deletion of a relativized NP in a relative clause. It is interesting to note that there seems to be no way to discover which of the particular functions of *-z-* was primary. Although it seems doubtful that a morpheme could originate with the highly “generalized” function of marking an omitted NP, it is not clear what the lexical source of the grammaticalization could be. Still more interestingly, at the present stage some apparent examples of the inverse degrammaticalization of *-z-* are evident: in combination with many preverbs it loses its syntactic function and a combination of the two morphemes is reinterpreted as a single compound preverb.

The *comitative* is marked with a special valence-increasing prefix, and *sociative* is expressed as a reciprocal of a comitative verb. Schema 1 shows the relations between these categories:



The synthetic means used to express the categories in question are introduced in Table 1.

These markers of reciprocity and the related categories are highly productive. A reciprocal with *-za-/-zarə-* may be derived in a regular way from any Kabardian verb for which the meaning of reciprocity is ever possible. It also covers all the diathesis types of reciprocals. This regularity makes redundant any lexical ways of expressing reciprocity. A pronoun with the meaning ‘each other’, though present in Kabardian, is but a marginal substitute for the reciprocal marker. Another important consequence of this regularity is that the reciprocal marker may be combined with a great variety of verbal markers within

Table 1. Verbal markers of reciprocal, reflexive, sociative, and comitative

	Type of coreference (if any)	
	Coreference between subject and direct object in transitive verbs	Other types of coreference
Reciprocal	-zarə-	-za-
Reflexive	-zə-	-za-
Comitative		-da-
Sociative		-za-da-

(The final vowel of these markers is usually omitted if the next morpheme begins with a vowel.)

one verbal form. Naturally, in many of these combinations the meaning of the reciprocal marker can be modified in one way or another. However, a calculus of all transformations becomes tremendously difficult because of the extraordinary combinatorial possibilities of the reciprocal marker. Therefore the present paper lists only the most regular semantic transformations, without a claim for completeness.

The comitative marker *-da-* belongs to the numerous set of derivational morphemes termed “preverbs”. Preverbs modify the meaning of a verb, at the same time introducing a new indirect object, the semantic role of which is indicated by the preverb. Specifically *-da-* indicates that the indirect object which it adds has a comitative meaning. This meaning can also be expressed by the adverb *i-γ^osau* ‘A together with B’, in which the first element preceding the hyphen is an agreement marker cross-referencing the comitative NP. The sociative adverb *za-γ^osau* ‘A and B together’ is formed from *i-γ^osau* by means of the reciprocal marker *-za-*.

1.3 Additional characteristics and illustrations

A variant of the reciprocal/reflexive marker is inserted in the agreement slot of an NP which is deleted in a reciprocal or reflexive construction. Because of this interaction of reciprocal/reflexive marking with the agreement system, Kabardian may be said to employ *morphological-paradigmatic* means to express reciprocity/reflexivity. The essence of morphological-paradigmatic marking is that there is a special marker (or markers) for a category, but it is substituted for an agreement marker in the agreement slot. Thus morphological-paradigmatic marking differs both from *morphological-derivative* marking, when a derivative marker of the category is added to the verb but does not substitute for any other marker, and from *paradigmatic* marking, when a category is expressed by a change of agreement markers.

The *reciprocal* marker is *-zarə-* if a reciprocal entails coreferentiality between the subject and the direct object of a transitive verb, and *-za-* in other cases:

- (2) a. a:ħa-m ua u-a:[-o]-cəx-Ø.
 they-ERG you 2SG.ABS-3PL.ERG-DYN-KNOW-PRES
 ‘They know you.’

- b. *a:ħa-r Ø-zar-o-cax-Ø.* (reciprocal of vt)
 they-ABS 3PL.ABS-REC-DYN-know-PRES
 ‘They know each other.’
- (3) a. *fa !’əžə-m fə-Ø-psa:l-a:-s’.*
 you.PL old.man-OBL 2PL.ABS-3SG.OBL-speak-PAST-ASS
 ‘You spoke to the old man.’
- b. *fa-ra !’əžə-m-ra fə-za-psa:l-a:-s’.* (reciprocal of vi)
 you.PL-CONJ old.man-OBL-CONJ 2PL.ABS-REC-speak-PAST-ASS
 ‘You and the old man spoke to each other.’

The *reflexive* marker is *-zə-* when a reflexive entails coreferentiality with the subject of a transitive verb and it is *-za-* on two-place intransitive bases:

- (4) a. *sa a:-r Ø-s-o-tx’as’-Ø.*
 I he-ABS 3SG.ABS-1SG.ERG-DYN-wash-PRES
 ‘I am washing him.’
- b. *sa zə-z-o-tx’as’-Ø.* (reflexive of vt)
 I REFL-1SG.ERG-DYN-wash-PRES
 ‘I am washing myself.’
- (5) a. *da a:-bə d-Ø-o-ups’-Ø.*
 we he-OBL 1PL.ABS-3SG.OBL-DYN-ask-PRES
 ‘We are asking him.’
- b. *da də-z-o-ups’-ž^α.* (reflexive of vi)
 we 1PL.ABS-REFL-DYN-ask-SUFF
 ‘We are asking ourselves (each of us is asking himself).’

The *comitative* is marked with the preverb *-da-*. The collaborator is named by an indirect object NP, and the agreement marker cross-referencing the collaborator immediately precedes the preverb:

- (6) a. *!’əžə-m š^αayər Ø-je-f-a:-s’.*
 old.man-ERG wine 3SG.ABS-3SG.ERG-drink-PAST-ASS
 ‘The old man was drinking wine.’
- b. *!’əžə-m x’as’a-xa-m š^αayər Ø-Ø-d-e-f-a:-s’.* (comitative)
 old.man-ERG guest-PL-OBL wine 3SG.ABS-3PL.OBL-COM-3SG.ERG-drink-PAST-ASS
 ‘The old man was drinking wine *with the guests*.’

Finally, the *sociative* meaning is rendered by a reciprocal derived from a comitative:

- (7) a. *!’əžə-m x’as’a-ħa-m š^αayər Ø-Ø-d-e-f-a:-s’.* (comitative)
 old.man-ERG guest-PL-OBL wine 3SG.ABS-3PL.OBL-COM-3SG.ERG-drink-PAST-ASS
 ‘The old man was drinking wine with the guests.’
- b. *!’əžə-m-ra x’as’a-xa-m-ra š^αayər*
 old.man-ERG-CONJ guest-PL-ERG-CONJ wine
Ø-za-da-ra-f-a:-s’. (sociative)
 3SG.ABS-REC-COM-3PL.ERG-drink-PAST-ASS
 ‘The old man and the guests were drinking wine *together*.’

Table 2. Case endings

Absolutive	- <i>r</i>
Ergative	- <i>m</i>
Oblique	- <i>m</i>
Instrumental	- <i>ča</i>
Adverbial	- <i>au/-u/-ua.</i>

2. A sketch of the Kabardian grammatical system

This section contains relevant information on the Kabardian grammatical system. For more details on Kabardian morphology see Abitov et al. (1957), Colarusso (1992). Much valuable information on some grammatical features of Kabardian and its close relative Adyghe is also contained in Gishev (1991), Jakovlev (1948), Kumaxov (1971; 1989), Rogava & Kerasheva (1966), Turchaninov & Cagov (1940).

2.1 Case system

Kabardian is a morphologically ergative language. The ergative case marker is *-m*, and the absolutive case marker is *-r*. The oblique (indirect object) case marker coincides with the ergative case marker (see Table 2). These case markers occur only with definite NPs, while indefinite NPs in the core syntactic positions normally bear no case marking. The 1st and 2nd person pronouns do not distinguish between the ergative, absolutive and oblique cases. (For the interpretation of some examples below it is important to know that NPs conjoined by the marker *-ra* in a coordinate construction always assume the ergative/oblique form, regardless of their syntactic role; cf. (3b))

Kabardian also possesses cases which are usually treated as “marginal” (cf. Kumaxov (1971:64)). These are the instrumental and the adverbial case. These cases are never cross-referenced on the verb.

2.2 Verb system

2.2.1 *Classes of verbs and verb agreement*

As I have already mentioned, Kabardian has a highly developed polysyntheticism of the verb. The subject, direct object and indirect object(s) in the oblique case are obligatorily cross-referenced by agreement prefixes on the verb. Cross-referenced NPs are usually deleted in the sentence, if they can be inferred from the context. The 1st and 2nd person pronouns are especially very rare if the corresponding agreement prefix is present on the verb (an overt pronoun in this case is used only with logical stress).

Because of obligatory agreement with all core NPs, syntactic classes of verbs correspond to verb agreement patterns:

1) One-place intransitives subcategorize for and agree with only one NP (subject), which is in the Absolutive case; cf. (9).

Table 3. First and second person agreement markers

	Singular	Plural
1st p.	-s-	-f-
2nd p.	-w-	-d-

(These consonants may undergo certain phonological changes: voiceless consonants become voiced before voiced consonants and vice versa, and *-w-* becomes *-b/p-* under certain conditions.)

2) Two- and three-place intransitives subcategorize for and agree with one NP in the Absolutive case (subject) and with one or as many as three NPs in the Oblique case (indirect object(s)); cf. (13).

3) Transitives (vt) subcategorize for and agree with one NP in the Ergative case (subject) and one NP in the Absolutive case (direct object); cf. (10).

4) Bitransitives (vb) subcategorize for and agree with one NP in the Ergative case (subject), one NP in the Absolutive case (direct object) and from one up to (potentially) three NPs in the Oblique case (indirect object(s)); cf. (11).

The order of agreement prefixes is fixed as follows:

- (8) ABS – OBL – ERG – [ROOT].

The agreement markers of the 1st and 2nd persons are as in Table 3.

The 1st and 2nd person agreement markers may also contain the vowels *-a-* or *-ə-* which follow the consonants given in Table 3. The choice between *-a-*, *-ə-* and *-∅-* depends upon the case of cross-referenced NP, tense and presence of a preverb in the verbal form:

- 1) *-ə-* when an absolutive NP is cross-referenced:

- (9) *sə-žag-a:-s'*
1SG.ABS-play-PAST-ASS
'I was playing.'
- (10) *sə-p-x'-a:-s'*
1SG.ABS-2SG.ERG-carry-PAST-ASS
'You carried me.'

- 2) *-a-* when an oblique NP is cross-referenced in the Past and in the Future:

- (11) *∅-fa-s-t-a:-s'*
3SG.ABS-2PL.OBL-1SG.ERG-give-PAST-ASS
'I gave this to you.'
- (12) *∅-qə-ua-da'ua-n-s'*
3SG.ABS-DIR-2PL.OBL-listen-FUT-ASS
'He will listen to you.'

3) No vowel if an oblique NP is cross-referenced in the Present or when the oblique NP agreement marker precedes a preverb (in any tense):

- (13) *sə-w-o-z'a-∅*
1SG.ABS-2PL.OBL-DYN-wait-PRES
'I am waiting for you.'

- (14) *sə-p-te-l'-a:-s'*
 1SG.ABS-2SG.OBL-PREV-jump-PAST-ASS
 'I jumped on you.'

4) No vowel if the ergative NP is cross-referenced:

- (15) *Ø-p-š'-a:-s'*
 3SG.ABS-2SG.ERG-do-PAST-ASS
 'You have done this.'

Note: any vowel of a personal agreement marker is deleted when followed by another vowel; the same holds true for vowels on markers of grammatical categories, including the reciprocal and reflexive, when they are inserted in the agreement slot instead of an agreement marker.

The markers of the 3rd person are *Ø*-, *ma:-*, *ma-*, *e-* and *i-*.

The 3rd person singular absolutive is always cross-referenced by zero suffix (cf. (16)) except in monovalent dynamic verbs, in which case it is cross-referenced by *ma:-* or *ma-* (cf. (17)):

- (16) *stača:n-ər Ø-sə-t-s'*
 glass-ABS 3SG.ABS-PREF-stand-ASS
 'The glass is standing.'
- (17) *š'a:la-r ma-la:ž-a.*
 young.man-ABS 3SG.ABS-WORK-PRES
 'The young man is working.'

The agreement marker for the 3rd person singular ergative of (bi)transitive verbs is *-e-* in the Present Indicative Affirmative and *-i-* in all the other tenses:

- (18) *a:-bə ža:na Ø-e-d-Ø.*
 he-ERG shirt 3SG.ABS-3SG.ERG-SEW-PRES
 'He is sewing a shirt.'
- (19) *a:-bə txəl' Ø-i-tx-a:-s'*
 he-ERG book 3SG.ABS-3SG.ERG-WRITE-PAST-ASS
 'He wrote a book.'

The same agreement markers with the same distribution cross-reference 3rd person singular indirect objects.

3rd person plural NPs in the ergative or oblique case are also cross-referenced with *-i-* and *-e-* with the same distribution of these markers, but, unlike 3rd p. singular, these markers are followed by the plural prefix *-a:-*. The agreement markers *-i-/e-* interact with *-a:-* resulting in *-a:-*, *-ja:-* and *-aj* (the latter for oblique NPs only) as contracted markers of 3rd p. singular:

- (20) *a-bə-ša-m a:-r Ø-ja:-x'-Ø.* (*ja:* < *-i-a:-*)
 he-ERG-PL-ERG he-ABS 3SG.ABS-3PL.ERG-CARRY-PRES 3PL.ERG < -3ERG-PL
 'They are carrying him.'

- (21) *a:-bə-ʃa-m s-a:-xʰ-Ø.* (a: < -i-a-)
 he-ERG-PL-ERG 1SG.ABS-3PL.ERG-CARRY-PRES 3PL.ERG < -3.ERG-PL
 ‘They are carrying me.’
- (22) *a:-bə-ʃa-m s-a:j-psalʰ-a:-sʰ.* (a:j < -i-a)
 he-OBL-PL-OBL 1SG.ABS-3PL.OBL-talk-PAST-ASS 3PL.OBL < -3.OBL-PL
 ‘I spoke to them.’

In the case of the 3rd person of the absolutive NP the suffix *-xa-* is optionally added to the verb. It is common with intransitives (cf. (23)), but marginal with transitives.

- (23) *a:-ʃa-r Ø-sʰə-s(-xa)-sʰ.*
 he-PL-ABS 3SG.ABS-PREF-sit-PL-ASS
 ‘They are sitting.’

2.2.2 Stative and dynamic verbs

All Kabardian verbs are divided into stative and dynamic. This semantic distinction is reflected in morphology: in the Present Tense, statives, but not dynamic verbs have the affirmative suffix *-sʰ*; conversely, dynamic verbs have the prefix *-o-* in the Present Tense (obligatorily in the 1st and 2nd person, with some verbs in the 3rd person as well), which is never attested on statives:

- (24) *s(ə)-o-bza:ʒa(*-sʰ).*
 1SG.ABS-DYN-evil(*-ASS)
 ‘I am getting evil.’ (dynamic verb)
- (25) *sə-bza:ʒa-sʰ.*
 1SG.ABS-evil-ASS
 ‘I am evil.’ (stative verb)

2.2.3 Tense

Kabardian has two series of tenses – I and II. In total, 8 tenses are distinguished: Present I and II, Past I and II, Aorist I and II, Future I and II. For the needs of understanding the present paper, however, the reader needs only to distinguish three main tenses of Kabardian – Present I, Past I and Future I. Present I is marked with the suffixes *-Ø* or *-r* (the latter appears optionally on dynamic verbs only); Past I is marked with the suffix *-a:*; Future I is marked with the suffix *-nu*. In Past I and Future I the affirmative suffix *-sʰ* obligatorily follows the tense suffixes.

2.2.4 Valence-increasing prefixes

There is a wide range of prefixes which signal increase of verbal valence, viz. addition of a direct or indirect object to the verb. The agreement marker of this (in)direct object immediately precedes a valence-increasing prefix. The following valence-increasing prefixes exist:

- 1) The causative marker *-ya-/ya:-*:

- (26) a. *u-o-kʰa-Ø.*
 2SG.ABS-DYN-go-PRES
 ‘You are going.’

- b. *uə-z-o-ya-k^oa-Ø*.
 2SG.ABS-1SG.ERG-DYN-CAUS-GO-PRES
 ‘I am sending you; I am making you go.’

2) The benefactive marker *-x^o(a)-* and malefactive marker *-f(a)-*: these markers signal addition of a Beneficiary NP or Maleficiary NP respectively in indirect object position:

- (27) a. *una Ø-z-o-š[’]-Ø*.
 house 3SG.ABS-1SG.ERG-DYN-build-PRES
 ‘I am building a house.’
 b. *una Ø-p-x^oa-z-o-š[’]-Ø*.
 house 3SG.ABS-2SG.OBL-BEN-1SG.ERG-DYN-build-PRES
 ‘I am building a house for you.’
 c. *una Ø-p-fə-z-o-š[’]-Ø*.
 house 3SG.ABS-2SG.OBL-MALEF-1SG.ERG-DYN-build-PRES
 ‘I am building a house in spite of your will.’

3) Valence-increasing preverbs: these preverbs signal addition of an indirect object with the meaning of location, direction, source of action, etc. There is a wide range of underived preverbs and a great many derived preverbs in Kabardian. The total number of preverbs seems to exceed 100. Smeets (1984: 251–87) lists 85 preverbs for Adyghe (for details on preverbs in Abkhaz-Adyghe languages see Tabulova & Temirova (1983)). Each preverb has its own meaning which can be modified in combination with different verbs. It should be emphasized that addition of a preverb to a verb is the basic way of expressing spatial characteristics of the action expressed by this verb: there is no system of locative cases in Kabardian, and expression of location or direction with the help of an indirect object NP in the Oblique case is possible only when this verb subcategorizes for this NP, and this, in turn, takes place only when this verb has an appropriate preverb. The examples in (28) show how different locative relations are expressed with the verb ‘sit’: this verb without a preverb cannot take an indirect object complement (28a), but when a preverb is added an indirect object becomes obligatory (28b–d). The exact interpretation of this indirect object depends upon the preverb:

- (28) a. *š[’]a:la-r Ø-š^oə-s-s[’]*.
 young.man-ABS 3SG.ABS-PREF-sit-ASS
 ‘The young man is sitting.’
 b. *š[’]a:la-r psə-m Ø-Ø-x^oa-s-s[’]*.
 young.man-ABS water-OBL 3SG.ABS-3SG.OBL-PREV-sit-ASS
 ‘The young man is sitting in the water.’
 c. *š[’]a:la-r stol-əm Ø-Ø-te-s-s[’]*.
 young.man-ABS table-OBL 3SG.ABS-3SG.OBL-PREV-sit-ASS
 ‘The young man is sitting on the table.’
 d. *š[’]a:la-r stol-əm Ø-Ø-g^oa-s-s[’]*.
 young.man-ABS table-OBL 3SG.ABS-3SG.OBL-PREV-sit-ASS
 ‘The young man is sitting near the table.’

As already mentioned, the comitative marker *-da-* patterns with the valence-increasing preverbs (see Section 6 for more details).

For the present study it is important to know that there cannot be more than one locative preverb in a verbal form. The causative and benefactive (or malefactive) markers however, are compatible with a locative preverb in a verbal form. Verbs containing both a locative preverb and a benefactive (or malefactive) marker have two indirect objects.

2.2.5 Valence-decreasing markers

Valence decrease is regularly marked only by the reciprocal and reflexive markers. There are no regular passive, antipassive, anticausative or other valence-decreasing mechanisms in Kabardian except reciprocal and reflexive.

2.3 Agreement in nominals

Kabardian nouns and adjectives agree with their possessors; when used predicatively, nouns also agree with the subject:

- (29) *murat Ø-si-a:da-s'.*
Murat 3SG-1SG-father-ASS
'Murat is my father.'
- (30) *u-i-a:da ma:-k^oa-Ø.*
2SG-i-father 3SG.ABS-go-PRES
'Your father is going.'

2.4 Agreement with conjoined NPs

Since reciprocals and sociatives for obvious semantic reasons often require conjoined subjects or objects, morphosyntactic intricacies of nominal conjunction are relevant for the present study. The conjunction *-ra* follows every conjoined NP. As already mentioned in 2.1 above, if an NP followed by *-ra* is definite and has to bear case marking, its case is always ergative/oblique, but never absolutive, irrespective of syntactic position. When two or more NPs are conjoined in one syntactic position, they are cross-referenced by one agreement marker on the verb. If all the conjoined NPs are 3rd person, they are cross-referenced by a 3rd person plural agreement marker; if a 2nd person (singular or plural) NP is conjoined with 3rd person NP(s), the agreement marker is 2nd person plural; finally, if a 1st person (singular or plural) NP is conjoined with a 2nd and/or 3rd person NP, the agreement marker is 1st person plural, cf:

- (31) a. *murat-ra rasul-ra ma-žag-Ø.*
M.-CONJ R.-CONJ 3PL.ABS-play-PRES
'Murat and Rasul are playing.'
- b. *murat-ra ua-ra f-o-žag-Ø.*
M.-CONJ YOU-CONJ 2PL.ABS-DYN-play-PRES
'Murat and you are playing.'
- c. *ua-ra sa-ra d-o-žag-Ø.*
YOU-CONJ I-CONJ 1PL.ABS-DYN-play-PRES
'You and I are playing.'

2.5 The syntax of lexical reciprocals

Underived lexical reciprocals do not allow expression of two arguments by one (conjoined) NP. Normally one of the two agents is expressed by an absolutive NP, and the other by an oblique NP:

- (32) a. *sa ʔəʒə-m s-Ø-o-zawa-Ø.*
 I old.man-OBL 1SG.ABS-3SG.OBL-DYN-fight-PRES
 ‘I am fighting with the old man.’
- b. *ʔəʒə-r sa Ø-qy-z-o-zawa-Ø.*
 old.man-ABS I 3SG.ABS-DIR-1SG.OBL-DYN-fight-PRES
 ‘The old man is fighting with me.’
- c. **ʔəʒə-m-ra sa-ra d-Ø-o-zawa-Ø.*
 old.man-OBL-CONJ I-CONJ 1.PL.ABS-3SG.OBL-DYN-fight-PRES
 ‘The old man and I are fighting with each other.’

Sentence (32c) is entirely grammatical in the meaning ‘The old man and I are fighting with someone else’. But for the meaning in (32c) a reciprocal construction is required (cf. (35b)).

2.6 Word order

The SOV order is usually regarded as unmarked for Kabardian. However, SVO is also frequent, and VSO and OSV are possible. Within a NP head-final order is strongly preferred.

3. The reciprocal meaning

3.1 The general rule for reciprocal formation

The general rule for derivation of morphological-paradigmatic reciprocals is as follows:

(I) coreferential participants of a reciprocal action are always expressed by one NP (possibly, conjoined);

(II) omitted NP is always the one which occupies lower position on the hierarchy in (33):

- (33) DIRECT OBJECT > SUBJECT > INDIRECT OBJECT;

(III) the reciprocal marker is placed in the agreement slot of the NP which is deleted in the reciprocal construction (cf. (34), (35), (36));

(IV) the reciprocal marker is *-zarə-* when it fills the Ergative agreement slot (cf. (34)) and *-za-* otherwise (cf. (35)).

As (I) implies, the coreferential NPs of a reciprocal construction never differ in their syntactic position, therefore a discontinuous reciprocal construction similar to the Russian *Ivan celovalsja s Mariej* lit. ‘John kissed *with Mary*’, where two participants of a reciprocal action are expressed by two NPs with different syntactic roles, is impossible in Kabardian.

As (II) implies, in the case of reciprocals from two-place transitives the ergative NP (subject) is deleted (*a:ǰa-m* in (34a)) and absolutive NP (*a:ǰar* in (34b)) expresses the agent of the reciprocal action. In the case of reciprocals from bivalent intransitives the oblique NP (indirect object) is deleted (*s'a:la-m* of (35a)), and again the absolutive NP (*a:ǰar* in (35b)) expresses the agent.

The general rule holds for all the diathesis types of reciprocals which are discussed in the subsequent subsections.

3.2 Diathesis types

3.2.1 Subject-oriented diathesis types

3.2.1.1 “Canonical” reciprocals

3.2.1.1.1 From two-place transitives. Here the reciprocal marker is *-zarə-*. Since an ergative NP is deleted, the reciprocal marker is inserted in the ergative agreement slot. The verb becomes intransitive with the deletion of the ergative NP:

- (34) a. *a:ǰa-m ua u-a:[-o]-cəx-Ø.* (= (2))
 they-ERG you 2SG.ABS-3.PL.ERG-DYN-know-PRES
 ‘They know you.’
 b. *a:ǰa-r Ø-zar-o-cəx-Ø.*
 they-ABS 3PL.ABS-REC-DYN-know-PRES
 ‘They know each other.’

3.2.1.1.2 From two-place intransitives. The reciprocal marker for these verbs is *-za-*. Since an oblique NP (indirect object) is deleted, the reciprocal marker occupies its agreement slot:

- (35) a. *l'əžə-r s'a:la-m Ø-j-o-zawa-Ø.*
 old.man-ABS young.man-OBL 3SG.ABS-3SG.OBL-DYN-fight-PRES
 ‘The old man is fighting with the young man.’
 b. *a:ǰa-r Ø-z-o-zawa-Ø.*
 they-ABS 3SG.ABS-REC-DYN-fight-PRES
 ‘They are fighting.’

3.2.1.1.3 From three-place transitives. The “canonical” type of reciprocals from bitransitives is formed in the same way as from two-place transitives: ergative NP is deleted and *-zarə-* is inserted in the ergative agreement slot. Naturally, this involves intransitivization of the verb:

- (36) a. *a:-bə a:-r (a:-bə) Ø-jə-rəj-t-a:-s'.*
 he-ERG he-ABS he-OBL 3SG.ABS-3SG.OBL-3SG.ERG-give-PAST-ASS
 ‘He gave this to him.’
 b. *a:ǰa-r a:-bə Ø-jə-zarə-t-a:-s'.* (Rogava & Kerasheva 1966:275)
 they-ABS he-OBL 3SG.ABS-3SG.OBL-REC-give-PAST-ASS
 ‘They gave each other to him.’

3.2.1.2 “Indirect” reciprocals

3.2.1.2.1 *From non-benefactive three-place transitives.* Here the indirect object is deleted (according to (II)), therefore the reciprocal marker is *-za-* inserted in its agreement slot (according to (III)). The verb retains its transitivity and the construction remains ergative:

- (37) a. *a:-bə ʃ'a:q^oa-r sabij-xa-m Ø-ja:-x-i-g^oa^s-a:-s'.*
 he-ERG bread-ABS child-PL-OBL 3SG.ABS-3PL.OBL-DIR-3SG.ERG-divide-PAST-ASS
 ‘(S)he divided the bread among the children.’
- b. *a:-bə-ʃa-m ʃ'a:q^oa-r Ø-za-x-i-g^oa^s-a:-s'.*
 he-ERG-PL-ERG bread-ABS 3SG.ABS-REC-DIR-3PL.ERG-divide-PAST-ASS
 ‘They divided the bread between each other.’

3.2.1.2.2 *From derived benefactives.* Here again the indirect object (beneficiary) is omitted, and the reciprocal marker is *-za-* inserted in its agreement slot:

- (38) a. *una-r Ø-p-ʃ^oa-z-o-ʃ'-Ø.*
 house-ABS 3SG.ABS-2SG.OBL-BEN-2SG.ERG-DYN-build-PRES
 ‘I am building this house for you.’
- b. *una-ʃa-r Ø-za-ʃ^o-f-o-ʃ'-Ø.*
 house-PL-ABS 3SG.ABS-REC-BEN-1PL.ERG-DYN-build-PRES
 ‘We are building houses for each other.’

3.2.1.3 *Expression of “possessive” reciprocity.* There is no “possessive” reciprocal proper in Kabardian. The idea of “possessive” reciprocity is expressed by a reciprocal of the “indirect” type derived from benefactive. Therefore, (38b) represents the only way of translating into Kabardian the two English sentences: *They are building houses for each other* and *They are building houses of each other*. The non-existence of “possessive” reciprocal may look surprising against the background of the high productivity of the other reciprocal types. However, it agrees with the general tendency observed in Kabardian to promote foregrounded NPs into argument positions. It is natural to assume that possessor is foregrounded when it is in reciprocal relation with another participant. Therefore such a possessor is obligatorily promoted into an argument position by means of benefactive.

3.2.2 Object-oriented reciprocals

3.2.2.1 Reciprocals and morphological causatives

3.2.2.1.1 *The standard case.* There is morphological evidence that in Kabardian causatives are derived from reciprocals in relevant cases, but not *vice versa*. Consider:

- (39) a. *mo ʃ'a:la-m mo xəʒabz-ər Ø-i-ʃ^o-a:-s'.*
 this young.man-ERG this girl-ABS 3SG.ABS-3SG.ERG-marry-PAST-ASS
 ‘This young man married this girl.’ (underived vt)
- b. *a:-bə mo ʃ'a:la-m mo xəʒabz-ər*
 he-ERG this young.man-OBL this girl-ABS
Ø-qə-Ø-ri-ya-ʃ^o-a:-s'.
 3SG.ABS-DIR-3SG.OBL-3SG.ERG-CAUS-marry-PAST-ASS
 ‘(S)he married this girl with this young man.’ (causative of vt)

- c. *a:-bə mo s'a:la-m-ra mo xəʒabz-əm-ra*
 he-ERG this young.man-OBL-AND this girl-OBL-AND
Ø-zar -i-ya-š^α-a:-s'
 3SG.ABS-REC-3SG.ERG-CAUS-marry-PAST-ASS
 '(S)he married this young man and this girl.' (reciprocal [putatively, of causative])

The reciprocal in (39c) entails coreference between the direct and indirect object of the causative, i.e. it is of object-oriented type. However, the reciprocal marker is *-zara-*, instead of *-za-* required elsewhere in object-oriented reciprocals. This is why the reciprocal in (39c) cannot be treated as derived from the causative in (39b). The analysis under which the appearance of *-zara-* in (39c) does not come as a surprise is the one that treats this marker as inherited from the corresponding reciprocal without a causative:

- (40) *mo š'a:la-m-ra mo xəʒabz-əm-ra Ø-zara-š^α-a:-s'*
 this young.man-OBL-CONJ this girl-OBL-CONJ 3SG.ABS-REC-marry-PAST-ASS
 'This young man and this girl married.'

3.2.2.1.2 *The sociative meaning of reciprocals from three-place causatives.* On some causatives, predominantly those denoting emotional states or spontaneous actions, the reciprocal marker may have the sociative meaning:

- (41) a. *a:-bə a:-r Ø-i-ya-dəx'aš^αš-a:-s'*
 he-ERG he-ABS 3SG.ABS-3SG.ERG-CAUS-laugh-PAST-ASS
 'He made him laugh.'
 b. *a:-š^αa -r Ø-zara-ya-dəx'aš^αš-a:-s'*
 he-PL-ABS 3SG.ABS-REC-CAUS-laugh-PAST-ASS
 'They made *each other* laugh', or 'They laughed *together*.'
- (42) a. *a:-bə a:-r Ø-i-ya-g^ozaw-a:-s'*
 he-ERG he-ABS 3SG.ABS-3SG.ERG-CAUS-worry-PAST-ASS
 'He made him worry.'
 b. *a:-xa-r Ø-zara-ya-g^ozaw-a:-s'*
 he-PL-ABS 3SG.ABS-REC-CAUS-worry-PAST-ASS
 'They made *each other* worry', or 'They became worried *together*'.

Here are some more examples of the complex "reciprocal + causative" with sociative meaning (among underived transitives and causatives only those actually attested are listed):

- (43) a. *yabadan* 'to make firm, strengthen' – *zara-yabadan* 'to prepare *together* for defense' (instead of 'to prepare *each other* for defense')
 b. *ya-delan* 'to be enticed with sth' – *zara-ya-delan* 'to commit *together* an unseemly action' (instead of 'to entice *each other*')
 c. *k'iin* 'to shout' – *zara-ya-k'iin* 'to shout *together*' (instead of 'to make *each other* shout').

Seeking for a semantic explanation of the present effect, it is interesting to note that all the listed verbs denote either an emotional state, or an action which expresses an emotional

state (*laugh, cry*). Performing such actions or achieving such states together may be seen as the co-agents' affecting each other: indeed one is likely to start worrying when other people worry, to shout when everybody around is shouting, etc.

It is very important to note that the meanings of reciprocals and causatives interact with each other rather than neutralize each other in verbal forms. That this is so is clear because their combination brings about a sociative meaning, whereas in case of pure neutralization it would be expected that the verbs with *zarə-ya-* would have the same meaning as the corresponding underived verbs.

There are reasons to assume that the present semantic effect is not a matter of specific interaction of the particular reciprocal and causative morphemes, but rather a realization of a mechanism of metaphorization which is not limited to any particular morphological contexts. As a matter of fact, the same effect of sociative meaning appears when a reciprocal marker is attached to some lexical causatives lacking the causative marker *-ya*:

- (44) *ḡun* 'to chase' – *zarəḡuḡan* 'to persecute sb together'
ṣʰan 'to lead' – *zareṣʰaḡan* 'to lead sb together'
lʰafən 'to pull' – *zarelʰafaḡan* 'to pull each other' / 'pull one after another'

3.2.2.2 Object-oriented reciprocals derived from three-place verbs. All the examples attested are from three-place transitives only. Here an indirect object NP is omitted as coreferential with the direct object NP, because the position of indirect object is lower than that of the direct object in the hierarchy under (34). The reciprocal marker, as expected, is *-za-* inserted into the indirect object agreement slot:

- (45) a. *a:-bə mo kʰa:psa-r mə kʰa:psa-m Ø-Ø-p-i-ṣʰ-a:-sʰ.*
 he-ERG this wire-ABS that wire-OBL 3SG.ABS-3SG.OBL-DIR-3SG.ERG-tie-PAST-ASS
 'He tied this wire with that wire.'
 b. *a:-bə mə kʰa:psa-m-ra mo kʰa:psa-m-ra*
 he-ERG that wire-OBL-AND this wire-OBL-AND
Ø-za-p-i-ṣʰ-a:-sʰ.
 3PL.ABS-REC-DIR-3.SG.ERG-tie-PAST-ASS
 'He tied this wire and that wire together.'

This type of reciprocals often undergoes certain reinterpretation of which two types can be distinguished:

1) if the underlying verb denotes separating a part or an element from the (whole) object, or inverse action of putting a part or an element together with the whole object, the verb with *-za-* often means dividing one object into parts:

- (46) a. *a:-bə pxa-m qʰda:ma Ø-qə-Ø-p-i-ḡ-a:-sʰ.*
 he-ERG tree-OBL branch 3SG.ABS-DIR-3SG.OBL-PREV-3SG.ERG-saw-PAST-ASS
 'He sawed a branch from the tree.'
 b. *a:-bə pxa-r Ø-za-p-i-ḡ-a:-sʰ.*
 he-ERG tree-ABS 3SG.ABS-REC-PREV-3SG.ERG-saw-PAST-ASS
 'He sawed the tree into pieces.'

This pattern of reinterpretation is generalized in (47):

- (47) Three-place transitive: ‘X separates Y (DO) from Z (IO), where Y is a part or an element of Z’ → Object-oriented reciprocal: ‘X divides Z into parts.’

This reinterpretation is quite natural, because object-oriented reciprocals proper are impossible for the corresponding bitransitives: indeed, if Y (DO) is a part of Z (IO), then Z may not be a part of Y, hence no reciprocity is possible.

This mechanism of reinterpretation appears to be very productive in Kabardian. As a matter of fact, for instance, the verb in (46b) is the principal Kabardian verb for sawing. Three-place verbs of separation as in (46a) are much less frequent than reciprocals derived from them. There are very many verbs of separation or putting together which are used only with the reciprocal marker, without a counterpart corresponding to (46a). As most verbs of separation are used with preverbs, it is reasonable to claim that the reciprocal marker forms an integral complex morpheme with the preverb. Therefore further discussion of such verbs will follow in Section 10 concerned with the interaction of preverbs with the reciprocal markers.

2) Many object-oriented reciprocals from three-place verbs are interpreted as *locative* reciprocals. This happens with especially high frequency in verbs with preverbs. The reason for this reinterpretation is quite clear: an indirect object required by the verb with a preverb often denotes space, a mass, a liquid, etc., into which the direct object referent is put or where it is situated. The direct and indirect objects of such verbs belong to different semantic classes, therefore the “canonical” reciprocal interpretation is blocked; cf.:

- (48) a. *γaʔəsən* ‘to seat sb (DO)’ (vt)
 b. *xa-γaʔəsən* ‘to seat sb (DO) somewhere (IO)’ (vb)
 c. *za-xa-γaʔəsən* ‘to seat some people (DO) together.’

This kind of reinterpretation is also considered in detail in Section 10, where combinations of the reciprocal marker with different preverbs are dealt with. Here I will just note that both types of reinterpretation of object-oriented reciprocals take place under similar conditions when reciprocal proper is impossible for semantic reasons.

3.3 Reciprocals from nominals

Nouns and adjectives denoting two-place relations cross-reference both subordinate NPs in the same way as two-place intransitives do:

- (49) a. *a:r a:bə Ø-e-q⁰a^{3α}-s²*
 he-ABS he-OBL 3SG.ABS-3SG.OBL-brother-ASS
 ‘He is his brother.’
- (50) a. *sa ua sə-n[-w]-o-^{3α}x²-s²*
 I you 1SG.ABS-DIR-2SG.OBL-o-similar-ASS
 lit. ‘I am similar to you.’

When two arguments of such nouns coincide, the reciprocal marking is obligatory:

- (49) b. *a:-ša-r Ø-za-q^oaš^α-s'.*
 he-PL-ABS 3PL.ABS-REC-brother-ASS
 'They are brothers to each other.'
- (50) b. *ua-ra sa-ra də-za-š^αx'-s'.*
 you-CONJ I-CONJ 1PL.ABS-REC-similar-ASS
 lit. 'You and I are similar to each other.'

The meanings of (49b) and (50b) cannot be expressed without the reciprocal marker on the predicative noun. The reciprocal nominal forms occur in the argument position as well:

- (51) a. *Ø-sa-š^αx'u çəx^o ma:-k^oa-Ø.*
 3SG.ABS-1SG.OBL-similar man 3SG.ABS-go-PRES
 'A person similar to me is going.'
- b. *Ø-za-š^αx'u çəx^o-xa ma:-k^oa-Ø.*
 3SG.ABS-REC-similar man-PL 3PL.ABS-go-PRES
 'Similar (to each other) people are going.'
- (52) a. *wi-q^oaš ma:-k^oa-Ø.*
 you-brother 3SG.ABS-go-PRES
 'My brother is walking.'
- b. *Ø-za-q^oaš ma:-k^oa-Ø.*
 3SG.ABS-REC-brother 3.SG.ABS-go-PRES
 'The brothers (of each other) are walking.'

The reciprocal forms are the canonical way of expressing plurality on the following nouns which denote symmetrical relations:

- (53) *za-šəpx^o* 'sisters'
za-γ^onay^o 'neighbours'
za-nəbžay^o 'friends'
za-bij 'enemies', etc.

4. The comitative meaning

4.1 Subject-oriented comitative

The comitative is formed with the preverb *-da-*, the collaborator being expressed by an indirect object NP:

- (54) a. *sa txəl'-am s-Ø-o-ž-a.*
 I book-OBL 1SG.ABS-3SG.OBL-DYN-read-PRES
 'I am reading the book.'
- b. *sa ua txəl'-am sə-b-d-Ø-o-ž-a.*
 I you book-OBL 1SG.ABS-2SG.OBL-COM-3SG.OBL-DYN-read-PRES
 'I am reading the book *with you*.'

The comitative marker *-da-* should be treated as a morpheme belonging to the same class as locative preverbs. It follows from the fact that the comitative marker is incompatible with a locative preverb in a verbal form, just as two locative preverbs are always incompat-

ible. In case the comitative has to be expressed with a verb which already has a preverb, an adverbial comitative is used (see 4.3).

It should be mentioned that there also exists a preverb *-da-* with the meaning of movement in or out of space or staying within some space, cf.:

- (55) a. *x'ən* 'to carry sth (DO)' (vt)
 b. *da-x'ən* 'to carry sth (DO) out of somewhere (IO)' (vb).

The synchronic and diachronic relations between the comitative *-da-* and the locative preverb *-da-* are not clear. Possibly they should be treated as homonyms, as no direct semantic relationship between them may be seen at the present stage of language development.

4.2 Object-oriented comitative

The object-oriented comitative is also possible in Kabardian. It is formed according to the same rules as the subject-oriented comitative, i.e. the preverb also appears in the verbal form, and the collaborator is expressed by an indirect object cross-referenced on the verb by an agreement morpheme immediately preceding the preverb:

- (56) a. *sa s'a:q^oa-r Ø-s-o-š^ox-Ø.*
 I bread-ABS 3SG.ABS-1SG.ERG-DYN-eat-PRES
 'I am eating the bread.'
 b. *sa q^oej-m s'a:q^oa-r Ø-Ø-da-z-o-š^ox-Ø.*
 I cheese-OBL bread-ABS 3SG.ABS-3SG.OBL-COM-1SG.ERG-DYN-eat-PRES
 'I'm eating the bread *and* (lit. 'with') *cheese*.'

Since there is no structural difference between subject-oriented and object-oriented comitatives, many comitative constructions are ambiguous. However, if a given construction may be understood as subject-oriented comitative, this interpretation is by far the most preferable. Thus, interpretations (ii) and (iii) for (57) are marginal, if at all possible, for the informants:

- (57) *Ø-qə-Ø-da-z-i-t-a:-s'.*
 3SG.ABS-DIR-3SG.OBL-COM-1SG.OBL-3SG.ERG-give-PAST-ASS
 i. 'He_i *together* with him_j; gave this to me' (subject-oriented)
 ii. '?He gave this *together* with that to me' (direct object-oriented)
 iii. '?He gave it to me *and* to (lit. 'with') him' (indirect object-oriented)

The object-oriented comitative meaning regularly arises only in cases like (56), where the subject-oriented comitative reading is absolutely impossible for semantic reasons.

4.3 Adverbial comitative

The comitative meaning may also be expressed lexically by the adverb *y^osau* 'together', historically a converb derived from the bivalent intransitive verb *y^osan* 'to join'. It agrees with the subject and the indirect object (collaborator), respectively as with the subject and with indirect object:

- (58) *sa a:-bə-ʃa-m sə-r-a-γ^osau s^ʰaγər*
 I he-OBL-PL-OBL 1SG.ABS-r-3PL.OBL-together wine
Ø-s-o-f-a:-s’
 3SG.ABS-1SG.ERG-DYN-drink-PAST-ASS
 ‘I was drinking wine *together* with them (lit. having joined with them).’

5. The sociative meaning

5.1 Subject-oriented sociative

The Kabardian sociative may be treated as a reciprocal derived from the respective comitative (cf. Kumaxov 1989:239). In fact, the sociative marker *-zada-* can be analysed as *-za-* (REC) + *-da-* (COM). The semantic justification of this analysis is quite clear. Indeed, if A is B’s collaborator in some situation and B is, in turn, A’s collaborator, mutual collaboration of A and B can be treated as their joint participation in the situation. Since the NP naming the collaborator is always in the oblique case, the marker that signals its deletion is *-za-*, but never *-zarə-*, therefore there is no sociative marker **-zarəda-*.

Consider derivation of sociative from comitative:

- (59) a. *sa ua txəl’-am sə-b-d-Ø-o-ža-Ø.*
 I you book-OBL 1SG.ABS-2SG.OBL-COM-3SG.OBL-DYN-read-PRES
 ‘I am reading the book with you.’
 b. *ua-ra sa-ra txəl’-am fə-za-d-Ø-o-ža-Ø.*
 you-CONJ I-CONJ book-OBL 1PL.ABS-REC-COM-3SG.OBL-DYN-read-PRES
 ‘You and I are reading the book *together*.’

The sociative marked with *-zada-* does not mean mere simultaneity of actions performed by several agents, but joint participation of agents in an action at the same time. For instance, in (59b) the agents are reading one and the same book; if they were separately reading different books, the sociative would be impossible.

According to Kumaxov (1989:239), the sociative is an innovation in the Adyghean languages. It is remarkable that in one of the dialects of Kabardian’s closest relative Adyghe, viz. Shapsug, there is no marker *-zada-*, and the sociative as well as the comitative is marked with *-da-* (see Kerasheva 1957:74).

5.2 Object-oriented sociative

The object-oriented sociative is regularly derived from an object nominative, cf.:

- (60) a. *sa q^oej-m s’a:q^oa-r Ø-Ø-da-z-o-s^ʰx-Ø.*
 I cheese-OBL bread-ABS 3SG.ABS-3SG.OBL-COM-1SG.ERG-DYN-eat-PRES
 ‘I am eating bread *and* (lit. ‘with’) cheese.’
 b. *sa q^oej-m-ra s’a:q^oa-m-ra Ø-za-da-z-o-s^ʰx-Ø.*
 I cheese-OBL-CONJ bread-OBL-CONJ SG.ABS-REC-COM-1SG.ERG-DYN-eat-PRES
 ‘I am eating *bread and cheese together*.’

(There is an interesting semantic difference between (60a) and (60b): (60a) is the standard way of describing someone eating bread with cheese on top of it, while (60b) sounds rather funny to the informants as it means eating cheese simultaneously with bread, but not placed on the bread, i.e. having bread in one hand and cheese in the other. I leave it here without further comment, but it seems that, at least in the case of the object-oriented sociative and comitative, derivation of sociative from comitative implies a kind of semantic shift: while comitative allows certain asymmetry between the ‘main’ participant and the collaborator, sociative always implies an absolutely symmetric relation between the two participants.)

5.3 Adverbial sociative

As is shown in 4.3, the comitative may be expressed lexically by the adverb γ^0 *sau*, which agrees with the subject and the indirect object (collaborator). When the NP denoting the collaborator is coordinated with the subject NP and the collaborator agreement slot in the adverb is filled with the reciprocal marker *-za-*, the whole construction becomes an instance of adverbial sociative. Consider the lexical sociative in (61b) derived from a lexical adverbial in (61a):

- (61) a. *sa a:-bə-xa-m sə-r-a-γ⁰ sau s^α ayər*
 I he-OBL-PL-OBL 1SG.ABS-*r*-3PL.OBL-together wine
Ø-s-o-f-a:-s’.
 3SG.ABS-1SG.ERG-DYN-drink-PAST-ASS
 ‘I was drinking wine *together* with them.’
- b. *sa-rə a:-bə-xa-m-rə də-za-γ⁰ sau s^α ayər*
 I-CONJ he-OBL-PL-OBL-CONJ 1PL.ABS-REC-together wine
Ø-d-o-f-a:-s’.
 3SG.ABS-1PL.ERG-DYN-drink-PAST-ASS
 ‘They and me were drinking wine *together*.’

Note that the agreement on the verb in the construction with an adverbial sociative obeys the rule for the agreement with coordinated NPs outlined in 2.5. For instance, in (61b) the subject, which itself includes a 3rd person plural NP and a first person singular NP, is cross-referenced as a first person plural NP, in accordance with that rule (see 2.5). It may be said that this agreement pattern contributes to marking sociative on a par with the adverb. Therefore the sociative in (61b) more precisely should be treated as “adverbial-syntactic” rather than purely adverbial. The sociative adverb itself also obeys the rule of agreement with coordinated NPs, so that only its forms with plural agreement markers are attested:

- (62) *də-za-γ⁰ sau* ‘we together’
fə-za-γ⁰ sau ‘you (PL) together’
Ø-za-γ⁰ sau ‘they together.’

A combination of morphological-paradigmatic and adverbial(-syntactic) sociative within one clause leads to pleonasm and is to be avoided:

- (63) ^{??}*sa-ra a:-bə-ǰa-m-ra ǰ^αayər də-za-γ^osau*
 I-CONJ he-OBL-PL-OBL-CONJ wine 1PL.ABS-REC-together
Ø-za-da-ra-f-a:-sʹ.
 3SG.ABS-REC-COM-3PL.ERG-drink-PAST-ASS
 lit. 'I and you we-are-drinking-together wine we-together.'

5.4 Syntactic sociative

When the sociative adverb is omitted in sentences like (61b), the sentence may still denote joint participation:

- (61b') *sa-ra a:-bə-ǰa-m-ra ǰ^αayər Ø-d-o-f-a:-sʹ.*
 I-CONJ he-OBL-PL-OBL-CONJ wine 3SG.ABS-1PL.ERG-DYN-drink-PAST-ASS
 'They and me were drinking wine.'

It should be noted, however, that (61b') differs from the other devices for expressing sociative in an important aspect. Unlike the sociative with *-zada-* and adverbial sociative, this construction does not obligatorily mean joint participation, but may mean parallel participation as well. Therefore in (61b') the action of drinking wine might be performed by the two participants separately, e.g. in different places or at a different time. Such 'separate' interpretation is not available in (61b). Similarly, (64) may be used to denote either that two Agents bought one and the same horse, or that each bought a horse separately; again, this interpretation would not be available with an adverbial or morphological-paradigmatic sociative:

- (64) *a:-bə-ra sa-ra mə ua Ø-qə-p-x^oa-t-ǰ^αax^o-a:-sʹ.*
 he-ERG-CONJ I-CONJ horse you 3SG.ABS-DIR-2SG.OBL-BEN-1PL.ERG-buy-PAST-ASS
 'I and he together bought a horse for you.'

It can be assumed, therefore, that Kabardian does not possess a syntactic sociative proper. This is not surprising because the same holds true for the reciprocal and comitative as well.

6. The reflexive meaning

6.1 The general rule for the formation of reflexives

Reflexives are formed according to the following rules:

- (I) The coreferential participants of a reflexive action are always expressed by one NP.
 (II) The omitted NP is always the one which occupies lower position on the hierarchy in (65):

- (65) SUBJECT > DIRECT OBJECT > INDIRECT OBJECT.

(III) The reflexive marker is put in the agreement slot of the NP which is omitted in reflexive construction.

(IV) The reflexive marker is *-zə-* when it is placed in the absolutive agreement slot, and *-za-* otherwise.

As (II) implies, in the case of reflexive from two-place transitives the direct object is deleted (*ua* in (66a)) and the subject is retained (*sa* in (66b)). In the reflexives from two-place intransitives the indirect object is deleted (*a:bə* in (68a)) and the subject is retained (*sa* in (68b)).

A comparison of the general rule for reflexives with the general rule for reciprocals outlined in 3.1 reveals that the reciprocal and reflexive differ only in the case of transitives: reflexives from these verbs delete direct object, i.e. the NP in the absolutive case, whereas reciprocals delete the subject, i.e. the NP in the ergative case. Besides, reflexives from bi-transitives differ from reciprocals in the marker of the category: the former are marked with *-zə-*, and the latter with *-zarə-*.

6.2 Reflexives derived from different types of verbs

6.2.1 From two-place transitives

The subject of a reflexive derived from a transitive verb assumes the ergative case, the coreferential absolutive NP being deleted. Therefore the subject of this type of reflexive construction is cross-referenced on the verb in the ergative agreement slot. The absolutive agreement slot is filled with the marker *-zə-* (as a rule, *-ə-* is deleted before vowels):

- (66) a. *sa ua wə-z-o-x'ap-a.*
 I YOU 2SG.ABS-1SG.ERG-DYN-dress-PRES
 'I'm dressing you.'
- b. *sa zə-z-o-x'ap-a.*
 I REFL-1SG.ERG-DYN-dress-PRES
 'I am dressing myself.'
- (67) a. *a:-bə a:-r Ø-e-tx'aš'-Ø.*
 he-ERG he-ABS 3SG.ABS-3SG.ERG-wash-PRES
 'He is washing him.'
- b. *a:-bə z(ə)-e-tx'aš'-Ø.*
 he-ERG REFL-3SG.ERG-wash-PRES
 'He is washing himself.'

6.2.2 From two-place intransitives

With reflexives from bivalent intransitives the indirect object NP in the oblique case is omitted, and the subject in the absolutive case is retained. The reflexive marker *-za-* is therefore inserted in the indirect object agreement slot.

All these parameters of reflexives from two-place intransitives coincide with those of reciprocals from the same class of verbs. To distinguish between reflexives and reciprocals from these verbs, the suffix *-ž-* is optionally attached to reflexives:

- (68) a. *sa a:-bə s-Ø-o-ups'ə-Ø.*
 I he-OBL 1SG.ABS-3SG.OBL-DYN-ask-PRES
 'I am asking you.'

- b. *sa sə-z-o-ups'ə-Ø[-ž].*
 I 1SG.ABS-REFL-DYN-ask-PRES-SUFF
 'I am asking myself.'

6.2.3 From non-benefactive and benefactive three-place transitives

Here both reflexives entailing the cross-reference of subject with direct object and with indirect object are possible. The former do not differ from reflexives from two-place transitives. The indirect object is deleted, and hence, according to the general rule in 8.1, the reflexive marker should be *-za-*. However, it is often *-zə-* instead of *-za-*; cf. the following reflexive from a benefactive:

- (69) a. *Ø-uə-x^oa-z-o-tx̣-Ø.*
 3SG.ABS-2SG.OBL-BEN-1SG.ERG-DYN-write-PRES
 'I am writing this for you.'
- b. *Ø-zə-x^oa-z-o-tx̣-Ø.*
 3SG.ABS-REFL-BEN-1SG.ERG-DYN-write-PRES
 'I write this for myself.'

This is an instance of sporadic change of *-a-* into *-ə-* in the indirect object agreement slot, which may take place if the absolutive marker is zero (see 2.2.1). The example in (69) makes it clear that *-zə-* and *-za-* should be treated as instances of a single marker, with the vowel depending upon morphonemic rules common for all the CV-markers in personal agreement slots (see Section 8 for further development of this idea).

7. Reciprocal and reflexive markers on participles

The markers *-za-*, *-zə-* and *-zarə-* also participate in formation of participles. They occur in agreement slots of certain types of relativized NPs. Specifically, *-za-* is placed in the agreement slot of relativized indirect object:

- (70) a. *sa šə s-Ø-o-pl'a.*
 I horse 1SG.ABS-3SG.OBL-DYN-look-PRES
 'I am looking at a horse.'
- b. *sə-za-pl'a:-r šə-r.*
 1SG.ABS-REL-look-PART horse-ABS
 'The horse [which] I am looking at.'

The marker *-zə-* is put in the ergative agreement slot when an ergative subject is relativized:

- (71) a. *Ø(-j) -i-t-a:-s'.*
 3SG.ABS-3SG.OBL-3SG.ERG-give-PAST-ASS
 'He gave this to him.'
- b. *Ø-je-zə-t-a:-r.*
 3SG.ABS-3SG.OBL-REL-give-PAST-PART
 'The one who gave this to him.'

Relativization of absolutive of both intransitives and transitives does not require any marker in the absolutive agreement slot. This allows to conclude that whenever the agreement slot of relativized core NP is not empty, it is filled with a marker of the reflexive/reciprocal domain.

The marker *-zə-* is also used when certain adjuncts are relativized. Purposive participles are formed with the prefix *-zə-fa-*, and locative participles are formed with the prefix *-zə-da-* or *-zə-šə*.

- (72) Purposive participle with *-zə-fa-*:

Ø-zəfa-kʰa-r

3SG.ABS-PREF-GO-PART

‘the purpose of his going.’

- (73) Locative participle with *-zə-da-*:

Ø-zəda-kʰa-r

3SG.ABS-PREF-GO-PART

‘(the place) where he goes.’

Remarkably, these prefixes occur in the position where usually preverbs occur, i.e. after the absolutive agreement slot. Furthermore, the elements following *-zə-* in these prefixes are in fact preverbs whose meanings correspond to the meanings of the participles: *-fa-* is a purposive preverb, and *-da-* and *-šə-* are locative preverbs. Given this, it is easy to see that *-zə-* in these participles is put in the agreement slot of relativized NP, as, according to 2.2.4, an agreement marker cross-referencing purpose must immediately precede a purposive preverb, and an agreement marker cross-referencing location must immediately precede a locative preverb. Therefore on these participles *-zə-* functions in the same way as on participles relativizing core NPs.

Now I am coming to the last marker used both in reciprocals and in participles: *-zarə-*, employed in “canonical” subject-oriented reciprocals (see 3.2.1.1.1), also occurs in instrumental participles and participles of manner.

- (74) Instrumental participle with *-zarə-*:

Ø-zarə-p-tʃə-r

3SG.ABS-PREF-2SG.ERG-write-PART

‘(the instrument) with which you are writing this (vt).’

- (75) Participle of manner with *-zarə-*:

Ø-zarə-lʼaža-r

3SG.ABS-PREF-work-PART

‘the way he works.’

This participial marker allows decomposition into *-za-* and a preverb in the same way as *-zə-fa-*, *-zə-da-* or *-zə-šə-*. The morpheme *-rə-* is reported in Jakovlev & Ashxamaf (1941:278) as an instrumental preverb, cf.:

- (76) *pxʼaʼa:šʷa-m Ø-Ø-r-e-zʼo-Ø.*

plough-OBL 3SG.ABS-3SG.OBL-INST-3SG.ERG-plough-PRES

‘He is ploughing with a plough.’

Therefore here again *-za-* is placed in the agreement slot of a relativized NP.

8. An overview of “syntactic” functions of *-za-*, *-zə-* and *-zarə-*

So far, we have been studying the markers *-za-*, *-zə-* and *-zarə-* in regular formation of syntactic constructions. Although their use is in fact not confined to such constructions, an overview of them, with possible generalizations, is useful at the present stage of our study.

We have seen that the markers *-zə-* and *-za-* appear in the agreement slot of an NP which is deleted as coreferential with some other NP. This is the case in reciprocalization, reflexivization and relativization. Since the choice of vowels obeys general rules for the choice of vowels on agreement markers in Kabardian (with slight deviations), it can be claimed that *-z-* is a special “substitute” of agreement markers used when an NP triggering agreement is omitted. The essential difference between reciprocals and reflexives is then observed only in the syntactic position of the omitted NP, but not in the markers.

This interpretation, simple and attractive though it is, in fact meets with two major difficulties. The first one concerns idiomatization of the reciprocal markers, which takes place in certain morphosyntactic contexts. Idiomatization is hardly expected for a marker whose functions are defined as merely “syntactic”. This issue, however, will be treated in more detail in the next section. Here I would like to turn to the second problem arising from this interpretation of the reciprocal markers: as soon as we assume that *-z-* is a special “substitutional” agreement marker, it comes as a surprise that when placed in the ergative agreement slot it takes the form *-zarə-*. Remember that normal agreement markers do not have any vowel in the ergative agreement slot, so that the reciprocal marker should be just *-z-* in this position. I do not have any non-speculative explanation of why it is *-zarə-* for now. However, some observations are worth mentioning.

As we saw it in Section 7 (see especially (76)), *-rə-* functions as an instrumental preverb. Therefore it is possible to say that the omitted ergative NP is introduced as an omitted instrument (not agent) in a reciprocal construction. Parallelism in expressing agent and instrument is not at all uncommon cross-linguistically, cf. instrumental case marking of agent in passive constructions, very common across languages. Parallelism in expressing agent and instrument is attested in some ergative languages as well. However, it is not clear why in Kabardian this parallelism is instantiated only in reciprocals.

9. The reciprocal marker *-za-* as a part of locative preverbs

9.1 Reciprocals derived from verbs with preverbs

As was already mentioned (see 2.2.4), Kabardian possesses many locative preverbs which increase valence of the verb by addition of an indirect object. As examples (77a-b) show, the indirect object agreement slot immediately precedes the preverb in verbal form:

- (77) a. $\xi^{\prime}a:la-r$ $\emptyset-s^{\alpha}\partial-s-s^{\prime}$ = (28a, b)
 young.man-ABS 3SG.ABS-PREF-sit-ASS
 ‘The young man is sitting.’

- b. *ʃ'a:la-r psə-m Ø-Ø-x^oa-s-s'.*
 young.man-ABS water-OBL 3SG.ABS-3SG.OBL-PREV-sit-ASS
 'The young man is sitting in the water.'

The indirect object agreement slot of verbs with preverbs, as any other agreement slot in Kabardian verbs, may be filled with a reciprocal marker, specifically with *-za-*, which, as the reader remembers, is used in subject-oriented “indirect” reciprocals:

- (78) a. *a:-r sa-te-uḥ-a:-s'.*
 he-ABS 1SG.OBL-PREV-step-PAST-ASS
 'He stepped on me.'
 b. *a:-ḥa-r za-te-uḥ-a:-s'.*
 he-PL-ABS REC-PREV-step-PAST-ASS
 'They stepped on each other.'

On some verbs with preverbs, like the predicate in (78), the reciprocal marker inserted in the indirect object agreement slot signals the standard reciprocal meaning. These instances of course do not deserve any additional study after I have considered reciprocals from different types of verbs with indirect object(s) along the lines of Section 3.

9.2 Idiomatic usages of *-za-* with preverbs

Sometimes, however, the reciprocal marker in combination with preverbs loses the standard reciprocal meaning. This use of *-za-* could be called idiomatic. In the following subsections I shall attempt to present briefly the major types of this idiomatization. It is not easy, however, to classify all the instances of idiomatic uses of *-za-* with preverbs. Therefore in 9.2.1–9.2.3 I shall survey the use of *-za-* with three frequent preverbs, and after this I shall attempt to draw a conclusion about the idiomatic use of *-za-* in 9.2.4. Interaction with preverbs is the very domain in which semantic nature of the reciprocal markers undergoes especially complex transformations, some of which are difficult to register due to complexity of semantic nuances and great variety of material. The examples below only serve as illustrations of the relevant phenomena, a complete description of which definitely would exceed the limits of not just the present chapter, but indeed those of the whole present volume, too.

9.2.1 *Reciprocal marker with the preverb -pa-*

This preverb has the following functions:

1) it may render a reversed action (optionally with the suffix *-žə*): *džən* 'to throw sth (DO)' – *pa-džən* / *pa-dzə-žə-n* 'to throw sth (DO) back to sb (IO)';

2) it may indicate that the action expressed by the verb is performed in front of an object or the movement expressed by the verb is directed to the front of an object: *uḥən* 'to stand' – *pa-uḥən* 'to stand in front of sth (IO)'.

Sometimes *za-* combined with *-pa-* marks a standard reciprocal meaning, entailing cross-reference of indirect object introduced by the preverb either with a direct object or with the subject, cf.:

- (79) a. *təsən* 'to sit down' (vi)
 b. *pa-təsən* 'to sit down in front of sth (IO)' (vi)
 c. *za-pa-təsən* 'to sit down in front of each other' (vi).
- (80) a. *γ^oa-uχən* 'to put sth (DO)' (vt, causative)
 b. *pa-γ^oa-uχən* 'to put sth (DO) in front of sth (IO)' (vb)
 c. *za-pa-γ^oa-uχən* 'to put sth/sb (DO) in front of each other' (vt).

With some other verbs, however, *-za-* combined with *-pa-* loses the reciprocal meaning, and the whole complex has the meaning 'on all sides of an object, on the whole surface of an object' (sometimes the verb with *zapa-* contains the suffix *-x'ə-*). Remarkably, some verbal stems which may be combined with *zapa-* in this meaning do not combine with *-pa-* alone, cf.:

- (81) a. *l'aş'-ən* 'to dust sth (DO)' (vt)
 b. **pa-l'aş'-ən*
 c. *za-pa-l'aş'ə-x'ə-n* 'to dust sth (DO) on all sides.'
- (82) a. *lādən* 'to shine' (vi)
 b. *za-pa-lādən* 'to shine brightly, from all sides.'
- (83) a. *pl'an* 'to look at sth (IO)' (vi)
 b. *pa-pl'an* 'to wait for sb (IO)' (vi)
 c. *za-pa-pl'ə-x'ə-n* 'to look at sth (IO) from all its sides, study sth carefully.'

In these examples the verbs with *-za-pa-* differ in meaning from verbs without the preverb. The main difference is that while ordinary verbs with *-pa-* denote three-place situations, the verbs in (81)–(83) denote two-place situations, i.e. it happens that the preverb does not add a participant in these cases. Surely this is an effect of metaphorical change of meaning. Consider (81): here, if a verb with *-pa-* and without *-za-* were possible, it would mean 'to dust sth (DO) in front of sth (IO)'. Now if the direct and indirect objects of this verb were parts of one entity, the verb would mean 'to dust one part of sth in front of another part'. The reciprocal meaning would be 'to dust parts of an object in front of each other'. It is probably the very meaning from which the present meaning of dusting an object on all sides has developed. Indeed, the reciprocal proper meaning of dusting parts of an object in front of each other can hardly be grasped as it is, and is most likely to be reinterpreted as dusting the whole object. Essential for this reinterpretation is the part-whole relation between direct and indirect objects of the underlying verb. A reciprocal of part-whole relation brings in the notion of covering an object from all sides.

9.2.2 Reciprocal marker with the preverb *-te-*

This preverb is used when an indirect object with the meaning of (surface) location of the action is added to the verb, cf. :

- (84) a. *q^otan* 'to break sth (DO)' (vt)
 → b. *te-q^otan* 'to break sth (DO) on some surface (IO)' (vb).

The reciprocal marker is very often used with *-te-* idiomatically, to the extent that *-zate-* is treated as a single preverb in the *Kabardian-Russian Dictionary* (Apazhev et al. 1957).

Often when a verb with *-te-* means connecting an object with a surface or separating it from a surface, the verb with *-za-te-* means connecting or separating two or more objects:

- (85) a. *te-l'x'an* 'to put sth (DO) upon sth (IO)' (vb)
 b. *za-te-l'x'an* 'to put sth (DO) together; construct sth (a wall, etc.) (DO)' (vt).
- (86) a. *txən* 'to skin sth (DO)' (vt)
 b. *te-txən* 'to tear sth (DO) off something (IO)' (vb)
 c. *za-te-txən* 'to open sth (DO)' (vt).
- (87) a. *ḱ^oan* 'to go' (vi)
 b. *te-ḱ^oan* 'to go away from sth (IO)' (vi)
 c. *za-te-ḱ^oan* 'to open' (vi).
- (88) a. *x'ən* 'to carry sth (DO)' (vt)
 b. *te-x'ən* 'to take sth (DO) away from sth (IO)' (vb)
 c. *za-te-x'ən* 'to open sth (DO)' (vt).

In these examples a “classical” reciprocal entailing indirect object deletion in verbs with *-te-* is impossible because indirect objects of the verbs with *-te-* do not belong to the same semantic class with subject or direct object (prototypically, a direct object or subject is an entity which moves, whereas the indirect object names a surface). Therefore with the addition of *-za-* a semantic shift takes place, with the result that the two entities which are connected or separated belong to the same semantic class: while the preverb without the reciprocal marker means separation of an object from or putting it together with some surface, the reciprocal marker brings in the meaning of putting two objects of the same class together or separating them.

With some verbs the complex *-za-te-* means intensity of action or action upon a multitude of objects. This meaning is possible, among other verbs, with verbs which are not combined with *-te-* alone:

- (89) a. *q^otan* 'to break sth' (vt)
 b. *zate-q^otan* 'to break sth entirely' (vt)
- (90) a. *l'an* 'to die' (vi)
 b. *zate-l'an* 'to die in great numbers' (vi)
- (91) a. *uk'ən* 'to kill sb' (vt)
 b. *zate-uk'ən* 'to kill a great multitude of' (vt)
- (92) a. *upaṣ'ən* 'to flatten sth (DO)' (vt)
 b. *zate-upaṣ'ən* 'to flatten sth (DO) up in great quantities.'

What could give rise to this meaning of *-za-te-* is quite obscure. As a matter of fact, this meaning is close to sociative, but the explanation of semantic shift from reciprocal to sociative, proposed for causatives in 3.2.2.1.2, surely cannot be valid also for the present examples. One could only note that morphological devices normally serving to denote separation sometimes may mean multitude of objects or intensity of action in some other languages as well, e.g. the Russian prefix *raz-*, which has separation as one of its basic meanings, sporadically means action over a large number of objects or intensive

action: *ras-prodat'* 'to sell out, sell everything (out of a large number)', *ras-krichat'sja* 'to raise a cry'.

9.2.3 Reciprocal marker with the preverb *-xa-*

The preverb *-xa-* introduces an indirect object with the meaning of location, direction or source of movement. When the indirect object agreement slot is filled with *-za-*, the verb sometimes means putting two or more objects together:

- (93) a. *žən* 'to throw sth (DO)' (vt)
 b. *xa-žən* 'to throw sth (DO) into sth (IO)' (vb)
 c. *za-xa-žən* 'to throw, put sth (DO) together' (vt).

The source of this semantic transformation could be the same as the one proposed for *-za-te-* in 9.2.2 above. In a number of instances *-za-xa-* denoting separation at the same time denotes intensity of action:

- (94) a. *š^αašan* 'to break' (vi)
 b. *za-xa-š^αašan* 'to break into small pieces.'
 (95) a. *taṗən* 'to rip sth (DO) up'
 b. *za-xa-taṗən* 'to rip sth (DO) into many pieces.'
 (96) a. *čatxan* 'to tear sth (DO)'
 b. *za-xa-čatxan* 'to tear sth (DO) into small pieces.'

The complex *-za-xa-* often brings in the meaning of object-oriented sociative:

- (97) a. *γ^oalybžan* 'to roast sth' (vt)
 b. *xa-γ^oalybžan* 'to roast sth (DO) somewhere (in oil, etc.) (IO)' (vb)
 c. *za-xa-γ^oalybžan* 'to roast several things (DO) together' (vt).
 (98) a. *γα-žan* 'to boil sth (DO)' (vt)
 b. *xa-γα-žan* 'to boil sth (DO) in sth (in water, etc.) (IO)' (vb)
 c. *za-xa-γαžan* 'to boil several things (DO) together' (vt).
 (99) a. *xun* 'to drive sb (DO)' (vt)
 b. *xa-xun* 'to drive sb (DO) somewhere (IO)' (vb)
 c. *za-xa-xun* 'to drive sb (DO) altogether' (vt).

In all these examples the direct object and indirect object of the verb with *-xa-* belong to different semantic classes (e.g. with the verbs meaning 'to roast' and 'to boil' the direct object is a compact entity, and the indirect object is a mass). Therefore an object-oriented reciprocal proper is impossible with such verbs, and the verbs with *-zaxa-* are reinterpreted as object-oriented sociatives.

With some other intransitive verbs with *-xa-* prefixation of *-za-* entails a "locative" reciprocal meaning, which is likely to be reinterpreted as sociative:

- (100) a. *yaṭəsən* 'to seat sb (DO)' (vt)
 b. *xa-yaṭəsən* 'to seat sb (DO) somewhere (IO)' (vb)
 c. *za-xa-yaṭəsən* 'to seat some people (DO) together' (vt).

- (101) a. ($\check{s}^{\alpha} \partial$ -)sən ‘to sit’ (vi)
 b. xa-sən ‘to sit somewhere (IO)’
 c. za-xa-sən ‘to sit together’ (vi).
- (102) a. ($\check{s}^{\alpha} \partial$ -)tən ‘to stand’ (vi)
 b. xa-tən ‘to stand somewhere (IO)’
 c. za-xa-tən ‘to stand together’ (vi).

Naturally, the “canonical” reciprocal meaning of ‘sitting/standing in each other’ would make no sense, and therefore it is replaced by the much more natural meaning of ‘sitting/standing *with* each other’ (“locative” reciprocal), that is, ‘sitting *together*’ (sociative).

Finally, with some other verbs the complex *-zaxa-* means mere intensity of action:

- (103) a. çalan ‘to smear sth (DO)’ (vt)
 b. za-xa-çalan ‘to smear sth (DO) all over’ (vt).

9.2.4 The complex “-za- + preverb” as a single marker

To conclude, the examples of *-ta-* and *-xa-* have shown that combination of the reciprocal marker with a preverb can result in idiomatization, to the effect that the verb including the reciprocal marker and a preverb may not be understood as a true reciprocal form. This happens, first of all, with preverbs which bring in the meaning of putting an object together with or separating it from some surface or some mass or some group of objects. Here, instead of a reciprocal meaning, the complex “reciprocal marker + preverb” signifies either sociativity or intensity of action.

Apart from *-ta-* and *-xa-*, similar idiomatization is observed with a large variety of other preverbs which mean separation or putting together, among which *-s’a-*, *-ga-*, *-bla-*, and *-pəɾə-* are especially frequent.

Of course this idiomatization may not be treated as a hundred percent regular rule for Kabardian, because, as already mentioned, any preverb and any verbal root can bring in various nuances of meaning in such combinations. Therefore in all cases of idiomatization it is preferable to treat the verbs with the “za + preverb” complex as one-step derivatives from verbs without a preverb. The combinations “za + preverb”, therefore, should be treated as complex derivational morphemes, with the basic meaning of separating/putting together and/or of intensity.

9.3 The reciprocal marker as a part of underived preverbs

Section 9.2 dealt with the combinations “-za + preverb” which, although synchronically are better treated as single derivational markers, still include preverbs which may be used without *-za-* as well. However, the marker *-za-* is also a part of some prefixes in which the other part, historically a preverb, does not function as such in present-day Kabardian. In such instances pure morphological conflating of *-za-* and the morpheme that follows it takes place. Usually resulting prefixes also have the meaning of separating or putting together, with various aspects. This means that that was also the meaning of historical preverbs on the basis of which such prefixes were formed. The mechanism of reinterpretation

tion could be the same as described in 9.2, with the only difference that in 9.2 the preverbs combined with *-za-* can occur without *-za-* as well.

A prefix which surely belongs to the present class is *-zabgərə-*, because there is no separate prefix *-bgərə-* in contemporary Kabardian. This preverb has a *diversative* meaning:

- | | | | |
|-------|----|---------------------------|-----------------------------------|
| (104) | a. | ž ^α an | ‘to run’ |
| | b. | zabgərə-ž ^α an | ‘to run in different directions.’ |
| (105) | a. | x’an | ‘to carry’ |
| | b. | zabgərə-x’an | ‘to distribute.’ |

Sometimes it is difficult to decide whether a historical preverb should still be analysed as such or not – some preverbs have a strong tendency to co-occur with *-za-*, but in some instances they may occur without it as well. Another probable candidate for this class of preverbs is *-zal’ə-*, also with the diversative meaning (‘*uk^oatən* ‘to move away from sth’ (vi) - *zal’ə-uk^oatən* ‘to move altogether in different directions’ (vi)).

10. Some additional remarks on the status of reciprocal markers

In Section 8, I suggested that the reciprocal markers may be treated as special markers of agreement, used when the NP which triggers agreement is omitted as a result of some syntactic process. This would put the reciprocal markers in one class with the agreement markers proper, in other words, they would become inflectional markers. This is what gives rise to the morphological-paradigmatic type of reciprocal. The first objection against such interpretation, concerning the form of the “canonical” subject-oriented reciprocal, was already discussed in Section 8. However, the data presented in Section 9 questions such an approach to the reciprocal markers more seriously.

Indeed, it can be argued that nowhere else inflectional markers are capable of idiomatization, specifically of building complex morphemes of special semantics with derivational markers. A preliminary cross-linguistic study suggests that this is true not only for the 1st, 2nd and 3rd person inflectional markers, but also for inflectional markers of special syntactic functions, substituted into agreement slots.

This hints at a specific position of the reciprocal marker between derivational and inflectional elements. It is true that these markers have the same location as agreement markers proper in verbal form, and that their basic function is to mark omission of NP triggering agreement in the corresponding slot. However, this definition of function is in fact too broad for the markers in question. As a matter of fact, Kabardian, as most languages with a developed system of personal agreement, normally does not require an overt NP in case its referent is unambiguously reconstructed from the context. However, this kind of omitted NPs, unlike NPs omitted in reciprocal, reflexive or relative clauses, never require *-z-* and its cognates in verbal form. The latter occur in a much more restricted set of grammatical contexts. This is what gives these markers their very special status. On the one hand, they behave as a part of verbal inflectional paradigm, but on the other hand, they are related to a restricted set of grammatical categories, that is, to a very

restricted set of reasons for omission of NP. In my opinion, this is why these markers are capable of interaction with derivational verbal morphology, without being themselves a part of it.

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Reciprocals, reflexives, comitatives, and sociatives in Adyghe

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Acknowledgments

References

1. Introduction

1.1 Adyghe

The Adyghe language is a member of the Abkhaz-Adyghe (West Caucasian) language family – it is included into the Adyghe group of this family with the Kabardian language. There are about 300,000 native speakers of Adyghe, 125,000 of them in Russia. Nearly all of the latter speak Russian. The vast majority of them live in the Adyghe Republic of Russian

Federation; there are also Adyghe speakers in other regions of Russia, in Turkey and other countries. In Russia newspapers and books in Adyghe are published.

Adyghe has four main dialects: Temirgoj, Bzhedugh, Abdzakh, Shapsug.

1.2 Sources of data

My materials were obtained in the Xakurinoxabl' village where the Temirgoj dialect is spoken and some Abdzakh features can also be noted (the Shovgenov district of Adyghe Republic) in the course of the fieldwork expeditions organized by the Russian State University for Humanities (2003–2004, 2006).¹ Most of the data were obtained by means of questioning native speakers (about 80 hours of interviews). When possible, the data from the texts written down in the course of the expeditions were also used.

Some data and a considerable number of characteristics of the phenomena under analysis are borrowed from the grammar of Standard Adyghe (Rogava & Kerasheva 1966).

1.3 On transliteration

In this chapter, in contrast to Chapter 17 on Kabardian reciprocals, the phonetic transcription is not used. The Cyrillic characters of the Adyghe alphabet are mostly replaced by the corresponding Latin characters, as is commonly accepted in the transliteration of the Russian alphabet. This concerns the following consonantal characters: *б*, *в*, *з*, *д*, *ж* (= *ž*), *з*, *к*, *п*, *м*, *н*, *п*, *с*, *м*, *ф*, *х*, *ц*, *ч* (= *č*), *ш* (= *š*), and vowel characters *а*, *о*, *у*, *и*. The Cyrillic letter *ш* is denoted by the combination *šb*. The letter *э* (= /e/) is preserved. The letter *я* is transliterated as *ja*; the letter *е* which usually signifies the diphthong /jə/ is retained. The following characters are preserved: *ʔ* (either a glottal stop or abruptivity of the previous consonant), *ь* and *ъ* (the latter two do not denote separate sounds: they change the value of the previous letter; cf. *г* = /g/ and *гъ* = /ɣ/). The letter *и* is rendered by schwa (ə). This way of transliterating the Adyghe material is intended to make it easier for the reader to use the Adyghe dictionaries, grammars and publications where the Cyrillic writing is used.

1.4 Overview. Means of expressing the reciprocal, reflexive, comitative, and sociative meanings

This paper is concerned with reciprocal, reflexive, comitative, and sociative constructions in Adyghe.

Adyghe has numerous means for expressing reciprocity:

1. The expeditions of 2003 and 2004 were financed by the Russian Humanitarian Scientific Fund (Grant “Adyghe linguistic expedition”: 03-04-1801e and 04-04-18008e) and the expedition of 2006 was financed by the same Fund (Grant “Syntax of a polysynthetic language” 06-04-00194a).

1. Prefixes: (a) the main means are two prefixes, the reflexive-reciprocal prefix *zə-* (with allomorphs *zə-* and *z-*; see 2.7, 3.1.1.1.2, 3.1.1.2) and reciprocal *zəɾə-* (3.1.1.1.1, 3.1.3.1); (b) a peripheral device is the complex prefix *zəɾəgəə-* (3.1.1.1.3, 3.1.3.2).

The marker *zə-* (in particular, its allomorph *zə-*) is also the only morphological device of expressing reflexivity. This prefix presumably goes back to the pronoun *zə* ‘one’, which also exists in the present-day language. Typologically, the reciprocal meaning is likely to be a result of reinterpretation of the reflexive marker on verbs whose lexical meaning makes it possible.

2. Reciprocal pronouns used as peripheral means: *zəm zər* ‘each other’, lit. ‘one one’ and (sometimes) *zəm adrər* ‘one another’ (see Section 9).
3. A possessive marker on the direct object in combination with the plural verbal marker *-x*, used as a peripheral device (see 3.1.3.3).

Comitative is coded with the marker *də-/də-* (see Section 4), which sometimes expresses the assistive meaning.

Sociative is marked with the prefixes *zə-də-*, which is a combination of the reciprocal and the comitative markers (see 5.1), and *zəɾə-gəə-* – a combination of the reciprocal and the causative markers (see 5.2).

All these means very often co-occur with the iterative suffix *-žbə* (see Section 6). This polysemous affix has the intensifying function when used on derivatives with the reciprocal and the reflexive markers, but it is glossed as ITER, because of its main meaning.

The first two prefixes, viz. *zə-* and *zəɾə-*, occupy the slot of one of the agreement affixes in the verb form, while other slots are occupied by agreement markers.

The prefix *zə-* is used in subject-oriented “canonical” reciprocals of two-place “common” intransitive bases (see (24), (25b)), inverse intransitive bases (see (28), (29b)) and subject-oriented “indirect” reciprocals of three-place transitive bases (see (32), (33b)), when the non-direct (indirect) object is deleted and the valency of the base verb decreases. Occasionally, *zə-* is used instead of *zəɾə-* in subject-oriented “canonical” reciprocals of transitive bases, in which case it converts the verb into an intransitive one (see (16c)). The marker *zə-* is also used in object-oriented reciprocals of all base verbs (cf. (40b)).

The marker *zəɾə-* is used on “canonical” reciprocals of transitives and has an intransitivizing force (see (13b)). It is never used on “canonical” reciprocals of two-place intransitive verbs and on object-oriented reciprocals.

The reciprocal pronouns and the prefix *zəɾə-gəə-* are used very rarely and have not been analyzed in linguistic literature so far.

In Adyghe, there are only simple reciprocal constructions, with both reciprocants expressed by the same syntactic argument. The only verb that forms a discontinuous construction is *zə-on* ‘to fight (with sb)’, which can take the second reciprocal marker to produce a simple reciprocal *zə-zə-on* ‘to fight’. Possibility of the discontinuous construction and compatibility with the second reciprocal marker is a result of lexicalization of the verb *zə-on*.

Another restriction is that the simple affixes *zərə-* and *zə-*, with rather few exceptions, express reciprocity only between arguments of a verb (see (13b) and (25b) respectively). The term “argument” will be understood as *a participant that controls agreement affixes of the verb*. The affix *zərə-gəə* and the reciprocal pronouns *zəm zər* and *zəm adrər* can express reciprocity between an argument and an adjunct (see (36b) and (67b) respectively).

2. Grammatical notes

2.1 Introductory

Like other languages of the West-Caucasian group, Adyghe is an ergative polysynthetic language. The subject of a transitive verb is marked with the ergative case, whereas the object of a transitive verb and the subject of an intransitive one must be marked with the absolutive. Most of the grammatical meanings are expressed by bound morphemes within a verb form: valency derivations, temporal, modal and aspectual meanings, subject and object agreement, direction and location.

Nominal morphology is much simpler. Only number, case and possession are expressed in the form of a noun, and all of them must be expressed only once in a noun phrase.

Below expression of the categories relevant for this paper will be sketched.

2.2 Nominal categories: Case, number, possession

In Adyghe, four cases are distinguished: absolutive, oblique, instrumental and the so-called “transformational” or adverbial case (in some works the inventory of cases is broadened), and two numbers – singular and plural. Table 1 shows case markers in singular and plural. Plural is marked by the suffix *-xə*.

The form with the affix *-m* is traditionally called ergative. Ergative is the case form of the transitive subject. All indirect objects are also marked with the ergative case. This is why I will call the marker *-m* ‘oblique’ rather than ‘ergative’ and gloss it as OBL, because it has a very broad range of uses.

The first and second person pronouns (*sə* ‘I’, *o* ‘you (SG)’, *tə* ‘we’, *šəu* ‘you (PL)’) do not distinguish absolutive and oblique – therefore, in the examples below the case of these pronouns is given in parentheses either as ABS or OBL depending on whether an oblique or

Table 1. Case-number markers

	Singular	Plural
Absolutive	<i>-r</i>	<i>-xə-r</i>
Oblique	<i>-m</i>	<i>-xə-m, -mə, -xə-mə</i>
Instrumental	<i>-klə, -m-klə</i>	<i>-xə-klə</i>
Adverbial	<i>-əw</i>	<i>-x-əw</i>

Table 2. Possessive prefixes

Person/number	Inalienable possession	Alienable possession
1SG	<i>s-</i> , <i>sə-</i>	<i>s-i-</i>
2SG	<i>p-</i>	<i>w-i-</i>
3SG	<i>ə-</i>	<i>jə-</i>
1PL	<i>t-</i>	<i>t-i-</i>
2PL	<i>švu-</i>	<i>švu-i-</i>
3PL	<i>a-</i>	<i>ja-</i>

an absolutive agreement marker in the verb form agrees with the pronoun (see (3), (8a), (10a), (12a, b), etc.).

In the function of the third person pronoun, the demonstrative pronoun *a-* ‘that’ is used. It is always case-marked: *a-r* <s/he-ABS>, *a-šv* <s/he-OBL>, *a-xə-r* <s/he-PL-ABS>, *a-xə-m* <s/he-PL-OBL>. The second component *-šv* in the 3SG.OBL form *a-šv* does not occur anywhere and it is distinguished here tentatively, and its glossing as OBL is questionable.

Possessivity is marked on the name of the possessum and expresses person and number of the possessor. The marking of inalienable and alienable possession is different.

In the third person metathesis changes sequence of the affixes: the marker of alienable possession *j-* is attached before the possessive affix. They are glossed by means of possessive pronouns (*my, your, his/her, our, your* and *their*).

2.3 Tense and aspect

Adyghe has a rich system of tense-aspect forms. Temporal and aspectual meanings are expressed by suffixes.

The most common are the present tense which is unmarked (*e-bəu-Ø* <3SG.IO-KISS-PRES> ‘he/she kisses him/her’), the past tense marked with the suffix *-gθ(ə)* (*ə-upsə-gθ* <3SG.S-SHAVE-PAST> ‘he shaved him’) and the future tense marked with the suffix *-švt* (*kəə-klo-švt* <DIR-GO-FUT> ‘he will come’), which can also express modal meanings. Adyghe has also a pluperfect marked with two past affixes *-gθa-gθə*, and habitual/progressive past formed by means of the affix *-švtə-gθə* (future + past) (on the meaning of these affixes see Kumaxov (1971) and Zekox (2002)).

2.4 Verb classes

Adyghe has three verb classes: transitive, intransitive non-inverse (“common”) and intransitive inverse verbs.

The class of transitive verbs includes lexemes that express a situation with a prototypically agentive subject and a prototypically patientive object; cf. *kəutən* ‘to shatter sth’, *zəpəklən* ‘to break sth’, *uuklən* ‘to kill sb’ (all Adyghe verbs are cited in the form of deverbal noun (masdar)).

- (1) *sə* *čaškə-r* *Ø-s-kəuta-gəə*.
 I(OBL) cup-ABS 3SG.DO-1SG.A-shatter-PAST
 ‘I broke (shattered) a cup.’

Intransitives are divided into non-inverse and inverse verbs. “Common” intransitive verbs (cf. *kIon* ‘to go’) have the subject and some of them also have an oblique object.

- (2) *vase* *Ø-kəə-kIua-gə*.
 V.ABS 3SG.S-DIR-go-PAST
 ‘Vasja came [-*kəə* = direction towards the speaker].’

Inverse verbs have, as a rule, two arguments – a stimulus and an experiencer (cf. *zəxəxen* ‘to hear’):

- (3) *sə* *a-r* *Ø-zəxə-sə-xə*.
 I(OBL) s/he-ABS 3SG.DO-LOC-1SG.A-hear
 ‘I hear him.’

Inverse verbs, in contrast to transitive ones, do not form reciprocals by means of the prefix *zərə-*. On the other hand, inverse verbs have an oblique subject – in this respect they differ from “common” intransitives, which have an absolutive subject. Subject properties are distributed between both of their arguments: the stimulus and the experiencer.

2.5 Agreement

In Adyghe, the absolutive argument and all oblique arguments (including oblique objects introduced by derivations) are cross-referenced in the verb form. All agreement markers are prefixes, except the 3PL marker of the absolutive argument *-x(ə)* which is a suffix.

The predicate takes agreement markers of absolutive arguments: the direct object of transitive and the subject of intransitive verbs (the first slot in the verb form). In the case of ergative (oblique) arguments the predicate takes the agreement markers of the subject and indirect objects of all groups of verbs, including indirect objects introduced by derivations. The markers of agreement with the latter indirect objects occupy the position immediately before the markers of these derivations. The markers of agreement with the absolutive subject are glossed as “s” (subject), the markers of agreement with the ergative subject as “A” (agent); the markers of agreement with the absolutive (direct) object are glossed as “DO” (direct object) and those for indirect objects (with oblique case marking) are glossed as “IO” (indirect object).

In Table 3 the absolutive and oblique markers on the predicate are listed.

Note the use of the only suffix *-x* among the agreement markers: it is controlled by the absolutive subject (see, for instance, (13b) and (14b)) or by the absolutive (direct) object (see, for instance, (8a), (33a, b)).

Table 3. Agreement markers

Person and number	Absolutive	Oblique
1 SG	<i>sə-</i>	<i>sə-, s-</i>
1 PL	<i>tə-</i>	<i>tə-, t-</i>
2 SG	<i>u-</i>	<i>o-, p-</i>
2 PL	<i>švu-</i>	<i>švo-, švu-</i>
3 SG	<i>∅-</i>	<i>ə-, e-, i-, ∅-</i>
3 PL	<i>-x</i>	<i>a-</i>

2.6 Locative and directional preverbs

Adyghe has a great number of locative preverbs (see, for example, (41)). Locative preverbs express or specify the location of the situation or direction. The location or direction is usually determined by the lexical meaning of the verb rather than by the preverb; cf. the following examples with the locative preverb *i-/r-* ‘in, inside, into’: *unə-m i-s* ‘[s/he] sits in the house’ (location), *unə-m i-xba-gə* ‘[s/he] entered the house’ (direction) (Rogava & Kerasheva 1966: 117). All locative preverbs add the locative to the verb arguments; cf. (4b) with the prefix *d-*:

- (4) a. *kIalə-m pšəašəə-r ∅-e-šbə.*
 boy-OBL girl-ABS 3SG.DO-3SG.A-lead
 ‘The boy leads a girl.’
 b. *kIalə-m pšəašəə-r unə-m ∅-∅-d-e-šbə.*
 boy-OBL girl-ABS house-OBL 3SG.DO-3SG.IO-LOC-3SG.A-lead
 ‘The boy leads a girl into the house.’

The polysemous directional preverb *kəə-/kəə-* deserves special mention. As a rule, it precedes another locative preverb in the verb form and may even form a complex preverb with it; cf. (44). With verbs of motion it denotes direction towards the speaker (cf. (2)). In certain cases this preverb serves as a component of verb conjugation; cf., for instance, (52b, c), (70a), (78a); see Rogava & Kerasheva (1966: 112–14).

2.7 Meanings of the reflexive marker *z(ə)-/z(ə)-*

Adyghe has three means of marking semantic reflexivity. The main marker is the reflexive-reciprocal prefix *z-*, more peripheral are the reflexive pronouns *ežv* ‘oneself’ and *əšəxə* ‘oneself’, lit. ‘one’s head’.

The reflexive prefix expresses coreference of any two arguments, i.e. the initial subject and any object, direct or indirect, but not between an argument and an adjunct. This prefix is controlled by the subject and, therefore, occupies the position of a non-subject agreement marker, i.e. the absolutive slot of transitive and intransitive inverse verbs, and the oblique slot of intransitive non-inverse verbs. Inverse verbs demonstrate variability of reciprocal forms (see 3.1.1.2.2). The subject of reflexive derivatives almost always has the same case form as the subject of the base verb (cf. (5a, b) with oblique subjects).

Alongside the reflexive proper and reciprocal meaning, the prefix *z-* has autocausative, anticausative, antipassive and possessive-reflexive uses. It is a highly polysemous marker demonstrating a widespread type of polysemy of reflexive-reciprocal markers. Henceforth, “reflexive” is used as a cover term for all its usages except the reciprocal one. The reflexive function (cf. (5b)) is referred to as “reflexive proper”. I gloss this prefix as REFL in all the functions except the reciprocal one.

Reflexive proper:

- (5) a. *si-gʷunəgʷu-m a-r Ø-ə-ukIə-gʷ.*
 my-neighbour-OBL s/he-ABS 3SG.DO-3SG.A-kill-PAST
 ‘My neighbour killed him.’
 b. *si-gʷunəgʷu-m z-i-ukIə-žbə-gʷ.*
 my-neighbour-OBL REFL-3SG.A-kill-ITER-PAST
 ‘My neighbour killed himself.’

Autocausative:

- (6) a. *a-šʷ a-r Ø-ə-Iətə-gʷ.*
 s/he-OBL s/he-ABS 3SG.DO-3SG.A-lift-PAST
 ‘He lifted it.’
 b. *a-šʷ z-i-Iətə-gʷ*
 s/he-OBL REFL-3SG.A-lift-PAST
 ‘He rose.’

Reciprocal:

- (7) a. *a-šʷ sə sə-zəx-e-xə.*
 s/he-OBL I(ABS) 1SG.DO-LOC-3SG.A-take
 ‘He hears me.’
 b. *a-xe-m zə-zəx-a-xə-žbə.*
 s/he-PL-OBL REC-LOC-3PL.A-take-ITER
 i. ‘They hear themselves.’ ii. ‘They hear each other.’

Antipassive:

- (8) a. *sə šʷxʷangʷupkIə-xə-r Ø-zəfə-s-šIə-gʷə-x.*
 I(OBL) window-PL-ABS 3SG.DO-LOC-1SG.A-do-PAST-PL.S
 ‘I closed the windows.’²
 b. *zə-zəfə-s-šIə-žbə.*
 REFL-LOC-1SG.A-do-ITER
 ‘I close (my shop, etc.),’ lit. ‘I close myself.’

Possessive reflexive (of a two-place intransitive verb):

- (9) a. *xʷə-r ə-lʷakʷo Ø-e-pləstxʷə-gʷ.*
 dog-ABS his-leg 3SG.S-3SG.IO-scratch-PAST
 ‘The dog scratched its leg.’ (two-place vi).

2. *zə-* in (8a) denotes an object-oriented reciprocal: see 3.2 about this type of reciprocals.

- b. *xvə-r Ø-zə-pləstxvə-žvə-gv.*
 dog-ABS 3SG.S-REFL-SCRATCH-ITER-PAST
 ‘The dog scratched itself (some part of its body).’

Anticausative:

- (10) a. *sə čvəgvə-r Ø-sə-ufa-gv.*
 I(OBL) tree-ABS 3SG.DO-1SG.A-bend-PAST
 ‘I bent the tree.’
 b. *čvəgvə-m z-i-ufa-gv.*
 tree-OBL REFL-3SG.A-bend-PAST
 ‘The tree bent.’

The prefix *zə-* on transitive bases always occupies the first slot in the verb form, i.e. the position of the DO agreement marker, including the cases, when it is used in “canonical” reciprocals derived from transitive verbs.

In all the uses of *zə-*, except the anticausative one, the subject of the derived construction corresponds to the underlying subject and retains its oblique case form. In the anticausative construction the subject of derived constructions with *zə-* forms corresponds to the object (patient) of the base construction (cf. (10b)). In other words, all the uses of *zə-* are subject-oriented, except the anticausative use, which is object-oriented.

In this respect the marker *zə-* in all its uses, except the anticausative one, differs from the reciprocal marker *zərvə-*: in constructions with *zərvə-* forms the underlying subject changes its marking to the absolutive one.

Reflexives proper of intransitive non-inverse verbs, as in (24b) (less frequently, of inverse verbs as in (28b)), contain the same reflexive-reciprocal prefix and the same agreement markers as “canonical” reciprocals. Some native speakers distinguish reflexive derivatives from reciprocal ones formally by using *zə-* in the reciprocal and *zə-* in the reflexive proper and other meanings, while others do not.

On the meanings of formally reflexive verbs see also Rogava & Kerasheva 1966:265–8.

2.8 Other means of valency derivation

Besides the reflexive-reciprocal marker *zə-* and the reciprocal markers *zərvə-* and *zərvə-gvə-* discussed in 1.3 and 2.7, there are the following valency changing markers (on the valency-increasing functions of locative preverbs see 2.6 above):

- (11) *gvə-* causative (40)
də- comitative (51b)
fə- benefactive (34)
šlo- malefactive

Besides these prefixes, there is a rarely used antipassive marker *-ə*: it substitutes for the last vowel of the verbal root; cf. *txən* ‘to write sth’ (two-place transitive verb) vs. *txən* ‘to write’ (antipassive, one-place intransitive verb).

- (12) a. *sə piʂmə-r Ø-sə-txə.*
 I(OBL) letter-ABS 3SG.DO-1SG.A-write
 ‘I write a letter.’
- b. *sə sə-txə.*
 I(ABS) 1SG.S-write.A.PASS
 ‘I write.’

Causative, benefactive, malefactive and comitative are valency-increasing markers: they add a new argument to the valency structure of the verb. The causative marker occupies the closest position to the verbal root among all derivational markers, i.e. it occurs immediately before the root. Reciprocals with the prefix *zərə-* undergo intransitivization, i.e. valency decrease takes place, and the ergative base construction changes into absolutive (see (13) and (14); for an exception see (35)). Reciprocals with the prefix *zə-* do not change the base construction: base constructions remain transitive (see (33), (34)) though the valency decreases due to the loss of an oblique object. And intransitive constructions with reciprocals in *zə-* remain intransitive (see (25), (27); a special case are reciprocals of inverse intransitive verbs, cf. (29), (30), (31)).

Reflexives are specific in that the verb retains the morphological structure as in the base construction and the subject does not change its case marking; thus for instance the oblique marking of the subject is preserved if the meaning of the derivative is reflexive proper, autocausative, antipassive and anticausative (see (5), (6), (8), (10)). In “common” intransitive verbs the reflexive marker occupies the oblique slot and the subject preserves the absolutive marking (see (9)). In inverse intransitive verbs it occupies the absolutive slot and the subject remains oblique (see (7)).

2.9 Compatibility of derivational markers

Most of the derivational markers are compatible with one another. On the other hand, only the causative prefix can be regularly repeated in a verb form, cf. *gəə-gəə-klon* <CAUS-CAUS-go> ‘to make sb lead sb’).

The sequence of the benefactive, malefactive and comitative affixes may vary. However, all of them always precede the causative prefix.

3. Morphological (prefixed) reciprocals

3.1 Subject-oriented reciprocals (intransitive and, rarely, transitive)

In Rogava & Kerasheva (1966:271–2), two morphological markers of reciprocity – *zərə-* and *zə-* are distinguished: *zərə-* is claimed to designate reciprocal relations between the subject and direct object referents of the underlying transitive verb, and *zə-* is claimed to be used in all other cases. My research shows that the situation is somewhat more complicated.

Table 4. Types of reciprocal constructions

Type of construction	REC marker	Case marking of the subject	Slot occupied by the REC marker
“Canonical” of vt	zərə-	ABS	OBL (S)
	zə-	OBL	ABS (DO)
“Canonical” of non-inverse vi	zə-	ABS	OBL (IO)
“Canonical” of inverse vi	zə-	ABS	OBL
	zə-	OBL (less frequently)	ABS
“Indirect” of vt	zə-	OBL	OBL
Object-oriented of vt	zə-	OBL	OBL

Table 5. Types of reflexive constructions³

Type of construction	REFL marker	Case marking of the subject	Slot occupied by the REFL marker
“Canonical” of vt	zə-/zə ⁴	OBL	ABS (DO)
“Canonical” of non-inverse vi	zə-/zə-	ABS	OBL (IO)
“Canonical” of inverse vi	zə-/zə-	ABS (less frequently)	OBL
	zə-/zə-	OBL	ABS
“Indirect” of vt	zə-/zə-	OBL	OBL
Object-oriented	zə-/zə-	OBL	OBL

This section concerns reciprocal constructions with *zə-* and *zərə-*-marked predicates. They are compared with reflexive proper constructions with the marker *zə-*. “Canonical” reciprocals of transitive verbs can also be formed by means of the complex prefix *zərə-gəə-*, which is analyzed in 3.1.1.1.3.

In Tables 4 and 5 the types of reciprocal and reflexive constructions are listed.

In the following subsections the constructions from Tables 4 and 5 are analyzed in detail.

3.1.1 “Canonical” (intransitive) reciprocals

3.1.1.1 Reciprocals derived from two-place transitive verbs

3.1.1.1.1 With the prefix *zərə-*.

Reciprocity between the subject and the direct object of a transitive verb is expressed by the prefix *zərə-*. Though *zərə-* is highly productive and combines with transitive verbs irrespective of their lexical meaning, some transitive verbs may form reciprocals both with *zərə-* and *zə-*, the latter occupies the position of the absolutive object (patient) agreement marker and thus substitutes for this marker. Cf. (13) and (14):

3. Reflexive constructions are classified in the same way as in the other papers of the present volume.

4. The distribution of *zə-* and *zə-* will not be discussed in this paper.

- (13) a. *klalə-m pšəašəə-r Ø-e-ləegəu.* (transitive)
 boy-OBL girl-ABS 3SG.DO-3SG.A-see
 ‘The boy sees the girl.’
 b. *zəklə cləf-xə-r zərə-ləegəu-žbə-x.*
 all man-PL-ABS REC-see-ITER-PL.S
 ‘All people see each other (= meet).’
- (14) a. *sə a-r Ø-z-gəəklodə-gə.* (transitive)
 I(OBL) s/he-ABS 3SG.DO-1SG.A-lose-PAST
 ‘I lost him/her.’
 b. *a-xə-r zərə-gəəklodə-gəə-x.*
 s/he-PL-ABS REC-lose-PAST-PL.S
 ‘They lost each other.’

Reciprocals of this type can also be formed from the following verbs:

- | | | |
|---------------------------------|---|---|
| (15) <i>uklən</i> ‘to kill’ | → | <i>zərə-uklən</i> ‘to kill each other, beat each other’ |
| <i>gəəšbəənən</i> ‘to frighten’ | → | <i>zərə-gəəšbəənən</i> ‘to frighten each other’ |
| <i>ulən</i> ‘to wound’ | → | <i>zərə-ulən</i> ‘to wound each other’ |
| <i>šlən</i> ‘to know’ | → | <i>zərə-šlən</i> ‘to know each other’ |
| <i>gəəšxən</i> ‘to feed’ | → | <i>zərə-gəəšxən</i> ‘to feed each other’ |
| <i>gəəpsklən</i> ‘to bath’ | → | <i>zərə-gəəpsklən</i> ‘to bath each other.’ |

However, it will be shown in the next section that these verbs can also form reciprocals of other types.

3.1.1.1.2 *Prefix zə- instead of zərə-.* As mentioned, *zə-* can be used on some verbs instead of *zərə-*. As also mentioned, *zərə-* is monosemous and *zə-* may have both a reciprocal and reflexive reading:

- (16) a. *pijə-m klalə-r Ø-ə-ula-gə.*
 enemy-OBL boy-ABS 3SG.DO-3SG.A-wound-PAST
 ‘The enemy wounded the boy.’
 b. *pij-xə-r zərə-ula-žbə-gəə-x.*
 enemy-PL-ABS REC-wound-ITER-PAST-PL.S
 ‘The enemies wounded each other.’
 c. *pij-xə-m z-a-ula-žbə-gə.*
 enemy-PL-OBL REC/REFL-3PL.A-wound-ITER-PAST
 ‘The enemies wounded each other/themselves.’

The subject in (16c) takes the oblique case form. This feature brings reciprocals in *zə-* together with reflexives proper of transitive verbs. In this case the reciprocal form coincides with the reflexive one, though the reciprocal reading is not available with a singular subject:

- (17) *sə zə-sə-ula-žbə-gə.*
 I(OBL) REFL-1SG.A-wound-ITER-PAST
 ‘I wounded myself.’

Significantly, my sample does not contain any verbs that form a reciprocal with *zə-* only. Therefore, the *zə-*variant seems to be secondary diachronically and synchronically.

On the other hand, in some cases the *zə-*variant may differ from the *zəɾə-*variant in meaning. The verb *ləɣgʊun* ‘to see’ which, unlike many other verbs of perception and emotions is transitive (cf. *zəxəxen* ‘to hear’, *ʃbəɣupʃən* ‘to be afraid’) forms reciprocals both with *zə-* and *zəɾə-*, with the following difference in meaning:

- (18) *tə təɣʊas tə-zəɾə-ləɣgʊ-gʊ.*
 we(ABS) yesterday 1PL.S-REC-SAW-PAST
 i. ‘We met yesterday.’ ii. ‘We saw each other.’
- (19) *dʒədədəm tə zə-tə-ləɣgʊ-ʒbə.*
 now we(OBL) REC-1PL.A-SAW-ITER
 ‘Now we see each other.’, but not ‘Now we are meeting.’

Two variants of the reciprocal form of *ləɣgʊun* ‘to see’ may be a result of the gradual loss of the inverse variant *ləɣgʊon* ‘to be seen, be visible’ which is cited in Rogava & Kerasheva (1966:99): now most speakers, except the oldest of them, do not use the inverse form *ləɣgʊon*. Perhaps the verb *ləɣgʊun*, which is initially transitive, received the functions of the inverse variant, which is proved by the high frequency of the *zəɾə-*variant formed according to the “transitive” pattern – this variant has not only the meaning ‘to meet’, but also ‘to see each other’.

This opposition has a close counterpart in Russian: the base verb *videt* ‘to see’ does not form a morphological reciprocal with the meaning of perception ‘to see each other’, but the form *videt’-sja* does exist and means ‘to meet.’

Another verb which combines with both reciprocal prefixes is *gʊə-stən* ‘to burn (with fire; vt)’, the morphological causative of *stən* ‘to burn (vi)/to burn (about fire; vt)’. The *zəɾə-*variant expresses reciprocity and *zə-*variant both reciprocity and reflexivity:

- (20) a. *tə pxəə-r Ø-tə-gʊəstə.*
 we(OBL) firewood-ABS 3SG.DO-1PL.A-burn
 ‘We burn firewood.’
- b. *zə-d-gʊəstə.*
 REC/REFL-1PL.A-burn
 i. ‘We burn each other.’ ii. ‘We burn ourselves.’
- c. *tə-zəɾə-gʊəstə.*
 1PL.S-REC-burn
 ‘We burn each other.’

This variation is probably determined by the fact that the causer and the causee in Adyghe do not generally tend to be bound by morphological reciprocals.

This, non-productive way of forming “canonical” reciprocals from transitive verbs by means of the prefix *zə-* has been noted only for the three verbs examined above: *gʊə-stən* ‘to burn’, *ləɣgʊun* ‘to see’ and *ulan* ‘to wound’.

3.1.1.1.3 *zəɾə-gʷə* instead of *zəɾə-*. The complex marker *zəɾə-gʷə* has two meanings which cannot be analyzed as the sum of causative and reciprocal meanings: the “canonical” reciprocal and the “possessive” (the latter is examined in 3.1.3.2).

The combination *zəɾə-gʷə-* can mark a “canonical” reciprocal of a transitive verb (21b) and in this case it is synonymous with the *zəɾə-* form (21c):

- (21) a. *sə a-r Ø-sə-ula-gʷə*
I(OBL) s/he-ABS 3SG.DO-1SG.A-WOUND-PAST
‘I wounded him.’
- b. *tə tə-zəɾə-ula-ʒbə-gʷə*
we(ABS) 1PL.S-REC-WOUND-ITER-PAST
‘We wounded each other.’
- c. *tə tə-zəɾəgʷə-ula-ʒbə-gʷə*
we(ABS) 1SG.S-REC-WOUND-ITER-PAST
‘We wounded each other.’

zəɾə-gʷə- is apparently a less productive marker of “canonical” reciprocals than *zəɾə-*. It marks “canonical” reciprocals derived from the following verbs of my sample:

- (22) *upsən* ‘to shave’ → *zəɾəgʷə-upsən* ‘to shave each other’
ulan ‘to wound’ → *zəɾəgʷə-ulan* ‘to wound each other’
ləɟɟun ‘to see’ → *zəɾəgʷə-ləɟɟun* ‘to see each other.’

These *zəɾəgʷə-* forms are interchangeable with forms in *zəɾə-*. On the other hand, almost all of verbs that can form *zəɾəgʷə-* derivatives can also form *gʷə-* causatives (e.g. *gʷə-upsən* ‘to make sb to shave sb’), but their meaning is not a combination of the causative and the reciprocal meaning.

The valency structure of derived verbs apparently does not result from consecutive causativization and reciprocalization of the base verb: the verb form in (21b) has only one argument. Consecutive causativization and reciprocalization, independently of the order of derivations, would result in a final two-place derivative, as in (23):

- (23) a. ‘to shave sb’ (vt) → ‘to cause sb to shave sb’ (three-place vt) → ‘to cause sb to shave each other’ (vt)
b. ‘to shave sb’ → ‘to shave each other’ (vi) → ‘to cause sb to shave each other’ (vt).

Therefore, we regard *zəɾəgʷə-* as a single complex marker, because its meaning cannot be regarded as a sum of the meaning of two derivative prefixes (compare the sociative use of *zəɾəgʷə-* in which it can be regarded as two distinct prefixes).

Explanation of the role of the causative marker *gʷə-* in cases like (21b) requires historical data about semantic changes in the meaning of such derivatives. It is worth noting, however, that *zəɾəgʷə-* most often attaches to verbs that can take the name of a body part in the object position (cf. (21b)), which makes this construction similar to a “possessive” one – therefore, “canonical” and “possessive” uses of *zəɾəgʷə-* historically are not independent from each other.

3.1.1.2 Reciprocals derived from two-place intransitive verbs (prefix *zə-*)

3.1.1.2.1 From non-inverse (common) intransitive verbs. These underlying verbs fall into two subsets, i.e. non-spatial and spatial intransitives. They combine exclusively with the marker *zə-*, which occupies the position of oblique agreement marker.

1. Reciprocals of non-spatial intransitives:

- | | | | |
|------|----------------------------------|---|---|
| (24) | <i>bəun</i> ‘to kiss sb’ | → | <i>zə-bəun</i> ‘to kiss each other’ |
| | <i>uepləsklun</i> ‘to pinch sb’ | → | <i>u-z-epləsklun</i> ‘to pinch each other’ |
| | <i>on</i> ‘to hit sb’ | → | <i>zə-on</i> ‘to hit each other’ |
| | <i>pləən</i> ‘to look at sb’ | → | <i>zə-pləən</i> ‘to look at each other’ |
| | <i>pIəstxəən</i> ‘to scratch sb’ | → | <i>zə-pIəstxəən</i> ‘to scratch each other’ |
| | <i>dəIəpələn</i> ‘to help sb’ | → | <i>zə-dəIəpələn</i> ‘to help each other’ |
| | <i>šbəgugəun</i> ‘to rely on sb’ | → | <i>zə-šbəgugəun</i> ‘to rely on each other’ |
| | <i>etIərgun</i> ‘to push sb’ | → | <i>zə-tIərgun</i> ‘to push each other.’ |

Cf. the following example:

- | | | | | |
|------|----|---|-----------------------------------|----------------------------|
| (25) | a. | <i>sə</i> | <i>a-šb</i> | <i>sə-Ø-šbə-gugəu-žbə.</i> |
| | | I(ABS) | s/he-OBL | 1SG.S-3SG.IO-LOC-rely-ITER |
| | | ‘I rely on him/her.’ | | |
| | b. | <i>tə</i> | <i>tə-zə-šbə-gugəu-žbə-x.</i> | |
| | | we(ABS) | 1PL.S-REC/REFL-LOC-rely-ITER-PL.S | |
| | | i. ‘We rely on each other.’ ii. ‘We rely on ourselves.’ | | |

2. Reciprocals of spatial intransitives. Spatial intransitives contain a locative prefix that retains its position after the derivation.

- | | | | |
|------|--------------------------------------|---|---|
| (26) | <i>xə-xəən</i> ‘to join to sb’ | → | <i>zə-xə-xəən</i> ‘to join to each other’ |
| | <i>go-kIən</i> ‘to go aside from sb’ | → | <i>zə-go-kIən</i> ‘to go aside from each other’ |
| | <i>go-fən</i> ‘to drop near sb’ | → | <i>zə-go-fən</i> ‘to drop near each other’ |
| | <i>go-tən</i> ‘to stay near sb’ | → | <i>zə-go-tən</i> ‘to stay close’ |
| | <i>te-ləən</i> ‘to lie on sb’ | → | <i>zə-te-ləən</i> ‘to lie on each other’; cf.: |

- | | | | | |
|------|----|----------------------------------|---------------------|---------------------|
| (27) | a. | <i>a-r</i> | <i>a-šb</i> | <i>Ø-Ø-go-kIə.</i> |
| | | s/he-ABS | s/he-OBL | 3SG.S-3SG.IO-LOC-go |
| | | ‘S/he goes aside from him/her.’ | | |
| | b. | <i>axə-r</i> | <i>zə-go-kIə-x.</i> | |
| | | they-ABS | REC-LOC-go-PL.S | |
| | | ‘They go aside from each other.’ | | |

3.1.1.2.2 From inverse intransitive verbs. This class includes non-derived verbs denoting perception, emotions and possession, and some others (see (28a)). Besides, here belong verbs with the potential meaning derived by means of the prefix *fə-* and suffix *-šbu* (see (28b)). All verbs with the potential meaning are inverse. Inverse verbs form reciprocals by means of the affix *zə-* (or its variant *zə-*).

- | | | | | |
|------|----|--|---|---|
| (28) | a. | <i>iIən</i> ‘to have’ (lit. ‘to be at sb’) | → | <i>z-iIən</i> ‘to have each other’ |
| | | <i>šbəgəupšən</i> ‘to forget’ | → | <i>zə-šbəgəupšən</i> ‘to forget each other’ |
| | | <i>zəxəən</i> ‘to hear’ | → | <i>zə-zəxəən</i> ‘to hear each other’ |

- b. *lʷəgʷun* ‘to see’
 → *fə-lʷəgʷun* ‘to be able to see’ → *zə-fə-lʷəgʷun* ‘to be able to see each other.’

As mentioned, reciprocalization of inverse verbs distinguishes them from transitive and non-inverse intransitive verbs. Many of their derivatives are ambiguous between the reflexive and the reciprocal meaning; cf.:

- (29) a. *a-r* *a-šb* \emptyset -*zəx-e-xə*. (= (7))
 s/he-ABS s/he-OBL 3SG.A-LOC-3SG.A-take
 ‘S/he hears him/her.’
 b. *a-xə-m* *zə-zəx-a-xə-žbə*.
 s/he-PL-OBL REC/REFL-LOC-3PL.A-take-ITER
 i. ‘They hear each other’; ii. ‘They hear themselves.’

Polyfunctionality of the reflexive/reciprocal affix obviously unites inverse verbs with non-inverse “common” intransitives. At the same time, we must note variation of the reciprocal constructions with inverse verbs: cf. (30b) with an absolutive subject where the reciprocal marker occupies the oblique agreement slot, and (30c) with an oblique subject where the reciprocal marker occupies the absolutive agreement slot:

- (30) a. *sə* *a-r* \emptyset -*s-šbə-gupš-žbə-gʷ*.
 I(OBL) s/he-ABS 3SG.S-1SG.A-LOC-forget-ITER-PAST
 ‘I forgot about him.’
 b. *a-xə-r* *zə-šbə-gʷupšə-žbə-gʷə-x*.
 s/he-PL-ABS REC-LOC-forget-ITER-PAST-PL.S
 ‘They forgot about each other.’
 c. *a-xə-m* *z-a-šbə-gʷupšə-žbə-gʷ*.
 s/he-PL-OBL REC-3PL.A-LOC-forget-ITER-PAST
 ‘They forgot about each other.’

Unlike transitives, inverse verbs never take the reciprocal marker *zərə-*. As we have seen, the marker *zərə-* is used only when the base verb is transitive and the reciprocal derivative is intransitive.

The reflexive marker in the reflexive proper meaning in Adyghe is always co-referential with the subject of the sentence: the oblique argument of inverse verbs has more semantic properties of a prototypical subject than the absolutive one (e.g., it is animate). On the other hand, the reciprocal markers are more often co-referential with the absolutive argument, irrespectively of its status, and occupy the non-absolutive slot, be it the subject position, as with *zərə-* on transitive verbs, or object position, as with *zə-* on intransitive verbs. Thus, it is not surprising that if there exist two forms of a particular inverse verb with a different order of affixes, forms with *zə-* in the oblique position get the reciprocal interpretation:

- (31) a. *a-xə-r* *zə-šbə-gʷupšə-žbə-gʷə-x*.
 s/he-PL-ABS REC-LOC-forget-ITER-PAST-PL.S
 ‘They forgot about each other.’

- b. *a-xə-m z-a-švə-gəvəpšə-žvə-gə.*
 s/he-PL-OBL REFL-3PL.A-LOC-forget-ITER-PAST
 ‘They forgot about themselves.’

(Compare, though, (29b), where both readings are available).

I think that we must consider constructions of type (31a) as “prototypically reciprocal” (they are built according to the reciprocal type, with *zə-* in the oblique slot, but later on acquire the reflexive reading). Constructions of type (31b) can be called “prototypically reflexive”, as they are built according to the reflexive type.

Thus, as we see, Adyghe displays three types of morphological marking in constructions which can express the reciprocal meaning:

- (1) *zəvə-*forms with an absolutive subject, absolutive subject agreement marker on the predicate, and the reciprocal prefix in the slot of oblique agreement marker, as in (13);
- (2) *zə-*forms with an absolutive subject, absolutive subject agreement marker on the predicate, and the reciprocal prefix in the slot of oblique argument agreement, as in (30b);
- (3) *zə-*forms with an oblique subject, oblique subject agreement marker on the predicate and the reciprocal prefix in the slot of absolutive argument agreement marker, as in (30c) (presumably a result of reinterpretation of reflexive forms).

3.1.2 “Indirect” (transitive) reciprocals (prefix *zə-*)

“Indirect” reciprocals are derived from three-place transitive verbs by means of the prefix *zə-* which designates coreferentiality between the subject and the indirect object:

- (32) *gəvəlvəgəvun* ‘to show sth to sb’ → *zə-gəvəlvəgəvun* ‘to show sth to each other’
etən ‘to give sth to sb’ → *z-etən* ‘to give sth to each other’
gəvəšxən ‘to feed sth to sb’ → *zə-gəvəšxən* ‘to feed sth to each other’
gəvəšlən ‘to teach sb sth’ → *zə-gəvəšlən* ‘to teach each other sth’
 (lit. ‘to teach sth to sb’) (lit. ‘to teach sth to each other’)
fəšlən ‘to build, make sth for sb’ → *zə-fəšlən* ‘to build make sth for each other’; cf.:
- (33) a. *sə klalə-m fotografija-xə-r e-z-gəvəlvəgəvə-gəvə-x.*
 I(OBL) boy-OBL photo-PL-ABS 3SG.IO-1SG.A-SHOW-PAST-PL.DO
 ‘I show the boy the photos.’
 b. *tə fotografija-xə-r zə-tə-gəvəlvəgəvə-žvə-x.*
 we(OBL) photo-PL-ABS REC-1PL.A-SHOW-ITER-PL.DO
 ‘We show photos to each other.’

As mentioned, reciprocals of benefactive and malefactive transitive verbs, which are naturally three-place, are also of this type:

- (34) a. *sə (a-šv) unə-r Ø-fə-s-šlə-gə.*
 I(OBL) s/he-OBL house-ABS 3SG.IO-BEN-1SG.A-make-PAST
 ‘I built a house for him.’
 b. *tə unə-xə-r zə-fə-t-šlə-gə.*
 we(OBL) house-PL-ABS REC-BEN-1PL.A-make-PAST
 ‘We built houses for each other.’

3.1.3 “Possessive” (transitive) reciprocals

“Possessive” reciprocity, i.e. a reciprocal relation between an argument of the predicate and expression of the possessor on another argument, is marked in the following ways: the prefix *zəɾə-*, the complex prefix *zəɾəgʊə-* and plural affixes on the object of the verb, none of which is productive in this sense. Some Adyghe verbs combine with several of these devices; for example, the verb *ulan* ‘to wound’ admits all three variants of “possessive” reciprocal constructions. The fact that “possessive” reciprocals are not productive seems to result from the semantic features of this type of reciprocal meaning.

3.1.3.1 *With the prefix zəɾə-*. Some native speakers allow transitive “possessive” use of *zəɾə-* forms, cf.:

- (35) a. *sə ə-la Ø-s-fəze-gʊ.*
 I(OBL) his-hand 3SG.DO-1SG.A-shake-PAST
 ‘I shook his hand.’
 b. *tə t-Iə-xə-r zəɾə-t-fəze-gʊ.*
 we(OBL) our-hand-PL-ABS REC-1PL.A-shake-PAST
 ‘We shook each other’s hands.’

This use of *zəɾə-* forms differs from its most productive “canonical” use in which the verb becomes syntactically monovalent. In examples like (35b) reciprocal derivation introduces a new slot in the verb form for indirect object, which is occupied by the reciprocal prefix *zəɾə-*. The “possessive” *zəɾə-* derivatives are syntactically two-place.

In fact, constructions like (35b) are rather semantically close to “canonical” reciprocal constructions derived from transitive verbs like ‘We wounded each other’: they are formed from the same semantic class of verbs.

3.1.3.2 *With the prefix zəɾəgʊə-*. The affix *zəɾəgʊə-* can mark not only “canonical” but also “possessive” reciprocals. In (36a), the possessor *pšəašʊə-m* ‘girl-OBL’ is an attribute of *əla* ‘her hand’.

- (36) a. *klalə-m pšəašʊə-m ə-la Ø-ə-ula-gʊ.*
 boy-OBL girl-OBL her-hand 3SG.DO-3SG.A-wound-PAST
 ‘The boy wounded the girl’s hand.’
 b. *tə t-Iə-xə-r ə-zəɾəgʊə-ula-gʊə-x.*
 we(OBL) our-hand-PL-ABS 1PL.IO-REC-wound-PAST-PL.DO
 ‘We wounded each other’s hands.’

Examples like (36b) are an exception in the sense that the reciprocal prefix binds an argument and an attribute of the argument (this attribute is, of course, not cross-referenced by agreement markers on the verb; possessive attributes do not control any slots on the verb), because usually Adyghe reciprocals tend to bind only arguments. Verbs with meanings like ‘to wound’ and ‘to hold’ are essentially two-place. Besides animate objects, they can take a direct object denoting a body part, in which case this object occurs with a possessive marker, as in (36a). In (36b) the verb has a direct object denoting a body part, the pos-

sensor becomes an indirect object, controls the IO prefix *tə-* and this makes a “possessive” reciprocal possible.

The complex affix *zəɾəgəθə-* in this use also combines with common intransitive verbs according to the same pattern: the only difference is that the possessee *nə* ‘eye’ in (37) is an indirect object:

- (37) a. *sə a-šb ə-nə sə-Ø-kIə-pləa-gə.*
I(ABS) s/he-OBL his-eye 1SG.S-3SG.IO-LOC-look-PAST
‘I look in his eyes.’
- b. *tə zə-m zə-r ə-nə⁵ tə-kIə-zəɾəgəθə-pləa-gə.*
we(ABS) one-OBL one-ABS his-eye 1PL.S-LOC-REC-look-PAST
‘We looked in each other’s eyes.’

The word *nə* ‘eye’ has the 3SG agreement prefix in (37b), because it agrees with the 3SG pronoun *zəm zər* ‘one another’.

In these examples the complex prefix *zəɾəgəθə-* either cannot be replaced with simple prefixes *zəɾə-* and *zə-* or such substitution makes the sentences marginal.

I regard the prefix *zəɾəgəθə-* in its “possessive” use as a single complex affix, as in the “canonical” use, because the “possessive” meaning is not a combination of the causative meaning of *gəθə-* and the “canonical” reciprocal meaning of *zəɾə-* (the combination would be reciprocal of causative or causative of reciprocal).

3.1.3.3 *With possessive plural prefixes on nominal constituents (objects of the base verb).* In some cases a plural possessive affix *t(ə)-* (1PL), *šəu(i)-* (2PL) and *(j)a-* (3PL) on the object of the verb is sufficient to make a sentence reciprocal, which happens when the predicate is also plural and describes a situation in which the patient is a body part of the agent (cf. (38b) and (39)). If the meaning of the verb or the context blocks the usual possessive interpretation ‘The enemies wounded their hands’, the reading is reciprocal, as in (38b):

- (38) a. *a-šb kIalə-m ə-Ia Ø-ə-ula-gə.*
s/he-OBL boy-OBL his-hand 3SG.DO-3SG.A-WOUND-PAST
‘He wounded the boy’s hand.’
- b. *zə-pij-xə-m a-Ia-xə-r a-ula-žbə-gəθə-x.*
REC-enemy-PL-OBL their-hand-PL-ABS 3PL.A-WOUND-ITER-PAST-PL.DO
‘The enemies wounded each other’s hands’ (“possessive” reciprocal).

(On the prefix *zə-* on relative nouns like *pij* ‘enemy’ and the like see Section 7 below.)

If the meaning or the context does not block the usual possessive interpretation, examples are ambiguous between the usual reflexive-possessive and reciprocal interpretation, as in (39):

- (39) *zəkIə gəunəgəθu-mə ja-Iaxəθəl-xə-r šlu a-ləgəθu-x.*
all neighbour-OBL.PL their-relative-PL-ABS good 3PL.A-see-3PL.DO
‘All neighbours love their/each other’s relatives.’

5. The 3SG possessive affix shows agreement with the noun phrase *zəm* (see Section 9).

In (39) we can see a phenomenon analogous to reflexive-reciprocal polysemy, which is analyzed below (cf. (38b) with (16c) ‘The enemies wounded themselves/each other’).

3.2 Object-oriented reciprocals (transitive; prefix *zə-*)

Object-oriented reciprocal constructions are formed from transitive three-place verbs having a direct and an indirect object and designate reciprocal relations between these two objects. They are marked only with the reciprocal prefix *zə-*, with the exception of the derivative of the verb *gəʔləgəʔun* ‘to show’ (see example (48b)). Object-oriented reciprocals can be divided into two types: spatial, which will be analyzed in 3.2.1, and non-spatial, analyzed in 3.2.2. The prefix *zə-* always occupies the IO slot.

3.2.1 *Spatial reciprocals*

Spatial object-oriented reciprocal constructions are derived from verbs with locative prefixes expressing localization and direction. These prefixes add to the valency structure an indirect object denoting the reference point. Like other arguments, these indirect objects may enter into reciprocal relations with direct objects denoting referents of the same semantic class. The main meanings of derived spatial reciprocals are those of joining the referents to each other and separating them from each other. Spatial reciprocals are very productive in Adyghe, they are often used in speech and many of them are lexicalized.

As mentioned, the prefix *zə-* in object-oriented reciprocals occupies the indirect object slot: in the case of spatial reciprocals it is the slot for the agreement marker of the object introduced by a locative prefix (e.g., in (40a) the prefix *te-* adds a new slot for an oblique object which is filled by the prefix *zə-* in (40b)).

3.2.1.1 *Reciprocals of joining.* Verbs like *teɡəʔpkIən* ‘to glue sth to sth’ denote joining of one referent to another. Their reciprocal derivatives denote joining of the referents together, i.e. to each other:

- (40) a. *te-gəʔ-pkIən*
 LOC-CAUS-g glue
 ‘to paste X to Y’
 b. *txəʔəʔpIə-xə-r zə-te-gəʔ-pkIən*
 paper-PL-ABS REC-LOC-CAUS-g glue
 ‘to paste pieces of paper together.’

Such derivatives are also formed from the following verbs with locative preverbs:

- (41) *pə-dən* ‘to sew X to Y’ → *zə-pə-dən* ‘to sew X and Y to each other, together’
pə-gəʔpkIən ‘to paste X to Y’ → *zə-pə-gəʔpkIən* ‘to paste X and Y together’
pə-gəʔəucon ‘to hook X to Y’ → *zə-pə-gəʔəucon* ‘to hook X and Y together, connect’
pə-ʂIən ‘to tie X to Y’ → *zə-pə-ʂIən* ‘to tie X and Y together’
xə-gəʔəxʁan ‘to join X to Y’ → *zə-xə-gəʔəxʁan* ‘to join X and Y together’
xə-lulʁən ‘to chain X to Y’ → *zə-xə-lulʁən* ‘to chain X and Y together’
te-pləxʁan ‘to lay X on Y’ → *zə-te-pləxʁan* ‘to lay X on Y on one another.’

In some cases such reciprocals do not have a plural object: it may be singular if the referent is composed of parts that are joined together; cf.:

- (42) a. *te-gvə-pkIən*
 LOC-CAUS-glye
 ‘to paste (X to Y)’
 b. *pisəmə-r zə-te-gvə-pkIən*
 letter-ABS REC-LOC-CAUS-paste
 ‘To glue the letter up.’ (‘to paste one of its part to the other’)

3.2.1.2 *Reciprocals of separating.* Verbs of separating like *pikIəkIən* ‘to break X from Y’ form reciprocals that have the meaning of separating the objects (or parts of an object) from one another.

- (43) a. (*a-šv*) *kəutamə-r cəəgə-m Ø-Ø-p-i-kIəkIə-gv.*
 [s/he-OBL] branch-ABS tree-OBL 3SG.DO-3SG.IO-LOC-3SG.A-break-PAST
 ‘S/he broke a branch from the tree.’
 b. (*a-šv*) *kəutamə-r Ø-zə-p-i-kIəkIə-gv.*
 [s/he-OBL] branch-ABS 3SG.DO-REC-LOC-3SG.A-break-PAST
 ‘S/he broke the branch (into parts).’

Such derivatives are also formed from the following verbs:

- (44) *gə-xən* ‘to separate X from Y’ → *zə-gə-xən* ‘to separate X and Y from one another’
kəi-txən ‘to tear X from Y’ → *zə-kəi-txən* ‘to tear X and Y from each other’
kəə-gə-Iən ‘to break X from Y’ → *zə-kəə-gə-Iən* ‘to break X and Y from each other’
kəə-pə-tlətəkIən ‘to untie X from Y’ → *zə-kəə-pə-tlətəkIən* ‘to untie X and Y from each other’
kəə-te-gvətIəpIəkIən ‘to unpick seams’ → *zə-kəə-te-gvətIəpIəkIən* ‘to unpick seams from each other’
pə-xən ‘to separate X from Y’ → *zə-pə-xən* ‘to separate X and Y from each other.’

3.2.2 *Non-spatial object-oriented reciprocals*

Non-spatial object-oriented reciprocals are peripheral in Adyghe. The only non-derived three-place verb in Adyghe is *tən* ‘to give X to Y’. The reciprocal derivative *zə-tən* ‘to give X and Y to each other’ is pragmatically peculiar: we can hardly imagine a situation when the subject gives two animate objects to each other, though it is grammatically possible. Non-spatial object-oriented reciprocals can be derived from causative, benefactive and malefactive derivatives, and also from verbs with locative prefixes if they are used in non-locative meanings:

- (45) *gəə-ləəgvun* ‘to show X to Y’ → *zə-gəə-ləəgvun* ‘to show X and Y to each other.’

The reciprocal marker occupies the indirect object slot:

- (46) a. *sə čətəu-r xba-m Ø-e-z-gvə-ləvəvəu-gv.*
 I(OBL) cat-ABS dog-OBL 3SG.DO-3SG.IO-1SG.A-CAUS-see-PAST
 ‘I showed the cat to the dog.’
- b. (*sə*) (*švə*) *švə-zə-z-gvə-ləvəvəu-gv.*
 (I(OBL)) (you(ABS)) 2PL.DO-REC-1SG.A-CAUS-see-PAST
 ‘I showed you to each other.’

Reciprocals of these three-place transitive verbs are often ambiguous between object-oriented readings relating direct and indirect objects, and subject-oriented reciprocals which relate the subject and the indirect object. This polysemy cannot be resolved by the position of the affixes: as mentioned, in both cases the reciprocal affix occupies the oblique slot of the indirect object, as in (47):

- (47) a. *sə a-šv si-švuz Ø-e-z-gvə-ləvəvəu-gv.*
 I(OBL) s/he-OBL my-wife 3SG.DO-3SG.IO-1SG.A-SHOW-PAST
 ‘I showed him my wife.’
- b. *cləf-xə-m ja-švuz-xə-r zə-r-a-gvə-ləvəvəu-žvə.*
 person-PL-OBL their-wife-PL-ABS REC-r-3PL.A-SHOW-ITER
 ‘People show their wives to each other.’
- i. ‘Each person shows his wife to other people.’ (‘indirect’ reciprocal)
 ii. ‘Each person shows his wife to the wives of other people.’ (object-oriented).

Semantic restrictions on the arguments of reciprocal verbs often do not help to distinguish two meanings: participants of the reciprocal relation (a) must be plural and (b) in most cases are animate, but some examples, like (47b), are ambiguous between two readings: both the subject and the direct object are plural and animate.

The causative derived from the transitive verb *gvə-ləvəvəu* ‘to show’ differs from other transitive verbs in that it can combine either with *zərə-* or with *zə-*:

- (48) a. *sə čətəu-r xba-m Ø-e-z-gvə-ləvəvəu-gv.*
 I(OBL) cat-ABS dog-OBL 3SG.DO-3SG.IO-1SG.A-CAUS-see-PAST
 ‘I showed the cat to the dog.’
- b. *sə čətəu-m-rə xba-m-rə zərə-z-gvə-ləvəvəu-gvə-x.*
 I(OBL) cat-OBL-and dog-OBL-and REC-1SG.A-CAUS-see-PAST-PL.DO
 ‘I showed the cat and the dog to each other.’
- c. *sə švə švə-zə-z-gvə-ləvəvəu-gv.*
 I(OBL) you.PL.ABS 2PL.S-REC-1SG.A-CAUS-see-PAST
 ‘I showed you to each other.’

Variation of reciprocal forms of *gvə-ləvəvəun* ‘to show’ may be presumably explained by the different sequence of reciprocalization and causativization, the following variants being possible:

(1) ‘A sees B’ > ‘A and B see each other’ > ‘X makes A and B see each other’ (‘X shows A and B to each other’, causative of a reciprocal base verb).

(2) ‘A sees B’ > ‘X shows A to B’ > ‘X shows A and B to each other’ (object-oriented reciprocal of a causative base verb).

In the first case the subject and the direct object of the underlying verb are reciprocalized, therefore the marker *zərə-* must be chosen. The second variant requires the prefix

zə-, because reciprocalization applies after causativization and binds the indirect object and the direct object.

3.2.3 Meanings of combinations of the prefix *zə-* with locative markers

The marker *zə-* forms complex affixes with a number of locative preverbs, including *pə-* ‘at the end of X’ and *i-* ‘in X’. These complex affixes may acquire idiomatic locative meanings, of which I have illustrations for the translative and reciprocal meanings.

In these combinations *zə-* seems to lose its reciprocal meaning and designate only a special type of spatial characteristics of the situation.

3.2.3.1 Translative meaning (motion across an object). The complex prefix *zəpə-* has the translative meaning ‘through, across X’. When used on its own, the prefix *pə-* marks location at the end of the object (Rogava & Kerasheva 1966:276), cf. *pə-ləən* ‘to hang on X’, lit. ‘to lie at X’s end.’

- (49) a. *a-šb a-r a-šb Ø-Ø-r-i-fə-gv̄.*
 s/he-OBL s/he-ABS s/he-OBL 3SG.DO-3SG.IO-LOC-3SG.A-lead-PAST
 ‘S/he drove her/him out away from it.’
- b. *a-šb čəmə-r psə-m Ø-zəpə-r-i-fə-gv̄.*
 s/he-OBL COW-ABS river-OBL 3SG.DO-zəpə-LOC-3SG.A-lead-PAST
 ‘S/he drove the cow across the river.’

This type of meaning occurs only when *zəpə-* is used on verbs with the locative prefix *r/i-* ‘in’.

3.2.3.2 Reciprocal meaning (motion in different/opposite directions). In combination with the locative prefix *r/i-* ‘in’ the reciprocal prefix *zə-* can acquire the meaning ‘in different directions’, though I have only the following example borrowed from Rogava & Kerasheva (1966:276) for this meaning:

- (50) a. *a-šb a-r Ø-e-šbə.*
 s/he-OBL s/he-ABS 3SG.DO-3SG.A-lead
 ‘S/he leads him/her.’
- b. *a-šb ku-klə xəəlʔa-bə Ø-zə-r-i-šbə-gv̄.*
 s/he-OBL cart-INST load-many 3SG.DO-REC-LOC-3SG.A-lead-PAST
 ‘S/he transported many loads by cart (in different directions).’

4. Comitatives and assistives with the prefix *də-*

The comitative meaning ‘with’ is marked with the prefix *də-/də-*. It precedes the agreement marker of the agent and the inherent IO marker. It adds an indirect object to the syntactic structure, e.g. *a-šb* in (51b) and *ramə-m* in (51c). The agreement marker of this indirect object occupies the slot preceding the comitative marker.

- (51) a. *sə o surət Ø-kʷə-o-s-tə-gʷ.*
 I(OBL) you(OBL) picture(ABS) 3SG.DO-DIR-2SG.IO-1SG.A-give-PAST
 ‘I gave you a picture.’
- b. *sə o a-šb surət-er*
 I(OBL) you(OBL) s/he-OBL picture-ABS
Ø-kʷə-Ø-də-o-s-tə-gʷ.
 3SG.DO-DIR-3SG.IO-COM-2SG.IO-1SG.A-give-PAST
 ‘I and he gave you a picture’, lit. ‘I with him gave you a picture.’
- c. *sə o surət ramə-m*
 I(OBL) you(OBL) picture frame-OBL
Ø-kʷə-Ø-də-o-s-tə-gʷ.
 3SG.DO-DIR-3SG.IO-COM-2SG.IO-1SG.A-give-PAST
 ‘I gave you a picture with the frame.’

Comitatives, like reciprocals, can be subject-oriented or object-oriented. In subject-oriented comitatives, like (51b) a secondary agent (object) is added, while in object-oriented constructions, like (51c), a secondary patient (object) is introduced. The subject-oriented (51b) and object-oriented (51c) comitative verb forms are identical but the constructions are not: subject-oriented (51b) contains an animate IO *a-šb* ‘s/he’ participating in the situation as agent and lacks the IO *ramə-m*, while object-oriented (51c) lacks the animate IO *a-šb* and contains the IO *ramə-m*, which is a patient.

In (51b) the first agent *sə* ‘I’ is more salient than *a-šb* ‘s/he’. This distinguishes comitatives from sociatives – the latter presuppose that the participants of the sociative relation are equally salient. Likewise, in (51c) the first, inherent patient *surət* ‘picture’ is more salient than the second one, added by the derivation (*ramə* ‘frame’).

The prefix *də-* may also have an assistive meaning, and a construction with a *də-* form may have both readings:

- (52) a. *klalə-m usə zə-r-i-gʷə-šIə.*
 boy-OBL poem.ABS REFL-AUG-3SG.A-CAUS-know
 ‘The child learns a poem’ (lit. ‘makes himself know a poem’).
- b. *ja-nə klalə-m usə Ø-də-zə-r-i-gʷə-šIə.*
 their-mother boy-OBL poem.ABS 3SG.DO-COM-REC-AUG-3SG.A-CAUS-know
 i. ‘Their mother learns the poem with her child.’ (comitative)
 ii. ‘Their mother helps her child to learn the poem.’ (assistive)

The assistive reading seems to be especially clear in the imperative:

- (53) *Ø-a-də-šIə ba šʷo unə.*
 3SG.DO-3PL.IO-COM-do let you(OBL) house
 i. ‘Build the house with them!’ (comitative)
 ii. ‘Help them to build the house!’ (assistive)

In the registered examples the assistive meaning is concomitant with the comitative and it may be seen as a possible pragmatic interpretation of the comitative situation: joint action is often performed in order to help someone. The existence of the assistive meaning requires additional investigation.

5. Sociatives

As mentioned in 1.3, the sociative meaning is marked with the combinations of prefixes *zə-də-* and *zə-rə-gəə-*.

5.1 With the reciprocal prefix *zə-* on comitative verbs with the prefix *də-*

The most common way of marking the sociative meaning is the reciprocal prefix *zə-* on derived comitative verbs with the prefix *də-* (cf. (54a, b)). The prefix *zə-* never marks the sociative meaning on verbs without *də-*. Therefore, the combination *zə-də-* may be regarded as a complex sociative prefix; henceforth it is glossed as *SOC* (cf. also Rogava & Kerasheva 1966:277–9).

- (54) a. *sə o čəmə-r Ø-o-də-sə-uklə-gə* (comitative)
 I(OBL) you(OBL) COW-ABS 3SG.DO-2SG.IO-COM-1PL.A-kill-PAST
 ‘I killed the cow with you.’
- b. *tə čəmə-r Ø-zədə-tə-uklə-gə* (sociative)
 we(OBL) COW-ABS 3SG.DO-SOC-1PL.A-kill-PAST
 ‘We killed the cow together.’

The reciprocal prefix *zə-* changes the degree of salience of the two participants: both of them become equally salient. The prefix changes a discontinuous comitative construction into a simple sociative.

If the subject is non-agentive, especially inanimate, sociatives in *zədə-*, like (55c), seem to be more acceptable than comitatives in *də-*, like (55b):

- (55) a. *ručka-r Ø-xə-gəə.*
 pen-ABS 3SG.S-drop-PAST
 ‘The pen dropped.’
- b. *?ručka-m karandašə-r e-gəus-əw Ø-Ø-də-fəxə-gə.*
 pen-OBL pencil-ABS DYN-together-CONV 3SG.S-3SG.IO-COM-drop-PAST
 ‘The pencil dropped with the pen.’
- c. *ručka-m-rə karandašə-m-rə zədə-xə-gəə-x.*
 pen-OBL-and pencil-OBL-and SOC-drop-PAST-PL.S
 ‘The pen and the pencil dropped (together).’

5.2 With the reciprocal prefix *zə-rə-* on causative verbs with the prefix *gəə-*

When the reciprocal prefix *zə-rə-* is used on derived causatives with the prefix *gəə-*, some causatives of intransitive emotional verbs may lose their causative meaning and denote that the participants experience an emotional state *together*; compare the derivational chain *šbtən* ‘to fear’ → *gəə-šbtən* ‘to frighten, cause to fear’ → *zə-rə-gəə-šbtən* ‘to frighten each other’. Alongside the reciprocal meaning which compositionally follows from the reciprocal and causative meanings of the two prefixes, the latter form may also have the sociative meaning ‘to fear together’. This combination of prefixes may be regarded as one complex marker of sociativity, by analogy with the combination *zə-də-* in 5.1, though with

a very narrow lexical base. Here is a list of sociative derivatives which are semantically related to the base intransitives rather than to the middle causatives:

- (56) *šbtən* ‘to fear’ → *zərə-gwə-šbtən* ‘to fear together’
šbənən ‘to fear’ → *zərə-gwə-šbənən* ‘to fear together’
gubžən ‘to be angry’ → *zərə-gwə-gubžən* ‘to be angry together’
gušlon ‘to be glad’ → *zərə-gwə-gušlon* ‘to be glad together’
guməklən ‘to be worried’ → *zərə-gwə-guməklən* ‘to worry together.’

In (57b) the reciprocal verb expresses sociativity (‘to fear together’), not reciprocity. Perhaps the word *zəklə* ‘all’ also contributes to this interpretation. Note that its translation alone explicates the sociative meaning in English:

- (57) a. *kIalə-m jə-gvunəgvu-r Ø-ə-gwə-šbta-gv.*
 boy-OBL his-neighbour-ABS 3SG.DO-3SG.A-CAUS-fear-PAST
 ‘The boy frightened his neighbour.’
 b. *cləf-xə-r zəklə zərəgwə-šbta-gwə-x.*
 person-PL-ABS all SOC-fear-PAST-PL.S
 ‘All people were frightened.’

See also Rogava & Kerasheva (1966: 272–5).

6. The iterative suffix *-žbə-* (often co-occurrent with reciprocal and reflexive prefixes)

The iterative suffix *-žbə-* seems to be worth noting here, because most reciprocal forms, both morphological and pronominal, may optionally contain the iterative suffix *-žbə-*.

- (58) a. *a-r a-šv Ø-Ø-dəIəpələ.*
s/he-ABS s/he-OBL 3SG.S-3SG.IO-help
 ‘He helps him.’
 b. *a-xə-r zə-dəIəpələ-žbə-x.*
s/he-PL-ABS REC-help-ITER-PL.S
 ‘They help each other.’
 c. *a-xə-r zə-dəIəpələ-x.*
s/he-PL-ABS REC-help-PL.S
 ‘They help each other.’

The difference in meaning between (58b) and (58c) is not clear. The iterative meaning is apparently close to reciprocity, because reciprocity presupposes multiple actions of several participants.

The non-reciprocal form with the iterative suffix *ləəgvu-žbə-n* of the verb *ləəgvun* ‘to see’ means ‘to see again’, cf. also:

- (59) *qutən* ‘to break’ – *qutə-žbə-n* ‘to break again’
zələtxəən ‘to tear’ – *zələtxəə-žbə-n* ‘to tear again.’

The suffix *-žbə* may also express the meaning of reverse direction of motion:

- (60) *bəbən* ‘to fly’ – *bəbə-žbə-n* ‘to fly back’
kIon ‘to go’ – *kIo-žbə-n* ‘to go back.’
 Compare also Rogava & Kerasheva (1966: 310–14).

7. The prefix *zə-* with relative nouns

In Adyghe, the use of the prefix *zə-* is not restricted to verbs: it can also combine with relational nouns. They are often kinship terms like *šə* ‘brother’, *šəpxəu* ‘sister’, *Iaxəəl* ‘relative’, and also reciprocal nouns like *gəvunəgəu* ‘neighbour’, *nəbdžəgə* ‘friend’, *nəIose* ‘acquaintance’, *clələgəu* ‘person from the same village’, *IofšIəgəu* ‘colleague’, *džəgəogəu* ‘enemy’, *pij* ‘enemy’. These nouns are in fact lexical reciprocals. Therefore, when used in the singular, they take an attribute expressed by a possessive noun phrase in the oblique case or a possessive prefix (see Table 2 above), as in (61a) and denoting the second participant of the reciprocal relation. When used with the reciprocal prefix they naturally occur in the plural.

- (61) a. *sə si-pij*
 I(OBL) my-enemy
 ‘my enemy’
 b. *zə-pij-xə-r*
 REC-ENEMY-PL-ABS
 ‘enemies’ (see also (38b)).

Here, the reciprocal prefix *zə-* denotes reciprocity of the relation ‘to be enemies’: the noun in (61b) literally means ‘enemies of each other’. Therefore, *zə-* is not here a marker of plurality proper.

Compare also Rogava & Kerasheva (1966: 276–7).

8. Prefixes *zə-* and *zərə-* on participles in relative constructions

The markers *zə-* and *zərə-* are used to mark non-finite forms (participles). In this paper this use will not be analyzed in detail. The data in this section are borrowed from Rogava & Kerasheva (1966: 314–27).

In non-finite forms, the markers *zə-* and *zərə-* are used as markers of relativization denoting co-reference between the arguments and adjuncts of the main and the embedded clauses.

The affix *zə-* is used on participles to refer to oblique arguments of the base verbs. These participles are in fact nominalized. Thus, this affix cannot be used in (62a) and (62b), because in (62a) the participle refers to the absolutive argument (subject) of the base intransitive verb ‘to go/come’ and in (62b) it refers to the absolutive argument (direct object, patient) of the base transitive verb ‘to throw’. But in (63a) the participle refers to the oblique argument (subject, agent) of the base transitive verb – therefore, *zə-* must be used. It is also used in participles referring to time, reason and localization of the situation. The affix *zərə-* marks participles of mode (see 63e), instrument and participles referring

to a situation as a whole (see Lander & Gerasimov, in press). In (63a)–(63e) the reciprocal affixes are obligatory, and participles with the same meanings cannot be built without these affixes.

- (62) a. *kʊə-kʌua-gʊə-r*
DIR-go-PAST-ABS
'The one who came', lit. 'the coming (one).'
- b. *ə-dzə-gʊə-r*
3SG.A-throw-PAST-ABS
'What was thrown by him/her', lit. 'the thrown (thing) by him/her'; but:
- (63) a. *zə-dzə-gʊə-r*
REFL-throw-PAST-ABS
'The one who threw it.'
- b. *z-i-dzə-gʊə-r*
REFL-3SG.A-throw-PAST-ABS
'the throwing *time*' ('the time when s/he threw it') (temporal participle)
- c. *zə-kʌə-kʌua-gʊə-r*
REFL-LOC-go-PAST-ABS
'the going *reason*' ('the *reason* why s/he went') (causal participle)
- d. *zə-ʃv-i-dzə-rə-r*
REFL-LOC-3SG.A-throw-PART-ABS
'the throwing *place*' ('the *place* where s(he) threw it') (locative participle)
- e. *zərə-kʌua-gʊə-r*
REC-go-PAST-PART
'the going *mode*' ('the *mode* how he went').

9. Pronominal reciprocals with the pronouns *zəm zər* 'each other' and *zəm adrər* 'one another'

As mentioned in Section 1, there are two reciprocal pronouns in Adyghe: the more productive one is *zə-m zə-r* 'one another', 'each other', lit. 'one-OBL one-ABS', and *zə-m adrər* 'one-OBL another-ABS'. Only the first pronoun will be discussed, because the second is not productive enough and the data at my disposal is insufficient.

9.1 Degree of the independence of the components and grammaticalization of the pronoun *zəm zər*

The pronoun *zəm zər* can be added both to reciprocal (64) and non-reciprocal (65) verbs, be it transitive or two-place intransitive verbs. I do not have any examples of object-oriented reciprocals marked by the prefix *zə-* and the pronoun *zəm zər* simultaneously – however, the pronoun alone can be used to mark object-oriented reciprocity (cf. (79b)). Constructions like (65) without a morphological reciprocal marker show that the pronoun is close to a grammaticalized marker and can be used as a sole marker of reciprocity in a sentence.

As a rule, in “canonical” reciprocals of transitive verbs the variant *zəm zər* is used and in reciprocals of two-place intransitive verbs the reverse order *zər zəm* with the first absolutive and the second oblique component is preferred. Therefore, the case marking of the first component repeats the case of the subject of the initial verb: cf. (64) derived from a transitive base verb *ləɖgun* ‘to see’ – the base verb has the oblique subject, though the derived reciprocal verb in (65) has the absolutive one. The oblique case of the first component *zəm* repeats the case of the subject of the base verb. In (65), derived from an intransitive base verb with absolutive subject, the first absolutive component *zər* also repeats the case of the subject of the base verb.

With a transitive base verb:

- (64) *tə zə-m zə-r tə-zərə-ləɖgəu-žvə.*
 we(ABS) one-OBL one-ABS 1PL.S-REC-see-ITER
 ‘We see each other.’

With a two-place intransitive base verb:

- (65) *a-xə-r zə-r zə-m gu-Ø-rə-Io-žvə-x.*
 s/he-PL-ABS one-ABS one-OBL heart-3SG.IO-LOC-be-ITER-3PL.S
 ‘They trust each other.’

The reciprocal pronoun is also used to denote reciprocity between the oblique subject and oblique indirect object of three-place transitives like *tən* ‘to give sth to sb’. In this case instead of the expected variant *zəm* (OBL) *zəm* (OBL) reflecting the case marking of the arguments native speakers usually choose the variant *zəm* (OBL) *zər* (ABS):

- (66) a. *sə o švuxvəftən-xə-r o-sə-tə-žvə-x.*
 I(OBL) you(OBL) gift-PL-ABS 2SG.IO-1SG.A-give-ITER-PL.DO
 ‘I give gifts to you’
 b. *tə zə-m zə-r švuxvəftən-xə-r e-tə-tə-žvə-x.*
 we(OBL) one-OBL one-ABS gift-PL-ABS 3SG.IO-1PL.A-give-ITER-PL.DO
 ‘We give gifts to each other.’

Therefore the case form *zəm zər* is in a certain sense grammaticalized – it is a default variant and can be used with all verb classes.

Reciprocal pronouns can occur in all types of subject-oriented reciprocal constructions: “canonical” from transitive and intransitive verbs, “indirect” from three-place transitive verbs and “possessive”.

The predicate with or without a reciprocal affix of a construction with a reciprocal pronoun may contain different agreement markers, because the pronoun may control one agreement slot (in which case this slot is filled with the 3SG marker, as in (66b)), or two agreement slots, as in (67b), where the oblique component *zəm* controls the oblique prefix *ə-* and the absolutive component *zər* is cross-referenced by the absolutive zero prefix:

- (67) a. *sə a-r Ø-sə-uIa-gv.*
 I(OBL) s/he-ABS 3SG.DO-1SG.A-wound-PAST
 ‘I wounded him/her.’

- b. *tə zə-m zə-r Ø-ə-ula-žbə-gəə-(x).*
 we(OBL) one-OBL one-ABS 3SG.DO-3SG.A-WOUND-ITER-PAST-(PL.S)
 ‘We wounded each other.’
- c. *tə zə-m zə-r te-ula-žbə-x.*
 we(OBL) one-OBL one-ABS 1PL.A-WOUND-ITER-PL.S
 ‘We wounded each other.’

Finally, it may control no slot at all (see (64)). The second and the third variants are the most productive.

Therefore, each of two valency slots can be controlled either by the reciprocal pronoun or by an argument noun phrase. If the pronoun controls a particular slot, this slot is occupied by the 3SG agreement marker – therefore, the pronoun and each of its components are regarded as 3SG pronouns. The agreement markers show which variant of agreement is chosen in a particular construction: if the pronoun controls a slot, it is filled by a 3SG agreement marker; otherwise, it can be filled by a reciprocal prefix *zə-rə-* or *zə-* or by a plural agreement affix.

We can see that the pronoun is in the intermediate stage of grammaticalization. Since in one of the productive variants each of the components of the pronoun controls two slots (68b) and is thus to a certain degree autonomous, this seems to show that the pronoun is not yet a simple but a complex marker consisting of two components. Variants like (64), where the pronoun does not control any agreement slot, show that the pronoun can be not an argument noun phrase, but a grammatical marker which only expresses reciprocity, but does not control agreement markers. As mentioned, variants of verb forms in which the pronoun controls only one slot also occur.

The pronoun *zəm zər* admits insertion of a possessive noun phrase between its components. When a noun phrase intervenes between them, the type of agreement changes. When the pronoun is not discontinuous it behaves like one unit and controls only the oblique indirect object agreement slot as in (67b). Insertion of the possessee makes the variant *kləpləgə* in (68c) preferable for informants. In (68c) the pronoun is discontinuous and controls both agreement slots (both the subject absolute and the oblique indirect object slots are occupied by zero prefixes, because they are controlled by the 3SG components *zəm* and *zər*, which are cross-referenced by zero prefixes of the subject and the indirect object of the preverb *klə-*). The same variant of agreement is much worse when the pronoun is discontinuous (cf. (68d)).

- (68) a. *tə šəo šəu-nə tə-Ø-klə-pləa-gə.*
 we(ABS) you(PL.OBL) your-eye 1PL.S-3SG.IO-LOC-look-PAST
 ‘We looked into your eyes.’
- b. *tə zə-m zə-r ə-nə tə-Ø-klə-pləa-gə.*
 we(ABS) one-OBL one-ABS his-eye 1PL.S-3SG.IO-LOC-look-PAST
 ‘We looked in each other’s eyes.’ (“canonical” reciprocal of two-place vi).

Note that the 3SG possessive marker *ə-* in the word *ə-nə* in (68b, c, d) shows that it agrees with the reciprocal pronoun *zəm zər*. The pronoun is regarded in the language as a 3SG noun phrase, while in (68a) it agrees with the 2PL constituent *šəo*.

- c. *tə zə-m ə-nə zə-r Ø-Ø-kIə-plʋa-gv.*
 we(ABS) one-OBL his-eye one-ABS 3SG.S-3SG.IO-LOC-look-PAST
 ‘We looked in each other’s eyes.’
- d. *tə zə-m zə-r ə-nə ??Ø-Ø-kIə-plʋa-gv.*
 we(ABS) one-OBL one-ABS his-eye 3SG.S-3SG.IO-LOC-look-PAST
 ‘We looked in each other’s eyes.’

In fact, most frequently the pronoun is not discontinuous, which shows that *zəm zər* is conceived as one syntactic unit rather than as two independent items.

9.2 Subject-oriented reciprocals

As mentioned, in subject-oriented reciprocal constructions with the reciprocal pronoun *zəm zər* both non-reciprocal (9.2.1) and reciprocal (9.2.2) verb forms can be used.

9.2.1 *Constructions with reciprocal pronouns only*

Constructions, where reciprocity is marked with the pronouns only, can be of all diathesis types of subject-oriented reciprocals, which can also be designated by *zə-*, *zərə-* and *zərə-gvə-* (see 3.1).

9.2.1.1 “Canonical” reciprocal constructions

9.2.1.1.1 *Derived from two-place transitives.* For an example see (67b) above, the 3SG marker *ə-* in the oblique subject slot is controlled by the 3SG component *zəm*. In (67c), on the other hand, the 1PL prefix *tə-* is controlled by the oblique subject *tə*. The absolutive slot is in both cases controlled by the absolutive object component of the reciprocal pronoun *zər*. In (67b) the pronoun is less grammaticalized than in (67c) and behaves like two lexical items.

9.2.1.1.2 *Derived from two-place intransitives.* In (68b) the IO slot is occupied by a zero prefix and controlled by the oblique component of the pronoun. The reciprocal pronoun is highly grammaticalized and controls only one agreement slot, whereas the other one is controlled by the pronoun *tə* ‘we’.

9.2.1.1.3 *Reciprocals of one-place verbs of motion.* Monovalent verbs cannot form morphological reciprocals. For instance, the verb *kIon* ‘to go’ has only one argument – the subject which is coded in the predicate. If the endpoint is denoted metonymically by a personal pronoun or an animate noun, as in (69a), the verb may undergo reciprocalization which can be expressed by means of *zər zəm*, as in (69b):

- (69) a. *sə a-šb ədi sə-kIo.*
 I(ABS) s/he-OBL to 1SG.S-go
 ‘I go to him.’
- b. *cləf-xə-r zə-r zə-m ədi ma-kIo-x.*
 PERSON-PL-ABS one-ABS one-OBL to DYN-go-PL.S
 ‘People go to one another’ (= ‘visit one another’).

In some cases, there is an alternative variant with verbs like *kIon* ‘to go’: the initial verb increases its valency by taking the benefactive affix *fa-/fə-* and thus becomes two-place intransitive. The benefactive derivative (69c) acquires the ability to take on the prefix *zə-* and form a morphological reciprocal, as in (69d), though a pronominal reciprocal, as in (69e), is also possible:

- c. *sə a-šb sə-Ø-fa-kIo.*
I(ABS) s/he-OBL 1SG.S-3SG.IO-BEN-go
‘I go to him/her (visit him/her).’
- d. *zəkIə kləf-xə-r xəakle zə-fə-kIo-x.*
all person-PL-ABS guest REC-BEN-go-PL.S
‘All people visit each other.’
- e. *a-xə-r zə-r zə-m Ø-fə-kIo-žbə-x.*
s/he-PL-ABS one-ABS one-OBL 3SG.IO-BEN-go-ITER-PL.S
‘They go to each other.’

9.2.1.2 “Indirect” reciprocal constructions. “Indirect” reciprocals derive from three-place transitive verbs. It is an interesting fact that in (70b) both oblique agreement slots are occupied by 3SG prefixes, and both the absolutive and the oblique component of the pronoun *zəm zər* control *oblique* slots (\emptyset - in the preverb object slot and *e-* in the agent slot) and the oblique case of the pronoun *tə* ‘we’ does not control any slot. The word *kəəbar-kIə-xə-r* ‘news’ is the direct object but the 3PL absolutive suffix *-x* does not occur on the verb, because it is not strictly obligatory in Adyghe. On the one hand, the pronoun controls two slots and thus behaves as two items. On the other hand, the pronoun does not change its form to *zəm zəm*, although it controls *two oblique slots* – in this sense it is grammaticalized and does not show all variants of combinations of case forms:

- (70) a. *sə o kəəbar-kIə-xə-r kəəp-fə-sə-Iotə.*
I(OBL) you(OBL) news-new-PL-ABS DIR-2SG.IO-BEN-1SG.A-tell
‘I tell you the news.’
- b. *tə kəəbar-kIə-xə-r zə-m zə-r kəə-Ø-f-e-Iotə-žbə.*
we(OBL) news-new-PL-ABS one-OBL one-ABS DIR-3SG.IO-BEN-3SG.A-tell-ITER
‘We tell the news to each other.’

9.2.1.3 “Possessive” reciprocal constructions. The reciprocal pronoun *zəm zər* can be used to mark “possessive” reciprocity. As mentioned in 3.1.3, this type of reciprocals can also be marked by the affixes *zərə-* and *zərgəbə-*. The morphological and the pronominal devices cannot be used in the same clause (see (71c)).

- (71) a. *a-šb kIalə-m ə-Ia Ø-ə-ula-gə.*
he-OBL boy-OBL his-hand 3SG.DO-3SG.A-wound-PAST
‘He wounded the boy’s hand.’
- b. *tə zə-m zə-r ə-Ia Ø-ə-ula-gə.*
we(OBL) one-OBL one-ABS his-hand 3SG.DO-3SG.A-wound-PAST
‘We wounded each other’s hands.’

- c. *tə zə-m zə-r ə-lə tə-zərə(ɡvə)-ulə-ɡv̄.
 we(OBL) one-OBL one-ABS his-hand 1PL.IO-REC-wound-PAST
 ‘We wounded each other’s hands.’

In (71b) the components of the reciprocal pronoun control the oblique and the absolutive slots on the predicate. Therefore, the pronoun here is not highly grammaticalized and occurs as a combination of two items.

9.2.1.4 Third person: Pronominal reciprocals with non-reciprocal verbs. If reciprocal relations hold between two third person participants, native speakers usually use either only *zə-* or *zərə-* (see (5b)) or only the reciprocal pronoun (see (72b) and (73b)), but not both a prefix and the pronoun *zəm zər*:

- (72) a. sə o u-s-švəɡupšə-ɡv̄.
 I(OBL) you(ABS) 2SG.DO-1SG.A-forget-PAST
 ‘I forgot you.’
 b. a-xə-r zə-r zə-m Ø-Ø-švəɡupšə-žvə-ɡv̄.
 s/he-PL-ABS one-ABS one-OBL 3SG.DO-3SG.A-forget-ITER-PAST
 ‘They forgot each other.’ (“canonical” reciprocal of an inverse vi)
- (73) a. sə a-šv sə-Ø-dəIəpələ.
 I(ABS) s/he-OBL 1SG.S-3SG.IO-help
 ‘I help him/her.’
 b. a-xə-m/a-xə-r zə-r zə-m Ø-Ø-dəIəpələ-x.
 s/he-PL-OBL / s/he-PL-ABS one-ABS one-OBL 3SG.S-3SG.IO-help-PL.s
 ‘They help each other.’ (“canonical” reciprocal of a non-inverse vi)

For a construction with a transitive base verb, see (15b).

If the participants are the 1st or 2nd persons the prefix *zə-* and the pronoun *zəm zər* may be used simultaneously, as in (74b) and (75b):

- (74) a. sə o u-s-švəɡupšə-ɡv̄. (= (72a))
 I(OBL) you(ABS) 2SG.DO-1SG.A-forget-PAST
 ‘I forgot you.’
 b. tə zə-r zə-m tə-zə-švəɡupšə-žvə-ɡv̄.
 we(ABS) one-ABS one-OBL 1PL.S-REC-forget-ITER-PAST
 ‘We forgot each other’ (“canonical” reciprocal of an inverse vi)
- (75) a. sə o sə-b-dəIəpələ.
 I(ABS) you-OBL 1SG.S-2SG.IO-help
 ‘I help you.’
 b. tə zə-r zə-m tə-zə-dəIəpələ.
 we(ABS) one-ABS one-OBL 1PL.S-REC-help
 ‘We help each other’ (“canonical” reciprocal of a non-inverse vi).

In the underlying construction (74a) the subject *sə* is in the oblique case, because it is the subject of an *inverse* verb and is coded by an oblique marker *s-* which follows the absolutive marker *u-*. In (75a) *sə* is in the absolutive case: it is cross-referenced by the absolutive marker *sə-* in the first slot of the verb form.

The 1PL marker in (74b) and (75b) *tə-* occupies the absolutive slot, whereas the oblique slot is occupied by the reciprocal prefix.

Perhaps the reason for the difference determined by the person of the participants is that semantically, the first and second persons are higher in the animacy hierarchy than the third person. If the subject is in the first or second person, it overranks the reciprocal pronoun (which is formally of the third person) and controls agreement, which is not the case when the subject is the third person.⁶

9.2.2 Constructions with the reciprocal pronoun and reciprocal verbs

Constructions where the pronoun *zəm zər* and reciprocal verbs with the prefixes *zə-* and *zərə-* occur simultaneously can be of all types, except “possessive” constructions.

9.2.2.1 “Canonical” reciprocal constructions

9.2.2.1.1 *Derived from two-place transitives.* Here is an example:

- (76) a. *sə a-r Ø-sə-ula-gv̆.*
 I(OBL) s/he-ABS 3SG.DO-1SG.A-WOUND-PAST
 ‘I wounded him.’
- b. *tə zə-m zə-r z-i-ula-žv̆ə-gv̆.*
 we(OBL) one-OBL one-ABS REC-3SG.A-WOUND-ITER-PAST
 ‘We wounded each other.’ (canonical reciprocal of a transitive verb).

Oblique agreement in (76b) is controlled by the component *zəm* of the reciprocal pronoun (the prefix *i-* is a variant of *ə-*). The absolutive slot in (76b) is occupied by the reciprocal prefix *z(ə)-*. I regard cases like (76b) where only one slot is controlled by the pronoun as a proof of grammaticalization of the pronoun, when it functions as a single unit.

9.2.2.1.2 *Derived from two-place intransitives.* An example:

- (77) a. *sə a-šb sə-Ø-šbə-gugv̆u.*
 I(ABS) s/he-OBL 1SG.S-3SG.IO-LOC-hope
 ‘I rely on him.’
- b. *a-xə-r zə-m zə-r zə-šbə-gugv̆u-x.*
 s/he-PL-ABS one-OBL one-ABS REC-LOC-hope-PL.S
 ‘They rely on each other.’

In the base construction (77a) the subject absolutive slot in the predicate is controlled by the absolutive subject phrase *sə* ‘I’ and the oblique one is controlled by the oblique form *ašb* ‘s/he’. In the reciprocal construction (77b), the absolutive slot is also controlled by the subject *axər* ‘they’ (if it were controlled by the pronoun *zəm zər*, which is 3SG, the plural marker *-x* would not occur) and the oblique one is occupied by *zə-*. The pronoun *zəm zər* does not control any slot (in (77b) no slot is filled by the 3SG agreement marker).

6. The difference between persons is illustrated by examples of canonical reciprocals, because other types of reciprocals show the same distinction less apparently.

9.2.2.2 “Indirect” reciprocal constructions. Compare:

- (78) a. *sə o kəəbar-klə-xə-r kəəp-fə-sə-Iotə-x.*
 I(OBL) you(OBL) news-new-PL-ABS DIR-2SG.IO-BEN-1SG.A-tell-PL.S
 ‘I tell you news.’
- b. *tə kəəbar-klə-xə-r zə-m zə-r kəə-zə-fə-tə-Iotə-žəə-x.*
 we(OBL) news-new-PL-ABS ONE-OBL ONE-ABS DIR-REC-BEN-1PL.A-tell-ITER-PL.DO
 ‘We tell news to each other.’

In (78a) the subject oblique slot is controlled by the subject *sə* and the IO oblique slot is controlled by the indirect object *o*. In (78b) the subject oblique slot is also controlled by the oblique subject *tə* and the oblique slot is occupied by the reciprocal prefix.

9.3 Object-oriented reciprocals

As I have mentioned above, in my data there are object-oriented reciprocals with the pronoun *zəm zər* only but not with both the pronoun and the reciprocal prefix; an example:

- (79) a. *sə klalə-m txəlv-ər Ø-e-z-gəvləgəv-u-gv.*
 I(OBL) boy-OBL book-ABS 3SG.DO-3SG.IO-1SG.A-show-PAST
 ‘I showed the book to the boy.’
- b. *sə ti-gəvunəgəv-u-xə-m zə-m zə-r*
 I(OBL) our-neighbour-PL-OBL one-OBL one-ABS
Ø-e-z-gəvə-ləgəv-u-gəvə-x.
 3SG.DO-3SG.IO-1SG.A-show-PAST-PL.DO
 ‘I showed our neighbours to each other.’

In (79b) the pronoun occurs as one grammaticalized unit and controls only one slot – the IO slot. The absolutive slot cannot be controlled by the oblique noun phrase *tigəvunəgəvuxəm*, because the controller must also be in the absolutive case.

9.4 Differences between constructions with the reciprocal pronoun only and constructions with reciprocal prefixed predicates and the pronoun

From what was said above we can see that constructions where the reciprocal pronoun and the morphological marker *zə-* or *zərə-* co-occur differ from those with the pronoun alone. First, constructions with “double marking” of reciprocity tend to bind a core participant (the subject or the direct object) with a participant of lower syntactic status (the indirect object or an adjunct): they are more frequent in “canonical” reciprocal constructions derived from two-place intransitive verbs (77b) and in “indirect” reciprocal constructions (78b) than in “canonical” reciprocal constructions from transitive verbs (see (12b) and (68b)). Second, constructions with double marking tend to designate reciprocity between the second or first person participants (cf. (74b)).

9.5 Expression of the subject or the object in constructions with reciprocal pronouns

In Adyghe, contrary to constructions of the type *They hate each other* where the antecedent of the reciprocal pronoun is unambiguously the subject and the reciprocal pronoun is usually regarded as an object, the situation is more complicated. The antecedent of the reciprocal pronoun may be either the absolutive subject or an oblique object, cf. (73b) where either the subject (*axər* (ABS) ‘they’) or the object (*axəm* (OBL) ‘them’) can be used in the initial position. Defining the syntactic role of the pronoun itself is problematic: if the pronoun does not control any agreement slot (as in (78b)), we do not have any test to determine whether the pronoun is the subject or an indirect object, or one of its components is the subject and the other one the indirect object. Case marking of the components, as I have shown in the case of “indirect” reciprocals, does not always let us to define their syntactic role.

We can see that, on the one hand, Adyghe reciprocals of all types generally tend to have an absolutive antecedent of the reciprocal pronoun. Constructions like the variant of (73b) with *axər* better agree with this tendency. All the types of reciprocal constructions more frequently contain an absolutive noun phrase than an oblique one, whatever the syntactic role of the absolutive noun phrase in the sentence.

On the other hand, the subject noun phrase is more often the antecedent of the pronoun *zəm zər* than the object one. Therefore, the pronoun tends to be subject-oriented. Sometimes this factor (subject orientation) contradicts the first one (absolutive orientation), because transitive verbs in Adyghe have an absolutive argument which is not the subject; therefore, in reciprocals of transitive verbs theoretically either the *oblique subject* or the *absolutive direct object* must be expressed.

The second factor is stronger than the first one: in reciprocal constructions derived from verbs which have oblique subjects in the base structure (i.e. inverse and especially transitive verbs) the reciprocal pronoun is usually controlled by the *oblique subject* and not *absolutive object*; cf. a “canonical” reciprocal of a two-place inverse intransitive verb which has an oblique subject: the oblique subject *axəm* and not the absolutive object *axər* tends to be used.

- (80) a. *sə a-r Ø-zəxə-sə-xə.*
 I(OBL) s/he-ABS 3SG.DO-LOC-3SG.A-take
 ‘I hear him.’
- b. *a-xə-m^l a-xə-r zə-r zə-m zəx-e-xə.*
 s/he-PL-OBL / s/he-PL-ABS one-ABS one-OBL LOC-3SG.A-take
 ‘They hear each other.’

In reciprocal constructions derived from some intransitive verbs, especially from comitative verbs like the one in (73a), the participant expression may be either the subject or an object (see (73b)). Generally, the choice of the subject case form *axər* or the object case form *axəm* does not influence the choice of the variant *zər zəm* or *zəm zər* of the reciprocal pronoun: the choice is determined by the valency class of the base verb, viz. with transitive bases *zəm zər* is preferable, and with intransitive bases *zər zəm*.

9.6 Difference between *zəm zər* and *zəm adrər*

The pronoun *zəm adrər* is very similar to *zəm zər* semantically. However, their syntactic properties are not absolutely identical. *Zəm zər* is more productive than *zəm adrər*. The latter seems to behave as two separate free morphemes. This results in two differences between *zəm zər* and *zəm adrər*.

(1) Though both pronouns may combine with several agreement variants of the predicate, the use of the plural suffix in constructions with *zəm zər* and *zəm adrər* tends to differ: it is usually, though optionally, present in constructions with *zəm zər* but not with *zəm adrər*. This suffix in (81) is not controlled by the absolutive component of the reciprocal pronoun, because the pronoun can control only 3SG markers:

- (81) *a-xə-m zə-m zə-r* (Ø)-ə-*ulə-žbə-gəə-(x)*.
s/he-PL-OBL one-OBL one-ABS 3SG.DO-3SG.A-WOUND-ITER-PAST-PL.DO
'They wounded each other' ("canonical" reciprocal of a two-place vt)
- (82) *a-xə-m zə-m adrə-r* (Ø)-ə-*ulə-žbə-gəə-(²x)*.
s/he-PL-OBL one-OBL other-ABS 3SG.DO-3SG.A-WOUND-ITER-PAST-PL.DO
'They wounded each other.'

The absolutive component of *zəm adrər* more readily controls 3SG absolutive agreement than the absolutive component of *zəm zər*, which shows that the components of the former are more independent than of the latter.

(2) The pronoun *zəm adrər*, in contrast to *zəm zər*, has the third morphological variant *zəm adrəm* with two oblique components, though it is peripheral in comparison with the other variants. This variant is possible only when the reciprocal relations connect two arguments which were oblique in the underlying structure:

- (83) a. *sə a-šb ə-la* Ø-Ø-*fə-sə-ula-gə*.
I(OBL) s/he-OBL his-hand 3SG.DO-3SG.IO-BEN-1SG.A-WOUND-PAST
'I wounded his hand.'
- b. *tə zə-m adrə-m / *zə-m zə-m ə-la-xə-r*
we(OBL) one-OBL other-OBL one-OBL one-OBL his-hand-PL-ABS
zə-fə-tə-ule-žbə-gəə-x.
REC-BEN-1PL.A-WOUND-ITER-PAST-PL.DO
'We wounded each other's hands.' ("possessive"/"indirect" reciprocal of vt).

If *zəm zər* were used in (83), it would have the sequence *zəm zər* because this pronoun does not have a variant with two components in the oblique form.

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Reciprocals in West Greenlandic Eskimo

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1. Introduction

1.1 West Greenlandic

West Greenlandic (henceforth WG) is a member of the Inuit branch of the Eskimo language family that stretches from Bering Strait to eastern Greenland. It is spoken by nearly all west coast Greenlanders (around 41,000 – a further 3,500 Greenlanders speak East Greenlandic and around 800 speak Polar Eskimo, very divergent dialects), and thus represents the Eskimo language spoken by the greatest number of speakers and by the highest percentage of speakers anywhere. Itself it falls into several sub-dialects of which the written language is based on the central sub-dialect of the capital Nuuk (previously Godthåb), as reflected also in the present study. Although over 8,000 Danes are also resident at any time in the country (which has Home Rule status within the Danish Kingdom), the influence of Danish on WG has been rather restricted apart from relatively recent loanwords.

1.2 Reciprocal constructions in West Greenlandic

Reciprocal constructions in WG represent an exclusively intransitive diathesis (see Section 7). They are expressed either by purely paradigmatic (inflectional) means – usually with support of a case-inflected reciprocal-reflexive pronoun – or by mixed inflectional-derivational means. The basic process is the replacement of transitive subject-object agree-

ment with plural intransitive (subject-only) agreement on the verb. The purely paradigmatic – perhaps more accurately termed pragmatic-syntactic – construction is used freely with transitive stems: there is a close parallel here with the basic reflexive construction and indeed considerable ambiguity with it, since the forms of the latter are identical when the subject is plural (in the following example the reflexive sense is excluded however by the semantics of the stem):

- (1) a. *nukappiaqqa-t niviarsiaqqa-t saap-pai.*
 boy-PL.REL girl-PL.ABS turn.to.face-3PL/3PL.IND
 ‘The boys turned to face the girls.’
 b. *nukappiaqqa-t immin-nut saap-put.*
 boy-PL.ABS self.PL-ALL turn.to.face-3PL.IND
 ‘The boys turned to face each other.’

Mixed inflectional-derivational constructions are much more limited and may be found with both transitive and intransitive stems. As in the purely paradigmatic case verbal agreement is always intransitive (plural subject). One derivational affix, *-ut(i)-*, originally a transitive applicative, has produced a considerable number of lexicalized reciprocals, however, and is usually given as an independent reciprocal suffix in standard dictionaries, this being the most common sense of the suffix when followed by intransitive plural inflections. Examples are given under 3.2.

2. Grammatical notes

The important features of the grammatical system of West Greenlandic that are relevant to understanding the workings of its reciprocal constructions are briefly sketched below.

2.1 General morphosyntactic characteristics

Like all Eskimo languages, WG is highly polysynthetic: individual words (apart from particles) must consist of a stem (verbal or nominal) plus a portmanteau inflection. On verbs the latter indicates mood, person and number of subject and – when transitive – object, and on nouns it indicates number, case and – where relevant – personal possessor). Between stem and inflection there can appear from zero to at least ten or so derivational affixes (“suffixes” or “infixes”) according to a general rule of cumulative scope from left to right. This is a recursive system with the possibility of several successive nominalizations and verbalizations in the same complex word-form, built up in layers, and of several switches of transitivity back and forth with successive affixes (see Fortescue 1984: 313ff.). Inflectional and derivational affixes are formally easy to distinguish in WG: the former morphemes are obligatory and occur (except for phrasal and clausal enclitics) word-finally, while the latter are optional and must be followed by an inflection (including \emptyset for the singular absolutive case on nominals). A “base” is defined as the combination of

a stem plus any number of successive derivational affixes standing before any “sentential” affix (see 2.6 below) and/or the true (paradigmatic) inflectional ending.

WG is a morphologically ergative language with a special “relative” (ergative) case marking for transitive subjects. Direct objects of morphologically transitive verbs are in the absolutive case, and semantically indefinite objects of morphologically intransitive/antipassivized verbs are in the instrumental case.

2.2 Parts of speech

The only parts of speech are verbs, nominals (including nouns, pronouns and participials) and uninflected particles, the latter principally in adverbial or conjunctive functions. There are no subordinating particles (verbal inflection covers these). Corresponding to the category “adjective” WG has stative/descriptive verbs – occurring in participial form when used attributively. Instrumental cases of such forms may have an adverbial function. WG does not have pre-/postpositions as such, only simple oblique cases of nominals and phrasal postpositional constructions (often headless) in adverbial function.

2.2.1 Verbs and their inflection

Inflected verbal bases represent minimal clauses since WG is a language with wide-spread zero-anaphora. With explicit NP arguments agreement is with the subject and, for transitives, also the object. No verb can be inflected for more than two actants even if semantically trivalent. They fall into four classes: intransitive-only, transitive-only, and two ambivalent classes. Of these, “agentive” verbs such as *niri-* ‘to eat/eat sth’ have the same actant as subject whatever the transitivity, the intransitive form acting like a zero-marked antipassive. “Non-agentive” verbs on the other hand, such as *matu-* ‘to close/be closed’ have different actants as subject in the two cases, the intransitive acting like a zero-marked passive of the transitive, as in (2) (and compare the anticausatives in 7.2.3).

- (2) a. *arna-p matu matu-aa.*
 woman-REL door close-3SG/3SG.IND
 ‘The woman closed the door.’
 b. *matu matu-vuq.*
 door close-3SG.IND
 ‘The door was closed.’

All verbs can be inflected in three superordinate moods (indicative, interrogative and imperative/optative) and four subordinate ones (causative, conditional, participial and contemporative – the latter also having coordinative function and generally indicating coreference with the subject of the main verb).

2.2.2 Nouns and their inflection

Nominal cases include absolutive and “relative”, the latter covering ergative (for transitive subjects) and genitive functions. Singular and plural number are distinguished. Nouns may further be inflected for possessor (any combination of case and possessor/possessum

number). The absolutive case is treated as the default in the example sentences in this chapter so it is not specifically indicated (it is marked by zero in the singular; the plural marker *-(i)t* may be either absolutive or relative). For similar reasons of simplification, the singular is treated as the default number marking in the glosses. The other noun cases are instrumental, locative, allative, ablative, vialis (perlative) and equalis.

Modifiers (whether nouns, quantifiers or participial forms of verbs) agree with head nouns in case and number.

2.2.3 Pronouns

1st and 2nd person pronouns are inflected for the same case categories as nouns except that there is no formal distinction between absolutive and relative. They are only used for special (e.g. contrastive) emphasis. Corresponding to 3rd person pronouns are an array of demonstrative stems that may be inflected for all cases (though with some idiosyncrasy of form).

Besides these, WG has a “4th” (= reflexive 3rd) person pronominal stem, *immi-*, plural *immiC-* (the “C” at the end of the stem indicates an indeterminate non-uvular consonant that undergoes assimilation). It is inflected like other pronouns for number and case, but lacks an absolutive form. It may further take possessor markings for 1st and 2nd person in the sense ‘myself, yourself’, etc. The plural allative case forms relevant for reciprocal constructions are:

1PL	<i>immi-tsin-nut</i>	‘to ourselves’
2PL	<i>immi-ssin-nut</i>	‘to yourselves’
4PL	<i>immin-nut</i>	‘to themselves.’

2.3 Word order

The basic sentential word order is fairly flexible SOXV, but NPs have an obligatory order of head plus modifier (the head may only be preceded by a possessor nominal).

2.4 Derivational affixes

There are between four and five hundred derivational affixes displaying varying degrees of productivity, and many of the fully productive ones perform functions which in less synthetic languages would be handled by the syntax. They may be verbal-deverbal (either extenders with lexically weighty meanings like ‘to try to’, ‘to want to’, ‘to ask to’, or modifiers for aspect, manner, degree and the like); verbal-denominal (with “incorporative” meanings like ‘to have’, ‘to be’, etc.); nominal-denominal (with meanings like ‘big’, ‘previous’, etc.); or nominal-deverbal (general participial-formants or with meanings like ‘result of V-ing’, ‘means of V-ing’, etc.). These apply successively to build up words of considerable complexity but with quite transparent scope relations.

2.5 Valency-changing affixes

There are various valency-affecting derivational affixes. Valency-increasing affixes include *-(v)vigi-* ‘to have as place/time/person of V-ing’ and the “double-transitive” affixes like *-tit-* ‘to let/cause to’ and *-qqu-* ‘to ask to’ that may be attached to either intransitive or transitive bases, and also the applicative and the comitative affixes treated separately under 2.9 and 11. Valency-decreasing affixes include the passive *-niqar-* and antipassive *-si-* or *-i-*.

2.6 Tense, aspect and modality

There is a group of completely general/productive “sentential” affixes which may appear after all recursiveness within a complex verb form ceases (i.e. just before the inflection) and these, although optional and not forming neat paradigmatic oppositions, correspond semantically more to inflectional than derivational categories in other languages, e.g. tense and epistemic modality, so there is a cline between more derivational-like and more inflectional-like derivational affixes (see Kristoffersen 1992 for further discussion). Paradigmatic reciprocals are of course a matter of true inflection, but mixed inflectional-derivational reciprocals involve affixes that always stand close to the stem (like other less productive affixes).

There is no (obligatory) distinction between past and present tense; in the example sentences simple indicative forms are generally glossed as referring to the past.

There are numerous aspectual/aspectoidal affixes in the language (at least fifty, none of them obligatory except for habitual *-sar-* in certain circumstances). Among them are several iteratives/frequentatives, including *-qattaar-*, *-sar-* (an iterative as well as a habitual) and more lexicalized *-rar*. There are also a number of distributive affixes with contiguous meanings that can be added with varying degrees of productivity to either intransitive or transitive bases (‘more than one subject together/ more than one object at a time’). Note in particular *-urar-* and *-urtur-*, which are usually found on transitive stems and indicate action on more than one object, as in *nui-urar-pai* ‘she strings them (e.g. beads onto a string)’. Such affixes are compatible with reciprocal derivations (though this is not productive) – thus *nui-uru-up-put* ‘they are braided or strung together’ under 7.2.3.

2.7 Morphophonology

Both derivational and inflectional affixes fall into two major morphophonological types: those that truncate a preceding consonant and those whose initial consonant assimilates regressively to it (vowel-initial affixes are generally truncating and assimilate to the preceding vowel progressively). Some inflectional endings are only “selectively” truncating and a small sub-class of derivational affixes is of a more radically “replacive” sort, causing the collapse of whole syllables (*-ut(i)-* may – but does not always – behave this way). There are also morpheme-initial intrusive consonants such as the first “p” in 3PL intransitive indicative inflection *-(p)put*, which only appears (orthographically) after vowel stems (or when

there is assimilation). There are various other morpheme-initial alternation patterns, e.g. between /p/ or /k/ after a consonant stem and /v/ or /g/ after a vowel stem respectively, also between /t/ and /s/. More idiosyncratic patterns of attachment are found with individual morphemes or small groups of affixal morphemes; in general there is considerable allomorphy in the language.

2.8 Reflexive constructions

The manner of forming reflexives has already been mentioned in 2.1, namely the intransitive inflection of a transitive base, with or without support of reflexive-reciprocal pronoun *immi(C)*- in the allative case. (3) is an example of the construction with a singular subject:

- (3) *arnaq atugarliurtuq immi-nut tuqup-puq.*
 woman unhappy self-ALL kill-3SG.IND
 ‘The unhappy woman killed herself.’

The category of “4th person” occurs in both nominal (possessed) and verbal (subordinate mood) inflectional paradigms in a reflexive (3rd person) sense, e.g. in the distinction between 3rd person *ui-a* ‘her (someone else’s) husband’ and *ui-ni* ‘her (own) husband’.

There are also corresponding 4th person plural inflections (absolutive *-tik*, relative *-mik*) and these may sometimes have a reciprocal sense in adverbial expressions – see also sentence (36) under 7.1.3.

2.9 Applicatives

The precise meaning of applicative (transitive) derivations with *-ut(i)*- depends on the semantic nature of the non-derived verbal stem and in general involves much idiosyncrasy (see Fortescue 1984: 89f.). The object of the non-derived verb if already transitive will be put into an oblique case in the derived sentence; the direct object introduced by *-ut(i)*- itself will be marked inflectionally on the verb – and if it cross-references an overt object NP that will be in the absolutive case.

In (4b) *-ut(i)*- is used in a benefactive sense; compare the non-derived stem in (4a):

- (4) a. *piniartu-p qajaq sana-vaa.*
 hunter-REL kayak work.on-3SG/3SG.IND
 ‘The hunter worked on the kayak.’
 b. *piniartu-p nukappiaraq qaja-ssa-anik sana-ap-paa.*
 hunter-REL boy kayak-FUT-3SG.INST work.on-APPL-3SG/3SG.IND
 ‘The hunter worked on a kayak for the boy.’

Besides the benefactive sense of ‘for’ the direct object, the applicative may be glossed as ‘with’, ‘with respect to’, or ‘along with sth else’, depending on the stem. With verbs of motion it generally has a comitative-causative sense of conveying an object in the manner depicted by the stem, as in *tiki-up-paa* ‘he has brought it’ (from *tikit-* ‘come’). Inflected intransitively these have the special meaning of arriving from nearby, as in *tiki-up-puq* ‘he has come’ (lit. ‘he has brought himself’).

Many such derivatives can be given a reflexive and/or reciprocal meaning by inflecting them intransitively (see (32) for a complete derivational sequence).

3. Means of expressing reciprocals

The basic means of forming reciprocals is, as mentioned, paradigmatic, but it is important to distinguish purely paradigmatic (the productive process) from mixed inflectional-derivational means. The latter process with the affix *-ut(i)-*, though highly lexicalized in WG today, probably represents the original way of forming reciprocals in Eskimo languages: outside of Greenland it is much more productive and appears to be the only way of coding this meaning apart from a few lexical reciprocals. Nor is “4th” person pronominal *immiC-* used in such constructions as in WG; the meaning of the cognate stem – as indeed the meaning of the cognate construction to the paradigmatic reciprocal in WG – is unambiguously reflexive outside of Greenland, as far as I have been able to ascertain. It is possible that there has been influence here from Danish and its analytic reciprocal construction with *hinanden* ‘each other’, but the ambiguity in WG between reciprocal and reflexive could not have come directly from that source (compare Danish reflexive *sig* ‘himself/ herself/ themselves’). Loss of productivity of *-ut(i)-* may have been the immediate motivation for the development of the newer construction type.

3.1 Purely paradigmatic (inflectional) means

The simple use of a plural intransitive inflection on a transitive verbal base produces a reciprocal sense, although as in the parallel reflexive (singular or plural) case this is usually supported – especially in main clauses – by reflexive-reciprocal pronoun *immiC-* in the allative case. An example has been given in (1a). With the 1st and 2nd person plural the pronoun (in the relevant possessor form) is obligatory and with the 3rd person it is generally only dispensable in subordinate contexts where the reference conditions are clear:

- (5) a. *arviq tuqun-niar-parsi.*
 walrus kill-FUT-2PL/3SG.IND
 ‘You are going to kill the walrus.’
 b. *immi-ssin-nut tuqun-niar-pusi.*
 self-2PL-ALL kill-FUT-2PL.IND
 ‘You are going to kill *yourselves* / *each other*.’
- (6) a. *nukappiaraq (pinngussa-mik) tuni-vaa.*
 boy toy-INST give.to-3SG/3SG.IND
 ‘He gave the boy sth (a toy).’
 b. *immi-tsin-nut (pinngussa-nik) tuni-vugut.*
 self-1PL-ALL toy-INST.PL give.to-1PL.IND
 ‘We gave things (toys) to each other.’

In (6) note that *tuni-* ‘to give sth to’ is a morphologically bivalent stem with recipient as direct object (the thing given may appear as a nominal in the instrumental case).

3.2 Mixed inflectional-derivational means

As mentioned above, this is not a productive process in the language today, but it is one that has left many lexicalized forms; these could in principle be treated under “lexical reciprocals” (3.4).

3.2.1 With affix *-ut(i)-*

Derivations with the applicative affix *-ut(i)-* inflected intransitively for plural subject will usually have a reciprocal sense, approximately ‘subjects V with each other’. I do not consistently gloss the morpheme as REC in the sentence examples in this article since in most cases it transparently adds its own applicative nuance to the stem (though this is often obscured by lexicalization): it only takes on a reciprocal sense with the concomitant change of a following transitive to an intransitive inflection on the verb. Note that owing to relatively recent assimilation and the dropping of the /i/ except before following truncating affixes (also sometimes of the preceding /u/, leaving gemination of the preceding consonant) the underlying form of the affix is often obscured in the surface chain. The combination of *-ut(i)-* plus 3PL indicative inflection *-put* needs to be carefully distinguished from the allomorph *-pput* of that inflection after vowel stems.

- (7) *nuliariit saqitsa-ap-put.*
 couple.PL quarrel-*ut(i)*-3PL.IND
 ‘The couple quarrelled (with each other).’
- (8) *nukappiaqqat assuru-up-put.*
 boy.PL exert.self-*ut(i)*-3PL.IND
 ‘The boys wrestled.’

The non-derived stem may be historically transitive (as in (7)) or intransitive (as in (8)), and the resultant meaning may be somewhat unpredictable, as for example derived *assuruupput* ‘they wrestled’ in (8) from non-derived stem *assuru(u)r-* ‘to exert oneself’ (it can also mean literally ‘they exerted themselves together’ – i.e. have a sociative sense). In (7) the non-derived stem is not used but is cited in older dictionaries such as Schultz-Lorentzen (1927) as transitive (*saqitsar-* ‘to quarrel with’) – etymologically it seems that it meant at an earlier stage something like ‘shove away’. There are, in other words, gaps in the original derivational chains.

There is less possibility of ambiguity with a reflexive sense than is the case with paradigmatic reciprocals, given the semantic nature of the bases concerned. It is possible to add a pleonastic allative case form of the reciprocal-reflexive pronoun *immiC-* (*imminnut*), though this does not add anything to the meaning here.

When *-ut(i)-* in its reciprocal sense is added to transitive-only stems, the additional meaning added by the applicative derivation (if it exists) is also generally discernible in the reciprocal, though this is not always immediately apparent from the nearest English gloss:

- (9) a. *akiqqata savik tigu-aa.*
 opponent.3SG.REL knife take-3SG/3SG.IND
 ‘His opponent took the knife.’
- b. *politii-p allartirum-mut savik tigg-up-paa.*
 policeman-REL cloth-ALL knife take-APPL-3SG/3SG.IND
 ‘The policeman took the knife together with the cloth (e.g. around it).’
- c. *akiqqat tigg-up-put.*
 opponent.PL take-*ut(i)*-3PL.IND
 ‘The opponents took hold of each other.’

In (9c) the ‘sth else’ of the applicative base *tiggut(i)*- ‘to take together with sth else’ is understood presumably as the subjects’ own bodies, but such sentences cannot be extended to include reference to a particular body part, for instance. Note that the corresponding simple inflectional reciprocal from *tigu-* (*imminnut tigu-pput*) would mean rather ‘they took themselves’, a semantically unlikely but otherwise well-formed sentence.

The most common reciprocals with *-ut(i)*- based on transitive-only stems – i.e. those found in Berthelsen et al. (1990) plus a few more from Schultz-Lorentzen (1927) – follow (many of them have semantic or formal idiosyncrasies, as exemplified in this article):

<i>malirsu-up-put</i> ‘they pursued one another’	(<i>malirsur-paa</i> ‘he pursued him’)
<i>tigg-up-put</i> ‘they took hold of each other’	(<i>tigu-aa</i> ‘he took it’)
<i>iliu-up-put</i> ‘they alternated (with each other) at doing sth’	(<i>iliur(ur)</i> - ‘do sth to’ (vt/vi))
<i>kinguraarta-ap-put</i> ‘they replace each other/ alternate (regularly)’	(<i>kinguraar-paa</i> ‘he replaced it’)
<i>assurtu-up-put</i> ‘they quarreled/ fought’	(<i>assurtur-paa</i> ‘he contradicted, went against him’)
<i>tikku-up-put</i> ‘they pointed things out to each other’	(<i>tikkuar-paa</i> ‘he pointed it out’)
<i>qirlira-ap-put</i> ‘they elbowed their way forward’	(<i>qirlir-paa</i> ‘he pushed him aside to get past’)
<i>akiu-up-put</i> ‘they answered each other back’	(<i>akiur-paa</i> ‘he answered him back’)
<i>sakka-ap-put</i> ‘they jostled forward’	(<i>sakap-paa</i> ‘he jostled him’)
<i>apura-ap-put</i> ‘they knocked into each other’	(<i>apuraC-</i> ‘knock into’ is vt/vi in Schultz-Lorentzen (1927) but is no longer in use).

The last of these (at least) may be better analysed as an anticausative rather than a reciprocal – from a transitive meaning of the sort ‘X caused Y and Z to join together’, parallel to *kasu-up-put* ‘they clinked glasses’ under 7.2.3. It has an alternative sociative/collective meaning, however: ‘they all arrived at the same place together’. In fact, the two meanings are actually compatible in the sense ‘they all (people on several sledges, etc.) knocked into each other’.

3.2.2 With affix *-qatigiic-*

Another important derivational affix with a reciprocal sense is *-qatigiic-* ‘to have each other as fellow V-er’. It is related to comitative affix *-qatigi-* ‘to have as fellow V-er’ and, on nominal stems, converse affix *-giic-* ‘to be mutual N-s’.

- (10) a. *ikinngutit uqalup-put.*
friend.PL speak-3PL.IND
‘The friends talked/spoke.’
b. *ikinngutit uqalu-qatigiip-put.*
friend.PL talk-together-3PL.IND
‘The friends talked together.’

This affix also has a more common sociative sense as in *niri-qatigiip-put* ‘they ate together’. Usually it attaches to intransitive stems only in this sense but in reciprocal use the stem may be transitive, as in (11):

- (11) a. *Tuumasi-p niviarsiaq taanna asa-vaa.*
Tuumasi-REL girl that love-3SG/3SG.IND
‘Tuumasi loves that girl.’
b. *inuusuttut taakku asa-qatigiip-put.*
young.person.PL that.PL love-REC-3PL.IND
‘Those young people love each other.’

Other common (though lexicalized) reciprocal combinations with this affix (most of them to be found in Berthelsen et al. 1990) are:

<i>atu-qatigiip-put</i> ‘they had intercourse’	(<i>atur-paa</i> ‘he used it, borrowed it, had intercourse with her (of man)’)
<i>ata-qatigiip-put</i> ‘they are coherent/connected’	(<i>ata-vuq</i> ‘it is coherent/connected (to sth)’)
<i>isuma-qatigiip-put</i> ‘they agree’	(<i>isuma-vuq</i> ‘he thinks’)
<i>paasi-qatigiip-put</i> ‘they understand each other’	(<i>paasi-vaa</i> ‘he understands him’)
<i>ilagi-qatigiip-put</i> ‘they accompanied one another’	(<i>ilagi-vaa</i> ‘he accompanied her’)
<i>taamaa-qatigiip-put</i> ‘they are equal/the same (e.g. age)’	(<i>taamaap-puq</i> ‘he does thus, it is like that’)
<i>asa-qatigiip-put</i> ‘they love each other’	(<i>asa-vaa</i> ‘he loves her’).

Compare the last example with *asa-* ‘to love’ intransitively inflected as in *imminnut asa-pput* ‘they love themselves’ (= ‘are selfish’) – i.e. with a reflexive, not a reciprocal sense. The form with *-qatigiic-* may have been introduced through biblical translations to distinguish it from the reflexive sense of *asa-pput*.

Note also combinations with “adjectival” – actually qualitative verbal – stems, as in *angi-q(q)atigiip-put* ‘they are equally big’ (from *angi-* ‘to be big’) and *taki-qqatigiip-put* ‘they are equally long’ (from *taki-* ‘to be long’), where the form of the affix is somewhat idiosyncratic.

3.2.3 With affixes *-giiC-* and *-giiaar-*

The verbal-denominal affix *-giiC-* is used to indicate a natural converse relationship in forms such as (12) from *irniq* ‘son’:

- (12) *irni-riip-put*.
 son-be.conversely-3PL.IND
 ‘They are father and son.’

It may be combined with all converse kinship stems (the junior member of the pair being the stem) and many relative positional stems and is also found in a few other lexicalized forms like *assi-giip-put* ‘they are identical, resemble each other’ (from *assik* ‘likeness, picture’) and *ikinnguti-giip-put* ‘they are friends’ (*ikinngut* ‘friend’). These refer to states rather than actions. See 12.3.3 for the corresponding nominal-denominal forms.

The related affix *-giiaar-* is used when there are more than two sets of participants in the converse relation concerned. Thus corresponding to *qali-riip-put* ‘they lie one on top of the other’ (of any number of things piled up in one pile) is *qali-riiaar-put* of several such piles, both from the stem *qaliq*, originally ‘thing on top’ (now restricted as an independent noun to the meanings ‘bow in hair’ or ‘tablecloth’). In (13) the stem (*saniliq* ‘person or thing at one’s side, neighbour’) has retained its original locational sense better:

- (13) *sanili-riiaar-put*.
 thing.at.side-be.several.conversely-3PL.IND
 ‘They lie (several groups or pairs) side by side.’

3.2.4 With other derivational affixes

There are three other derivational affixes of limited productivity which contain a reciprocal element and share the notion of competition, namely *-niqqisaat(i)-*, *-qqaanniut(i)-* and *-niut(i)-* ‘compete at V-ing’. It is difficult to state categorically whether these are reciprocal rather than sociative in sense; stems to which they are attached are always intransitive. Historically they all contain *-ut(i)-*.

- (14) *inuusuttut ajumngin-niqqisaap-put*.
 young.person.PL be.good-compete.at-3PL.IND
 ‘The young people competed at being best.’

Other stems to which this affix may be attached are: *illar-* ‘to laugh’ (thus *illar-niqqisaap-put* ‘they tried to see who could laugh the most’), *sapiit-* ‘to be brave’, *uqila-* ‘to be fast’, *pinnir-* ‘to be beautiful’ and *angi-* ‘to be big’.

Stems to which *-qqaanniut(i)-* attaches include *ani-* ‘to go out’, *isir-* ‘to go in’ and *aki-* ‘reply’; the meaning can often be glossed as ‘to try to V first’, as in:

- (15) *miiqqat tamarmik aki-qqaanniuti-lir-put*.
 child.PL all answer-compete-begin-3PL.IND
 ‘All the children started trying to answer first.’

A typical (lexicalized) example with *-niut(i)-* alone is *sukan-niup-put* ‘they raced’ (from *sukaC-* ‘to be fast’).

3.3 The syntactic reciprocal marker

The syntactic reciprocal marker, pronoun *immiC-*, is of the actant-circumstantial type, since it may in the allative case represent the direct object or an oblique adverbial (in any oblique case) and may also be used pleonastically with a derived reciprocal. It is generally required in the paradigmatic reciprocal construction. When used pleonastically, i.e. with lexical reciprocals (as in 3.4) and with *-ut(i)-* (as in 3.2.1), it seems simply to underline the reciprocity of the action (which may be weakened and/or lexicalized with such verbs). It may, however, also function in such pleonastic cases to indicate that the reciprocal action involves exactly two participants, no more (i.e. not several pairs). It is not used (except adverbially) with the other derivational affixes such as *-qatigiiC-*. The reciprocal pronoun can never occur as simple subject, whether in a main or a subordinate clause, since as a verbal argument it must always stand in the allative case (as combined subject/object). In adverbial usage (any oblique case) it may have the special reflexive-reciprocal meaning ‘one’s/each other’s house(s) or place(s)’. Even though the stem is originally 4th person (reflexive 3rd), 1st and 2nd person markers can, as has been seen, regularly be added to it. An example of its use in adverbial function (typically ambiguous with the reflexive sense) is seen in (16):

- (16) *immi-tsin-nit ani-vugut.*
 self-1PL-ABL go.out-1PL.IND
 ‘We came out of each other’s houses/we came out of our own house(s).’

Substitution of *nammin(n)i-tsin-nit* ‘from ourselves’ with the emphatic reflexive stem *nammin(n)ir-* for of the first word here would preclude the reciprocal meaning.

Note also the following postpositional construction with the stem *akunir-/akurni-* ‘between, among’ (other suitable verbs, including reciprocals, could be substituted):

- (17) *akurni-tsin-ni uqalu-lir-pugut.*
 among-1PL-LOC speak-begin-1PL.IND
 ‘We began to talk among ourselves.’

Further verbalizing derivation of the reciprocal-reflexive pronoun is possible:

- (18) *immi-tsin-niip-pugut.*
 self-1PL-be.in-1PL.IND
 ‘We are in *our (own)* house(s) / *each other’s* houses.’

3.4 Lexical reciprocals

If a lexical stem itself contains an element of inherent reciprocity (i.e. some degree of mutuality of action between obligatorily plural subjects), the inflected form is that expected in the paradigmatic case but *immiC-* can be – and usually is – dispensed with, as in:

- (19) a. *Suulu-p Maalia kunip-paa.*
 S.-REL M. kiss-3SG/3SG.IND
 ‘Suulut kissed Maalia.’

- b. *asaqatigiit kunip-put.*
 lover.PL kiss-3PL.IND
 ‘The lovers kissed (each other).’

Interestingly enough, the corresponding form meaning ‘they kissed several times’ is not a pure lexical reciprocal but contains *-ut(i)-*: *kunis-su-up-put* (where *-su(r)-* is a non-productive affix of repeated action). In Canadian Inuktitut *-ut(i)-* is present even in the basic non-repetitive reciprocal form of this verb (Spalding 1993:155). Besides *kuniC-* ‘to kiss’ the following lexical reciprocals (all from Berthelsen et al. 1990) are in common use:

<i>tutip-put</i> ‘they slept together’	(cf. <i>tutip-paa</i> ‘he lay down/slept next to her’)
<i>paa-pput</i> ‘they fought’	(<i>paa-vaa</i> ‘he fought him’)
<i>patip-put</i> ‘they supported each other to avoid capsizing (two kayakers alongside each other placing their paddles across each other’s kayaks)’	(cf. <i>patip-paa</i> (vt) of one kayaker supporting another in this fashion)
<i>katip-put</i> ‘they got married’	(cf. <i>katip-paa</i> ‘he joined them’)
<i>avip-put</i> ‘they got divorced’	(cf. <i>avip-paa</i> ‘he divorced her’)
<i>nuliar-put</i> ‘they mated (of animals)’	(<i>nuliar-paa</i> ‘it (male) copulated with it (female)’)
<i>avissaar-put</i> ‘they separated’	(<i>avissaar-paa</i> ‘he separated himself from him/her’)
<i>kii-pput</i> ‘they squeezed together (ice floes)’ or ‘they quarreled/fought’	(<i>kii-vaa</i> ‘he bit it’)
<i>unammi-pput</i> ‘they competed’	(<i>unammi-vaa</i> ‘he competed with him’)
<i>paarlap-put</i> ‘they passed each other in opposite directions’	(<i>paarlap-paa</i> ‘he crossed his path’)
<i>sammi-pput</i> ‘they discussed something’	(<i>sammi-vaa</i> ‘he turned towards him, occupied himself with him/it’).

The last verb is of particular interest here, since it may also occur in constructions with the reciprocal pronoun *imminnut*, in which case it has a different, more literal meaning, namely ‘they faced each other’. Also *kii-pput* may appear with *immiC-* in a more literal sense of ‘bite each other’, as illustrated in (39). None of these verbs can be used (in the meanings given) with a singular intransitive subject.

4. Polysemy of reciprocal markers

4.1 Reciprocal – reflexive

The basic reflexive construction in WG utilizes the same detransitivizing process as for reciprocals; the same process may produce anticausatives (see further under 7.2.3), and also antipassives (though here without *immiC-*). The basic anticausative construction with non-agentive stem *matu-* was illustrated in example (2).

The antipassive corresponding to transitive *matu-* in (2) is as in (20), where, as can be seen, an overt object can be added in the instrumental case but with concomitant despecification (i.e. an indefinite meaning):

- (20) *arnaq (matu-mik) matu-si-vuq.*
 woman door-INST close-APASS-3SG.IND
 ‘She closed sth (a door).’

Note also the possibility of zero-marked antipassives, producing the so-called agentive verbs mentioned under 2.2.1, which may also be inflected either transitively or intransitively.

As already illustrated, transitive verbs inflected for plural subject may be ambiguous between a reflexive and a reciprocal reading, which is also the case with the pronoun *immiC-* in adverbial phrases. There is no way of disambiguating a sentence such as the following short of breaking it into two:

- (21) *Paavia Suulul-lu immin-nut assuari-pput*
 P. S.-and self-ALL.PL blame-3PL.IND
surraat-su-u-nirar-lutik.
 be.thoughtless-PART-be.say.that-4PL.CONTM
 ‘Paavia and Suulut blamed *each other / themselves* for being thoughtless.’

4.2 Reciprocal – sociative

Although *-ut(i)-* is arguably not a reciprocal marker in its own right (independent of a concomitant inflectional change), it is important to note that with suitable stems its meaning when followed by plural subject inflection may be sociative (actually collective/sociative) rather than reciprocal, as in:

- (22) a. *arna-t kavvi-sur-put.*
 woman-PL coffee-drink-3PL.IND
 ‘The women drank coffee.’
 b. *arna-t kavvi-su-up-put.*
 woman-PL coffee-drink-COLL-3PL.IND
 ‘The women (a whole group) drank coffee together.’

Similarly with *angirla-ap-pugut* ‘we went home in a group’ from *angirlar-* ‘to go home’. This is not a productive process, but in the modern language one particular allomorph, *-rrat(i)-* (from combination with preceding uvular-stems) has become more productive, as in (23):

- (23) *qaqqa-mi sisura-rrap-put.*
 mountain-LOC ski-COLL-3PL.IND
 ‘There were (lots of) people out skiing on the mountain.’

As opposed to *-qatigiiC-*, which may also be ambiguous between a reciprocal and its more productive sociative sense (see 3.2.2), these forms always refer to a group, i.e. more than two subjects acting together. Sometimes a base with *-ut(i)-* may have two distinguishable

senses, a reciprocal and a sociative, as for example *atuvv-ap-put* ‘they are reading to *each other*’ or ‘*many* are reading’, both from stem *atuar-* ‘read’. But in many instances the combination conflates both meanings, as with *tigg-up-put* in sentence (9), which could refer to just two opponents or several sets. See also under 11.

5. Referential situations and the reciprocals

There is considerable overlap and ambiguity between canonical two-actant and collective interpretations of reciprocals: the number of participants (whether just two or more) is usually indeterminate except from overall context. Thus in the following (with lexicalized derived reciprocal *malirsu-ut(i)-* from *malirsur-* ‘to pursue, follow’) there could be just two actants or several groups in parallel or in a chain:

- (24) *pinniartut malirsuup-put.*
 hunter.PL pursue.each.other-3PL.IND
 ‘The hunters pursued / followed each other.’

Observe the possibility of a reciprocal construction without overt antecedent in:

- (25) *immin-nut uqarviga-luni pitsaa-niru-ssa-aq.*
 self.PL-ALL speak.to-4SG.CONTM be.good-more-FUT-3SG.IND
 ‘talking to each other would be better.’

This is an example of the “impersonal subject” use of the contemporative mood (which otherwise expresses identical subject conditions with the main clause). The transitive base *uqarvigi-*, though itself derived, enters here into the usual paradigmatic reciprocal construction.

A further derivational extension of a derived reciprocal verb form can produce an existential construction without any antecedent, as in:

- (26) *(amirlasuu-nik) saqitsaat-tu-qar-puq.*
 many-INST.PL quarrel-PART-have-3SG.IND
 ‘There are (many) people quarreling.’

This is the usual existential construction with impersonal 3SG subject and verbalizing affix *-qar-* ‘to have’; it allows for a possible number distinction on any stranded modifier. With a paradigmatic reciprocal the construction is also possible, but here, even with *immiC-*, there is ambiguity between the reflexive and reciprocal senses:

- (27) *immin-nut uqaluvvigi-su-qar-puq.*
 self-ALL.PL talk.to-PART-have-3SG.IND
 ‘There are people talking to *themselves* / *each other*.’

6. Simultaneity and succession of actions

Simultaneity and succession may be expressed by adverbials such as *ataatsikkut* ‘at the same time’ and *kingulirriaaginnarlutik* (or *tulliriillutik*) ‘one after the other’; these are compatible with suitable reciprocals, as are adverbials of precise temporal points such as *marlunut* ‘at two o’clock’. This is purely a matter of the semantics of the verb concerned. Thus *ataatsikkut imminnut takulirput* ‘they saw each other at the same time’ is perfectly normal but *²*ataatsikkut kunipput* ‘they kissed at the same time’ would require a special situation (e.g. more than one couple).

There does not appear to be any consistent distinction between derived and non-derived reciprocals in this respect, nor does the presence or absence of *immin-nut* seem to play any role. In (28a) the time frame is indeterminate (one of the friends may or may not have written before the other), whereas in (b) the meaning is habitual and therefore by inference successive:

- (28) a. *ikinngutigiĩt immin-nut allavvigi-pput.*
 friends self-ALL.PL write.to-3PL.IND
 ‘The friends wrote to each other.’
 b. *ikinngutigiĩt immin-nut allavvigi-sar-put.*
 friends self-ALL.PL write.to-HAB-3PL.IND
 ‘The friends write / wrote to each other (regularly).’

Depending on the meaning of the verb, the addition of *-sar-* may produce sentences referring to successive parallel incidents of the reciprocal action, rather than to the one actant being first subject then object, switching roles with the other actant. The latter meaning may require spelling out as two symmetrical actions or by the addition of expressions like *sinnirsiraallutik* ‘alternating at V-ing’ (itself a derived reciprocal verb) as in the following (with *-sar-* of repeated action):

- (29) *sinnirsiraal-lutik immin-nut uqarvigi-sar-put.*
 alternate-4PL.CONTM self-ALL.PL speak.to-ITER-3PL.IND
 ‘They alternated in addressing each other.’

With the lexical reciprocal *paa-pput* ‘they fought’ instead in the last example, for instance, the meaning would not be ‘first the one fought the other then the reverse’, but rather ‘first one pair/team fought, than another’.

The more lexicalized kind of combination of base plus iterative affix illustrated in (30b) does not indicate a repetition of the reciprocal action but more than one action of the same type being performed during the same reciprocal incident:

- (30) a. *akiqqat immin-nut ikilir-put.*
 enemy.PL self-ALL.PL wound-3PL.IND
 ‘The enemies wounded each other.’
 b. *akiqqat immin-nut ikilirsur-put.*
 enemy.PL self-ALL.PL inflict.wounds.ON-3PL.IND
 ‘The enemies inflicted wounds on each other.’

The affix *-ut(i)-* may itself (in lexicalized forms) follow affixes of iteration, notably the suffix *-(sa)qattaar-* of repeated action, which produces the lexicalized combination *-(sa)qattaat(i)-*, limited to a few combinations like *pasillir-saqattaap-put* ‘they hurled accusations back and forth’ (from *pasillir-* ‘to accuse’). In derivations meaning ‘to replace each other regularly, alternate’ the meaning is quite overtly one of successive actions, as in *kinguraarta-at(i)-* ‘to alternate’, where *-ut(i)-* follows habitual *-tar-* (an allomorph of *-sar-*); in (31c) this repetitive action can itself be qualified as habitual with a second (productive) occurrence of *-tar-*:

- (31) a. *suliqati-ni kinguraar-paa.*
 fellow.worker-4SG replace-3SG/3SG.IND
 ‘He took over from his fellow worker (e.g. starting a new shift).’
 b. *sulisartut kinguraarta-ap-put.*
 worker.PL replace.regularly-*ut(i)*-3PL.IND
 ‘The workers work in shifts.’
 c. *ullu-t tamaasa kinguraartaat-tar-put.*
 day-PL all work.in.shifts-HAB-3PL.IND
 ‘They work in shifts every day.’

That such combinations as in (31b) are completely lexicalized can be seen from the unusual order of the habitual marker preceding *-ut(i)-* (itself non-productive). Also *sin-nirsiraat(i)-* in (29) above contains a lexicalized habitual marker (*-rar-*) before *-ut(i)-*.

7. Types of diathesis

As stated in 1.2, all reciprocal constructions in WG represent an intransitive type of diathesis. Moreover, the distinction between bivalent and trivalent transitive verbs as the source of reciprocals is obscured by the fact that transitive verbs are morphologically limited to two arguments (marked in the inflectional complex). Thus there is no symmetrization of subject and morphological oblique as opposed to direct object. Nevertheless, the following remarks correlating the phenomenon in WG to cross-linguistic diathesis categories can be made.

7.1 Subject-oriented diathesis

The same process of forming reciprocals by inflecting a transitive verbal base intransitively in WG applies to transitive verbs whatever their number or type of semantic arguments. The basic (non-derived) type is the “canonical” reciprocal construction exemplified in 3.1. Non-basic types (including the benefactive) require an intermediate derivational stage, for example with *-ut(i)-* as in 3.2, which draws an oblique item into the direct object slot of the verbal inflection.

Although there is no transitive subject-oriented diathesis in WG, in semantically analogous cases an oblique object may correspond to a direct object involved in such a diathesis in other languages (see 7.1.2).

7.1.1 Reciprocals from bivalent transitives

See Sections 3.1 and 3.4 for examples of non-derived reciprocals from semantically bivalent verbs, respectively with and without reciprocal pronoun support.

7.1.1.1 Reciprocals with *-ut(i)-* on intransitive stems. As described in 3.2.1, many lexicalized reciprocals are derived with the applicative affix *-ut(i)-* before being inflected intransitively; the case where the non-derived stem is intransitive belongs here (note the usual reflexive/reciprocal ambiguity):

- (32) a. *angut kamap-puq.*
 man get.angry-3SG.IND
 ‘The man got angry.’
 b. *angut kama-ap-paa.*
 man get.angry-APPL-3SG/3SG.IND
 ‘He got angry with the man.’
 c. *angutit kama-ap-put.*
 man.PL get.angry-*ut(i)*-3PL.IND
 ‘The men got angry *with themselves / with each other.*’

It is in fact possible to use the productive benefactive allomorph of this affix, *-ssut(i)-* (which is attached to intransitive – or antipassivized – bases only), to produce a reciprocal construction in which the object retains its benefactive sense, thus:

- (33) a. *irn-i (mamakujuttu-nik) pisi-ssup-paa.*
 son-4SG sweets-INST.PL buy.sth-for-3SG/3SG.IND
 ‘He bought sth (sweets) for his son.’
 b. *immin-nut (mamakujuttu-nik) pisi-ssup-put.*
 self-ALL.PL sweets-INST.PL buy.sth-for-3PL.IND
 ‘They bought things (sweets) for each other.’

Here the stem (*pisi-* ‘to buy sth’) is morphologically intransitive. A semantic direct object may be present as an oblique object.

7.1.1.2 Reciprocals from derived transitives with *-(v)vigi-*. Reciprocals are formed in the same basic manner from verbal bases derived with affixes such as *-(v)vigi-* ‘have as place/time/person of V-ing’ (always added to intransitive bases). For an example with a derived base see sentence (28) in Section 6, where the underived stem is *allaC-* ‘to write’ and the derived base *allavvigi-* ‘have as place/thing/person of writing to’ is inflected intransitively to produce a reciprocal sense in the normal way.

7.1.1.3 Reciprocals from morphological causatives on intransitive stems. Morphological causatives may enter into reciprocal constructions where the reciprocal relation is between the causer and causee, but they are ambiguous between a reciprocal and a reflexive reading, just as with plain (non-causative) reciprocals:

- (34) a. *niviarsiaq illar-puq.*
 girl laugh-3SG.IND
 ‘The girl laughed.’

- b. *nukappiaqqa-p niviarsiaraq illar-tip-paa.*
 boy-REL girl laugh-make-3SG/3SG.IND
 ‘The boy made the girl laugh.’
- c. *immin-nut illar-tip-put.*
 self-ALL.PL laugh-make-3PL.IND
 ‘They made *each other / themselves* laugh.’

7.1.2 Reciprocals from (semantically) trivalent transitives

See sentence (6) for an example of a reciprocal formed from a non-derived semantically trivalent stem, *tuni-* ‘to give to’. Although derived applicative forms with *-ut(i)-* (in locative/benefactive senses) added to transitive stems can in turn form the basis of reciprocals, as has been seen in 3.2.1, these are still morphologically bitransitive. A semantic direct object appears in some cases to be present as an oblique, as in (35), but the non-derived stem here is of the “agentive” type, i.e. may be either transitive or intransitive, in the latter case acting as a zero-marked antipassive, so it could be that the derived form in (b) is based on the intransitive *nassar-puq* ‘he has brought sth along’, which would itself take an instrumental case semantic object:

- (35) a. *Tuumasi-p tunissut nassar-paa.*
 T.-REL gift bring.along-3SG/3SG.IND
 ‘Tuumasi brought a gift along.’
- b. *Tuumasi-p Suulut tunissum-mik nassa-ap-paa.*
 T.-REL S. gift-INST bring.along-APPL-3SG/3SG.IND
 ‘Tuumasi brought along a gift for Suulut.’
- c. *Tuumasi Suulul-lu tunissun-nik nassa-ap-put.*
 T. S.-and gift-INST.PL bring.along-APPL-3PL.IND
 ‘Tuumasi and Suulut brought each other gifts.’

Such cases are at all events lexicalized, and cannot be generalized to all reciprocal expressions involving *-ut(i)-* with transitive bases.

7.1.3 “Possessive” type diathesis

A further “possessive” type found cross-linguistically has no direct parallel in WG, but compare (36), where there is the usual ambiguity between reflexive and reciprocal, but here with 4th person possessor inflection on a noun, and (37), where it is a matter of an adverbial reciprocal:

- (36) *angutit qimmi-tik tuqup-paat.*
 man.PL dog-4PL.PL kill-3PL/3PL.IND
 ‘The men killed their (own) dogs/ killed *each other’s* dog.’
- (37) *immi-tsin-nut pulaar-tar-pugut.*
 self-1PL-ALL visit-ITER-1PL.IND
 ‘We visited *each other / each other’s* houses.’

One could substitute the *illuqarvi-tsin-nut* ‘(to) each other’s towns’ (with 1PL possessed noun stem) for the first expression in (37). Compare also (16), where the allative expression could just as well have been in the ablative, for example.

Note the following with productive nominal-denominal affix *-ir-* ‘remove (from), remove N’s’, underlyingly transitive in this sense:

- (38) a. *ilinniartitsisua kavaaja-ar-paa.*
 teacher jacket-remove-3SG/3SG.IND
 ‘He took the teacher’s jacket from him.’
 b. *immin-nut kavaaja-ar-put.*
 self-ALL.PL jacket-remove-3PL.IND
 ‘They helped each other off with their jackets.’

7.2 Object-oriented diathesis

It is possible to causativize reciprocals, the causee being different from the subject/object of the non-derived verb. In such cases an analogue to objective diathesis in other languages is achieved.

7.2.1 Non-derived reciprocals

Compare the following, involving a lexical reciprocal:

- (39) a. *Paavia-p Maalia paarlap-paa.*
 P.-REL M. cross.path-3SG/3SG.IND
 ‘Paavia crossed Maalia’s path (going in the opposite direction).’
 b. *Paavia Maalia-lu paarlap-put.*
 P. M-and cross.path-3PL.IND
 ‘Paavia and Maalia crossed each other going in opposite directions.’
 c. *Paavia Maalia-lu paarlat-sip-pai.*
 P. M.-and cross.path-make-3SG/3PL.IND
 ‘He had Paavia and Maalia pass each other.’

It is only the inflection on the derived form in (39c) that makes it clear that the underlying subject must be plural.

It is also possible to causativize a paradigmatic reciprocal in the same way (note that the reciprocal pronoun is necessary):

- (40) a. *qimmit immin-nut kii-pput.*
 dog.PL self-ALL.PL bite-3PL.IND
 ‘The dogs bit each other.’
 b. *Paavia-p qimmi-ni immin-nut kii-tip-pai.*
 P.-REL dog-4SG.PL self-ALL.PL bite-make-3SG/3PL.IND
 ‘Paavia let/made his dogs bite each other.’

With a plural subject the meaning of the underlying non-derived sentence would be the same; if one wanted a meaning equivalent to ‘the men let their dogs bite them (the men)’ a (quasi-)passive construction would have to be used instead:

- (41) *anguti-t marluk immin-nut qimmi-min-nut kii-tip-put.*
 man-PL two self-ALL.PL dog-4PL.PL-ALL bite-make-3PL.IND
 ‘The two men let themselves be bitten by *their / each other’s* dogs.’

7.2.2 *Derived reciprocals*

Also reciprocals with *-qatigiiC-* or *-giiC-* may be freely causativized, as in:

- (42) *palasi-p aapparit asaqatigii-qqu-ai.*
 priest-REL married.couple.PL love.each.other-ask.to-3SG/3PL.IND
 ‘The priest told the couple to love each other.’
- (43) *quppirnirit qaliriis-sip-pai.*
 page.PL lie.on.top.of.each.other-make-3SG/3PL.IND
 ‘He laid the pages on top of one another.’

Causatives based on reciprocals formed with *-ut(i)-* are somewhat less common, but the following is quite normal with lexicalized *tigg-up-put* ‘they took hold of each other’ (from *tigu-* ‘to take’):

- (44) *tiggut-sip-pai.*
 take.hold.of.each.other-make-3SG/3PL.IND
 ‘He had them take hold of each other.’

7.2.3 *Verbs of connecting and disconnecting*

It is possible to form anticausative forms from derived causatives by a similar process of intransitivization as for reciprocals, thus with lexical applicative *nuiu-ut(i)-* from transitive *nuiurar-* ‘to string (beads), braid (hair, etc.) together’ (*-ut(i)-* does not itself add anything discernible to the meaning of the stem here):

- (45) a. *arna-p allunaasat (immin-nut) nuiu-up-pai.*
 woman-REL string.PL self-ALL.PL braid-APPL-3SG/3PL.IND
 ‘The woman braided the strings together.’
- b. *allunaasat immin-nut nuiu-up-put.*
 string.PL self-ALL.PL braid-*ut(i)*-3PL.IND
 ‘The strings were braided together.’

Similarly from derived applicative base *kattut(i)-* ‘to join or add to sth else’ can be formed intransitive *kattup-put* ‘they are joined or mixed together’ (note that *sukkut* ‘sugar’ is plural in WG):

- (46) a. *niuirtu-p puuttu-p sukkut paassa-nut kattup-pai.*
 shopkeeper-REL confused-REL sugar gunpowder-ALL join.to-3SG/3PL.IND
 ‘The confused shopkeeper mixed the sugar and gunpowder together.’
- b. *sukkut paassa-nut kattup-put.*
 sugar gunpowder-ALL join-3PL.IND
 ‘The sugar was mixed with the gunpowder.’

However, this could just as well take a singular subject, *kattup-puq* ‘it was joined (to sth else)’. In fact this is parallel to the ordinary “non-agentive” verb (see 2.2.1), where the object of the transitive form of the stem is the same as the subject of the corresponding intransitive, but is much more restricted.

There is, as elsewhere with *-ut(i)-*, considerable lexicalization, thus *katt-up-put* in (46b) may also have a somewhat different, purely reciprocal meaning with animate subjects:

- (47) *angalirnir-mut immin-nut katt-up-put.*
 trip-ALL self-ALL.PL join-ut(i)-3PL.IND
 ‘They joined together for the trip.’

Compare also transitive *katt-up-paat* ‘they did it together’ with 3PL/3SG transitive inflection (a secondary extension).

The simple non-applicative transitive verb to which these forms correspond is *katip-pai* ‘he joined them’ (stem *katiC-*), as in (48a); being a non-agentive stem it may also function as an anticausative as in (b):

- (48) a. *allunaasat marluk katip-pai.*
 rope.PL two join-3SG/3PL.IND
 ‘He joined the two ropes.’
 b. *allunaasat marluk katip-put.*
 rope.PL two join-3PL.IND
 ‘The two ropes are joined.’

Inflected intransitively in the plural this also produces a lexical reciprocal in the sense ‘they joined together, were married’, as listed in 3.4 (note also regular causative derivation *kati-tip-pai* ‘he married them’).

Other anticausatives of the same type as *kattup-put* include *ilanngup-put* and *akuliup-put*, both ‘they are added, mixed (together)’ (also historically containing *-ut(i)-*). They are often used together with *imminnut* or allative case adverbial *ataatsimut* ‘together’. Note also *turr-up-put* ‘they pressed together’ corresponding to applicative *turr-up-paa* ‘he pressed it against sth’ (the non-derived stem *tuur-* on which it is based has a different sense altogether: ‘to jab, thrust away from oneself’). Some of the forms with *-ut(i)-* on transitive stems given in 3.2.1. probably also belong here, e.g. *kasu-ut(i)-*:

- (49) a. *immiarturvik kasu-paa.*
 beer.glass knock-3SG/3SG.IND
 ‘He knocked the beer glass.’
 b. *savik immiarturvim-mut kasu-up-paa.*
 knife beer.glass-ALL knock-APPL-3SG/3SG.IND
 ‘He clinked his knife against the beer glass.’
 c. *ikinngutigjit kasu-up-put.*
 friend.PL knock.against-ut(i)-3PL.IND
 ‘The friends clinked glasses together (drinking).’

In (49c) the verb literally means ‘they knocked against each other with sth (i.e. their glasses)’ – this is a fixed lexicalization and ‘glasses’ is not expressed as an NP.

The stem *aviC-* ‘to separate, divide in two’ has already been listed as a lexicalized reciprocal under 3.4 in the sense ‘to be separated/divorced (of man and woman)’. A further derivative, *avissaar-* ‘to separate (oneself from sth), come apart’, transitive ‘to separate from, go one’s own way from’ (with the affix *-saar-* ‘make an effort to V’) follows a similar pattern: with plural inflection it can be regarded as a lexicalized anticausative. It can be further causativized as in (50c).

- (50) a. *aalakuurtuq avissaar-paa.*
 drunk separate.oneself.from-3SG/3SG.IND
 ‘He separated himself from the drunk.’
- b. *inuusuttut marluk avissaar-put.*
 youth.PL two separate-3PL.IND
 ‘The two youths separated/went their own ways.’
- c. *inuusuttut avissaar-tip-pai.*
 youth.PL separate-make-3SG/3PL.IND
 ‘He separated the youths.’

For the productive affix *-ir-* ‘remove (N’s-)’ see Section 7.1.3.

7.3 Multiple-diathesis reciprocals

There are no single verb forms that display binary reciprocal readings, but the highly productive derivational apparatus of the language allows numerous sets of derivationally related forms from a single stem that display different diathesis relations. Compare the ‘joining’ verbs from basic *katiC-* in 7.2.3 for an example.

8. Productivity and restrictions on reciprocal derivation

WG is a language where practically any transitive verb of suitable semantic content can be inflected as a reciprocal.

Also many intransitives can be first transitivized (typically with applicative affix *-ut(i)-*) then inflected intransitively as a reciprocal. Here the situation is much more lexicalized, but the restrictions are still purely semantic: if an applicative derivation exists then the corresponding reciprocal will usually exist if the semantics allows it. The reciprocal usage of *-ut(i)-* is of similarly restricted productivity to the applicative itself, which is textually very common but highly lexicalized. Only a few derivations formed with *-ut(i)-* exist solely as reciprocals and not as applicatives as well. This is usually a matter of loss of the intermediate applicative. Note that verbs of ‘directed emotion’ like *ajuri-* ‘to dislike’ do not combine with *-ut(i)-* as is apparently possible in Central Alaskan Yupik – cf. *kenk-ut-uk* ‘they love each other’ (Jacobson 1984:199). In WG these enter rather into the usual paradigmatic reciprocal construction when inflected intransitively (cf. (51) below). This is symptomatic of the greater productivity of *-ut(i)-* as a mixed derivational-inflectional reciprocal marker in Eskimo languages outside of West Greenland.

All reciprocal derivations with *-qatigiC-*, *-giiC-* and the other derivational affixes under 3.2.2. are lexicalized.

9. Means of expressing symmetrical actants

The subject of a reciprocal construction in WG must be plural (there are no collective singular nouns requiring singular inflection of the verb). Such a subject may be covert (referred to by the plural inflection of the verb alone) or expressed by an overt NP, including a plural pronoun, a plural noun (derived or non-derived) and a coordinated structure joined by the enclitic *-lu* ‘and’: *X Y-lu*, where *X* and *Y* can each be singular:

- (51) a. *Paavia-p Suulut qinngari-vaa.*
 P.-REL S. hate-3SG/3SG.IND
 ‘Paavia hates Suulut.’
 b. *Paavia Suulul-lu immin-nut qinngari-pput.*
 P. S.-and self-ALL.PL hate-3PL.IND
 ‘Paavia and Suulut hated each other.’

Note that the first of the two coordinated nouns could be dropped in (51b), the rest of the sentence remaining unchanged; the meaning of *Suulullu* is then ‘he and Suulut’.

There is no way that *S*₂ can be moved to object position leaving a singular *S*₁ in subject position and retaining a reciprocal meaning.

10. Formal and semantic correlation between the reciprocal, the reflexive and the sociative

Paradigmatic reciprocals seem to represent a special extension of the reflexive – similarly formed but not restricted to plural subjects. Both constructions are quite general and productive in texts, though the reflexive as a whole must occur at least twice as often as the reciprocal since it allows both plural and singular subjects.

As has been illustrated in 4.2, the applicative affix *-ut(i)-* ingredient in a mixed inflectional-derivational reciprocal construction also has a restricted sociative use when inflected intransitively for plural subject in a sociative/collective sense (‘in a group’). This is no doubt a secondary development from the original applicative construction, understood as referring to more than just two actants (literally ‘with others’).

11. Sociatives and comitatives

Regular subject-oriented sociative and comitative expressions are formed by verbal derivation in WG, i.e. by the sociative affix *-qatigiiC-* ‘do together’ and related (transitive) comitative affix *-qatigi-* ‘do together with’:

- (52) a. *ilinniaritsisuuq nukappiarar-lu ani-pput.*
 teacher boy-and go.OUT-3PL.IND
 ‘The teacher and the boy went out.’

- b. *ilinniartitsisu-p nukappiaraq ani-qatig-aa.*
 teacher-REL boy go.out-COM-3SG/3SG.IND
 ‘The teacher went out with the boy.’
- c. *ilinniartitsuuq nukappiarar-lu ani-qatigiip-put.*
 teacher boy-and go.out-SOC-3PL.IND
 ‘The teacher and the boy went out together.’

The non-symmetrical verb of accompaniment *ilagi-* can also form reciprocals as in (53):

- (53) a. *Tuumasi-p Maalia illuqarvim-mut ilag-aa.*
 T.-REL M. town-ALL accompany-3SG/3SG.IND
 ‘Tuumasi accompanied Maalia to town.’
- b. *Tuumasi Maalia-lu immin-nut ilagi-uar-put.*
 T. M.-and self-ALL.PL accompany-always-3PL.IND
 ‘Tuumasi and Maalia are always together (always accompany each other).’

There is no diathesis type as such corresponding to object-oriented reciprocals here, but some of the lexicalized applicatives have the meaning ‘to take X along with one’ (as in *tiki-up-paa* ‘he took/brought her along’) or ‘V object X together with sth else’, as in *napp-up-paa* ‘he broke it together with sth else’. If all actants are expressed as overt NPs in the latter type of construction the second object must be in an oblique case, thus:

- (54) a. *piniartu-p cigaretti napi-vaa.*
 hunter-REL cigarette break-3SG/3SG.IND
 ‘The hunter broke the cigarette.’
- b. *piniartu-p cigaretti puu-ani napp-up-paa.*
 hunter-REL cigarette packet-3SG.LOC break-APPL-3SG/3SG.IND
 ‘The hunter broke a cigarette together with / inside its packet (e.g. crumpling it up).’

12. Non-canonical reciprocals

12.1 Irregular derivations

Derived reciprocals often display irregularities of both form and meaning. The affixes concerned are not productive in producing reciprocal meanings and sometimes are attached idiosyncratically to the stem with intervening affixal (usually aspectual) material. Reciprocals with *-ut(i)-* in particular may occur without the corresponding applicative existing as in the following:

- (55) a. *assurtur-paa* ‘He contradicted/opposed him.’
 b. **assurtu-up-paa*
 c. *assurtu-up-put* ‘They quarreled/fought.’
 d. *imminnut assurtur-put* ‘They contradicted each other.’

Here the intermediate applicative form is not used (any more), although the corresponding non-derived paradigmatic reciprocal as in (55d) is quite possible.

A group of such derived verbs refers to the playing of games, in which the distinction between reciprocal and sociative is neutralized so that *-ut(i)-* could equally well be analysed as sociative, cf.:

- (56) a. *arsar-put.* 'They play (with a) ball.'
 b. **arsa-ap-paa.*
 c. *arsa-ap-put.* 'They played football (together).'

(56a) could also have had a singular subject (the nominal *arsaq* refers to any kind of ball). Similarly *patta-ap-put* 'they played (hand)ball' (also non-reciprocal 'they applauded') from *pattaC-* 'to strike with the hand', *irsullira-ap-put* or *irsulliga-ap-put* 'they played hide and seek' from *irsuC-* 'to hide from', and *atturtara-ap-put* 'they played tag' from *attur-* 'to touch'. The stems to which *-ut(i)-* is directly attached here may be either intransitive (e.g. *arsar-*) or transitive (e.g. *pattaC-*), as the glosses indicate.

In cases such as *atturtara-ap-put* above and others like *qungujuru-up-put* 'they smiled at each other in a friendly fashion' from *qungujuC-* 'to smile', lexically obscure intervening material appears before *-ut(i)-* when compared with the basic non-derived stem. In other cases there is simply irregularity of derivation, as in the two derivations from *paa-* 'to fight' (already a lexical reciprocal) plus *-ut(i)-*:

- (57) a. *paa-pput.* 'They fought.'
 b. *pagg-ip-put.* 'They fought, there was a big fight going on.'
 c. *pagg-ap-put.* 'They scrambled for cast coins (a Greenlandic custom).'

In both of these there is conflation between the sociative/collective and reciprocal senses of the marker *-ut(i)-*.

Another case of two different derivations from the same stem with *-ut(i)-*, the one form historically older – and more irregular – than the other, is found in the following series based on stem *sakaC-* 'to shove':

- (58) a. *immin-nut sakap-put.*
 self-ALL.PL shove-3PL.IND
 'They shoved each other.'
 b. *sakk-ap-put.*
 shove-APPL-3PL.IND
 'They elbowed their way forward.'
 c. *sakka-ap-put.*
 shove-*ut(i)*-3PL.IND
 'They shoved each other (violently) to get past.'

The first construction is an ordinary paradigmatic reciprocal, the second contains an old lexicalized derivative with applicative *-ut(i)-* which could just as well have been in the singular if the subject had been singular (as with verbs of motion with *-ut(i)-* like *tiki-up-puq* mentioned under 2.9), whereas (58c) is a more regular formation with *-ut(i)-* in its reciprocal and/or sociative sense (plural subject only). A further form *sakat-ta-ap-put* 'they jostled each other' is also possible, where *-ut(i)-* follows an affix of repetition, *-sar/tar-*.

Some stems may take more than one clearly reciprocal (not sociative) derivation, e.g. *akiu-up-put* or *akiu-riip-put* ‘they answered each other back, quarreled, sang alternately’ from transitive *akiur-* ‘to answer back’ and respectively *-ut(i)-* and *-giiC-* (here irregularly on a verbal stem).

12.2 Reciprocal verbs formed from other than verbal stems

Converse derivational affixes *-giiC-* and *-giiaar-* mentioned under 3.2.3 are both typically added to nominal stems and may be inflected either verbally or nominally.

Also *-qatigiiC-* can be added in lexicalized cases to nominal stems, as in:

- (59) *illu-qatigiip-put*.
house-have.mutually-3PL.IND
‘They share a house.’

12.3 Nouns with a reciprocal marker

12.3.1 Nominalized reciprocals

Both paradigmatic and mixed derivational-inflectional reciprocals may be further nominalized by a simple addition of nominalizing affixes such as *-niq* (with or without a suitable possessive inflection) as in (60):

- (60) *angutit uqalu-qatigiin-nir-at*
man.PL.REL speak-REC-NOM-3PL
‘their speaking together.’

Similarly *paa-nir-at* ‘their fighting (each other)’, and *asurtu-un-nir-at* ‘their contradicting of each other’, and (without possession marking) *paasi-qatigiin-niq* ‘mutual understanding’. Note also participial forms like *imminnut tuqut-tut* ‘those who killed *themselves / each other*’ and *saqitsa-at-tut* ‘those who quarrelled’, which can be formed freely.

A lexicalized reciprocal base may be nominalized and reverbalized several times within one complex word, as for example:

- (61) *saqitsa-ati-lir-niar-tuar-tu-qa-rumaa-raluar-put*.
quarrel-*ut(i)*-begin-try-all.the.time-PART-have-FUT-however-3PL.IND
‘But there will be people who try all the time to start quarrelling.’

12.3.2 Nominal forms with *-qatigiit*

The affix *-qatigiiC-* (see 3.2.2) used and inflected as a nominalizer on its own usually has a sociative meaning (‘club, association of V-ers’); cf.:

- (62) *irinarsu-qatigiit*
sing-association.of.V-ers
‘choir.’

12.3.3 Nominal forms with *-giit* and *-giiaat*

Corresponding to all verbal converses with *-giitC-* and *-giiaar-* discussed in 3.2.3 are nominal forms in *-giit*, *-giiaat*. Thus *irni-riit* ‘father and son’, and *irni-riiaat* ‘several fathers and their sons’, both from *irniq* ‘son’. Usually the overt stem in such converse pairs refers to the junior/subordinate member; cf. also *nulia-riit* ‘married couple’ from *nuliaq* ‘wife’. As with the verbal forms, the underlying nominal stem usually denotes either a kinship relationship between two humans or a spatial relationship between two things as in *sanili-riiaat* ‘a row of things side by side’ from *saniliq* ‘thing beside’.

13. Etymology of the reciprocal markers

The reciprocal-reflexive pronoun *immiC-* comes from Proto-Eskimo **almig-* containing the relative case form of the 4th person plural possessor marker *-miC-* on a stem probably deriving from **ət-* ‘to be’ plus an l-initial nominalizer, so literally ‘their (own) being’; cognate forms are found in Aleut. There are parallel 2nd and 3rd person forms (2p. **əlpaci*, 3p. **ələŋa*; 1st plural **uvakut* has been reformulated on a different stem).

The affix *-ut(i)-* of the mixed inflectional-derivational reciprocal construction is an original applicative formant (Proto-Eskimo **-utə-*), a function it has in all Eskimo languages and in Aleut as well (it further functions as a reciprocal in all the former, but not in Aleut). For details see Fortescue et al. (1994: 431). In all the languages of the family it has a corresponding nominal form **-un/-utə-* meaning ‘instrument/means for V-ing’ and it may well be that this represents the oldest source of the morpheme.

The etymological sources of the other derivational affixes used reciprocally are:

1. *-qatigiiC-* < **-qan/qatə-* ‘fellow V-er/ companion at V-ing’ + *-giitC-* (as follows);
2. *-giitC-* < nominal plural *-giit*, dual *-giik* (used verbally), itself from **-kə-* ‘have as’ + collective *-it* / dual *-ik* ‘group/set of’ (*-giiaar-* contains a further iterative affix);
3. *-niqqisaat(i)-* < the nominalizer **-nər* + Proto-Inuit **-tqisaq-* ‘do more/most’ + applicative *-ut(i)-*; and finally
4. *-qqaanniut(i)-* < Proto-Inuit **-qqaq-* ‘do first’ + *-niut(i)-*, itself from *-niaq-* ‘try’ + *-ut(i)-*.

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B. Verbal reciprocal marker only

Reciprocals and reflexives in North-Arawak languages of the Upper Rio Negro

(Warekena of Xié, Bare, Baniwa of Içana)

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References

1. Introduction

1.1 General remarks

This paper considers reciprocals and reflexives in three North-Arawak languages spoken in the region of the Upper Rio Negro: Warekena of Xié, Bare and Baniwa of Içana.¹

Warekena is spoken on Xié river in Brazil by a few dozen old people. It is a dialect of Baniwa of Guainia spoken by c. 200 people in Venezuela. All the speakers of Warekena use *Língua Geral* and Portuguese in their everyday life. Bare is an almost extinct language, formerly spoken in Venezuela and Brazil, around the Casiquaire Channel.

This explains the possible influence of Portuguese and Spanish patterns of reflexives and reciprocals in Warekena and Bare.

Baniwa of Içana is spoken in Brazil and Colombia on the Içana river by around 3,000 people (some Baniwa dialects are also known as Kurripako).

Within North-Arawak, Baniwa of Içana belongs to the same subgroup as Tariana (see Aikhenvald, Ch. 30 in this monograph). The two languages display lexical similarity and significant grammatical differences due to areal diffusion from East-Tucanoan to Tariana (see Aikhenvald 2002). Bare and Warekena are more closely related to each other than they are to Baniwa and Tariana. Warekena belongs to the Baniwa-Yavitero subgroup of North-Arawak (see Aikhenvald 1998). Bare belongs to the Bare-Guinau subgroup (see Aikhenvald 1999a).

These languages belong to three different subgroups of North-Arawak. However, they display a number of typological similarities, some of which are due to common genetic origins and some due to their long-term coexistence in the linguistic area of the Upper Rio Negro, with a certain amount of bilingualism (see Aikhenvald 1999b).

1.2 Typological characteristics

The North-Arawak languages of the region of the Upper Rio Negro are head-marking and predominantly suffixing, with a few prefixes. They tend to display a split-ergative pattern. Cross-referencing prefixes are used to mark subjects of transitive and intransitive active verbs ($A=S_a$). Cross-referencing enclitics mark direct objects and subjects of intransitive stative verbs ($O=S_o$; see Aikhenvald 1995b). Verbs fall into transitive (which

1. Materials on Baniwa of Içana were collected in 1991–1994, during three field trips. My materials contain about 350 pp. of narratives (Siuci and Hohòdene dialects).

The discussion of Bare is based on fieldwork (July–August 1991) with the last fluent speaker of Bare in Brazil, late Candelário da Silva multilingual in Bare, *Língua Geral*, Spanish and Portuguese. His Bare displayed symptoms of language attrition, which resulted in a heavy impact of syntactic influence of Spanish and Portuguese. My data contain around 150 pp. of texts.

The discussion of Warekena is based on the materials collected during three field trips to the Upper Rio Negro region in 1991, 1994 and 1995. My corpus includes approximately 200 pp. of texts.

divide into obligatorily transitive, A=S and S=O ambitransitives), intransitive active (S_a) and intransitive stative (S_o). Case-marking is not used for core arguments.

1.3 Overview

North-Arawak languages of the Upper Rio Negro do not have reflexive or reciprocal pronominal of any sort. There is no special sociative marking. All three languages use an etymologically different verbal suffix to mark reciprocals and reflexives: Warekena *-na*, Bare *-tini*, Baniwa *-wa*. These suffixes more often occur with obligatorily transitive verbs; when they occur with intransitive ones they have a different meaning. These suffixes are also used to mark impersonal passives. This is the only valency reducing operation in North-Arawak languages of the Upper Rio Negro.²

The typological patterns of polysemy of reciprocal and reflexive suffixes are very similar, which may be due both to genetically inherited patterns and areal diffusion between genetically related languages spoken in the same linguistic area (see Section 1.4).

1.4 Reciprocals and reflexives in Arawak languages

About half of Amazonian languages have some sort of intransitivizing derivation, usually just one (Dixon & Aikhenvald 1999: 1–22). This derivation is typically used for agentless passives, reflexives and reciprocals. Such is the case in Carib languages (Derbyshire 1999: 23–64), Ika (isolate from Colombia: Frank 1990), Wari (Chapacuran: Everett & Kern 1997), and the North Arawak languages discussed in the previous sections.

However, the majority of Arawak languages mark reflexives and reciprocals differently. Reciprocal meanings are expressed with a verbal derivation. Reflexive markers are often used as general intransitivizers on verbs of motion (Campa, Amuesha, Achagua); in some languages they can acquire a meaning of agentless passive (Waura). Reflexive pronouns are rare – in agreement with predominantly head-marking morphology of Arawak languages (see Aikhenvald 1999a).

Thus, the pattern encountered in the Arawak languages of the Upper Rio Negro is quite common for Amazonian languages, but unusual for languages of the Arawak family.

Intransitivizing verbal derivations with a reflexive, reciprocal and impersonal passive meaning in Baniwa, Bare and Warekena are very similar typologically, in spite of their different etymology. Possibly, they developed on the level of individual subgroups, as the result of an areal diffusion between languages spoken in the linguistic area of the Upper Rio Negro.

Intransitivizing derivations in Baniwa and Bare also have other meanings. For one thing, Baniwa *-kawa* and Bare *-tini* can mark intensive action, or coreferentiality of the subject of a subordinate predicate to the main predicate, respectively, if used with intransitive verbs.

2. The only valency increasing operation is causative. Morphological causatives (marked with *-sa* in Bare, *-ta* in Warekena and *-ita* in Baniwa) are typically formed on intransitive verbs. Periphrastic causatives are used with transitive verbs.

sitive verbs. *-Tini* derivation in Bare can also have a few other meanings, e.g. sociative; it is also sometimes used to suppress the identity of the agent (A/S_a constituent). These divergencies may be accounted for by the fact that these languages belong to different subgroups within North Arawak.

2. Warekena of Xié

2.1 Reciprocals

-Na ‘reflexive-reciprocal’ in Warekena has a reciprocal meaning with a plural subject. (1) illustrates this meaning of the *-na* derivation.

- (1) *ni-wiyu-yua ni-mai-na-wa ni-yutfia-na-wa payalu ifi ni-ma-li.*
 3PL-die-RED 3PL-quarrel-REC-NACC 3PL-kill-REC-NACC all what 3PL-do-RELTR
 ‘They (non-evangelicals) faint of drunkenness, they quarrel with each other and kill each other, this is all they do.’

A transitive verb *-yutfia* ‘to kill’ is illustrated in (2).

- (2) *nu-yutfia pifiwa mawaya.*
 1SG-kill 2SG.from snake
 ‘I shall kill the snake from you.’

More examples of reciprocal meaning of *-na* derivation are given in (3) and (4). All verbs with reciprocal meanings in Warekena are *-na* derivations.

- (3) *ni-mai-na-wa.*
 3PL-fight-REC-NACC
 ‘They fought each other.’
- (4) *ni-we-na-wa.*
 3PL-leave-REC-NACC
 ‘They left each other.’

2.2 Reflexives

With a non-plural subject, *-na* derivation has reflexive meaning, illustrated with *nu-teluka-na-wa* ‘I cut myself’ in (5). The transitive use of *-teluka* ‘to cut’ is shown in (6).

- (5) *nu-teluka-na-wa kutfiyu iyu.*
 1SG-cut-REFL-NACC knife with
 ‘I cut myself with a knife.’
- (6) *piya-hā nu-yalitua pi-fa pi-teluka a:tapi.*
 YOU-PAUS 1SG-brother 2SG-go 2SG-cut tree
 ‘You, brother, go and cut a tree (to make a smoking grid, to smoke our stock).’

(7) illustrates the transitive use of *-alaka* ‘to put on (clothes)’. (8) illustrates the reflexive intransitive use of the same verb with the suffix *-na*: *alaka-na* ‘dress oneself’:

- (7) *ni-alaka ni-tsiluɬa-ne ni-kamitsa-ne ne-palu ni-tsume-ne*
 3PL-put.on 3PL-trousers-POSS 3PL-shirt-POSS 3PL.eat-PURP 3PL-food-POSS
ni-tsume-ne.
 3PL-food-POSS
 ‘They put on their trousers and shirts, to eat their food.’
- (8) *wa: tsuludawa wa alake-na-mia-wa.*
 then soldier then get.dressed-REFL-PFV-NACC
 ‘Then the soldier got dressed.’

There are a few cases of the use of *-na-* ‘reflexive’ with intransitive S_a verbs which are probably influenced by Portuguese, as in (9).

- (9) *neda wafi nu-escape-na-wa ifiwa.*
 1SG.see jaguar 1SG-escape-REFL-NACC from
 ‘I saw a jaguar and escaped (lit. ‘escaped myself’; cf. Portuguese: *me escapei*) from him.’

Reflexive *-na* derivation can be formed on a causative of an intransitive verb:

- (10) *ya-mia-tse-pia daba kunehu pipi-nia-ta-na-mia-wa ifiwa.*
 NEG-PFV-know-NEG where rabbit lost-INCH-CAUS-REFL-PFV-NACC from
 ‘The rabbit did not know where to hide himself (lit. ‘make himself get lost’) from him (jaguar).’

A *-na* derivation can sometimes have a reflexive meaning even if the subject is plural, as in (11). Then, reflexive and reciprocal meanings can only be distinguished by the context. Without a reciprocal marker, *-bayata* is a regular transitive verb.

- (11) *ale-hē ni-bayata-na-wa-mia-hā.*
 SO-PAUS 3PL-spread-REFL-NACC-PFV-PAUS
 ‘So they (the turtles) spread themselves (over the road) (they went away).’

Reflexive derivation does not apply to S=O ambitransitives. The verb *-eta* ‘to burn’ is an ambitransitive. (12a) illustrates its transitive use, and (12b) its intransitive use. Note that Ø prefix is used to cross-reference 3.SG.NF A/S_a in Warekena.

- (12) a. *nata-mia-wa napi.*
 1SG.burn-PFV-NACC 1SG.hand
 ‘I burnt my hand.’
 b. *eta-mia-wa pani-fi.*
 burn-PFV-NACC house-NPOSS
 ‘The house burnt.’

If the O is omitted, the construction is understood as reflexive by default; cf.:

- c. *nata-mia-wa payalu.*
 1SG.burn-PFV-NACC all
 ‘I burnt myself all.’

Reflexive derivation in Warekena is not used to emphasize the identity of the A constituent. The instrumental-comitative adposition *ima* which cross-references A, is used for this purpose, as illustrated in (13):

- (13) *pi-wakwa-na pima.*
 2SG-untie-1SG 2SG.with.
 ‘Untie me yourself’ (lit. ‘with yourself’) (said the jaguar to the monkey).’

2.3 Agentless passives

-*Na* derivations can be used as agentless passives, as illustrated below. In (14) *-na* cannot be understood as reflexive because it is known from the previous text that the jaguar did not tie himself to the tree (it was the smart rabbit who did it).

- (14) *wa ja-wa puatfi mutfita-mia-hā a:ta wali alita-na-wa.*
 then go-NACC monkey bite-PFV-PAUS vine where tie-REFL-NACC
 ‘Then the monkey went and bit the vine where he (the jaguar) was tied.’

In (15), the jaguar could not have untied himself, since it is known from the previous stretch of the text that it was a young monkey who untied him.

- (15) *mutfita puatfi ate balika-mia-wa a:ta wakwe-na-mia-wa*
 bite monkey until tear-PFV-NACC vine untie-REFL-PERFS-NACC
wakwe-na-mia-wa.
 untie-REFL-PERFS-NACC
 ‘The monkey bit (the vine) until it tore, and he (the jaguar) was untied, untied.’

The agent cannot be expressed, as illustrated by (16) and (17) (elicited).

- (16) *wafi alite-na-wa minafi atapi.*
 jaguar tie-REFL-NACC on tree
 ‘The jaguar was tied to the tree.’
- (17) **wafi alite-na-wa minafi atapi ima kunehu.*
 jaguar tie-REFL-NACC on tree with rabbit
 ‘?The jaguar was tied to the tree by the rabbit.’

Agentless passive is used very rarely. It may be the result of an influence of Portuguese *se*.

3. Bare

3.1 Reciprocals

The marker *-tini* ‘reflexive-reciprocal’ in Bare (see Aikhenvald 1995a) has a reciprocal meaning if the subject is plural. The reciprocal meaning of *-tini* is illustrated with (18). The transitive use of *-kuyud’a* ‘to embrace’ is illustrated in (19).

- (18) *nu-tfitfi-ka kuhu u-tfitfi-ka nū wa-kuyud’a-tini.*
 1SG-kiss-SEQ she 3SG.F-kiss-SEQ I 1PL-embrace-REC
 ‘I kissed her (the woman), she kissed me, we embraced each other.’
- (19) *nu-kuyud’ā kuhu.*
 1SG-kiss/hug.PFV she
 ‘I embraced her.’

3.2 Reflexives

-Tini ‘reflexive-reciprocal’ has a reflexive meaning when the subject is singular. Its reflexive meaning is illustrated with (20). The transitive use of the verb ‘to cover’ is shown in (21).

(20) *nu-bale-d’a-tini.*

1SG-cover-INCH-REFL

‘I covered myself.’

(21) *nu-bale-d’ā kuhū nu-kaku-λe abi.*

1SG-cover-INCH.PFV he 1SG-fishing.net-POSS with

‘I covered him with my fishing-net.’

3.3 Other meanings of *-tini* derivation

-Tini derivation has a number of other meanings. It has a spatial reciprocal meaning with transitive and intransitive verbs (Section 3.3.1). Other meanings considered here, i.e. subject coreferentiality, full involvement of the subject and unspecified subject, are confined to intransitive verbs. All these uses are rather rare in my corpus. Some of them may be due to calques from Portuguese, or Spanish.

3.3.1 Spatial reciprocal meaning

The spatial reciprocal meaning of the *-tini* derivation with a transitive verb is illustrated in (22), and with an intransitive one in (24). The transitive use of *-wabukuda* ‘to join, collect’ is illustrated in (23). The verb *-ituka* ‘to return’ is used intransitively in (25).

(22) *kuļimau-nu me-wabukuda-tini me-nika-waka kwati.*

turtle-PL 3PL-join-REC 3PL-eat-PURP jaguar

‘Turtles joined each other (came together) to eat the jaguar.’

(23) *wamisi hiwiña kameni-ute ikha wa-wabukuda idi wa-nika ted’a.*

1PL.smoked 3SG.NF.fall fire-DIR 3SG.NF.burn 1PL-join then 1PL-eat that

‘Our smoked food fell into the fire, it burnt. We joined (it), then we ate (all) that.’

(24) *hwetuka-tini-ka wa-bahada-tini.*

1PL.return-REC-DECL 1PL-share-REC

‘We will return to each other and divide (the found money) between ourselves.’

(25) *nu-dirikā kuhū hetuka ihiwa-na.*

1SG-hit he 3SG.NF.return 3SG.NF.GO-PFV

‘I hit him (the dog), he went away.’

3.3.2 Subject coreferentiality

-Tini derivation can be formed on intransitive verbs. Then it may express coreferentiality of the subject of a subordinate predicate to that of the main predicate. Such an example is (26). *Helu-da* in (26) is an intransitive verb, and so *helu-da-tini* cannot mean ‘make himself dry’. These examples are very rare.

- (26) *ihīwa i-pīli-li-ka helu-da-tini-waka.*
 3SG.NF.GO 3SG.NF-FOLL-RED-TH dry-INCH-REC-PURP
 'He (the dog) went to roll (in the sand) for him to become dry.'

3.3.3 Full involvement of subject

In the following examples the *-tini* derivation means that the subject fully undergoes the action/state expressed by the verb. This is illustrated with (27) and (28). Intransitive uses of *kahawi* 'to be painful' and *-khuna* 'to excrete' are shown in (29) and (30).

- (27) *nu-kahawi-d'a-tini.*
 1SG-pain-INCH-REFL
 'I feel pain all over myself, I am complaining about pain.'
- (28) *tantu nu-kiate-d'a-ka kasi nu-khuna-tinyaka.*
 so 1SG-fear-INCH-DECL almost 1SG-excrete-REFL.DECL
 'I was so scared that I almost excreted on myself.' (Port. *quase me cageui*)
- (29) *tekiyabite kahawi nu-dusia.*
 this.over pain 1SG-head
 'This is why I had a headache.' (lit. 'my head was painful.')
- (30) *nu-khunā.*
 1SG-excrete.PFV
 'I excreted.'

3.3.4 Unspecified subject

The marker *-tini* is also sometimes used when the subject is unspecified, as in (31). Examples of this sort are rare.

- (31) *lansa id'uali hamuduka-tini-waka.*
 spear good INDF.kill-REFL-PURP
 'Spear is good for fighting.'

Examples like (31) may be considered the result of the influence of Spanish or Portuguese *se* 'reflexive-reciprocal enclitic', which is frequently used in this meaning. (32) is the Portuguese equivalent of (31) given by the speaker:

- (32) *a lança é boa para se matar.*
 ART.SG.F spear be.PRES.3SG good.SG.F for REFL kill
 'A spear is good for fighting.' (lit. 'for killing each other.')

The use of *-tini* with a number of verbs could result from Portuguese/Spanish influence. *Nu-takasa-tini* (1SG-cheat-REFL) 'I was mistaken' looks like a calque of Portuguese *eu me enganei* (lit. 'I cheated myself') 'I was mistaken'; *nu-karakasa-tini* (1SG-stumble-REFL) 'I stumbled by hitting myself (on something)'.

The *-tini* derivation is not used to emphasize the identity of agent. Then, Bare uses the emphatic particle *-ki*.

4. Baniwa of Içana

Baniwa of Içana uses *-kawa* ‘intransitivizer’ for both reciprocal and reflexive meanings (also see Taylor 1991:47).

4.1 Reciprocals

When *-kawa* is used on a transitive verb with a plural subject, the verb acquires a reciprocal meaning, as in (33). The verb can optionally take a comitative constituent (‘with their enemies’ in (33)). The verb *-inua* ‘to kill’ is used transitively in (34).

- (33) *na-inua-kawa hnepūda i-apidza.*
 3PL-kill-REC 3PL.enemy INDF-with
 ‘They fought (lit. ‘killed each other’) with their enemies.’

- (34) *na-inua dzawi.*
 3PL-kill jaguar
 ‘They killed a jaguar.’

4.2 Reflexives

When *-kawa* is used on a transitive verb with a singular subject, the verb acquires a reflexive meaning. Reflexive use of *-takha* ‘to cut’ is shown in (35). Its transitive use is illustrated in (36).

- (35) *kwame-kha pi-kaphiwida n̄ame nu-takha-kawa-ka.*
 how-INT 2SG-finger no 1SG-cut-REFL-DECL
 ‘What is there with your finger? (asked the mother). Nothing, I cut myself’ (answered the daughter).’

- (36) *nu-takha nu-kapi.*
 1SG-cut 1SG-hand
 ‘I cut my hand.’

If *-kawa* is used on a transitive verb which can also be used intransitively (as a A=S ambitransitive verb), it still expresses a reflexive meaning with a singular subject, see (37). The verb *-kapuku* ‘to turn’ is used transitively in (38), and intransitively in (39).

- (37) *dzama kadzu-pida li-kapuku-kawa.*
 two SO-RPRT 3SG.NF-turn-REFL
 ‘He (the god) turned around (lit. ‘turned himself’) twice.’

- (38) *nu-kapuku ita.*
 1SG-turn canoe
 ‘I turned the canoe.’

- (39) *ita li-kapuku.*
 canoe 3SG.NF-turn
 ‘The canoe turned.’

4.3 Agentless passive

When used with a transitive verb, *-kawa* derivation may have the meaning of an agentless passive. Example (40) illustrates this use of the verb *-phiuta* ‘to trap’, and of *-taita* ‘to finish’. The verb *-phiuta* is used transitively in (41).

- (40) *kamena inemi li-phiuta-kawa li-taita-kawa.*
 then devil 3SG.NF-trap-INTR 3SG.NF-finish-PASS
 ‘Then the devil was trapped, he was finished.’

- (41) *nu-phiuta dzawi.*
 1SG-trap jaguar
 ‘I trapped a jaguar.’

4.4 Other uses of *-kawa*: Intensive action

The marker *-kawa* can be used to mark intensive action, both with transitive and with intransitive verbs. (42) and (43) follow each other in the origin myth. (42) contains the transitive predicate *-hmaita* ‘to burn’ and (43) contains an intransitivized *-hmaita-kawa* ‘to burn strongly’.

- (42) *na-hmaita-pida heku pamudzua.*
 3.PL-burn-RPRT wood middle
 ‘They burnt the wood in the middle.’

- (43) *na: na-kapuku, na-dana li-hmaita-kawa tidze.*
 3PL.go 3PL-go.around, 3PL-around 3SG.NF-burn-INTS fire
 ‘They went around, around them fire was burning.’

-Kawa is used with an intransitive verb *-eku* ‘to run’: *-eku-kawa* ‘to run around (a lot)’ in (44):

- (44) *kame-tsa-pide-ka li-eku-kawa-ka kamuy rii li-fwa-ta.*
 then-EMPH-RPRT-DECL 3SG.NF-run-INTS-DECL sun rii! 3SG.NF-stay-again
 ‘Then the sun started running around, rii! it stopped.’

Unlike To’aba’ita, where, according to Lichtenberk (1991; also Lichtenberk, Ch. 36), the depatientive function of the morpheme *kwai-* developed from its reciprocal function, there are no reasons to believe that it happened the same way in Baniwa. The suffix *-kawa* is polysemous. In this language, there is no reason for considering any of its meanings as primary, or secondary.

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C. Pronominal reciprocal marker only

Reciprocal-reflexive constructions in Djaru

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1. Introductory notes

1.1 Djaru and other Australian languages

At the time of the arrival of Europeans, there were approximately 250 Aboriginal languages in Australia. However, their number has since decreased drastically, and there are only around 20 really viable languages left. (Dixon & Blake 1991:27; Thieberger & McGregor 1994:xi–xii). “The languages of the Australian mainland appear to be genetically related”, but “it has not proved possible to establish a genetic link with any language outside Australia” (Dixon & Blake 1991:3).

Djaru (*/jaru/*) is spoken in and around Halls Creek, Kimberley, Western Australia. It has perhaps about 200 fluent speakers, including a fair number of children. The closest relatives of Djaru are Wanyjirra and Gardangarurru. As of 1995, Wanyjirra has probably less than 20 speakers, while Gardangarurru has no speakers left.

Publications on Djaru include Tsunoda (1981), for which the principal consultant was the late Mr. Robert Moses. During my 1995 field trip additional information was provided by the late Mr. Jack Jugayarri (*/jukayarri/*), and also by Mrs. Danba (*/tanpa/*) Moses and Mrs. Lily Banks. Both the late Mr. Robert Moses and the late Mr. Jack Jugayarri were speakers of the western dialect, and most of the examples given below are from this dialect. (In the following, I shall omit the titles, e.g. “Mr.” when I mention people’s names.)

The Djaru phoneme inventory, written in a practical orthography, contains twenty one phonemes: /p, t, rt, j, k, m, n, rn, ny, ng, l, rl, ly, rr, r, y, w, i, a, u, aa/.

1.2 Overview

Djaru has enclitic pronouns as well as free pronouns. The enclitic pronouns have the following four cases: nominative (for the subject), accusative (for the direct object), dative (for the indirect object/recipient, possessor, beneficiary, and so on) and general oblique (for “locative”, “allative” and “ablative” meanings/functions).¹

Enclitic pronouns may cross-reference free NPs, e.g. (1a), (1c), (2), although they may – and in natural speech often do – occur without cross-referenced NPs, e.g. (13b), (14b), (35), (43). In other words, they are agreement markers. Henceforth, I shall often refer to the nominative forms as “subject agreement markers” (“SB”), to the accusative forms as “direct object agreement markers” (“DO”), to the dative forms as “indirect object agreement markers” (“IO”), and to the oblique forms as “oblique agreement markers” (“OBL”).²

If any non-subject agreement marker is coreferential with the subject agreement marker, it is obligatorily replaced by the reciprocal-reflexive enclitic pronoun *-nyunu* (or *-nyanu*) (henceforth, “REC/REFL pronoun” or “REC/REFL marker” or simply “REC/REFL”). Thus, compare the following examples.

- (1) a. *ngaju-ngku nga=rna=ngku nyuntu-Ø nyanya.*
 1SG-ERG C=1SG.SB=2SG.DO 2SG-ABS see/look.PAST
 ‘I looked at you.’ (TT)³
- b. **ngali-ngku nga=li=ngaliny ngali-Ø nyanya.*
 1DU.INC-ERG C=1DU.INC.SB=1DU.INC.DO 1DU.INC-ABS see.PAST
 (intended meaning:) ‘We two looked at us two.’ (TT)
- c. *ngali-ngku nga=li=nyunu ngali-Ø nyanya.*
 1DU.INC-ERG C=1DU.INC.SB=REC/REFL 1DU.INC-ABS see.PAST
 i. ‘We two looked at *each other*’, or
 ii. ‘We two looked at *ourselves*.’ (TT)

The REC/REFL pronoun indicates the coreferentiality with the subject, and not with any other member of the sentence. That is, Djaru reciprocal-reflexive constructions are subject-oriented.

1. The term ‘general oblique’ is from Mary Laughren (p.c.), via Lee Cataldi. Hereafter, I shall simply refer to it as ‘oblique’.

2. In this paper, I use the terms “subject”, “direct object”, “indirect object” and “oblique” in a loose sense. An attempt at a rigid identification of grammatical relations in Djaru is in Tsunoda (1981:106–24). Identification of the subject and the direct object (cross-referenced respectively by the nominative and the accusative enclitic pronouns) is reasonably straightforward, but this is not necessarily true of other grammatical relations. For example, I have found no syntactic evidence to set up the indirect object as distinct from other uses of the dative, such as “possessor” and “beneficiary”. Nonetheless, I use these terms – albeit not in a rigid sense – largely in the hope that this will facilitate comparison with other papers in the volume.

3. “TT” indicates those examples which have been made up by me or those words which have been added by me but which have not been checked with a Djaru speaker.

The diathesis types involved in Djaru reciprocal-reflexive constructions may be classified as follows (partly on morphosyntactic grounds, but largely on semantic grounds): “canonical” type, “indirect”/recipient type, “possessive”/possessor type, benefactive type, and oblique type.

Formation of reciprocal-reflexive constructions involves enclitic pronouns only, and it does not affect free pronouns or any other free NPs. The only change that occurs is for the REC/REFL pronoun to replace the non-subject agreement marker that is coreferential with the subject agreement marker. In other respects, there is no change. That is, there is no change, for instance, in (a) verb morphology, and (b) (regarding both clitic pronouns and free NPs) transitivity of the clause in terms of (i) valency and (ii) case-marking. Note, for instance, that in (1c) the free pronoun for the subject remains in the ergative and also that the free pronoun for the direct object can be retained.

As noted above, Djaru reciprocal-reflexive constructions are subject-oriented. It does not seem possible to have an object-oriented reciprocal involving causativization such as ‘he made them hit each other’.

The central meanings of the REC/REFL pronoun are reflexive and reciprocal. They can also express a few other related meanings. There is no other way to express reciprocity or reflexivity. Thus there is no verbal suffix for reciprocal or reflexive. Nor are there any valency-changing markers, such as causative, anticausative, passive, or antipassive.

2. Grammatical notes

In the following, I shall deal with only those aspects of Djaru grammar which are pertinent to the ensuing discussions. For further details, see Tsunoda (1981).

2.1 Morphology

Djaru is almost entirely suffixing. It is also largely agglutinating, although there are elements of fusion as well. In the examples, morpheme boundaries are indicated by hyphens, and equation signs are used for enclitics. In instances of fusion, glosses are given as, for instance, =*rna* ‘1.SG.SB’, without indicating morpheme boundaries.

There are a few linking morphemes (glossed ‘LINK’). They merely occur between morphemes without expressing any meaning; see (11c), (49), (51).

There are occasionally instances of homonymy of morphemes. Thus, *-ngku* may be one of the ergative case suffixes (cf. (1a)), the enclitic pronoun ‘2SG.DO’ or ‘2SG.IO’ (see (1a)), or a linking morpheme (cf. (11c)).

2.2 Parts of speech

The following parts of speech can be set up for Djaru: nouns, free pronouns, adverbs, preverbs, verbs, conjunctions, carriers, and interjections. Carriers carry enclitic pronouns. In

addition to these parts of speech, there are three types of enclitics: pronominal, directional and modal/discourse. The meaning/function of most of the modal/discourse enclitics is not quite clear, and they will be simply glossed ‘CLT’, e.g. (14b), (26b), (28b).

2.3 Verbs and preverbs

Verbs inflect for tense, aspect, mood and the like, but not for person or number.

There are only forty odd verb roots, but this is compensated for by the existence of numerous compound verbs, each of which (roughly speaking) consists of a verb root and preverb(s). An example:

- (2) *ngaju-Ø nga=rna purja yan-i.*
 1SG-ABS C=1SG.SB run-PAST
 ‘I ran.’ (TT)

The compound verb *purja yan-i* consists of the preverb *purja* ‘running’ and the verb root *yan-* ‘go’, which jointly mean ‘to run’. As shown in (2), I provide just one gloss for the entire compound verb, rather than separate glosses for individual words.

There are also compound verbs which involve a verb and a participle, rather than a preverb. Examples are in (43) and (51).

2.4 Nouns and pronouns

Nouns (which include “adjectives” and “demonstratives”) lack number distinction. Both free and enclitic pronouns (except for the REC/REFL pronoun) distinguish three numbers (singular, dual, plural), and they also possess an inclusive-exclusive distinction in the dual and the plural of the first person. The enclitic pronouns include the REC/REFL pronoun =*nyunu* (used in all dialects) and =*nyanu* (used in Sturt Creek and Gordon Downs dialects only). (For examples of =*nyanu*, see (36) and (53). See also Section 11 on the possible etymology of =*nyanu*.)

In terms of case-marking patterns employed, the nouns and pronouns can be, very roughly, classified as follows (see Table 1):

- (a) nouns and free pronouns, exemplified by ‘water’;
- (b) enclitic pronoun ‘3SG’;
- (c) enclitic pronoun ‘reciprocal-reflexive’, and;
- (d) other enclitic pronouns, exemplified by ‘1SG’.

The four dots (...) in Table 1 mean ‘non-existent’.

Note that, roughly speaking, nouns and free pronouns have an ergative-absolutive pattern, while enclitic pronouns have a nominative-accusative pattern. As noted in 1.2, I shall use labels such as “subject agreement marker”, etc., rather than case labels such as “nominative” – in the hope that this will facilitate comparison with other papers in this volume.

Table 1. Case-marking patterns

	Nouns, free pronouns 'water'			Clitic pronouns		
				1sg	3sg	REC/REFL
transitive subject	ERG	<i>ngapa-ngku</i>	NON/SBJ	= <i>rna</i>	=\emptyset	....
intransitive subject	ABS	<i>ngapa-\emptyset</i>	NOM/SBJ	= <i>rna</i>	=\emptyset	....
direct object	ABS	<i>ngapa-\emptyset</i>	ACC/DO	= <i>yi</i>	= \emptyset	= <i>nyunu</i>
	DAT	<i>ngapa-wu</i>	DAT/IO	= <i>yi</i>	= <i>la</i>	= <i>nyunu</i>
	LOC	<i>ngapa-ngka</i>	OBL	= <i>yila</i>	= <i>nyanta</i>	= <i>nyunu(ngkula)</i>
	ALL	<i>ngapa-ngkawu</i>	OBL	= <i>yila</i>	= <i>nyanta</i>	= <i>nyunu(ngkula)</i>
	ABL	<i>ngapa-ngu</i>	OBL	= <i>yila</i>	= <i>nyanta</i>	= <i>nyunu(ngkula)</i>
	INST	<i>ngapa-ngku</i>	....	....	....	....

Table 2. Subject forms of clitic pronouns

	Singular	Dual	Plural
1st person	= <i>rna</i>	= <i>li</i>	= <i>liwa</i> (inclusive)
		= <i>liyarra</i>	= <i>rnalu</i> (exclusive)
2nd person	= <i>n</i>	= <i>npula</i>	= <i>nta</i>
3rd person	= \emptyset	= <i>wula</i>	= <i>lu</i>

2.5 Enclitic pronouns

2.5.1 General notes

As Table 1 shows, the subject and direct object forms of the enclitic pronoun '3sg' are phonologically zero. It is difficult to distinguish between a zero clitic pronoun and the absence of any clitic pronoun. In the examples below, the zero pronoun will be omitted where it seems irrelevant to the discussion.

The REC/REFL pronoun lacks a subject form; it always indicates coreferentiality with the subject. It has only two forms: one for the accusative/direct object and the dative/indirect object, and the other for the oblique. The former, simple form is often used in place of the longer, oblique form, cf. (12b), (28b), (32b). It is in view of this that the element =*ngkula* is parenthesized in Table 1.

When more than one enclitic pronouns occur together, their relative order is determined by certain principles (for details see Tsunoda 1981: 131–2). The REC/REFL pronoun is always and immediately preceded by the subject marker. All the subject forms of enclitic pronouns are shown in Table 2.

The host for enclitic pronouns is generally *nga*, the carrier morpheme for declarative sentences.

Enclitic pronouns of Djaru show a striking similarity (partial or total) to free pronouns of Djaru and/or some other Australian languages (Tsunoda 1981: 129). Etymologically, they are perhaps cliticised pronouns that were once free (see Hale 1973: 340).

Table 3. Clause types

	Free NPs	Clitic pronouns	Examples of verbs	Examples of sentences
intransitive				
one-place	ABS	SBJ	'to go', 'to run'	(2)
two-place	ABS-DAT	SBJ-IO	'to talk about'	(24a)
	ABS-LOC	SBJ-OBL	'to talk to/with'	
transitive				
two-place	ERG-DAT	SBJ-IO	'to search', 'await'	(10)
	ERG-ABS	SBJ-DO	'to hit', 'to see'	(1a), (4a)
three-place	ERG-ABS-DAT	SBJ-DO, SBJ-IO	'to give', 'ask for'	(25a), (26a)
	ERG-ABS-LOC	SBJ-OBL	'to show', 'to tell'	(27a)
	ERG-ABS-ALL	SBJ-OBL	'to send to'	(28a)

2.5.2 *Cross-reference (1): Correspondence with free NPs*

Enclitic pronouns are agreement markers, or, to be more precise, cross-reference markers (except that the REC/REFL pronoun does not cross-reference any NP; it indicates coreferentiality with the subject). They indicate number and person (and also inclusiveness/exclusiveness in the case of 1st person non-singulars) and also, roughly speaking, the case and grammatical function of the cross-referenced NPs, as shown in Table 1.

2.5.3 *Cross-reference (2): Clause types*

Non-derived clauses in Djaru, i.e. those other than reciprocal-reflexive clauses, can be classified as shown in Table 3. The table shows the correspondence between free NPs and enclitic pronouns in terms of the case frames employed. It does not exhaust the clause types encountered, but they are sufficient for our purpose. Also, it must be admitted that valency of verbs has been determined here somewhat arbitrarily. The case frames listed do not imply any rigid ordering of the free NPs; the latter's relative order is not fixed. For a discussion of word order in Djaru, see Tsunoda (1989).

2.6 Expression of possession

Possession in Djaru is of two types: (a) alienable possession, including that of languages and kinsmen, and (b) inalienable possession, including that of body parts, parts of inanimate objects, body secretions, footprints, shadows, names, and possibly dreams. These two types will be dealt with below.

2.6.1 *Alienable possession*

Alienable possession can be expressed by the dative, by the ablative-1 (of free pronouns only), and so on. The dative case can also indicate a possessor, a beneficiary, and a purpose in a general sense (e.g. 'in order to get'). Thus, the dative can denote either a possessor or a beneficiary in:

- (3) *ngaju-ngku nga=rna=la mangarri-Ø kamparn-i ngama-yi-wu.*
 1SG-ERG C=1SG.SB=3SG.IO food-ABS COOK-PAST mother-KIN-DAT
 i. 'I cooked [my] mother's food', or ii. 'I cooked food for [my] mother.'

2.6.2 *Inalienable possession*

Inalienable possession is generally expressed in one of the following two ways:

(a) by apposition: the possessor and the possessed are in apposition, occurring in the same case, cf. (4a), (5a);

(b) by non-apposition: for instance, the possessor is a direct object (in the absolutive) and the possessed is in the locative, as in (4b), or the ablative, as in (5b).

Thus, compare:

- (4) a. *ngaju-ngku nga=rna=Ø mawun-Ø langka-Ø pung-an.*
 1SG-ERG C=1SG.SB=3SG.DO man-ABS head-ABS hit-PRES
 'I hit a man's head.'
- b. *ngaju-ngku nga=rna=Ø mawun-Ø pung-an langka-ka.*
 1SG-ERG C=1SG.SB=3SG.DO man-ABS hit-PRES head-LOC
 'I hit a man on the head.'
- (5) a. *ngaju-ngku nga=rna=Ø jaji-Ø narra-Ø lan-i.*
 1SG-ERG C=1SG.SB=3.SG.DO kangaroo-ABS back-ABS spear-PAST
 'I speared a kangaroo's back.'
- b. *ngaju-ngku nga=rna=Ø jaji-Ø lan -i narra-ngu.*
 1SG-ERG C=1SG.SB=3SG.DO kangaroo-ABS spear-PAST back-ABL
 'I speared a kangaroo from the back.'

(I have attempted to show the possible semantic difference in these pairs of examples by means of the English translations. But this is only tentative.)

3. Formation of reciprocal-reflexive constructions

3.1 Marking in clitic pronouns only

The formation of reciprocal-reflexive constructions involves enclitic pronouns only and does not affect free NPs. Thus, free pronouns can be retained in reciprocal-reflexive constructions – even when a given free pronoun is coreferential with the subject, e.g. the direct object in (1c), (7c). Also, the case-marking of free NPs is not affected. For instance, a transitive subject remains ergative, as in (1c), (7c). This applies even when the direct object is elliptical, cf. (49).

3.2 Reflexive and reciprocal meanings

The central meanings of the REC/REFL pronoun are reciprocal and reflexive, and it has a few related meanings. There are eleven subject markers (see Table 2). If the subject is

singular, the meaning is always reflexive, as in (6a, b, c). If the subject is dual or plural, the meaning can be either reflexive or reciprocal, cf. (6d, e):

- (6) a. *nga=rna=nyunu parr winya.*
 C=1SG.SB=REC/REFL paint.PAST
 'I painted myself.' (TT)
- b. *nga=n=nyunu parr winya.*
 C=2SG.SB=REC/REFL paint.PAST
 'You (SG) painted yourself.' (TT)
- c. *nga=Ø=nyunu parr winya.*
 C=3SG.SB=REC/REFL paint.PAST
 'He/She painted himself/herself.' (TT)
- d. *nga=li=nyunu parr winya.*
 C=1DU.INC.SB=REC/REFL paint.PAST
 i. 'We two painted *ourselves*,' or
 ii. 'We two painted *each other*.' (TT)
- e. *nga=lu=nyunu parr winya.*
 C=3PL.SB=REC/REFL paint.PAST
 i. 'They painted *themselves*,' or
 ii. 'They painted *one another*.' (TT)

3.3 Oblique case

The oblique case, =*nyunungkula*, cross-references the locative, the allative, or the ablative of free NPs. As was mentioned in 2.5.1 in connection with Table 1, often, though not always, the simple form, =*nyunu* (which otherwise functions as an direct object agreement marker or as an indirect object agreement marker) is used in place of the longer, oblique form.

We shall now look at details of reciprocal-reflexive constructions. We shall look at those with a reflexive meaning, followed by those with a reciprocal meaning and those with related meanings, such as 'partial coreferentiality' and 'sociative'.

The classifications of constructions with a reflexive meaning and also that of those with a reciprocal meaning are semantic, rather than morphosyntactic, and they do not accurately reflect the morphosyntactic facts of Djaru. However, these classifications have been recommended by the editor of this volume and will facilitate comparison with other papers in the volume.

4. Reflexives

4.1 The reflexive meaning proper

Consider the following three sentences:

- (7) a. *ngaju-ngku nga=rna=yanu mawun-Ø parr wung-an.*
 1SG-ERG C=1SG.SB=3PL.DO man-ABS paint-PRES
 'I paint the men.' (TT)

- b. **ngaju-ngku nga=rna=yi ngaju-Ø parr wung-an.*
 1SG-ERG C=1SG.SB=1.SG.DO 1SG-ABS paint-PRES
 *‘I paint me.’
- c. *ngaju-ngku nga=rna=nyunu ngaju-Ø parr wung-an.*
 1SG-ERG C=1SG.SB=REC/REFL 1SG-ABS paint-PRES
 ‘I paint myself.’

(7a) is an ordinary transitive clause. (7b) is ungrammatical; the sequence of the enclitic pronouns *=*rna=yi*, in which =*rna* ‘1SG.SB’ and =*yi* ‘1SG.DO’ are coreferential, is not allowed, and =*yi* ‘1SG.DO’ must be replaced by the REC/REFL pronoun, as in (7c).⁴ The behaviour of free NPs is different, the case frame of ERG-ABS being left intact. It is important to emphasize that the free pronoun *ngaju-Ø*, a direct object, can be retained. This is despite the fact that it is coreferential with the free pronoun subject *ngaju-ngku* (and, for that matter, coreferential with the subject agreement marker, =*rna*, as well). (It should be noted, however, that in natural speech, e.g. running texts, free pronouns, e.g. *ngaju-ngku* and *ngaju-Ø* in (7a, c) are likely to be elliptical.)

4.2 The possessive-reflexive meaning

Here, the free NP direct object refers to a body part, an inalienably possessed item. Consider the following three examples:

- (8) a. *ngaju-ngku nga=rna=ngku nyuntu-Ø wirrkil-Ø pangin-an.*
 1SG-ERG C=1SG.SB=2.SG.DO 2SG-ABS hair-ABS comb-PRES
 ‘I comb your hair.’ (TT)
- b. **ngaju-ngku nga=rna=yi ngaju-Ø wirrkil-Ø pangin-an.*
 1SG-ERG C=1SG.SB=1SG.DO 1.SG-ABS hair-ABS comb-PRES
 (intended meaning: ‘I comb my hair.’)
- c. *ngaju-ngku nga=rna=nyunu [TT ngaju-Ø] wirrkil-Ø pangin-an.*
 1SG-ERG C=1SG.SB=REC/REFL 1SG-ABS hair-ABS comb-PRES
 ‘I comb my [own] hair.’

As noted in 2.6.2, inalienable possession can be expressed by the apposition of the possessor and the possessed. In (8a), which is an ordinary transitive clause, the possessor and the possessed are in the direct object position. Now, (8b) is ungrammatical, and =*yi* ‘1SG.DO’ must be replaced by the REC/REFL pronoun, as in (8c). The direct object denoting the body part affected by the action, e.g. *wirrkil-Ø* ‘hair-ABS’ in (8c), can be retained in the reflexive version and in fact is often retained. The free pronoun for the direct object, e.g. *ngaju-Ø* ‘1SG-ABS’ presumably can be retained, although it is likely to be elliptical.

4. Djaru places no restrictions on the person of the reflexive use of the REC/REFL pronoun. Now, the neighbouring languages to the east, e.g. Mudbura, and to the south, e.g. Warlpiri, have the enclitic REC/REFL pronoun =*nyunu* or =*nyanu*. Warlpiri (Hale 1973:337) and Mudbura (McConvell 1980:34) differ in two respects from the Djaru pattern described above. In Mudbura and Warlpiri, very roughly speaking, reflexivization (as against reciprocalization) fails to apply: (a) if the subject is the first person singular, or (b) if the subject of an imperative sentence is the second person. For example, a sequence equivalent to =*rna=yi* ‘1SG.SB=1SG.DO’ is allowed in those languages.

4.3 The possessive-benefactive-reflexive meaning

This type concerns a dative NP expressing a possessor or a beneficiary of the direct object (in the absolutive case). Consider the following three examples:

- (9) a. *ngaju-ngku nga=rna=la ngama-yi-wu mangarri-Ø kamparn-an.*
 1SG-ERG C=1SG.SB=3SG.IO mother-KIN-DAT food-ABS cook-PRES
 i. 'I cook [my] mother's food', or
 ii. 'I cook food for [my] mother.' (TT)
- b. **ngaju-ngku nga=rna=yi nganinga mangarri-Ø kamparn-an.*
 1SG-ERG C=1SG.SB=1SG.IO 1SG.DAT food-ABS cook-PRES
 (intended meaning:) i. 'I cook my [own] food', or ii. 'I cook food for myself.'
- c. *ngaju-ngku nga=rna=nyunu nganinga mangarri-Ø kamparn-an.*
 1SG-ERG C=1SG.SB=REC/REFL 1SG.DAT food-ABS cook-PRES
 i. 'I cook my [own] food', or ii. 'I cook food for myself.'

The free pronoun expressing a possessor or a beneficiary of the direct object, e.g. *nganinga* '1SG.DAT' in (9c), can be retained.

4.4 The benefactive-reflexive meaning

In clauses of the ERG-DAT case frame, the dative NP indicates the goal of pursuit (e.g. 'to look for sb', 'to wait for sb', 'to sneak up on sb'):

- (10) *ngaju-ngku nga=rna=la jaji-wu muwu wung-an.*
 1SG-ERG C=1SG.SB=3.SG.IO kangaroo-DAT search-PRES
 'I am looking for a kangaroo.' (TT)

Now, in addition to the dative NP which marks the goal of pursuit, ERG-DAT clauses can contain a dative NP which marks a beneficiary, resulting in ERG-DAT-DAT clauses. (I am not certain if they can contain a dative NP which marks a possessor rather than a beneficiary.) Compare the following three sentences:

- (11) a. *ngaju-ngku nga=rna=ngku=la jaji-wu muwu wung-an nyunu-nga.*
 1SG-ERG C=1SG.SB=2SG.IO=3SG.IO kangaroo-DAT search-PRES 2SG-DAT
 'I am looking for a kangaroo for you (SG).' (TT)
- b. **ngalipa-lu nga=liwa=ngalipa=la jaji-wu muwu wung-an*
 1PL.INC-ERG C=1PL.INC.SB=1PL.INC.IO=3SG.IO kangaroo-DAT search-PRES
ngalipa -nga.
 1PL.INC-DAT
 (intended meaning:) 'We are looking for a kangaroo for ourselves.'
- c. *ngalipa-lu nga=liwa=nyunu=ngku=la jaji-wu*
 1PL.INC-ERG C=1PL.INC.SB=REC/REFL=LINK=3SG.IO kangaroo-DAT
muwu wung-an ngalipa-nga.
 search-PRES 1PL.INC-DAT
 'We are looking for a kangaroo for ourselves.'

=*ngku*= is a linking morpheme and its nature is epenthetic. =*nyunu*=*ngku*=*la* ‘REC/REFL =LINK=3SG.IO’ should not be confused with the oblique form of the REC/REFL pronoun =*nyunungkula*: see Table 1.

4.5 The oblique-reflexive meaning

The oblique form of an enclitic pronoun may have various oblique meanings, such as ‘to’ (when it cross-references a free NP in the allative), ‘at’, ‘on’ (when cross-referencing a free NP in the locative), ‘from’ (when cross-referencing a free NP in the ablative), and so on. If an oblique enclitic pronoun is coreferential with the subject marker, it is obligatorily replaced by the REC/REFL pronoun. Thus, a pair of examples involving the locative:

- (12) a. **ngaju-ngku nga=rna=yila makarta-Ø yaan-an nganinginy-ja.*
 1SG-ERG C=1SG.SB=1SG.OBL hat-ABS put-PRES 1SG-LOC
 *‘I put a hat on me.’ (TT)
- b. *ngaju-ngku nga=rna=nyunungkula* [or *nga=rna=nyunu*] *makarta-Ø yaan-an*
 1SG-ERG C=1SG.SB=REC/REFL C=1SG.SB=REC/REFL hat-ABS put-PRES
nganinginy-ja.
 1SG-LOC
 ‘I put a hat on myself.’

As mentioned in 3.3, the simple form =*nyunu* is often used in place of the oblique form =*nyunungkula*.

4.6 Unclear cases

There are a few instances for which it is difficult to make up a corresponding non-reflexive version. (13b) and (14b) are two such instances. I tentatively suggest (13a) and (14a) as their respective corresponding sentences.

- (13) a. **ngaju-ngku nga=rna=yi ngaju-Ø payan-i nganyju-ku.*
 1SG-ERG C=1SG.SB=1SG.DO 1SG-ABS bite-PAST calf-INST
 (intended meaning:) ‘I bit me with the calves [of my legs].’ (TT)
- b. *nga=rna=nyunu nganyju-ku payan-i.*
 C=1SG.SB=REC/REFL calf.of.leg-INST bite-PAST
 ‘I had a cramp [in my legs].’

Presumably, (13b) literally means ‘I bit myself with the calves [of my legs].’

- (14) a. **ngaju-ngku nga=rna=yi ngaju-Ø kit man-i kanyji-ku.*
 1SG-ERG C=1SG.SB=1SG.DO 1SG-ABS catch/entangle-PAST leg-INST
 *‘I entangled/caught me with [my] legs.’ (TT)
- b. (‘I was riding a horse, and it bucked’)
kit man-i nga=rna=nyunu kanyji-ku=yali.
 catch-PAST C=1SG.SB=REC/REFL leg-INST=CLT
 ‘I caught myself with [my] legs’, or ‘I was caught/got stuck, with [my] legs.’

5. Reciprocals

5.1 “Canonical” reciprocals

5.1.1 *Derived from* ERG-ABS *clauses: Two-place transitive with an absolutive object*

Two-place clauses with an ERG-ABS case frame (with an absolutive object) are typical transitive clauses, and the derived reciprocals may be considered as the most canonical. Thus:

- (15) a. *ngaju-ngku nga=rna=ngku nyuntu-Ø nyanya.*
 1SG-ERG C=1SG.SB=2SG.DO 2SG-ABS see-PAST
 ‘I looked at you.’ (TT)
- b. *ngali-ngku nga=li=nyunu ngali-Ø nyanya.*
 1DU.INC-ERG C=1DU.INC.SB=REC 1DU.INC-ABS see.PAST
 ‘We two looked at each other.’ (TT)

Among “canonical” reciprocals, two subtypes may be set up: those involving inalienable possession (5.1.1.1) and those involving an inanimate subject (5.1.1.2).

5.1.1.1 *Involving a part-whole relationship.* As noted in 2.6.2, inalienable possession, which typically concerns body parts, can be expressed by the apposition of the possessor and the possessed. Thus, in (4a), the possessor and the possessed are in apposition and they are in the direct object position. Corresponding to (4a), we can have a reciprocal version such as:

- (16) *ngali-ngku nga=li=nyunu ngali-Ø langka-Ø pung-an.*
 1DU.INC-ERG C=1DU.INC.SB=REC 1DU.INC-ABS head-ABS hit-PRES
 ‘We two hit each other’s head.’

When the possessor and the possessed are not in apposition, the possessed may be either in the locative or the ablative. In (4b), the possessed is in the locative. Corresponding to (4b), we can have a reciprocal version such as:

- (17) *ngali-ngku nga=li=nyunu ngali-Ø pung-an langka-ka.*
 1DU.INC-ERG C=1DU.INC.SB=REC 1DU.INC-ABS hit-PRES head-LOC
 ‘We two hit each other on the head.’

In (5b), the possessed is in the ablative; compare it with (18):

- (18) *ngali-ngku nga=li=nyunu ngali-Ø lan-i narra-ngu.*
 1DU.INC-ERG C=1DU.INC.SB=REC/REFL 1DU.INC-ABS spear-PAST back-ABL
 ‘We two speared each other in (lit. from) the back [in turns].’

5.1.1.2 *With an inanimate subject.* Reflexives do not seem to allow an inanimate subject, while on the other hand reciprocals do; I have obtained at least three examples. (They are all Djaru translations of the English sentences I put forward.) I tentatively set up (19a), (20a) and (21a) as respective corresponding sentences. (I am not certain if they are acceptable sentences.)

- (19) a. *mutaka-lu nga=Ø=Ø mutaka-Ø tumal-a pinya.*
 car-ERG C=3SG.SB=3SG.DO car-ABS middle-LOC hit.PAST
 (intended meaning:) ‘A car hit [another] car in the middle.’ (TT)
- b. (‘One car came from the north and another came from the south’):
kujarra-lu mutaka-lu nga=wula=nyunu tumal-a pinya.
 two-ERG car-ERG C=3DU.SB=REC/REFL middle-LOC hit.PAST
 ‘The two cars hit (i.e. collided with) each other in the middle.’
- (20) a. *purnu-ngku nga=Ø=Ø purnu-Ø purrpurr wung-an.*
 tree-ERG C=3SG.SB=3SG.DO tree-ABS rub-PRES
 (intended meaning:) ‘A tree is rubbing [against another] tree.’ (TT)
- b. (‘The wind is blowing’):
yalu-ngku jilawaja-lu purnu-ngku nga=lu=nyunu purrpurr wung-an.
 that-ERG many-ERG tree-ERG C=3PL.SB=REC/REFL rub-PRES
 ‘Those many trees are rubbing against one another.’
- (21) a. *purnu-ngku nga=Ø=Ø purnu-Ø kit pan-i.*
 tree-ERG C=3SG.SB=3SG.DO tree-ABS entangle-PAST
 (intended meaning:) ‘A tree entangled [another] tree.’ (TT)
- b. (‘The wind is blowing’):
nyila purnu-ngku nga=wula=nyunu kit pan-i.
 there tree-ERG C=3DU.SB=REC/REFL entangle-PAST
 lit. ‘The trees entangle each other there’, i.e. ‘The trees are stuck with each other there.’

Sentence (19b) may not be a good example of an inanimate subject (for cars move like animate beings), but (20b) and (21b) are better examples.

All of these three examples describe actions. It is not certain if an inanimate subject (for a reciprocal sentence) is allowed when the sentence describes a state. Consider:

- (22) *kujarra-lu pinka-ku nga=wula=nyunu palmuku yaan-i.*
 two-ERG creek-ERG C=3DU.SB=REC/REFL meet(?) -PAST
 lit. ‘The two creeks met (or, have met) here.’

Jack Jugayrri did utter (22), but his subsequent comment makes it uncertain if this is really an acceptable sentence.

5.1.2 Derived from two-place clauses with a dative object

There are two types: transitive ERG-DAT and intransitive ABS-DAT.

5.1.2.1 *Derived from ERG-DAT clauses.* Corresponding to sentences such as (23a) (ERG-DAT), we can have a reciprocal version such as (23b):

- (23) a. *mawun-tu nga=Ø=la yampakina-wu muwu wung-an.*
 man-ERG C=3SG.SB=3SD.IO child-DAT search-PRES
 ‘The man is looking for the child.’ (TT)
- b. *kujarra-lu nga=wula=nyunu muwu wunga-n.*
 two-ERG C=3DU.SB=REC/REFL search-PRES
 ‘The two people are looking for each other.’

5.1.2.2 *Derived from ABS-DAT clauses.* Corresponding to sentences such as (24a) (ABS-DAT), we can have a reciprocal version such as (24b):

- (24) a. *ngaju-Ø nga=rna=la marn-an mawun-ku.*
 1SG-ABS C=1SG.SB=3SG.IO talk-PRES man-DAT
 ‘I am talking about the man.’
 b. *ngajarra-Ø nga=liyarra=nyunu ngajarra-nga marn-i.*
 1DU.EXC-ABS C=1DU.EXC.SB=REC 1DU.EXC-DAT talk-PAST
 ‘We two talked about each other.’ (TT).

5.1.3 *Derived from three-place (or ditransitive) clauses*

As a pair of examples, consider:

- (25) a. *mawun-tu nga=lu=yanu ngumpirr-Ø miyangki man-an pamarr-ku.*
 man-ERG C=3PL.SB=3PL.DO woman-ABS ask-PRES stone-DAT
 ‘The men ask the women for money (lit. stone).’ (TT)
 b. *nga=lu=nyunu miyangki man-an pamarr-ku.*
 C=3PL.SB=REC/REFL ask-PRES stone-DAT
 ‘They (PL) ask one another for money.’

The direct object marker is coreferential with that for the subject, and is (obligatorily) replaced by the REC/REFL pronoun. The verb *miyangki man-* ‘to ask for’ (ERG-ABS-DAT) has yielded the only example of this type.

(25b) may appear similar to the reciprocals of three-place clauses discussed below, but it differs from the latter in that it is a direct object, and not an indirect object or the like, that is replaced by the REC/REFL pronoun. Thus, unlike the latter, it is of the “canonical” type.

5.2 “Indirect”/recipient reciprocals

Here, the term “indirect” refers to the semantic role of “recipient”. This type involves three-place (or ditransitive) clauses: ERG-ABS-DAT, ERG-ABS-LOC and ERG-ABS-ALL. The case of the free NP denoting a recipient is the dative, the allative or the locative, depending on the verb employed. The clitic pronoun referring to the recipient – the IO in (26a), the OBL in (27a) and (28a) – is replaced by the REC/REFL pronoun.

As a pair of examples involving *yung-* ‘to give’ (ERG-ABS-DAT), consider:

- (26) a. *ngaju-ngku nga=rna=ngku kuyu-Ø nyumunga yung-an.*
 1SG-ERG C=1SG.SB=2SG.IO meat-ABS 2SG.DAT give-PRES
 ‘I give you meat.’ (TT)
 b. *ngali-ngku nga=li=nyunu ngali-nga=lu kuyu-Ø yung-an.*
 1DU.INC-ERG C=1DU.INC.SB=REC 1DU.INC-DAT=CLT meat-ABS give-PRES
 ‘We two give each other meat.’

As a pair of examples involving *jirri yaan-* ‘to show’ (ERG-ABS-LOC), compare:

- (27) a. *maluga-maluga-la nga=rnalu=yanula jirri yaan-an kirmimiliny-Ø.*
 old.man-old man-LOC C=1PL.EXC.SB=3PL.OBL show-PRES spear-ABS
 ‘We show the spear to many old men.’

- b. *nganampa-lu nga=rnalu=nyunungkula jirri yaan-an kirmimiliny-Ø*
 1PL.EXC-ERG C=1PL.EXC.SB=REC/REFL show-PRES spear-ABS
nganampanginy-ja.
 1PL.INC-LOC
 ‘We (PL) show spear(s) to one another.’ (TT)

As a pair of examples involving *yuwarn-* ‘to send’ (ERG-ABS-ALL), compare:

- (28) a. *ngaju-ngku nga=rna=nyanta marnu-Ø yuwarn-i mawun-tawu.*
 1SG-ERG C=1SG.SB=3SG.OBL word-ABS send-PAST man-ALL
 ‘I sent a message to the man.’
 b. *ngali-ngku nga=li=nyunu* [or *nga=li=nyunungkula*] *marnu-Ø*
 1DU.INC-ERG C=1DU.INC.SB=REC/REFL C=1DU.INC.SB=REC/REFL word-ABS
yuwarn-an ngalinginy-jawu wayini mirni-mirni=lu.
 send-PRES 1DU.INC-ALL in.the.same.way=CLT
 ‘We two send words to each other likewise.’

5.2.1 Unclear case: A four-place transitive clause?

It seems that reciprocals which could be considered as corresponding to an underlying four-place transitive clause are possible. Thus, (29b) may be taken to correspond to (29a), which has the ERG-ABS-ALL-ABL case frame. (This case frame would be obtained by the addition of an ablative NP to the ERG-ABS-ALL case frame, e.g. (28a).)

- (29) a. **ngaju-ngku nga=rna=yila=ngkula yuwarn-i kuyu-Ø nganinginy-ngu*
 1SG-ERG C=1SG.SB=1SG.OBL=2SG.OBL send-PAST meat-ABS 1SG-ABL
nyununginy-jawu.
 2SG-ALL
 (intended meaning:) ‘I sent meat from me to you (SG).’ (TT)
 b. *ngali-ngku nga=li=nyunungkula yuwarn-i kuyu-Ø ngalinginy-ngu.*
 1DU.INC-ERG C=1DU.INC.SB=REC/REFL send-PAST meat-ABS 1DU.INC-ABL
 ‘We two sent meat to (lit. from) each other [e.g. in turns].’

It would appear that the oblique REC/REFL =*nyunungkula* corresponds to the oblique =*yila* and =*ngkula*.

5.3 “Possessive”/possessor reciprocals

The reciprocals in question generally correspond to two-place transitive clauses. Here, the enclitic pronoun denoting the possessor is coreferential with the subject marker and is replaced by the REC/REFL pronoun. The possession concerned may be either alienable or inalienable.

When the possession is of the alienable type, the dative case is employed to denote the possessor. Compare:

- (30) a. *nganampa-lu nga=rnalu=yanu nyanunga marnu-Ø ngarra man-an.*
 1PL.EXC-ERG C=1PL.EXC.SB=3PL.IO 3PL/SG.DAT language-ABS know-PRES
 ‘We (PL) know their (PL) language.’ (TT)

- b. *nganampa-lu nga=rnalu=nyunu nganampa-nga marnu-Ø*
 1PL.EXC-ERG C=1PL.EXC.SB=REC/REFL 1PL.EXC-DAT language-ABS
ngarra man-an.
 know-PRES
 ‘We (PL) know one another’s languages.’ (TT).

When the possession is of the inalienable type, the possessor and the possessed may be in apposition or in non-apposition; their reciprocal versions are (16), (17) and (18).

5.4 Adverbial/oblique reciprocals

If the oblique form of an enclitic pronoun (which can cross-reference free NPs in the allative ‘to’, locative ‘at, on’ or ablative ‘from’) is coreferential with the subject marker, it is replaced by the REC/REFL pronoun. A pair of examples involving the allative:

- (31) a. *ngaju-Ø nga=rna=ngkula yatik yan-i nyununginy-jawu.*
 1SG-ABS C=1SG.SB=2SG.OBL close.by go/come-PAST 2SG-ALL
 ‘I went/came close to you.’ (TT)
 b. *ngali-Ø nga=li=nyunungkula yatik yan-i ngalinginy-jawu.*
 1DU.INC-ABS C=1DU.INC.SB=REC/REFL close.by go-PAST 1DU.INC-ALL
 ‘We two went close to each other.’

Examples involving the ablative:

- (32) a. *yampakina-Ø nga=Ø=nyanta yan-an mawun-ngu.*
 child-ABS C=3SG.SB=3SG.OBL go-PRES man-ABL
 ‘The child is going [away] from the man.’ (TT)
 b. *kujarra-Ø nga=wula=nyunu [or nga=wula=nyunungkula] warrngaarra*
 two-ABS C=3DU.SB=REC/REFL separately
yan-an [TT nyanpulanginy-ngu].
 go-PRES 3DU-ABL
 ‘Two people are going [away] from each other.’

A final pair of examples involving the locative:

- (33) a. *ngaju-Ø nga=rna=ngkula yatik yut nyinang-an nyununginy-ja.*
 1SG-ABS C=1SG.SB=2SG.OBL close.by sit-PRES 2SG-LOC
 ‘I am sitting close by with you.’ (TT)
 b. *ngali-Ø nga=li=nyunungkula yatik yut nyinang-an*
 1DU.INC-ABS C=1DU.INC.SB=REC/REFL close.by sit-PRES
 [TT *ngalinginy-ja*].
 1DU.INC-LOC
 ‘We two are sitting close with/to each other.’

Semantically, these reciprocals are similar to “indirect”/recipient reciprocals (see 5.2).

5.5 Benefactive reciprocals

A dative NP may denote a possessor or a beneficiary; see (9a) and (30a). It is interesting to note that clauses with the ERG-DAT frame, e.g. (23a), can take an additional dative NP denoting a beneficiary, resulting in the ERG-DAT-DAT frame, e.g. (11a), from which a reflexive or reciprocal sentence can be derived, e.g. (11c). The resultant sentence can have either a reflexive reading (e.g. ‘we are looking for a kangaroo for ourselves’, as shown in (11c)) or a reciprocal reading: ‘we are looking for a kangaroo for one another’, i.e. for the benefit of one another.

6. Differentiation between reciprocal and reflexive readings

As demonstrated above, the REC/REFL pronoun can have both reciprocal and reflexive readings. When the subject is singular, naturally only the reflexive reading is possible; cf. (6a, b, c). When the subject is dual or plural, both reciprocal and reflexive readings are possible, e.g. (6d, e), although the vast majority of such examples have a reciprocal reading in the sense intended by the context. Thus, consider:

- (34) *mawun-tu nga=lu=nyunu pung-an.*
 man-ERG C=3PL.SB=REC/REFL hit-PRES

According to Matthew Wrigley (p.c.), when confronted with (34), Jack Jugayarrri stated to the effect that (34) can have the following two readings: (a) reciprocal: ‘the men are fighting one another’, and (b) reflexive: ‘the men are hitting themselves’, like when a group of people in mourning hit themselves in anguish.

There is at least one way to select a reciprocal reading, namely, inclusion of a phrase which contains *wayini(ny)* ‘similar, same’ or ‘thus, like this, like that’. An instance of such a phrase is *wayininy mirni-mirni=lu* ‘in return’.

- (35) *nga=rnalu=nyunu pirrirrki yaan-inyurra wayininy mirni-mirni=lu.*
 C=1PL.EXC.SB=REC/REFL shoot-PAST.NARR in.return
 ‘We shot one another in return.’

The phrase *wayininy mirni-mirni=lu* apparently contains the adverb *mirni* ‘at here, in here’. The entire phrase seems to mean ‘in the same way’ or ‘in return’. It is often followed by the discourse enclitic =*lu*, whose meaning is not understood well. Another example is (28b).

There appear to exist at least three ways to select a reflexive reading. One is the inclusion of the adverb *limpal-limpal* ‘respectively, to oneself, for oneself’. (Etymologically, *limpal-limpal* contains *limpal* ‘one’s own’); e.g.:

- (36) [TT *ngalipa-lu*] *nga=liwa=nyanu kang-ku* [TT *ngalipa-nga ngari-Ø*]
 1PL.INC-ERG C=1PL.INC.SB=REC/REFL carry-PURP 1PL.INC-DAT clothes-ABS
limpal-limpal.
 respectively
 ‘We (PL) will each carry our own [clothes].’

The second method is the affixation of the derivational suffix *-wariny* ‘by oneself’ to the root of a free pronoun, e.g.:

- (37) *nga=li=nyunu ngali-wariny-ju ngali-ngku parr wung-ku*
 C=1DU.INC.SB=REC/REFL 1DU.INC-by.oneself-ERG 1DU.INC-ERG paint-PURP
 [TT *ngali-Ø*].
 1DU.INC-ABS
 ‘We two will paint ourselves, by ourselves.’

The third method is exemplified by the following:

- (38) (‘They panicked and were in chaos’):
wakurra nga=lu=nyunu man-an-i nyanunga-nyaaniny-Ø [TT *ngari-Ø*].
 not C=3PL.SB=REC hold-CONT-PAST 3SG/PL.DAT-very-ABS clothes-ABS
 ‘They (PL) did not grab their own [clothes].’ (‘They each took someone else’s’).

The derivational suffix *-nyaaniny* can be translated by the English adjective *very* (not the adverb *very*). Inclusion of a dative free pronoun (here, indicating possessors), affixed with the derivational suffix *-nyaaniny*, seems to select the reflexive reading ‘one’s own’.

It is not known whether or not the use of a phrase such as *wayininy mirnimirni* ‘in the same way’, without using the REC/REFL pronoun, is sufficient for the purpose of expressing reciprocity. Similarly for the three methods used for reflexive readings.⁵

7. Partial coreferentiality

With reflexives and also with reciprocals, the participants who perform the action and those who receive it are completely coreferential. There are, however, instances in which these two sets of participants are only partially coreferential. In these instances, there may be participants who only perform the action, without receiving it, and/or those who only receive the action, without doing it. Two types can be recognized: extended reflexives (see 7.1) and chaining (see 7.2).

7.1 Extended reflexives

Consider:

- (39) **ngaju-ngku nga=rna=ngaliny ngali-Ø parr winya.*
 1SG-ERG C=1SG.SB=1DU.INC.DO 1DU.INC-ABS paint.PAST
 (intended meaning: ‘I painted us (you and me).’)

5. Alan Rumsey (p.c.) points out that in Bunaba, about 300 km west of Djaru, at least in certain instances the reciprocal vs. the reflexive reading can be distinguished by the ergative vs. the absolutive marking on the subject. However, this does not apply to Djaru. See (34). As noted in 1.2 and 9, reciprocalization/reflexivization in Djaru does not concern the case-marking of free NPs.

Table 4. Reflexive, reciprocal and extended reflexive

	(41) as reflexive	(41) as reciprocal	extended reflexive (41)=(39)	(41)=(40)
	I → I	I → you	I → I, you	I ← I, you
	you → you	I ← you		
agent(s)	two	two	one	two
patient(s)	two	two	two	one

- (40) **ngali-ngku nga=li=yi ngaju-Ø parr winya.*
 1DU.INC-ERG C=1DU.INC.SB=1SG.DO 1SG-ABS paint.PAST
 (intended meaning: ‘We (you and I) painted me.’)

Examples (39) and (40) are ungrammatical. Instead of them, Robert Moses gave:

- (41) *ngali-ngku nga=li=nyunu ngali-Ø=lu parr winya.*
 1DU.INC-ERG C=1DU.INC.SB=REC 1DU.INC-ABS=CLT paint.PAST
 i. ‘I painted us (you and me),’ or ii. ‘We (you and I) painted me.’

Note that (41) can have the meaning of either (39) or (40). In each of the intended readings of (41), the subject and the object (the latter which is replaced by the REC/REFL pronoun) are only partly coreferential. I termed sentences such as (41) “extended reflexive” (Tsunoda 1981: 157). Admittedly, extended reflexives have never been uttered in natural speech. All the examples were obtained through elicitation.

In addition to the two extended reflexive readings, (41) can also have the reflexive reading ‘we each painted *ourselves*’ and the reciprocal reading ‘we painted *each other*’. Similarly for other examples of extended reflexives. (Out of context, the reciprocal reading will probably be preferred.) These four possible readings are shown in Table 4.

7.2 Chaining

I have found two instances which appear to exemplify what Lichtenberk (1985: 24–6) terms “chaining” type. Both examples involve variants of the compound verb *pila man-* ‘to chase, follow’ (with the ERG-ABS case frame); cf.:

- (42) a. *kunyarr-u nga=Ø=Ø pila-pila man-an kunyarr-Ø.*
 dog-ERG C=3SG.SB=3SG.DO chase-PRES dog-ABS
 (intended meaning: ‘A dog chases [another] dog.’ (TT))
 b. *kunyarr-u nga=lu=nyunu pila-pila man-an.*
 dog-ERG C=3PL.SB=REC/REFL chase-PRES
 ‘The dogs are chasing one another.’

(I am not certain if (42a) is an acceptable sentence.)

The subject must be plural for the chaining type. A chaining situation is not possible with a singular or dual subject.

In line with Lichtenberk’s statement, these two examples involve the verb ‘to follow’, and there is no example of ‘to precede’.

8. Sociative (?)

With the “partial coreferentiality” type, at least one of the participants who receives the action is coreferential with one member of the set of participants who perform the action. There are instances, however, in which even this partial coreferentiality does not seem to hold. These instances seem to have a sociative meaning: ‘to act together’. The subject is naturally dual or plural, but never singular. All the examples obtained appear to correspond to clauses that are intransitive and one-place. It is not certain if this sociative use of the REC/REFL pronoun is productive, and it is difficult to find an unequivocal example of this type. The only example obtained in spontaneous speech is (43), which was uttered by an old lady (the late Inverway Ruby), who was trying to comfort her old friend (Tiny McCale) who had lost her only daughter in a car accident.

- (43) *nga=li=nyunu lung-u=lu lung-ku.*
 C=1DU.INC.SB=REC/REFL cry-PART=CLT cry-PURP
 ‘We two will cry together.’

(This sentence contains a compound verb which consists of a verb and a participle; see 2.3. Both verb and participle happen to involve the same verb root: *lung-* ‘to cry’ (vi). The function or necessity of the participle in this compound verb is not understood.) Inverway Ruby herself translated (43) as ‘we got to cry one another’. Maggie Scott translated it as ‘we will cry with one another’. She also approved my translation ‘we cry together’ and said as follows: ‘Yes, “We cry together” in English’.

I have made up (44) and (45a, b) by analogy with (43):

- (44) *mawun-Ø nga=wula=nyunu lung-an.*
 man-ABS C=3DU.SB=REC/REFL cry-PRES
 ‘The two men are crying together.’
- (45) a. *mawun-Ø nga=wula=nyunu makin nyinang-an.*
 man-ABS C=3DU.SB=REC/REFL sleep-PRES
 ‘The two men are sleeping together.’

(The translation for (45a) provided by Danba Moses and Lily Banks is ‘that two man sleeping together.’)

- b. *mawun-Ø nga=lu=nyunu makin nyinang-an.*
 man-ABS C=3PL.SB=REC/REFL sleep-PRES
 ‘Big mob sleeping together.’ (Translation by Danba Moses and Lily Banks).

All of (44) and (45a, b) were approved in the ‘together’ reading (although the speakers would often use ‘one another’ in their translations, e.g. ‘cry one another’). (Regarding the men referred to in (45a), a certain speaker remarked as follows: “Poofter!” (i.e. male homosexual). This comment makes it clear that (45a) has the meaning of ‘together’.)

The use of the REC/REFL pronoun with a sociative meaning (‘together’) was checked for a fair number of intransitive verbs with three or four Djaru speakers, but not all of the suggested examples were approved. It is difficult to decide which are acceptable and

which are not. Thus, Danba Moses and Lily Banks approved (46a, b) and translated them as shown:

- (46) a. *mawun-Ø nga=wula=nyunu purja marn-an.*
 man-ABS C=3DU.SB=REC/REFL run-PRES
 ‘(TT: Two men are) running together.’
 b. *mawun-Ø nga=lu=nyunu purja marn-an.*
 man-ABS C=3PL.SB=REC/REFL run-PRES
 ‘Big mob running together.’

However, Jack Jugayarri rejected sentences such as (46a, b) and gave (47) instead and translated as shown, using the word ‘together’:

- (47) *nga=wula purja marn-a.*
 C=3DU.SB run-PRES.CONT
 ‘Tobala (i.e. two people) running together.’

The use of the word “together” clearly indicates that (47) describes a sociative situation, despite the absence of the REC/REFL pronoun. In other words, the use of the REC/REFL pronoun is not obligatory in order to express ‘together’.

It seems that a dual or plural subject by itself generally describes joint actions, and that, like passives, the use of the REC/REFL pronoun for “sociative” is optional, being employed when it is considered necessary or adequate by the speaker. (I owe this observation to Vladimir Nedjalkov (p.c.).)

9. Expression of the reciprocal arguments

As has been demonstrated above, formation of reciprocal-reflexive constructions concerns enclitic pronouns only; the only change is the replacement of the non-subject agreement marker coreferential with the subject, by the REC/REFL pronoun. The formation does not involve or affect free pronouns or any other free NPs. Note the following points in particular.

(a) There is no free pronoun that has a reciprocal or reflexive meaning/function.

(b) Unlike enclitic pronouns, a free NP coreferential with the subject can remain (although it may be elliptical). This applies not only to nouns but also to free pronouns. Examples of free pronouns:

- (i) the direct object – *ngali-Ø* ‘1DU.INC-ABS’ in (41);
 (ii) the indirect object/recipient – *ngali-nga* ‘1DU.INC-DAT’ in (26b);
 (iii) the dative for a possessor or a beneficiary – *nganampa-nga* ‘1PL.EXC-DAT’ in (30b),
ngalipa-nga ‘1PL.INC-DAT’ in (11c);
 (iv) the locative – *nganampanginy-ja* ‘1PL.EXC-LOC’ in (27b);
 (v) the allative – *ngalinginy-jawu* ‘1DU.INC-ALL’ in (31b), (28b);
 (vi) the ablative – *ngalinginy-ngu* ‘1DU.INC-ABL’ in (29b).

Examples of nouns:

- (i) the direct object – *langka-Ø* ‘head-ABS’ in (16);
 (ii) the locative – *langka-ka* ‘head-LOC’ in (17);

(iii) the ablative – *narra-ngu* ‘head-ABL’ in (18).

(c) Consequently, there is no valency decrease – as far as free NPs are concerned. (In the case of enclitic pronouns as well, it is difficult to show that valency does decrease. The replacement by the REC/REFL pronoun may be taken as evidence of valency decrease. However, the REC/REFL pronoun does remain and this may be considered as evidence of no change in valency.)

(d) Case-marking of free NPs is not affected at all. For instance, the transitive subject remains ergative.

(e) That is, the transitivity of the clause, in terms of valency and case-marking of free NPs, is left intact.

These remarks apparently apply to all the examples containing the REC/REFL pronoun.

10. Lexicalization

There are a few instances of what may be considered as idiomatic expressions.

10.1 Reflexives

[1] *pura nyang-* (which takes the ERG-ABS frame) means ‘to hear, listen to’.

- (48) *ngaju-ngku nga=rna=∅ pura nyang-an ngama-yi-∅.*
 1SG-ERG C=1SG.SB=3SG.DO hear-PRES mother-KIN-ABS
 ‘I am listening to [my] mother.’ (TT).

The combination of this verb and the REC/REFL pronoun means ‘to think (about someone)’, in all of the examples (with one exception: (50)):

- (49) *ngaju-ngku nga=rna=nyunu pura nyang-an ngama-yi-wuny-ja*
 1SG-ERG C=1SG.SB=REC/REFL hear-PRES mother-KIN-LINK-LOC
 [or *ngama-yi-wu*].
 mother-KIN-DAT
 ‘I am thinking about [my] mother.’ (lit. ‘I am listening to myself about mother.’)

This combination can also have the usual reciprocal meaning. Thus, when confronted with something like (50), Jack Jugayarri translated it as follows:

- (50) [TT *ngali-ngku*] *nga=li=nyunu pura nyanga-n.*
 1DU.INC-ERG C=1DU.SB=REC/REFL hear-PRES
 ‘We two are listening to each other.’

It seems that the addition of a locative NP or a dative NP referring to the person thought of, e.g. *ngama-yi-wuny-ja* ‘mother-KIN-LINK-LOC’ and *ngama-yi-wu* ‘mother-KIN-DAT’, makes the meaning ‘to think’ clear.⁶

6. The reflexive form of the verb ‘hear, listen to’ can mean ‘think’ in Dyirbal (Dixon 1972: 89–92) and Warrungu (Tsunoda 1988: 606–7) of North Queensland, Australia, as well.

[2] For another example of an idiomatic expression, see (13b) ‘to have a cramp’, lit. ‘to bite oneself with the calves of the legs’.

10.2 Reciprocals

[1] *nyanga-* ‘to see, look at’ (ERG-ABS, cf.(1a)) can take a dative NP, resulting in the ERG-ABS-DAT frame, which in turn can be reciprocalized. Thus:

- (51) *murrkun-tu mawun-tu nga=lu=nyunu=ngku=la nyangu-nyangu man-an*
 three-ERG man-ERG C=3PL.SB=REC/REFL=LINK=3SG.IO watch-PRES
yangi-wu yalu-wu ngumpirr-ku.
 one-DAT that-DAT woman-DAT
 ‘The three men watch one another over that one woman.’

This is a common way of expressing rivalry in love. (The enclitic pronoun =*la* ‘3SG.IO’ cross-references the DAT phrase *yangi-wu yalu-wu ngumpirr-ku*. Etymologically, the compound verb *nyangu-nyangu man-* ‘watch’ contains the participle form of the verb *nyang-* ‘to see, look at’, i.e. *nyang-u*, and the verb root *man-* ‘to get, obtain’.)

[2] *pali wung-* ‘to find’ (ERG-ABS). Its reciprocal versions can generally be best translated by ‘to meet’ (although the translation ‘to find one another/each other’, too, would be possible), e.g.:

- (52) *matarn-rtu nga=li=nyunu pali winya jalani=lu.*
 countryman-ERG C=1DU.INC.SB=REC find.PAST today=CLT
 ‘We two, countrymen, met [for the first time] [only] today.’

This expression of ‘to meet’ appears to describe accidental, rather than deliberate, meeting. Reciprocal-reflexive constructions almost always describe volitional/deliberate actions when the subject is human, and (52) is an exception to this general tendency.

[3] *pung-* ‘to hit’ (ERG-ABS, cf. (4a, b)). Its reciprocal versions can mean ‘to hit one another/each other’, e.g. (34). They can also mean ‘to fight with/against someone’, without actually meaning punching or hitting, e.g.:

- (53) *nga=lu=nyanu nguyuru-lu pung-an.*
 C=3PL.SB=REC/REFL many-ERG hit-PRES
 lit. ‘Many people are hitting one another’, i.e. ‘they are fighting.’

[4] *yunga-* ‘to give’ (ERG-ABS-DAT, cf. (26a)). There is an idiomatic expression involving this verb: (54b) ‘to shake hands’. This would correspond to a (no doubt ungrammatical) sentence such as (54a).

- (54) a. **ngaju-ngku nga=rna=yi=ngku ngaju-Ø marla-Ø yinya nyununga.*
 1SG-ERG C=1SG.SB=1SG.DO=2SG.IO 1SG-ABS hand-ABS give.PAST 2SG.DAT
 (intended meaning:) ‘I gave my hand to you.’ (TT)
 b. *marla-Ø yung-ka=li=nyunu.*
 hand-ABS give-IMP=1DU.INC.SB=REC/REFL
 ‘Let’s shake hands.’ (lit. ‘Let’s give each other a hand.’)

[5] *marran-* ‘to tell’ takes the case frame of ‘ERG(narrator) tells ABS(topic) to LOC(audience)’, e.g.:

- (55) *yangi-ngku mawun-tu nga=Ø=wulaanungkula marran-an yangi-Ø wajpali-Ø*
 one-ERG man-ERG C=3SG.SB=3DU.OBL tell-PRES one-ABS white
kujarra-la yampa-wuyarra-la.
 man-ABS two-LOC child-two-LOC
 ‘One man is telling [a story about] one white man to two children.’

A combination of this verb and the REC/REFL pronoun can mean ‘to argue, quarrel, growl’. (No doubt, it can mean ‘to tell one another/each other’ as well.) In the sense of ‘argue, quarrel, growl’, it is almost always accompanied by the word *kuli* ‘anger, angry, angrily’, e.g.:

- (56) *yampaji-lu nga=wula=nyunu kuli marran-an.*
 child-ERG C=3DU.SB=REC/REFL angrily tell-PRES
 ‘The two children are arguing with each other.’

It seems that reciprocals such as (56) do NOT correspond to sentences such as (55) (‘ERG tells ABS(topic) to LOC(audience)’). And that they rather correspond to sentences of the case frame ‘ERG tells ABS(a person)’, but no instance of this latter case frame has been attested.

11. Etymology of the reciprocal/reflexive pronoun

There is no information regarding the origin of the REC/REFL pronoun =*nyunu*/=*nyanu*. (The =*nyanu* form is used in certain dialects only; examples include (36), (53).) At least, the enclitic REC/REFL pronoun =*nyunu* or =*nyanu* occurs in the neighbouring languages to the east and to the south, e.g. Warlpiri; see Note 4. This may not be relevant, but Djaru has a noun-stem-forming suffix *-nyan* ‘3rd person’s own’. It is attached to kinship-term roots and the noun *jaliji* ‘friend’, e.g. *ngawu-nyan* ‘his/her/their own father’, and *ngama-nyan* ‘his/her/their own mother’ (Tsunoda 1981:233). Note that *-nyan* is phonologically similar to the REC/REFL pronoun =*nyanu*. It is interesting to note that Warlpiri has the REC/REFL enclitic pronoun =*nyanu* (Hale 1973:337), and also has the noun-stem-forming suffix *-nyanu* ‘own’, e.g. *kirta-nyanu* ‘his own father’ (Hale 1976:83). It is not known, however, whether these kin suffixes are related to the REC/REFL pronoun.

The Djaru REC/REFL pronoun =*nyunu*/=*nyanu* cannot be used as a derivational marker.

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PART III

**Reciprocal-sociative polysemy
of reciprocal markers**

A. Verbal and pronominal reciprocal markers

Reciprocal, sociative, and comitative constructions in Tagalog

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1. Introductory notes

1.1 The Tagalog language

Tagalog belongs to the Philippine group of Western Austronesian languages. To be precise, it belongs to the Central subgroup of the Philippine group, together with the Bikol, Bisayan and Mansakan languages. It functions as a basis of the official language of the Republic of the Philippines, now called Filipino (formerly Pilipino). The number of its native speakers, according to the census of 1980, exceeds 16 million. All in all, there are more than 100 related languages in the Philippines spoken by about 60 million people. Alongside Tagalog, the most numerous are the speakers of Cebuano, Ilokano and Hiligaynon (see McFarland 1980).

Tagalog is a highly synthetic language, with a rich inventory of agglutinative affixes (prefixes, suffixes and infixes). Prefixation is prevalent. Lengthy affixal combinations are mostly formed by prefixes. Various kinds of reduplication and phonological accent play an essential role in inflection and derivation.

Tagalog syntax combines features of different typologies – of the ergative, active and accusative types (for a discussion of this problem see, among others, Foley & Van Valin (1984: 138); Drossard (1984); Himmelmann (1991: 1–2); Payne (1982: 75–106); Shibatani (1988: 85–142); De Wolf (1988: 143–93)).

1.2 Overview

Tagalog grammars published so far do not contain any special sections on reciprocal constructions.

There are no specialized morphological markers of reciprocity in Tagalog. All morphemes used for this purpose are highly polysemous – this feature unites reciprocal

derivation with other derivational (valency changing and preserving) processes (see 2.7). The Tagalog equivalent of the English phrase *each other* does not play any important role in the expression of reciprocity.

The following means are used to derive reciprocals in Tagalog:

1. The prefix *mag-* which forms what might be called (with some reservations) lexical reciprocals (see (18c)).

2. The prefix-suffix combination (not a circumfix!) *mag-...-an*, each affix corresponding to one derivational step. This combination marks the best known kind of Tagalog reciprocals, which may be regarded as morphological reciprocals (see (1)).

3. The prefixal combination *mag-ka-* forms involitional reciprocals denoting uncontrollable processes (see (144c)).

4. The combination *mag-ka-...-an* that contains the suffix *-an* is also used to form involitional reciprocals (see (158b)).

5. The combinations *pag-...-in* and *pag-ka-...-in* with the suffix *-in* derive causative reciprocals from *mag-* and *mag-ka-* reciprocals, i.e. from types 1 and 3 listed here.

The first four types of reciprocals represent the “canonical” subject-oriented diathesis. Reciprocals marked by *mag-...-an* are able to form the “indirect” type of diathesis. The “possessive” type seems to exist on a very limited scale (if at all!).

Reciprocals in *pag-...-in* and *pag-ka-...-in* form the object-oriented diathesis.

There seem to be semantic and no formal restrictions on the derivation of reciprocals in *mag-...-an*, *mag-ka-* and *mag-ka-...-an*.

Derivational relations between reciprocal and non-reciprocal verbs, and often the direction of derivation, are far from clear in Tagalog. Morphologically, non-reciprocal verbs do not serve as immediate bases for the formation of reciprocals, as is the case in most languages. Paradigmatic relations between them cannot be described as derivational, but rather as relations based on affix correspondences between lexically related non-reciprocal and reciprocal verbs (cf. affix correspondence classes in Schachter & Otanes (1972:293ff.)). When speaking of non-reciprocal verbs as semantically underlying related reciprocals, we shall keep in mind that morphologically, Tagalog reciprocal verbs are mainly derived from bases identical to reciprocal nouns.

Numerous involitional reciprocals throw light on that part of morphology which contributes heavily to the typological peculiarity of Tagalog (see 2.3.1).

Involitional reciprocals display morphological similarity of verbs and nouns: they are a manifestation (one out of many!) of fundamental affinity of the Tagalog verb and noun (on the low level of the noun/verb differentiation in Philippine languages see, e.g. the following works where this issue is central: Himmelmann (1991); Gil (1993); Shkarban (1995)).

Another peculiarity of Tagalog is the optional marking of plurality (‘more than two’) of reciprocal agents (see Section 7; cf. 3.2.1), and also the existence of comitative forms derived from reciprocals (see Section 12).

Here is an example of two base constructions and corresponding reciprocal construction (in (1a) and (1b) the infixes *-um-* and *-in-* split the root morpheme *sulat* ‘to write’,

hence the translation for each segment of the root morpheme; further on, however, the second segment alone is glossed):

- (1) a. *S-um-ulat ang binata sa dalaga.*
 write-AG.PFV-write NOM boy OBL.ADR girl
 ‘The boy wrote to the girl.’
 b. *S-in-ulat-an ang binata nang dalaga.*
 write-PFV-write-ADR NOM boy ERG.AG girl
 ‘The boy was written to by the girl.’
 → c. *Nag-sulat-an ang binata at dalaga.*
 REC.PFV-write-REC NOM boy and girl
 ‘The boy and the girl wrote to each other.’

Here is an example of a comitative verb derived by the prefix *maki-* from a reciprocal base (so far, analogous forms are not attested in any other languages):

- d. *Naki-pag-sulat-an ang binata sa dalaga.*
 AG.COM.PFV-REC-write-REC NOM boy OBL.ADR girl
 ‘The boy corresponded/entered into correspondence with the girl.’

2. Grammatical information

2.1 Verbs, nouns, adjectives

Morphologically marked grammatical categories provide the most obvious distinctions between the parts of speech. Every verbal lexeme is represented by a paradigm of four modal-aspectual forms and is obligatorily marked for voice. Unlike verbs, Tagalog nouns and adjectives may be root-words.

Syntactically, verbs, nouns and adjectives are practically not differentiated. The majority of the affixes are common to different word classes.

2.2 Sentence structure. Case marking. Word order. Attributive constructions

Syntactic constituents are marked with prepositional particles: case markers, predicative and attributive linkers.

Case markers of common nouns (the abbreviation ERG refers to *nang* (*ng* in writing) when it marks the agent in “passive” constructions; see 2.3; the term OBL[ique] here covers the dative and locative cases):

- (2) NOM GEN, ERG, ACC OBL, ACC
ang nang sa

Case markers of personal names:

- (3) NOM GEN, ERG OBL, ACC
 SG *si ni kay*
 PL *sina nina kina*

Basically, Tagalog is a predicate initial, VOS/VSO language. In derived structures, the SVO order occurs entailing the use of the predicative linker *ay* which precedes the predicate in its non-initial position:

- (4) a. *Um-alis ang bata.* b. *Ang bata ay um-alis.*
 AG.PFV-leave NOM child NOM child LNK AG.PFV-leave
 ‘The child went away.’ ‘The child went away.’

Attributive constructions are formed with the help of the linker *na/ng*, each allomorph being phonetically determined. The word order in attributive constructions is relatively free:

- (5) a. *maliit na bahagi* b. *bahagi-ng maliit*
 small LNK part part-LNK small
 ‘a small part’ ‘a part which is small.’

2.3 Voice system

Every voice (in other terms, focus) affix on a Tagalog verb manifests argument (role) agreement between the verbal predicate and the subject, i.e. it shows which of the arguments is chosen as subject. This is to say that the verb always contains an affix indicating the semantic role of the subject (topic).

The core of the voice system in Tagalog is the opposition of the “active” (agentive) voice vs. “passive” (non-agentive) voices. Here is a fragment of the voice system markers:

- (6) “Active” voice (for Agent) “Passive” voices
-um- (see (1a)) *-in* – Patient
mag- (see (1c)) *-an* – Patient (see (9b)), Addressee, Location
maki- (see (1d)) *i-* – Patient, Instrument, Beneficiary

Here is a fragment of the voice paradigm (for the root morpheme *-luto-* ‘cooking’):

- (7) a. *mag-luto* ‘to cook, prepare food’
 b. *lutu-in* ‘to cook’ (the subject is the prepared food)
 c. *pag-lutu-an* ‘to cook’ (the subject is the place of cooking)
 d. *i-pag-luto* ‘to cook’ (the subject is the person for whom the food is cooked).

Two points should be stressed in this connection: (a) verbal prefixes with the initial *m-* have correlates with the initial *n-* (see 2.5; 2.8); (b) prefixes with the initial *m-* and *n-* have base-forming correlates with the initial *p-* which are obligatory for some voice forms (like *pag-* in (7c) and (7d)); hence affix paradigms like *mag-/nag-/pag-* or *maki-/naki-/paki-*. Prefixes in *p-* (*pag-*, *paki-*, etc.) are also used in nominal derivation. (For the base-forming function of *pag-* the gloss *PAG* is used in some examples below if its meaning is vague).

For common nouns, the main argument positions are marked with the following case markers:

(8)	Subject	Complements
“Active”	<i>ang</i> – Agent	<i>nang</i> – indefinite Patient
voice	(see <i>ang dalaga</i> in (9a))	(see <i>nang pinggan</i> in (9a))
		<i>sa</i> – definite Patient
		(see <i>sa bisita</i> in (28a))
“Passive”	<i>ang</i> – definite Patient	<i>nang</i> – Agent
voice	(see <i>ang pinggan</i> in (9b))	(see <i>nang dalaga</i> in (9b)).

As a rule, indefinite patients are encoded by a *nang* complement in “active” constructions, and definite patients by (grammatical) subject in “passive” constructions:

- (9) a. *Nag-hugas nang pinggan ang dalaga.*
 AG.PFV-wash ACC.PAT dish NOM girl
 ‘The girl washed a dish/dishes.’
- b. *H-in-ugas-an nang dalaga ang pinggan.*
 PFV-wash-PAT ERG.AG girl NOM dish
 ‘The girl washed the dish.’

Note that the so called “passive” (i.e. type (9b)) constructions are more common in texts than respective “active” (i.e. type (9a)) constructions (see, e.g., Cooreman et al. (1984:17)).

2.3.1 Involitional verbs

Another subsystem of voice affixes is realized on involitional verbs, i.e. verbs denoting uncontrollable processes undergone by an experiencer or involuntary, accidental actions and also actions an agent is able to perform.

The main variant of this subsystem is based on the following three voices opposed to each other: experiencer voice vs. involitional “active” (for indefinite non-human cause) vs. involitional “passives” (for definite non-human cause, addressee/location):

- | | | | |
|------|-------------------|-----------------------|------------------------|
| (10) | Experiencer voice | “Active” involitional | “Passive” involitional |
| | <i>ma-</i> (11a) | <i>ma-ka-</i> (11b) | <i>i-ka-</i> (11c) |
| | | | <i>ka-...-an</i> |
- (11) a. *ma-galit* ‘to be/become angry’
 b. *ma-ka-galit* ‘to cause anger’ (for non-human cause)
 c. *i-ka-galit* ‘to be the cause of anger’ (non-human, definite)
 d. *ka-galit-an* ‘to be the addressee (object) of anger.’

Other verbs of this kind are *ma-gulat* ‘to be astonished’, *ma-takot* ‘to be afraid’, *ma-gising* ‘to be awake’, *ma-galak* ‘to rejoice’, etc.

Another variant of the involitional subsystem is realized on verbs of perception, and also ability verbs (ability counterparts of volitional verbs in *-um-*, *mag-*, etc.; cf. Schachter & Otnes (1972:331)). Below is a fragment of these complicated paradigmatic relations:

- | | | | |
|------|----------------------|------------------------|------------------------|
| (12) | “Active” voilitional | “Active” involitional | “Passive” involitional |
| | <i>-um-</i> (14a) | <i>ma-ka-</i> (13a) | <i>ma-</i> (13b) |
| | <i>mag-</i> (15a) | <i>ma-ka-</i> (14b) | <i>ma-</i> (14c) |
| | | <i>ma-ka-pag</i> (15b) | <i>ma-pag-</i> (15c) |

- (13) a. *ma-ka-kita* 'to see'
 b. *ma-kita* 'to be seen'
- (14) a. *g-um-awa* 'to do'
 b. *ma-ka-gawa* 'to be able to do'
 c. *ma-gawa* 'able to be done'
- (15) a. *mag-bigay* 'to give'
 b. *ma-ka-pag-bigay* 'to be able to give'
 c. *ma-pag-bigay* 'able to be given.'

In publications on Tagalog grammar, besides the terms “volition” vs. “non-volition” (Ferrell 1983) and “volitive” vs. “non-volitive” (Kroeger 1993:80–5, 94–6), the alternative terms are used, namely, “active” vs. “stative” (Drossard 1984).

2.4 Number

There is no obligatory agreement in number between subject and predicate in Tagalog. The marking of plurality on nouns, anjectives and verbs is optional.

The main means of encoding plurality are as follows:

1. The proclitic particle *manga* (*mga* in writing): *bahay* ‘house’ – *manga bahay* ‘houses’.
2. Reduplication: *ka-putol* ‘a piece’ – *mag-ka-putol* ‘two pieces’ – *mag-ka-ka-putol* ‘(more than two) pieces’, *mag-hiwalay* ‘to part’ – *mag-hiwa-hiwalay* ‘to part’ (of many agents).

2.5 Mood, aspect, tense

The Tagalog verb has two aspect forms, perfective and imperfective, and one tense form – future which shares (with few exceptions) affixation with the infinitive. The latter two forms are opposed to the former two as irrealis to realis.

There are four main types of modal-aspectual paradigms:

- | | | |
|------|------------------|----------------------|
| I. | <i>mag-bigay</i> | ‘to give’ |
| II. | <i>s-um-ulat</i> | ‘to write’ |
| III. | <i>sulat-in</i> | ‘to be written’ |
| IV. | <i>i-bigay</i> | ‘to be given to sb.’ |

Example (16) illustrates these types:

(16)	I.	II.	III.	IV.
Perfective	<i>nag-bigay</i>	<i>s-um-ulat</i>	<i>s-in-ulat</i>	<i>i-b-in-igay</i>
Imperfective	<i>nag-bi-bigay</i>	<i>s-um-u-sulat</i>	<i>s-in-u-sulat</i>	<i>i-b-in-i-bigay</i>
Future	<i>mag-bi-bigay</i>	<i>su-sulat</i>	<i>su-sulat-in</i>	<i>i-bi-bigay</i> .
Infinitive	<i>mag-bigay</i>	<i>s-um-ulat</i>	<i>sulat-in</i>	<i>i-bigay</i> .

In these paradigms, the following means are used to mark mood, aspect and tense (RED – reduplication of the first syllable of the root-morpheme):

(17)		I.	II.	III.	IV.
	Perfective	<i>nag-</i>	<i>-um-</i>	<i>-in-</i>	<i>i-...-in-</i>
	Imperfective	<i>nag-</i> + RED	<i>-um-</i> + RED	<i>-in-</i> + RED	<i>i-...-in-</i> + RED
	Future	<i>mag-</i> + RED	+ RED	+ RED + <i>-in</i>	<i>i-</i> + RED
	Infinitive	<i>mag-</i>	<i>-um-</i>		+ <i>-in i-</i>

In paradigms II, III and IV the infixes (*-um-* and *-in-*) are inserted into the reduplicated syllable of the root-morpheme: *su-sulat* + *-um-* = *s-um-u-sulat* ‘is/was writing’. The Tagalog infixes are capable of splitting not only roots and reduplicated root syllables (see (II, III, IV in (16)), but also other prefixes (see (74b), (157b), (173b)).

In paradigm III, the suffix *-in* (marking “passive” voice) is omitted in the perfective and imperfective, so that only the infix *-in-* (marking realis on all “passive” voice verbs) indicates the voice on these forms (for some other verbs with the alternative *-in/-in-* marking of “passive” voice see 3.2 (29), 4.3.1 (82)).

2.6 Verb classes

Roughly speaking, Tagalog has two kinds of transitivity, one for an indefinite patient (“active” voice) and the other for a definite one (mainly “passive” voice; see 2.3).

Transitivity and intransitivity are not always differentiated formally, since in both cases the same, highly polysemous affixes and syntactic markers are used; besides, “passive” voices may promote to subject position not only a patient, but also addressee, location, cause, etc. Keeping all this in mind, we shall speak of the following main syntactic verb classes:

1. One-place intransitives: *um-ubo* ‘to cough’ (← *ubo* ‘cough’), *mag-saya* ‘to rejoice’ (← *saya* ‘joy’).

2. Two-place intransitives: *d-um-aan* ‘to pass by/across’ – *daan-an* ‘to be the place of passing by/across’, *mag-sawa* ‘to get bored’ – *pag-sawa-an* ‘to be sb/sth one gets bored with’.

3. Two-place transitives: *k-um-ain* ‘to eat’ – *kain-in* ‘to be eaten’, *mag-sabi* ‘to say’ – *sabih-in* ‘to be said’.

4. Three-place transitives: *mag-lagay* ‘to put’ – *i-lagay* ‘to be put’ – *lag(a)y-an* ‘to be the place where sth is put’.

The following examples illustrate the use of verbs of these classes (due to space limitations, only “active” voice constructions are given):

- (18) *Um-u-ubo siya.*
AG-IPFV-cough 3SG.NOM
‘He is coughing.’
- (19) *D-um-aan siya sa damuhan.*
-AG.PFV-pass 3SG.NOM LOC lawn
‘He passed across the lawn.’
- (20) *K-um-ain siya nang saging.*
-AG.PFV-eat 3SG.NOM ACC.PAT banana
‘He ate a banana.’

- (21) *Nag-lagay sila nang manga bulaklak sa libing.*
 AG.PFV-put 3PL.NOM ACC.PAT PL flower LOC grave
 ‘They put flowers on the grave.’

2.7 Verbal derivation

All valency affecting processes use non-specialized highly polysemous affixation whose function in each case depends on semantic features of root-morphemes.

2.7.1 Valency increasing means

These are:

1. Transitivity-causative, e.g.:

- (22) *um-alis* ‘to leave’ → *mag-alis* ‘to remove.’

2. Causative proper (indirect-action verbs, in terms of Schachter & Otanes (1972: 321)):

- (23) *mag-dala* ‘to carry’ → *mag-pa-dala* ‘to make sb carry.’

3. Comitative, e.g.:

- (24) *um-inom* ‘to drink’ → *maki-inom* ‘to drink together with sb.’

(For details see Section 12).

Such valency increasing means as benefactive, applicative/locative, instrumental are voice markers in voice paradigms of various verb groups; cf.:

- | | | | |
|---------|-----------------------|------------------------------|------------------------|
| (25) a. | <i>p-um-utol</i> | ‘to cut’ “active” | voice |
| b. | <i>putul-an</i> | ‘to be the place of cutting’ | locative “passive” |
| c. | <i>i-putol</i> | ‘to cut for sb’ | benefactive “passive” |
| d. | <i>i-(pang-)putol</i> | ‘to cut with sth’ | instrumental “passive” |

2.7.2 Valency decreasing means

Here belong the following markers:

1. Reciprocal (see (1)).

2. Reflexive, e.g.:

- (26) a. *um-ahit* ‘to shave sb’ → *mag-ahit* ‘to shave oneself’
 b. *p-um-atay* ‘to kill’ → *pag-pa-ka-matay* ‘to kill oneself’
 c. *p-um-uri* ‘to praise sb’ → *mag-ma-puri* ‘to praise oneself’
 d. *mag-pa-ganda* ‘to beautify sb’ → *mag-pa-ganda* ‘to beautify oneself.’

3. Anticausative, e.g.:

- (27) a. *ma-basag* ‘to be broken by sb’ – *ma-basag* ‘to get broken (by itself)’
 b. *sunug-in* ‘to burn sth’ – *mag-ka-sunog* ‘to get on fire (by itself)’
 c. *mag-pa-tawa* ‘to make sb laugh’ – *ma-pa-tawa* ‘to burst out laughing.’

The so-called “direct passive” (patient voice/focus) does not, as a rule, decrease valency, since the underlying subject is preserved.

2.7.3 Valency retaining means

Here belong:

1. Sociative (formed by the same means as reciprocals; see Section 11).
2. Intensive, e.g. *s-um-ikap* ‘to strive’ – *mag-sikap* ‘to strive hard’ – *mag-s-um-ikap* ‘to strive very hard’ – *mag-pa-ka-sikap* ‘to strive with extreme efforts’.
3. Intensive-iterative: *s-um-ulat* ‘to write’ – *mag-sulat* ‘to write much and often’.

2.8 Affixation. Phoneme alternation. Reduplication

There are fourteen grammatically most important prefixes: *mag-*, *nag-*, *pag-*, *mang-*, *nang-*, *pang-*, *maki-*, *naki-*, *paki-*, *ma-*, *na-*, *pa-*, *ka-*, and *i-*.

There are two suffixes: *-in*, *-an*; two infixes/prefixes: *-um-*, *-in-/ni-*. An infix is placed after the first consonant of the word.

As the list of prefixes shows, there is grammatical alternation of the initial consonants *m-/n-/p-*. Except for the grammatical functions of *m-* and *n-* (see 2.5), members of pairs like *mag-/nag-* are functionally and semantically identical prefixes. In grammars they are usually listed as *mag-*, *mang-*, *maki-*, etc.

The prefixes with *p-* (*pag-*, *pang-*, etc.) are nominal and base-forming correlates of the verbal *m-/n-* prefixes; cf.: *mag-bigay* ‘to give’ – *nag-bigay* ‘gave/has given’ – *pag-bi-bigay* ‘a giving’ – *maki-pag-bigay* ‘to give together with sb’.

Rules of affix combinability allow to form more than 100 combinations of affixes (including less important morphemes), of which more than 30 are combinations of two prefixes (like *ma-ka-*, *mag-ka-*, *i-ka-*, *pag-ka-*, *mag-ka-*, *pag-pa-*, etc.), a considerable number are combinations of three and four affixes, etc.

A number of affix combinations act, each, as a single morpheme, like the circumfix *ka-...-an*, the complexes *ma-ka-*, *i-ka-*, etc.

In the following example, the third word contains the affixal complex *i-ka-* which indicates an (involitional) cause: *ka-sundo* ‘a partner in reaching an agreement’ – *mag-ka-sundo* ‘to reach an agreement’ – *i-ka-pag-ka-sundo* ‘to be the cause of reaching an agreement’.

There are phonetically determined alternations *d/r* (with *r* occurring in intervocalic position only) and *u/o* (with *o* occurring in word-final syllables), e.g. *mag-digma* ‘to wage a war against each other’ – *mag-di-rigma* ‘will wage a war against each other’; *tulong* ‘help’ – *t-um-ulong* ‘to help’ – *tulong-an* ‘to be helped’.

Two kinds of reduplication interact with affixation:

- reduplication of the first syllable of the base, e.g. *nag-bi-bigay* ‘is/was giving’ – *mag-bi-bigay* ‘will give’;
- reduplication of two syllables of the base, e.g. *mag-ka-sundu-sundo* ‘to reach an agreement (of many agents)’, *mag-lutu-lutu-an* ‘to pretend to be cooking’, ‘to play cooking’.

The complexity of Tagalog morphology is described in grammars (see, for instance, Bloomfield 1917; Schachter & Otanes 1972) and also in a number of specialized monographs (Makarenko 1970; Guzman 1978; Rachkov 1981).

2.9 Alternation of stress patterns

Phonological accent helps to resolve high polysemy of affixation and reduplication. Two kinds of changes in stress patterns perform this function:

1. Shift of the main stress (inherent to a root-morpheme, obligatory for a full word; marked `).

2. Presence vs. absence of secondary stress (marked ^).

Examples: *útos* ‘order’ – *utús-an* ‘to be given an order’ – *utus-án* ‘a servant’ – *ùtús-an* ‘giving orders to each other’; *mag-kà-ka-galít* ‘will be quarrelling with each other’ – *mag-ka-ka-galít* ‘more than two people quarrelling with each other’.

Henceforth, stress is marked only in examples meant to show its grammatical function (see (116), (117)).

3. Reciprocals with the prefix *mag-* only (= lexical reciprocals). Subject-oriented reciprocals only

3.1 Introductory

There are about 30 reciprocals with the prefix *mag-*. It should be remembered that throughout this text the prefix *mag-* is mostly used to refer to two alternate prefixes of the same verb, viz. *mag-* and *nag-* differing only in the meanings of irrealis and realis respectively (see 2.5).

Reciprocals in *mag-* are derived mainly from verbal bases (root-morphemes) which denote actions with the following features:

1. The action of the agent implies an identical action from the patient, see (30).
2. The patient is provoked to respond/responds to the agent with an identical action (with the resulting dual agent), see (28).
3. The patient is typically definite for the agent.
4. The patient is typically human (excepting verbs of connecting/disconnecting).

- (28) a. *B-um-ati ang dalaga sa bisita.*
AG.PFV-greet NOM girl PAT visitor
‘The girl greeted the visitor.’
- b. *B-in-ati ang dalaga nang bisita.*
PAT.PFV-greet NOM girl AG visitor
‘The girl was greeted by the visitor.’
- c. *Nag-bati ang dalaga at ang bisita.*
AG.REC.PFV-greet NOM girl and NOM visitor
‘The girl and the visitor greeted each other.’

Lexical meaning makes the suffix *-an* redundant on *mag-* reciprocal bases (contrary to morphological reciprocals marked by *mag-...-an*). Features 1 and 2 listed above show that the underlying verbs are [near-]lexical reciprocals, therefore the term “non-reciprocals” is a conventional label for them. In some cases, their derivation involves only substitution of a simple reciprocal construction for a discontinuous one (see 3.3.3).

Affix correspondences between lexically related verbs – reciprocal and non-reciprocal – include affix correspondences between the “active” and “passive” voice non-reciprocals.

Formally, the “active” voice marking on a non-reciprocal (mostly with *-um-*) corresponds to the grammatical role of *mag-*, the “active” voice marker on a reciprocal.

Semantically, however, “passive” voice constructions (specializing in encoding definite patients as grammatical subjects) render the “agent – patient” relation in reciprocal situations more adequately than “active” constructions (normally, chosen when the patient is indefinite).

3.2 “Canonical” diathesis only

In (28) above and (30)–(55) below, various types of the “active” and “passive” voice marking on underlying non-reciprocals are represented, the main types being the following (*-in/-in-* means that the suffix *-in* and infix *-in-* alternate in marking the “passive” voice; see in this connection 2.5):

- | (29) | Non-reciprocals | | Reciprocals | |
|---------|-----------------|------------------|-------------|---------------------|
| | “Active” voice | “Passive” voices | | |
| Type A: | <i>-um-</i> | <i>-in/-in-</i> | <i>mag-</i> | cf. (28), (31)–(38) |
| Type B: | <i>-um-</i> | <i>-an</i> | <i>mag-</i> | cf. (30), (39)–(52) |
| Type C: | – | <i>-in/-in-</i> | <i>mag-</i> | cf. (53)–(55) |
- (30) a. *L-um-a-laban ang Tailand sa Vietnam sa Kambodya.*
 -AG-IPFV-fight NOM T. PAT V. LOC C.
 ‘Thailand was fighting against Vietnam in Cambodia.’
- b. *Ni-la-laban-an ang Tailand nang Vietnam sa Kambodya.*
 IPFV-fight-PAT NOM T. AG V. LOC C.
 ‘Thailand was fought against by Vietnam in Cambodia.’
- c. *Nag-la-laban ang Tailand at Vietnam sa Kambodya.*
 AG.REC-IPFV-fight NOM T. and V. LOC C.
 ‘Thailand and Vietnam were fighting against each other in Cambodia.’

The following are reciprocals with the marker *mag-* listed according to the morphological type of underlying verbs given in (29).

Type A

- (31) a. *s-um-alubong* ‘to meet (on the way), to greet’
 b. *salubung-in* ‘to be met (on the way), to be greeted’
 → c. *mag-salubong* ‘to meet, greet each other.’

- (32) a. *t-um-agpo* 'to encounter'
 b. *tagpu-in* 'to be encountered'
 → c. *mag-tagpo* 'to encounter each other.'
- (33) a. *um-usap* 'to talk to sb'
 b. *usap-in* 'to be talked to'
 → c. *mag-usap* 'to talk to each other.'
- (34) a. *y-um-akap* 'to embrace'
 b. *yakap-in* 'to be embraced'
 → c. *mag-yakap* 'to embrace each other.'
- (35) a. *b-um-abag* 'to fight with sb'
 b. *babag-in* 'to be fought with'
 → c. *mag-babag* 'to fight with each other.'
- (36) a. *s-um-igalot* 'to disagree with sb'
 b. *sigalut-in* 'to be in disagreement with'
 → c. *mag-sigalot* 'to disagree with each other.'
- (37) a. *s-um-unod* 'to follow sb'
 b. *sun(u)d-in* 'to be followed'
 → c. *mag-sunod* 'to follow each other.'
- (38) a. *k-um-ita* 'to see', 'to find', 'to earn'
 b. *kita-in* 'to be seen', 'to be found', 'to be earned'
 → c. *mag-kita* 'to see each other', 'to meet with each other.'

Type B

- (39) a. *k-um-amay* 'to shake sb's hand'
 b. *kamay-an* 'to have (one's) hand shaken'
 → c. *mag-kamay* 'to shake hands with each other.'
- (40) a. *t-um-ulong* 'to help'
 b. *tulong-an* 'to be helped'
 → c. *mag-tulong* 'to help each other.'
- (41) a. *p-um-isan* 'to stay under one roof with sb'
 b. *pisan-an* 'to be joined under one roof'
 → c. *mag-pisan* 'to stay together under one roof.'
- (42) a. *s-um-abay* 'to act simultaneously with sb'
 b. *sabay-an* 'to be the one with whom sb acts simultaneously'
 → c. *mag-sabay* 'to act simultaneously with each other.'
- (43) a. *s-um-ama* 'to join sb'
 b. *samah-an* 'to be joined (by sb)'
 → c. *mag-sama* 'to get together', 'to join each other.'
- (44) a. *b-um-angga* 'to hit against sth'
 b. *bangga-an* 'to be hit against'
 → c. *mag-bangga* 'to hit against each other', 'to collide with each other.'

- (45) a. *d-um-ikit* 'to stick to sth'
 b. *dikit-an* 'to be stuck/pasted to sth'
 → c. *mag-dikit* 'to stick/get pasted to one another.'
- (46) a. *d-um-ugtong* 'to increase/complete (by adding)'
 b. *dugtong-an* 'to be increased, completed (with sth added)'
 → c. *mag-dugtong* 'to increase/complete each other.'
- (47) a. *b-um-ukod* 'to separate from sth/sb'
 b. *bukur-an* 'to be separated from'
 → c. *mag-bukod* 'to separate from each other.'
- (48) a. *h-um-iwalay* 'to separate from sth/sb'
 b. *hiwalay-an* 'to be separated from'
 → c. *mag-hiwalay* 'to separate from each other.'
- (49) a. *l-um-apit* 'to come close/approach'
 b. *lapit-an* 'to be approached'
 → c. *mag-lapit* 'to approach each other.'
- (50) a. *l-um-ayo* 'to stay/keep away from sth/sb'
 b. *layu-an* 'to be kept away from'
 → c. *mag-layo* 'to stay/keep away from each other.'
- (51) a. *s-um-iping* 'to sit, lie beside sth/sb'
 b. *siping-an* 'to be that beside which sth/sb lies, sits'
 → c. *mag-siping* 'to sit down/lie beside each other.'
- (52) a. *t-um-ama* 'to hit (the mark, target)'
 b. *tama-an* 'to be hit (as a mark, target)'
 → c. *mag-tama* 'to hit each other.'

Type C

In this type, non-reciprocals seem to be represented only by “passive” voice forms:

- (53) a. *alit-in* 'to quarrel' (lit. 'to be quarrelled with')
 → b. *mag-alit* 'to quarrel with each other'
- (54) a. *away-in* 'to quarrel' (lit. 'to be quarreled with')
 → b. *mag-away* 'to quarrel with each other'
- (55) a. *digma-in* 'to wage a war against sb' (lit. 'to be waged a war against')
 → b. *mag-digma* 'to wage a war against each other.'

3.2.1 Lexical reciprocals in *mag-* and morphological reciprocals in *mag-...-an* derived from the same root-morphemes

As a rule, a lexical reciprocal in *mag-* has a suffixed correlate. The two variants are not identical in meaning: verbs in *mag-...-an* denote reciprocal situations with *more than two agents* involved and/or a more intensive action than parallel *mag-* reciprocals. Compare:

- (56) a. *b-um-ati* 'to greet sb'
 b. *bati-in* 'to be greeted by sb' (*b-in-ati* 'was greeted by sb')
 → c. *mag-bati / mag-bati-an* 'to greet each other' (see also (28)).

- (57) *mag-digma / mag-digma-an* 'to wage a war against each other'
 (58) *mag-kamay / mag-kamay-an* 'to shake hands with each other' (cf. also (39))
 (59) *mag-tagpo / mag-tagpu-an* 'to encounter each other' (cf. (32))
 (60) *mag-bangga / mag-bangga-an* 'to collide with each other' (cf. (44)).

J.V. Panganiban (1969–1972:576) describes the difference between *mag-laban* and *mag-laban-an* 'to fight with each other' in the following way: "*Maglabanan*, as *maglaban*, but involving more participants and more active opposition or fighting". The same difference is observed between *mag-hiwalay* and *mag-hiwalay-an* 'to separate from each other' of which the latter is used "if more than two persons are involved". Compare also *mag-usap* 'to talk (a mutual action)' and *mag-usap-an* 'to hold a conversation' (Wolff 1991:1252), *mag-away* 'to fight with each other' and *mag-away-an* 'to fight with each other in numbers' (Wolff 1991:685).

3.3 Polysemy of the prefix *mag-*

The prefix *mag-* is selected – out of all "active" voice affixes – to form lexical reciprocals due to its individual semantic features (corresponding to the above mentioned properties (see 3.1) of the relevant verbal bases). This fact, i.e. the selection of the marker with regard to its semantics, makes *mag-* reciprocals as morphological (and lexical at the same time) as all other groups of Tagalog verbs. We make this reservation while labelling these *mag-* reciprocals as lexical.

The number of verbs covered by each of the meanings of the polysemous prefix *mag-*, i.e. the nature of productivity of its meanings, is subject to further investigation.

3.3.1 Polysemy of *mag-* in the verbal domain

This prefix usually implies:

1. Involvement of human participants in a situation: of the agent, also of the counter-agent (in reciprocal situations), of the agent=patient (in reflexive situations), or of collaborating agents (in sociative situations).

2. A relation between two (in the first place) or more actants.

These prevailing semantic features of *mag-* ('human' and 'dual/plural') are represented in the following main meanings it encodes in the verbal domain; in groups (a), (b), (c), (d), (e) and (f) semantically underlying verbs are entered (in group (g) *mag-* verbs have none); groups (h), (i) and (k) contain *mag-* verbs derived from nominal bases:

(a) Reciprocal, see (28), (30)–(55).

(b) Anticausative:

- (61) a. *mag-tipon/tipun-in* 'to gather/collect' → *mag-tipon* 'to get together'
 b. *s-um-ugat* 'to wound' → *mag-sugat* 'to develop into a wound'
 c. *pag-umpuk-in* 'to group sb/sth' → *mag-umpok* 'to group (together)'
 d. *pag-samah-in* 'to join sth/sb' → *mag-sama* 'to become joined.'

(c) Reflexive:

- (62) a. *um-ahit* 'to shave sb' → *mag-ahit* 'to shave oneself'
 b. *p-um-igil* 'to restrain sb' → *mag-pigil* 'to restrain oneself'
 c. *b-um-igti* 'to kill sb by hanging' → *mag-bigti* 'to kill oneself by hanging.'

(d) Transitivity-causative:

- (63) a. *um-alis* 'to go away' → *mag-alis* 'to remove'
 b. *um-akyat* 'to go up' → *mag-akyat* 'to take sth upstairs'
 c. *l-um-apit* 'to come close' → *mag-lapit* 'to bring sth close to sth'
 d. *s-um-anay* 'to train oneself' → *mag-sanay* 'to train sb.'

(e) Converse:

- (64) a. *b-um-ili* 'to buy' → *mag-bili* 'to sell'
 b. *um-abot* 'to reach for sth' → *mag-abot* 'to hand over sth to sb.'

(f) Intensive/iterative:

- (65) a. *s-um-ulat* 'to write' → *mag-sulat* 'to write much and often'
 b. *k-um-ain* 'to eat' → *mag-kain* 'to eat much and often'
 c. *b-um-asa* 'to read' → *mag-basa* 'to read much and often.'

(g) Mental and speech activities, psychological processes:

- (66) a. *mag-salita* 'to speak'
 b. *mag-aral* 'to study'
 c. *mag-turo* 'to teach'
 d. *mag-damdam* 'to feel.'

(h) Professional occupations (derived from professional names):

- (67) a. *presidente* 'president' → *mag-presidente* 'to be a president'
 b. *hukom* 'judge' → *mag-hukom* 'to be a judge'
 c. *pulube* 'beggar' → *mag-pulube* 'to be a beggar.'

(i) Occupational/habitual (derived from names of things and qualities):

- (68) a. *bukid* 'field' → *mag-bukid* 'to cultivate land', 'to be a farmer'
 b. *bigas* 'rice' → *mag-bigas* 'to deal in rice'
 c. *pula* 'red' → *mag-pula* 'to wear red.'

(j) Possessive:

- (69) a. *asawa* 'a spouse' → *mag-asawa* 'to get married' (= 'to get a wife/husband')
 b. *bahay* 'house' → *mag-bahay* 'to build up one's own house'.

3.3.2 Polysemy of *mag-* in the nominal domain. Duality

This covers two cases.

(a) This prefix derives nouns denoting two persons in a reciprocal relation:

- (70) a. *asawa* 'a spouse' → *mag-asawa* 'a married couple'
 b. *kapit-bahay* 'neighbour' → *mag-kapit-bahay* 'two neighbours'

- c. *nobyo* ‘sweetheart’ → *mag-nobyo* ‘two sweethearts’
 d. *pinsan* ‘cousin’ → *mag-pinsan* ‘two cousins’
 e. *ka-patid* ‘brother/sister’ → *mag-ka-patid* ‘two brothers/sisters, brother and sister.’

(b) It derives nouns denoting two persons in a converse relation; these forms derive from the names of socially more important or superior members:

- (71) a. *ama* ‘father’ → *mag-ama* ‘father and child’
 b. *ina* ‘mother’ → *mag-ina* ‘mother and child’
 c. *ale* ‘aunt’ → *mag-ale* ‘aunt and nephew/niece’
 d. *ginoo* ‘master’ → *mag-ginoo* ‘master and servant.’

3.3.3 One-place reciprocals in *mag-* and three-place transitives in *mag-* (object-oriented lexical reciprocals) derived from the same root-morphemes

Transitive or intransitive use of these verbs depends on the syntactic construction they occur in; cf.:

- (72) a. *mag-hiwalay* ‘separate from each other’ – *mag-hiwalay* ‘to separate sth from sth’
 b. *mag-lapit* ‘come close to each other’ – *mag-lapit* ‘to bring sth close to sth’
 c. *mag-tabi* ‘be side by side with each other’ – *mag-tabi* ‘to put sth aside.’
- (73) a. *Nag-hiwalay sila.*
 AG.PFV-separate 3PL.NOM
 ‘They separated from each other.’
 b. *Mag-hiwalay ka nang karne sa gulay.*
 AG-separate 2SG.NOM PAT meat OBL vegetable
 ‘Separate meat from vegetables.’

Compare also Section 6.

3.4 “Passives” in *pag-...-an* from *mag-* reciprocals. Voice transformations of lexical reciprocals

Lexical reciprocals with an oblique object may undergo “passivization” which promotes the oblique object to subject position (in (74b) the infix *-in-* is incorporated in *pag-*):

- (74) a. *Nag-away kami dahil sa bagay na iyon.*
 AG.REC.PFV-fight 1PL.NOM because OBL thing LNK that
 ‘We fought with each other for that thing.’
 b. *P-in-ag-away-an namin ang bagay na iyon.*
 PFV-fight-OBL 1PL.AG NOM thing LNK that
 lit. ‘That thing was fought for by us’; cf. also:
- (75) a. *mag-alit* ‘to quarrel with each other’ – *pag-alit-an* ‘to be the object of a quarrel’
 b. *mag-babag* ‘to be in conflict with each other’ – *pag-babag-an* ‘to be the object of a mutual conflict’.

3.5 Reciprocal *nomina actionis*

A number of lexical reciprocals are derived from bases identical to underived (root-word) *nomina actionis*, e.g.:

- (76) *usap* ‘a talk’ → *mag-usap* ‘to talk with each other.’

Besides, names of actions are formed from all *mag-* reciprocals by the prefix *pag-* (a regular correlate of *mag-*) and a reduplication of the first syllable of the root-morpheme, e.g.:

- (77) a. *mag-usap* ‘to talk with each other’ → *pag-u-usap* ‘a talk with each other’
 b. *mag-digma* ‘to wage a war against each other’ → *pag-di-rigma* ‘waging a war against each other.’

There are also pairs of underived (root-word) and derived *nomina actionis*. The difference between the members of such a pair has been explained as follows: “The root-word is used of a single instance rather than of the action in general, which is expressed rather by abstracts of action” (with *pag-* – L.Sh., E.R.) (Bloomfield 1917: 219); cf.:

- (78) a. *usap* / *pag-u-usap* ‘a talk with each other’
 b. *away* / *pag-a-away* ‘quarrelling with each other.’

4. Reciprocal verbs with *mag-...-an*

4.1 Introductory

These reciprocals have a double marking of reciprocity: the suffix *-an* on the verbal base and the prefix *mag-* forming a verb from this base. It should be kept in mind that *mag-* alternates with the prefix *nag-* on the same verbs, the two prefixes differing only in modality (see 2.5; cf. 3.1).

The bases with the suffix *-an* are identical to reciprocal *nomina actionis*. Therefore, derivationally, reciprocals marked with *mag-...-an* are relatable to these nouns; e.g.:

- (79) a. *ibig-an* ‘mutual love’ → *mag-ibig-an* ‘to love each other’
 b. *sulat-an* ‘writing to each other’ → *mag-sulat-an* ‘to write to each other’
 c. *baril-an* ‘shooting (at) each other’ → *mag-baril-an* ‘to shoot (at) each other’
 d. *tulong-an* ‘mutual help’ → *mag-tulong-an* ‘to help each other.’

We may view derivation of the previous type (see Section 3) as similar to this one, since most of the verbs in *mag-* are also formed from underlying bases with a [near] reciprocal meaning. Compare:

- (80) a. *alit* ‘quarrel’ → b. *mag-alit* ‘to quarrel with each other’ (see (53)).
 (81) a. *alit-an* ‘mutual quarrel’ → b. *mag-alit-an* ‘quarrel with each other’ (cf. 3.2.1).

As this chapter concerns reciprocal and related non-reciprocal verbal constructions in the first place, further on the relationship of reciprocals in *mag-...-an* with the (actual or potential) underlying [near-]reciprocal nouns is not taken into consideration.

Paradigmatic relations of reciprocal verbs with related non-reciprocal verbs are based on affix correspondences between them (including affix correspondences between “active” and “passive” voice non-reciprocals).

The main types of correspondences between reciprocals and related non-reciprocals are the following (*-in/-in-* means here the alternative suffix/infix marking of the “passive” voice; see 2.5; 3.2):

(82)	Non-reciprocals			Reciprocals
	“Active” voice	“Passive” voices		
Type A:	<i>-um-</i>	<i>-an</i>	<i>mag-...-an</i>	see (83), (94a, b, c, d)
Type B:	<i>-um-</i>	<i>-in/-in-</i>	<i>mag-...-an</i>	see (84), (94e)
Type C:	<i>-um-</i>	<i>i-</i>	<i>mag-...-an</i>	see (94g)
Type D:	<i>mag-</i>	<i>-in/-in-</i>	<i>mag-...-an</i>	see (94f).

For instance:

- (83) a. *T-um-ulong ang binata sa dalaga.*
 -AG.PFV-help NOM boy PAT girl
 ‘The boy helped the girl.’
- b. *T-in-ulung-an ang binata nang dalaga.*
 -PFV-help-PAT NOM boy AG girl
 ‘The boy was helped by the girl.’
- c. *Nag-tulong-an ang binata at dalaga.*
 AG.REC.PFV-help-REC NOM boy and girl
 ‘The boy and the girl helped each other.’
- (84) a. *B-um-a-baril ang manga kriminal sa manga pulis.*
 -AG-IPFV-shoot NOM PL criminal PAT PL police
 ‘Criminals were shooting at policemen.’
- b. *B-in-a-baril ang manga kriminal nang manga pulis.*
 -PAT-IPFV-shoot NOM PL criminal AG PL police
 ‘Criminals were being shot (at) by policemen.’
- c. *Nag-ba-baril-an ang manga kriminal at manga pulis.*
 AG.REC-IPFV-shoot-REC NOM PL criminal and PL police
 ‘Criminals and policemen were shooting (at) each other.’

4.2 Polysemy of the suffix *-an*

Semantic relations between the various meanings of the suffix *-an* on verbs, on the one hand, and its meanings on nouns, on the other, are not always quite clear.

4.2.1 In the verbal domain

This suffix is mainly used to indicate:

1. Situational participants partly (superficially) affected by the action.
2. Plurality (more than one) of situational participants.

In the verbal domain, the suffix *-an* functions as a “passive” voice marker if the affected (partly or superficially) actant is

- (a) the patient, e.g.:

- (85) a. *h-um-alik* ‘to kiss’ – *halik-an* ‘to be kissed’
 b. *t-um-ingin* ‘to look at’ – *ting(i)n-an* ‘to be looked at’
 c. *s-um-ugat* ‘to wound’ – *sugat-an* ‘to be wounded’

(b) an addressee:

- (86) a. *s-um-ulat* ‘to write’ – *sulat-an* ‘to be written to’
 b. *mag-bigay* ‘to give’ – *big(a)y-an* ‘to be given to’

(c) location/direction:

- (87) a. *t-um-ira* ‘to stay, live’ – *tir(a)h-an* ‘to be the place of staying/living’
 b. *h-um-iram* ‘to borrow from sb’ – *hiram-an* ‘to be borrowed from’

(d) a beneficiary:

- (88) a. *b-um-asa* ‘to read’ – *basah-an* ‘to read for sb’
 b. *s-um-ayaw* ‘to dance’ – *sayaw-an* ‘to dance for/before sb.’

4.2.2 In the nominal domain

Nouns with the suffix *-an* may be or denote:

(a) reciprocal *nomina actionis* (for details see 4.5), e.g.:

- (89) a. *patay-an* ‘killing each other’
 b. *bigay-an* ‘giving each other’

(b) sociative *nomina actionis*, e.g.

- (90) a. *sayaw-an* ‘collective dancing’
 b. *inum-an* ‘collective drinking’
 c. *sigaw-an* ‘collective shouting’

(c) place of a habitual action (performed by a plural agent or over plural patients):

- (91) a. *laru-an* ‘place for games’
 b. *gupit-an* ‘barber shop’
 c. *kain-an* ‘place for eating’

(d) location of many homogeneous objects:

- (92) a. *saging-an* ‘banana grove’
 b. *babuy-an* ‘piggery’
 c. *manuk-an* ‘chicken raising business’

(e) (in combination with disyllabic reduplication) simulative:

- (93) a. *bahay* ‘house’ → *bahay-bahay-an* ‘toy house’
 b. *tao* ‘man’ → *tau-tauh-an* ‘puppet’
 c. *duktur* ‘doctor’ → *duktur-duktur-an* ‘sb pretending to be a doctor.’

Compare also 5.2.3.3.

4.3 Diathesis types of reciprocal constructions

4.3.1 The “canonical” diathesis type

Reciprocals with the marker *mag-...-an* characterized by “canonical” diathesis derive from two-place non-reciprocals. In (83) and (84) above (see 4.1), the main types of affix correspondences between reciprocals and underlying non-reciprocals (including “active” – “passive” voice correspondences) are illustrated. See example (1) and the following:

- (94) a. *h-um-alik* ‘to kiss’/ *halik-an* ‘to be kissed’ → *mag-halik-an* ‘to kiss each other’
 b. *s-um-ugat* ‘to wound’/ *sugat-an* ‘to be wounded’ → *mag-sugat-an* ‘to wound each other’
 c. *um-utos* ‘to give order(s)’/ *utus-an* ‘to be given orders’ → *mag-utus-an* ‘to give orders to each other’
 d. *p-um-atay* ‘to kill’/ *patay-an* ‘to be killed’ → *mag-patay-an* ‘to kill each other’
 e. *um-ibig* ‘to love’/ *ibig-in* ‘to be loved’ → *mag-ibig-an* ‘to love each other’
 f. *mag-biro* ‘to joke at sb’/ *biru-in* ‘to be joked at’ → *mag-biru-an* ‘to joke at each other’
 g. *t-um-ulak* ‘to push’/ *i-tulak* ‘to be pushed’ → *mag-tulak-an* ‘to push each other.’

4.3.2 The “indirect” diathesis type. Reciprocals with *mag-...-an* derived from three-place non-reciprocals

The nominal environment of the underlying non-reciprocals includes an agent, patient and addressee. The addressee is encoded by a *sa* complement, the patient being marked by the case particle *nang*:

- (95) a. *Nag-bigay nang saging ang binata sa dalaga.*
 AG.PFV-give PAT banana NOM boy ADR girl
 ‘The boy gave a banana to the girl.’
 b. *B-in-ig(a)y-an nang saging ang binata nang dalaga.*
 -PFV-give-ADR PAT banana NOM boy AG girl
 ‘The boy was given a banana by the girl.’
 c. *Nag-bigay-an nang saging ang binata at dalaga.*
 AG.REC.PFV-give-REC PAT banana NOM boy and girl
 ‘The boy and the girl gave bananas to each other.’
- (96) a. *Nag-balita nang nangyari ang binata sa dalaga.*
 AG.PFV-inform PAT event NOM boy ADR girl
 ‘The boy informed the girl of the event.’
 b. *B-in-alita-an nang nangyari ang binata nang dalaga.*
 -PFV-inform-ADR PAT event NOM boy AG girl
 ‘The boy was informed of the event by the girl.’
 c. *Nag-balita-an nang nangyari ang binata at dalaga.*
 AG.REC.PFV-inform-REC PAT event NOM boy and girl
 ‘The boy and the girl informed each other of the event.’

Here also belong:

- (97) a. *mag-handog nang libro* 'to present a book'
 b. *handug-an nang libro* 'to be presented (with) a book'
 c. *mag-handug-an nang libro* 'to present books to each other'
- (98) a. *h-um-iram nang pera* 'to borrow money'
 b. *hiram-an nang pera* 'to be borrowed money from'
 c. *mag-hiram-an nang pera* 'to borrow money from each other.'

4.3.3 The “quasi-possessive” diathesis type

The existence of the “possessive” type of reciprocal diathesis in Tagalog arouses doubts. Restrictions imposed on it deserve special study, being, it seems, mainly connected with the peculiarities of encoding alienable and inalienable possession. Meanwhile, we shall only present some instances of what might be labelled the “quasi-possessive” diathesis type.

If an object of inalienable possession (a body part) is directly affected by the action, it is nevertheless the possessor that is encoded as a patient, while the body part is encoded by a non-referential adjunct (modifying the predicate). Although the adjunct retains the meaning of patient, it is functionally closer to an adverbial modifier; this is why its marker *nang* is glossed here as LNK (linker; see (99a, d), (100a, d)).

In some non-reciprocal constructions, a body part may be encoded as an oblique object marked with *sa*, as in (99b), or as head of a possessive phrase filling in subject position in a “passive” voice clause, as in (99c) and (100c); cf. Guzman (1978:36–7).

In reciprocal constructions, a body part may be encoded only by a verb adjunct, viz. by a constituent which may not be transformed into subject of a clause (the verb adjuncts in reciprocal clauses below (see *nang paa* ‘in the foot’ in (99d) and *nang kamay* ‘by the hand’ in (100d)) may be omitted, the clauses retaining grammaticality):

- (99) a. *S-um-ugat ako sa kanya nang paa.*
 -AG.PFV-WOUND 1SG.NOM PAT 3SG LNK foot
 ‘I injured his foot’, lit. ‘I wounded him in the foot.’
- b. *S-in-ugat-an niya ako sa paa.*
 -PFV-WOUND-PAT 3SG.AG 1SG.NOM OBL foot
 ‘My foot was injured by him’, lit. ‘I was wounded by him in the foot.’
- c. *S-in-ugat-an niya ang aki(n)-ng paa.*
 -PFV-WOUND-OBL 3SG.AG NOM 1SG.GEN-LNK foot
 ‘My foot was injured by him.’
- d. *Nag-sugat-an kami nang paa.*
 AG.REC.PFV-WOUND-REC 1PL.NOM LNK foot
 ‘We injured each other’s feet’, lit. ‘We wounded each other in the foot.’
- (100) a. *H-um-awak ang dalaga sa binata nang kamay.*
 -AG.PFV-HOLD NOM girl PAT boy LNK hand
 ‘The girl took hold of the boy’s hand.’
 lit. ‘The girl took hold of the boy by the hand.’
- b. *H-in-awak-an nang binata ang dalaga nang kamay.*
 -PFV-HOLD-PAT AG boy NOM girl LNK hand
 ‘The boy took hold of the girl’s hand.’
 lit. ‘The girl was taken hold of by the boy by the hand.’

- c. *H-in-awak-an nang binata ang kamay nang dalaga.*
 -PFV-hold-OBL AG boy NOM hand GEN girl
 ‘The boy took hold of the girl’s hand.’
 lit. ‘The girl’s hand was taken hold of by the boy.’
- d. *Nag-hawak-an nang kamay ang dalaga at binata.*
 AG.REC.PFV-hold-REC LNK hand NOM girl and boy
 ‘The girl and the boy took hold of each other’s hand.’
 lit. ‘The girl and the boy took hold of each other by the hand.’

(For more information on verb adjuncts in Tagalog see Schachter & Otones (1972:384ff.). The functional proximity of the marker *nang* to the attributive linker *na/-ng* is shown in Gonzalez (1971), Naylor (1980)).

4.3.4 The “quasi-dative” diathesis type

A number of reciprocal constructions are derived from non-reciprocals with two nominal constituents denoting agent and addressee, and also with an adjunct marked by the attributive marker (linker) *-ng* allowing, in some cases, an alternative marking similar to that of a patient, i.e. marking with *nang*. As this marker alternates here with the attributive linker *-ng* it is glossed as LNK (see 4.3.3):

- (101) a. *T-um-awag ako sa kanya-ng // nang pinsan.*
 -AG.PFV-call 1SG.NOM ADR 3SG-LNK LNK cousin
 ‘I called him cousin.’
- b. *T-in-awag-an niya ako-ng // nang pinsan.*
 -PFV-call-ADR 3SG.AG 1SG.NOM-LNK LNK cousin
 ‘I was called cousin by him.’
- c. *Nag-tawag-an kami-ng // nang pinsan.*
 AG.REC.PFV-call-REC 1PL.NOM-LNK LNK cousin
 ‘We called each other cousins.’
- (102) a. *S-um-umpa siya sa kanya-ng pakakasal.*
 -AG.PFV-swear 3SG.NOM ADR 3SG-LNK be.married
 ‘He swore to her that he would marry her.’
- b. *Nag-sumpa-an sila-ng pakakasal.*
 AG.REC.PFV-SWEAR-REC 3PL.NOM-LNK be.married
 ‘They swore to each other to marry each other.’

4.4 Polysemy of the complex *mag-...-an* (in the verbal domain only)

The polysemy of *mag-...-an* verbs is determined by their bases in *-an*. It includes the following meanings:

- (a) Reciprocal (see (1)).
- (b) Sociative, e.g.:
- (103) a. *awit-an* ‘collective singing’
 → b. *mag-awit-an* ‘to sing collectively’ (for details see below).
- (c) Competitive (= sociative – reciprocal):

- (104) a. (*takbo* ‘a run’ →) *takbuh-an* ‘a running race’
 → b. *mag-takbuh-an* ‘to run a race/in competition with others’
- (105) a. (*pana* ‘a bow and arrows’ →) *panah-an* ‘a contest in shooting arrows’
 → b. *mag-panah-an* ‘to shoot arrows in contest.’

With bases in *pa...-an*:

- (106) a. (*ganda* ‘beauty’ →) *pa-gandah-an* ‘a beauty contest’
 → b. *mag-pa-gandah-an* ‘to contest for beauty’
- (107) a. (*lakas* ‘strength’ →) *pa-lakas-an* ‘a strength contest’
 → b. *mag-pa-lakas-an* ‘to contest for strength.’

(d) The meaning ‘to be engaged in an activity related to the referent of the base word’:

- (108) a. *manuk-an* ‘chicken raising business’
 → b. *mag-manuk-an* ‘to be engaged in chicken raising business’
- (109) a. *babuy-an* ‘piggery’
 → b. *mag-babuy-an* ‘to be engaged in pig raising.’

(e) Simulative (with disyllabic reduplication):

- (110) a. *bahay-bahay-an* ‘a toy house’
 → b. *mag-bahay-bahay-an* ‘to play house’
- (111) a. *duktur-duktur-an* ‘sb pretending to be a doctor’
 → b. *mag-duktur-duktur-an* ‘to play doctor’, ‘to pretend to be a doctor’
- (112) a. *pilay* ‘lame’
 → b. *mag-pilay-pilay-an* ‘to pretend to be lame’
- (113) a. *iyak* ‘crying’
 → b. *mag-iyak-iyak-an* ‘to pretend to be crying.’

4.5 Reciprocal *nomina actionis*

Each *mag...-an* reciprocal correlates with two reciprocal *nomina actionis*, one identical with the nominal base in *-an* and another formed with the prefix *pag-* (a regular correlate of *mag-*) in combination with *-an* and monosyllabic reduplication:

- (114) a. *palit-an* ‘exchange’
 → b. *mag-palit-an* ‘to exchange with each other’
 → c. *pag-pa-palit-an* ‘mutual exchange’
- (115) a. *tulong-an* ‘mutual help’
 → b. *mag-tulong-an* ‘to help each other’
 → c. *pag-tu-tulong-an* ‘mutual help.’

The semantic difference between these two kinds of *nomina actionis* is the same as between the root-word and derived actional noun related to lexical *mag-* reciprocals (see 3.5).

In (numerous enough) cases when a *nomen actionis* is morphemically identical to a non-reciprocal verb in the “passive” voice form in *-an*, stress is employed to resolve ambiguity:

- (116) a. *tùlúng-an* ‘mutual help’ → b. *tulúng-an* ‘to be helped’
 (117) a. *bàti-an* / *bati-án* ‘greeting each other’ → b. *bati-an* ‘to be greeted.’

5. Nouns and verbs with the combinations *mag-ka-* and *mag-ka-...-an* (= involitional reciprocals). Subject-oriented reciprocals only

5.1 Introductory

Reciprocals of this type refer to processes and states (emotions, attitudes, relations, etc.) involuntarily inflicted by the counter-agents upon each other, or accidental actions towards each other.

These reciprocals are not derived from verbal bases only (as reciprocals in *mag-...-an* are): they are also freely derived from nominal and adjectival roots (with more freedom than lexical reciprocals in *mag-*).

The prefix *ka-* is a characteristic feature of involitional reciprocals. As a common trait of nouns and verbs, it creates one of the haziest areas of noun/verb differentiation in Tagalog.

The (unstressed) prefix *ka-* marks nouns referring to a participant of a reciprocal relation. They denote a person (or a thing) similar or equal to another in respect of a given feature. From these nouns, the prefix *mag-* derives reciprocal nouns denoting both participants.

5.2 Reciprocal nouns in *mag-ka-* and *mag-ka-...-an* with the meaning of dual reciprocity

5.2.1 Reciprocals in *mag-ka-* derived from nouns in *ka-* denoting class membership

The meaning of the prefix *ka-* on these nouns is ‘singularity’ + ‘equality with others in what is denoted by the root-morpheme’ (= ‘a member of the class’).

The meaning of the prefix *mag-* here is ‘dual’, i.e. it has a clearly quantitative character (cf. 3.3.2). For the meaning ‘more than two’ see Section 7.

The underlying nouns in *ka-* are in their turn derived from two main types of bases:

(a) From root-morphemes with nominal, adjectival and verbal meanings, e.g.:

- (118) a. *pangalan* ‘name’
 → b. *ka-pangalan* ‘namesake’
 → c. *mag-ka-pangalan* ‘two namesakes’
 (119) a. *klase* ‘class’
 → b. *ka-klase* ‘class-mate’
 → c. *mag-ka-klase* ‘two class-mates’
 (120) a. *salungat* ‘contradictory’
 → b. *ka-salungat* ‘one in contradiction with sb’
 → c. *mag-ka-salungat* ‘two in contradiction with each other’

- (121) a. *kilala* 'known'
 → b. *ka-kilala* 'one acquainted with sb'
 → c. *mag-ka-kilala* 'two acquainted with each other'
- (122) a. *iba* 'different'
 → b. *ka-iba* 'one different from sb/sth'
 → c. *mag-ka-iba* 'two different from each other'
- (123) a. *pareho* 'equal'
 → b. *ka-pareho* 'one equal to sb/sth'
 → c. *mag-ka-pareho* 'two equal to each other'
- (124) a. *tiwala* 'belief, trust'
 → b. *ka-tiwala* 'one trusted by sb'
 → c. *mag-ka-tiwala* 'two who trust each other.'

(b) From derived bases with the components (*i*)*sang-* 'one', *sing-* 'equal in sth' and some other prefix-like components:

- (125) a. *isang-palad* 'the same fate'
 → b. *ka-isang-palad* 'one of the same fate with sb'
 → c. *mag-ka-isang-palad* 'two of the same fate'
- (126) a. *sang-ayon* 'the same opinion'
 → b. *ka-sang-ayon* 'one of the same opinion with'
 → c. *mag-ka-sang-ayon* 'two of the same opinion'
- (127) a. *sing-taas* 'equal height'
 → b. *ka-sing-taas* 'one of equal height with sb/sth'
 → c. *mag-ka-sing-taas* 'two of equal height'
- (128) a. *sing-tamis* 'equally sweet'
 → b. *ka-sing-tamis* 'sth equally sweet with sth'
 → c. *mag-ka-sing-tamis* 'two equally sweet'
- (129) a. *taga-Maynila* 'a native of Manila'
 → b. *ka-taga-Maynila* 'a co-native of Manila'
 → c. *mag-ka-taga-Maynila* 'two co-natives of Manila.'

Typical constructions with nouns in *ka-* and *mag-ka-*:

- (130) a. *Ka-pangalan ko siya.*
 REC.SG-name 1SG.GEN 3SG.NOM
 'He is my namesake.'
- b. *Mag-ka-pangalan kami.*
 REC.DU-REC.SG-name 1PL.NOM
 'We two are namesakes.'

5.2.2 Reciprocals in *mag-ka-...-an* derived from nouns in *ka-...-an* denoting a participant of a reciprocal relation

Reciprocal nouns of this formal type have triple marking of reciprocity: with the suffix *-an* and the prefixes *ka-* and *mag-* each added at a successive derivational step:

1. A reciprocal noun of action with *an-* serves as the base for 2.

2. The derived noun in *ka-...-an* denotes a participant of a reciprocal relation and serves as the base for 3.

3. The subsequently derived noun in *mag-ka-...-an* denotes two participants in reciprocal relation (for the meaning ‘more than two’ see Section 7; cf. also 3.2.1). Compare:

- (131) a. *galit-an* ‘angry discord’
 → b. *ka-galit-an* ‘one in angry discord with sb’
 → c. *mag-ka-galit-an* ‘two persons in angry discord with each other.’
- (132) a. *bigay-an* ‘giving each other’
 → b. *ka-bigay-an* ‘one of two giving to each other’
 → c. *mag-ka-bigay-an* ‘two persons giving to each other.’
- (133) a. *ibig-an* ‘mutual love’
 → b. *ka-ibig-an* ‘one of the two in love with each other’
 → c. *mag-ka-ibig-an* ‘two persons in love with each other.’

Although a reciprocal meaning is common both for nouns in *mag-ka-* and *mag-ka-...-an*, they differ in some properties of the underlying nominal bases: typically, nouns in *ka-* are derived from nominal and adjectival root-morphemes, their meaning of reciprocity being connected with another, somewhat broader meaning of class membership; cf.:

- (134) *ka-ba-bayan/ka-bayan* ‘townsman’, ‘compatriot’ (← *bayan* ‘town, country’)
ka-barkada ‘member of a group of people’ (← *barkada* ‘a group of people’)
ka-bahala ‘member of a board of trustees’ (← *bahala* ‘responsibility’).

As for nouns in *ka-...-an* that underlie reciprocals in *mag-ka-...-an*, they contain the suffix *-an* which explicates reciprocity, being mainly added (in this meaning) to verbal root-morphemes (see (131), (132), (133)).

The following examples illustrate the use of nouns in *ka-...-an* and *mag-ka-...-an*:

- (135) a. *Ka-galit-an ni Maria si Neni.*
 REC.SG-anger-REC GEN M. NOM N.
 ‘Neni is in a quarrel with Maria’, lit. ‘N. is opponent of M. in a quarrel.’
- b. *Mag-ka-galit-an si Neni at si Maria.*
 REC.DU-REC.SG-anger-REC NOM N. and NOM M.
 ‘Neni and Maria quarrel with each other’, lit. ‘N. and M. are opponents in a quarrel.’

5.2.3 Meanings of the prefix *ka-* on non-reciprocals

5.2.3.1 *In the nominal domain.* It has two meanings, both of which are semantically related to the reciprocal meaning of *ka-* discussed above:

(a) classifying/numerative (with *tao* ‘man’ only; this function is a relic):

- (136) *tao* ‘man’ → *ka-tao* ‘one man’;

(b) fractional/ordinal (on numerals):

- (137) a. *apat* ‘four’ → *ka-apat* ‘one fourth’ → *i-ka-apat* ‘the fourth (one)’
 b. *lima* ‘five’ → *ka-lima* ‘one fifth’ → *i-ka-lima* ‘the fifth (one)’

5.2.3.2 *In the verbal and adjectival domains.* The prefix *ka-* is used in combination with reduplication to encode the following meanings:

(a) recent perfect:

- (138) a. *d-um-ating* ‘to come/arrive’ → *ka-ra-rating* ‘have/has just come’
 b. *g-um-awa* ‘to make’ → *ka-ga-gawa* ‘have/has just made’;

(b) intensive:

- (139) a. *ma-taas* ‘high’ → *ka-taas-taas* ‘very high’
 b. *mahal* ‘expensive’ → *ka-mahal-mahal* ‘very expensive.’

5.2.3.3 *The prefix ka- as part of the nominal circumfix ka-...-an.* It is used to derive:

(a) collective nouns:

- (140) a. *pulo* ‘island’ → *ka-pulu-an* ‘archipelago’
 b. *tao* ‘man’ → *ka-tauh-an* ‘mankind’;

(b) abstract nouns from adjectives:

- (141) a. *ma-ganda* ‘beautiful’ → *ka-ganda-an* ‘beauty’
 b. *ma-yaman* ‘wealthy’ → *ka-yaman-an* ‘wealth.’

For the prefix *ka-* as part of verbal affixal complexes see 2.3, 5.1, 5.3.1.1. On its various meanings and its place in the Tagalog morphological system see Bloomfield (1917:265–98).

5.3 Reciprocal verbs in *mag-ka-* and *mag-ka-...-an*

5.3.1 *Reciprocals in mag-ka-*

Most of these verbs are related to involitional non-reciprocal verbs marked with *ma-* (for the “experiencer” voice), *ka-...-an* (for “passive”) (see 2.3.1) and to reciprocal nouns in *ka-* simultaneously. Here are forms with this dual relationship all derived from the root-morpheme *-galit-* ‘anger’.

(a) Derived reciprocal nouns (see 5.2.1):

- (142) a. *ka-galit* ‘a person in angry discord with sb’
 b. *mag-ka-galit* ‘two persons in angry discord *with each other*.’

(b) Derived involitional verbs (see 2.3.1):

- (143) a. *ma-galit* ‘to become angry at sb’
 b. *ka-galit-an* ‘to become an object of sb’s anger’
 c. *mag-ka-galit* ‘to fall into mutual angry discord *with each other*.’

The following examples illustrate case (b):

- (144) a. *Na-galit ang Ina sa Ama.*
 AG.INVL.PFV-anger NOM mother OBL father
 ‘Mother got angry with Father.’

- b. *K-in-a-galit-an* *ang Ina nang Ama.*
 -PVF-INVL-anger-OBL NOM mother AG father
 ‘Father got angry with Mother’, lit. ‘Mother became object of Father’s anger.’
- c. *Nag-ka-galit* *ang Ina at ang Ama.*
 AG.REC.DU.PVF-INVL.SG-anger NOM mother and NOM father
 ‘Mother and Father got angry with each other.’
- (145) a. *Na-lugod* *ang dalaga sa binata.*
 AG.INVL.PFV-CORDIAL NOM girl OBL boy
 ‘The girl became cordial with the boy.’
- b. *K-in-a-lug(o)d-an* *ang dalaga nang binata.*
 -PVF-INVL-CORDIAL-OBL NOM girl AG boy
 ‘The boy became cordial with the girl’, lit. ‘The girl became object of cordiality.’
- c. *Nag-ka-lugod* *ang dalaga at binata.*
 AG.REC.DU.PVF-INVL.SG-CORDIAL NOM girl and boy
 ‘The girl and the boy became cordial with each other.’

Here are a few more verbs of case (b):

- (146) a. *ma-muhi* ‘to hate sb’
 b. *ka-muhi-an* ‘to be hated by sb’
 c. *mag-ka-muhi* ‘to hate each other.’
- (147) a. *ma-inggit* ‘to feel envy toward sb’
 b. *ka-inggit-an* ‘to become an object of sb’s envy’
 c. *mag-ka-inggit* ‘to feel envy toward each other.’

Those verbs in *mag-ka-* which have related nominal and adjectival root-morphemes can be viewed as derived from nouns in *ka-* (see 5.2.1) rather than from non-reciprocal involitional verbs. As a rule, these reciprocal verbs have the accented prefix *kà-* which points to the accidental character of an involuntary action, e.g.:

- (148) a. *ka-klase* ‘class-mate’
 → b. *mag-kà-klase* ‘to happen to become class-mates’
- (149) a. *ka-pareho* ‘one equal to sb’
 → b. *mag-kà-pareho* ‘to happen to become equal to each other’
- (150) a. *ka-sang-ayon* ‘one of the same opinion with sb’
 → b. *mag-kà-sang-ayon* ‘to happen to become of the same opinion with each other’
- (151) a. *ka-sing-taas* ‘one of equal height with sb/sth’
 → b. *mag-kà-sing-taas* ‘to happen to become of the same height with each other.’

5.3.1.1 *Polysemy of mag-ka- (in the verbal domain only).* It encodes the following meanings:

- (a) Reciprocal (including accidental reciprocal and potential reciprocal; see 5.3.3).
 (b) Anticausative (see also 2.7.2):

- (152) a. *sira-in* ‘to be broken by sb’
 b. *mag-ka-sira* ‘to get broken (by itself)’

- (153) a. *ma-ka-sakit* 'to cause pain, to hurt' (of non-human causer)
 b. *mag-ka-sakit* 'to get ill'

(c) Coming into possession, acquiring (what is denoted by the root-morpheme):

- (154) a. *apo* 'grandchild'
 b. *mag-ka-apo* 'to get a grandchild'
- (155) a. *panahon* 'time'
 b. *mag-ka-panahon* 'to get time'
- (156) a. *malay* 'consciousness, awareness'
 b. *mag-ka-malay* 'to get consciousness, awareness.'

5.3.1.2 "Passives" in *pag-ka-...-an* from *mag-ka-* reciprocals. Reciprocals in *mag-ka-* which have an oblique object may undergo "passivization", with the latter object being promoted to subject position. Examples:

- (157) a. *Nag-ka-galit* *kami dahil sa bagay na iyon*
 AG.REC.DU.PFV-REC.INVL.SG-anger 1PL.NOM because OBL thing LNK that
 'We quarrelled because of that thing.'
- b. *P-in-ag-ka-galit-an* *namin ang bagay na iyon.*
 -PFV-PAG-REC.INVL.SG-anger-OBL 1PL.AG NOM thing LNK that
 'That thing became the object of our quarrel.'

5.3.2 Reciprocals in *mag-ka-...-an*

It is not always clear what underlying derivatives these reciprocals are related to. There seem to be two different solutions, viz. verbs in *mag-ka-...-an* may be viewed as derived from:

(a) involitional *nomina actionis* with the complex *ka-...-an*:

- (158) a. *ka-sundu-an* 'accord, agreement'
 b. *mag-ka-sundu-an* 'to reach an agreement with each other'
- (159) a. *ka-unawa-an* 'mutual understanding'
 b. *mag-ka-unawa-an* 'to reach mutual understanding';

(c) involitional *nomina agentis* with the complex *ka-...-an*:

- (160) a. *ka-ibig-an* 'one of two who love each other'
 b. *mag-ka-ibig-an* 'to love each other', 'fall in love with each other'
- (161) a. *ka-galit-an* 'a person at odds with sb'
 b. *mag-ka-galit-an* 'to fall out with each other.'

It should be noted that prosodic differences and similarities between *nomina actionis* and *nomina agentis* in *ka-...-an* require special detailed study.

5.3.3 *Reciprocals in mag-ka- and mag- derived from the same root. Reciprocals in mag-ka-...-an and mag-...-an derived from the same root*

5.3.3.1 *Accidental vs. non-accidental reciprocal actions.* Involitionals with the complexes *mag-kà-* and *mag-kà-...-an* (with secondary stress on *-kà-*) are kind of accidental correlates of *mag-* and *mag-...-an* reciprocals respectively, cf.:

- (162) a. *mag-kita* 'to see/meet each other'
 b. *mag-kà-kita* 'to happen to see/meet each other'
- (163) a. *mag-tagpo* 'to encounter each other'
 b. *mag-kà-tagpo* 'to happen to encounter each other'
- (164) a. *mag-away* 'to quarrel with each other'
 b. *mag-kà-away* 'to happen to fall out with each other'
- (165) a. *mag-tulak-an* 'to push each other'
 b. *mag-kà-tulak-an* 'to push each other by accident.'

5.3.3.2 *Potential vs. non-potential reciprocal actions.* There are two ways of marking potentiality on reciprocals, either with *mag-ka-* (*-ka-* may be unstressed) or with *ma-ka-pag-* (where *ma-ka-* is a widely used marker of potentiality not confined to the domain of reciprocity/sociativity; see 2.3); cf.:

- (166) a. *mag-usap* 'to talk with each other'
 b. *ma-ka-pag-usap* 'to be able to talk with each other'
 c. *mag-ka-usap* (same translation)
- (167) a. *mag-hiram-an* 'to borrow from each other'
 b. *ma-ka-pag-hiram-an* 'to be able to borrow from each other'
 c. *mag-ka-hiram-an* (same translation).

5.4 Involitional reciprocal *nomina actionis*

Besides nouns of action mentioned in 5.3.2 there are abstract nouns in *pag-ka-* and *pag-ka-...-an* (where *pag-* is a regular nominal correlate of *mag-*) in combination with unaccented reduplication of prefix *ka-* (*pag-ka-ka-*):

- (168) a. *mag-ka-lapit* 'to become close to each other'
 b. *pag-ka-ka-lapit* 'becoming close to each other.'

5.5 Morphemic homonymy between reciprocal nouns and verbs. Prosody as a means of disambiguation

5.5.1 *Mag-kà- infinitives and mag-ka- nouns*

At least in the case of verbs denoting accidental actions, the accented *kà-* distinguishes infinitives with the complex *mag-kà-* from nouns in *mag-ka-* with obligatorily unstressed *ka-*; e.g.:

- (169) a. *mag-kà-lapit* 'to happen to be close to each other'
 b. *mag-ka-lapit* 'two close to each other.'

As for other meanings of *mag-ka-* verbs, the role of accent on *ka-* requires special study.

5.5.2 Future forms with the marker *mag-kà-ka-* and pluralized nouns with *mag-ka-ka-*

These verbal and nominal forms also differ in the presence vs. absence of accent on the reduplicated syllable. This prosodic difference is obligatory; cf.:

- (170) a. *mag-kà-ka-lapit* 'will happen to be close to each other'
 b. *mag-ka-ka-lapit* 'more than two close to each other.'

6. Object-oriented diathesis type of reciprocal constructions

6.1 Two-place lexical reciprocals in *pag-...-in*. Verbs of connecting and disconnecting

Formally, these reciprocals appear as a result of “passivization” of lexical reciprocals in *mag-* (due to the “passive” voice marker *-in* and regular *mag-/pag-* alternation of affixes, where *pag-* is a base-forming correlate of *mag-*; cf. “passives” in *pag-...-an* in 3.4):

- (171) a. *mag-lapit* 'to come close to each other'
 b. *pag-lapit-in* 'to be brought close to each other.'

Semantically, however, two-place verbs in *pag-...-in* are causative correlates of one-place lexical reciprocals in *mag-*. This is due to the fact that the derivation of reciprocals in *pag-...-in* involves valency increase, viz., the appearance of an agent valency. Therefore, a reciprocal relation appears as caused from the outside, by an agent expressed by a *nang* complement (see *nang eruplano* in (173b)). The position of (grammatical) subject is filled by a plural patient/(semantic) object, i.e. by a noun phrase denoting participants of a reciprocal relation (see *ang mangga bansa* in (173b)). This is why reciprocals in *pag-...-in* are treated here as “two-place lexical reciprocals” with the object (patient)-oriented type of diathesis.

Besides, the presence of agent (causer) and the “passive” voice form of reciprocals in *pag-...-in* make them related also to three-place lexical reciprocals in the form of the “passive” voice in *i-*, used in a discontinuous construction (see (173a)). Compare also three-place transitive verbs (object-oriented lexical reciprocals) in *mag-*, viz., in the form of the “active” voice, also used in a discontinuous construction, as in (72), (73b).

Thus, the list of the related verbs under (171) may be enlarged by the following three-place (object-oriented) lexical reciprocals:

- (172) a. *mag-lapit* 'to bring sth close to sth' (see (72b))
 b. *i-lapit* 'to be brought close to sth (by sb).'

The following examples illustrate the use of the verbs *i-lapit* and *pag-lapit-in*:

- (173) a. *I-ni-la-lapit nang eruplano ang isa-ng bansa. sa iba-ng bansa*
 PAT-IPFV-close AG plane NOM one-LNK country ADR other-LNK country
 'One country is being brought close to another country by planes.'

- b. *P-in-ag-la-lapit nang eruplano ang manga bansa nang daigdig.*
 -PAT-PAG-IPFV-close AG plane NOM PL country GEN world
 ‘Countries of the world are being brought close to each other by planes.’

Other verbs of this type:

- (174) a. *i-dikit* ‘to be pasted to sth’
 → b. *pag-dikit-in* ‘to be pasted to each other’
 (175) a. *i-dugtong* ‘to be added to sth’
 → b. *pag-dugtong-in* ‘to be added to each other’
 (176) a. *i-siping* ‘to put/lay close to sth/sb’
 → b. *pag-siping-in* ‘to make sit/lie close to each other’
 (177) a. *i-hiwalay* ‘to be separated from sth’
 → b. *pag-hiwalay-in* ‘to be separated from each other’
 (178) a. *i-layo* ‘to take/keep away from sth’
 → b. *pag-layu-in* ‘to be taken/kept away from each other.’

6.2 Two-place involitional reciprocals in *pag-ka-...-in*

Formally, these causative object-oriented reciprocals also appear as a result of “passivization” of involitional reciprocals in *mag-ka-* (cf. 6.1):

- (179) a. *Nag-ka-sundo sila.*
 AG.PFV-REC-agree 3PL.NOM
 ‘They have come to an agreement.’
 b. *Dapat sila-ng pag-ka-sundu-in.*
 must 3PL-LNK PAG-REC-agree-PAT
 ‘They must be brought to an agreement.’
 (180) a. *mag-ka-galit* ‘to fall into angry discord with each other’
 b. *pag-ka-galit-in* ‘to cause mutual angry discord’
 (181) a. *mag-ka-sang-ayon* ‘to be of the same opinion’
 b. *pag-ka-sang-ayun-in* ‘to bring to mutual concord.’

7. Reciprocals with base reduplication (for more than two agents)

Plurality of agents marked by disyllabic reduplication of the root characterizes reciprocals in *mag-*, *mag-ka-*, *pag-...-in*, and *pag-ka-...-in* (for involitionals with *ka-* an alternative kind of reduplication is possible, viz. reduplication of the first two syllables of *ka-* bases):

(a) Lexical reciprocals (cf. also 3.2.1)

- (182) a. *mag-away* ‘to quarrel with each other’ (of two or more persons)
 b. *mag-away-away* (same of more than two persons)
 (183) a. *mag-hiwalay* ‘to separate from each other’ (of two or more persons)
 b. *mag-hiwa-hiwalay* (same of more than two persons)

- (184) a. *mag-kita* 'to see, meet each other' (of two or more persons)
 b. *mag-kita-kita* (same of more than two persons).

(b) Reciprocal nouns in *mag-ka-* (see also 5.2.1)

- (185) a. *mag-ka-klase* 'two classmates'
 b. *mag-ka-ka-klase* 'more than two classmates'
 (186) a. *mag-ka-kilala* 'two acquainted with each other'
 b. *mag-ka-ka-kilala* 'more than two acquainted with each other.'

(c) Reciprocal verbs in *mag-ka-* (see also 5.3.1)

- (187) a. *mag-ka-galit* 'to fall into angry discord with each other' (of two or more)
 b. *mag-ka-ga-ka-galit* (same of more than two)
 (188) a. *mag-ka-sunod* 'to follow one another'
 b. *mag-ka-sunud-sunod* (same of more than two).

(d) Reciprocals in *pag-...-in* and *pag-ka-...-in* (see also 6.1, 6.2)

- (189) a. *pag-lapit-in* 'to bring close to each other' (of two or more objects)
 b. *pag-lapit-lapit-in* (same of more than two objects)
 (190) a. *pag-dikit-in* 'to paste to each other' (of two or more objects)
 b. *pag-dikit-dikit-in* 'to paste to one another' (more than two objects)
 (191) a. *pag-ka-sundu-in* 'to be brought to an agreement' (of two or more persons)
 b. *pag-ka-sundu-sundu-in* (same of more than two).

With regard to the opposition 'two or more' vs. 'more than two', it should be pointed out that this opposition can be optionally expressed by means of the prefix *-si-* in immediate postposition to the prefixes *mag-* or *nag-*; cf.:

- (192) a. *Nag-a-anas-an sila.*
 'They whispered to each other' (two or more persons).
 b. *Nag-si-si-pag-anas-an sila.*
 'They whispered to each other' (more than two persons).

The opposition 'two or more' vs. 'more than two' may also be expressed with the help of the suffix *-an* (see 3.2.1).

7.1 Disyllabic reduplication for other meanings

This type of reduplication (like mono-syllabic reduplication) is highly polysemous. Only a few of its various meanings are illustrated below (for more details see, for instance, Lopez 1970; Naylor 1986):

- (a) distributive, cf. *bahay-bahay* 'every house', *bayan-bayan* 'every town';
 (b) moderative, cf. *mag-walis-walis* 'to sweep a little', *ma-asim-asim* 'a little salty';
 (c) simulative, cf. *mag-pilay-pilay-an* 'to pretend to be lame' (see also (e) in 4.4);
 (d) intensive, emphatic, cf. *Ang-ganda-ganda!* 'How beautiful!';
 (e) iterative, cf. *mag-bulung-bulung-an* 'to whisper with each other from time to time'.

8. Reciprocal constructions with *isa't isa* 'each other'

8.1 In combination with reciprocal verbs

The pronominal phrase *isa't isa* 'each other' (lit. 'one and one') is mainly used in combination with reciprocal verbs, either pleonastically or as a means of disambiguation (in the case of polysemous verbs). It should be mentioned that the numeral *isa* 'one' also occurs in the adverb *isa-isa* 'one after another, singly'.

8.1.1 *In non-subject position*

In these cases *isa't isa* occurs in both functions.

(a) It is pleonastic in the following sentences:

(193) *Nag-ibig-an sila sa isa't isa.*
 AG.REC.PFV-love-REC 3PL PAT one.and one
 'They loved each other.'

(194) *Nag-pasalamat-an sila sa isa't isa.*
 AG.REC.PFV-thank-REC 3PL PAT one.and one
 'They thanked each other.'

(b) It is used for disambiguation in (195a) and (196a):

(195) a. *Nag-tulak-an sila sa isa't isa.*
 AG.REC.PFV-push-REC 3PL PAT one.and one
 'They pushed each other.'

cf.: b. *Nag-tulak-an sila.*
 AG.REC.PFV-push-REC 3PL
 'They pushed each other / They pushed collectively.'

(196) a. *mag-sulat-an sa isa't isa* 'to write to each other'

cf.: b. *mag-sulat-an* 'to write to each other', 'to write together.'

8.1.2 *In subject position*

Examples:

(197) *Nag-patawar-an ang isa't isa.*
 AG.REC.PFV-forgive-REC NOM one.and one
 '[They] forgave each other.'

(198) *Nag-pasalamat-an ang isa't isa.*
 AG.REC.PFV-forgive-REC NOM one.and one
 '[They] thanked each other.'

8.2 In combination with non-reciprocal verbs. In non-subject position only

The phrase *isa't isa* 'each other' rarely occurs as a single marker of reciprocity in a clause. It also has the meanings 'everybody', 'everyone', 'each one'. Therefore it needs contextual means to resolve its polysemy; cf.:

- (199) *Nang-ako [sila] sa isa't isa.*
 AG.PFV-promise 3PL ADR one.and one
 '[They] promised to each other.'
- (200) *Ang manga ka-harap ay... nag-ta-tanong sa isa't isa.*
 NOM PL REC-front LNK AG-IPFV-ask ADR one.and one
 'The opponents ... asked each other.'
 lit. 'Those in front of each other... asked each other.'

In subject position with non-reciprocal verbs, the polysemous phrase *isa't isa* cannot express a reciprocal meaning, because Tagalog verbal morphology requires that role agreement between the verbal predicate and subject be obligatorily marked on the verb. Therefore, the phrase *isa't isa* does not code reciprocity unless it is marked on the verb:

- (201) *Nag-pasalamat ang isa't isa.*
 AG.PFV-thank NOM one.and one
 'Everyone/everybody/each one gave his thanks.'

9. Means of expressing reciprocal arguments

The reciprocal arguments always surface as subject which is marked in the same way as in non-reciprocal clauses (cf. (202)), namely with markers of the nominative case (see 2.2). Reciprocal arguments encoded by a coordinate construction are either marked separately, each with its own nominative marker or with a single marker for the whole construction:

- (202) a. *Nag-tulong-an ang binata at [ang] dalaga.*
 'The boy and the girl helped each other.'
 b. *Nag-trabaho ang binata at [ang] dalaga.*
 'The boy and the girl worked.'

Naturally enough, reciprocal nouns may also function as arguments:

- (203) a. *Nag-away ang mag-asawa* 'The married couple quarrel'
 b. *Nag-pasyal ang mag-ka-sama* 'The two companions took a walk.'

Thus reciprocal constructions of the types considered so far in this chapter are simple, while discontinuous constructions require a special comitative prefix (see Section 12).

A special place is reserved for lexical reciprocals (see Section 3) on which substitution of the prefix *mag-* for the infix *-um-* results in replacing a discontinuous construction with a simple one; cf.:

- (204) a. *L-um-a-laban ang X sa Y.* 'X was fighting against Y.'
 b. *Nag-la-laban ang X at Y.* 'X and Y were fighting against each other.'

10. Referential situations and sequence of actions

10.1 Deviations from canonical cross-reference of the actants

Semantic properties of verbal root-morphemes and/or certain contextual factors may cause deviations from the canonical reciprocal situation in which each participant is both agent and patient (below the canonical situation is denoted by the lexical reciprocal *mag-yakap* ‘to embrace each other’):

- (205) *Nag-yakap sila.*
 AG.REC.PFV-embrace 3PL.NOM
 ‘They embraced each other.’

In (206) and (207) below, the reciprocal verbs refer to groups of persons affecting each other in such a way that no single patient may become anybody’s counter-agent:

- (206) *Nag-pa-patay-an sila.*
 AG.REC-IPFV-kill-REC 3PL
 ‘They are killing one another.’
- (207) *Nag-ba-baril-an sila.*
 AG.REC-IPFV-shoot-REC 3PL
 ‘They are shooting one another.’

10.2 Simultaneity and non-simultaneity of reciprocal actions

One or the other interpretation of a reciprocal situation is usually determined by the lexical meaning of the base verb. The following examples illustrate simultaneous reciprocal actions:

- (208) *Nag-hawak-an sila nang kamay.*
 AG.REC.PFV-hold-REC 3PL PAT hand
 ‘They took hold of each other’s hands.’
- (209) *Nag-palit-an sila nang suntok.*
 AG.REC.PFV-change-REC 3PL PAT blow
 ‘They exchanged blows.’

Verbs like the following typically denote non-simultaneous actions within a reciprocal situation:

- (210) a. *mag-hiram-an* ‘to borrow from each other’
 b. *mag-utus-an* ‘to give orders to each other’
 c. *mag-sulat-an* ‘to write to each other.’

11. Sociatives in *mag...-an*

This type of sociatives is highly productive, They are formed from transitive as well as intransitive verb bases. Examples:

- (211) *Ang manga tao-ng yaon ay nag-sa-sayaw-an at*
 NOM PL man-LNK that LNK AG.SOC-IPFV-dance-SOC and
nag-i-imun-an nang alak.
 AG.SOC-IPFV-drink-SOC PAT wine
 ‘Those people were dancing together and drinking wine together.’
- (212) a. *k-um-ain* ‘to eat’ → *mag-kain-an* ‘to eat together’
 b. *d-um-ating* ‘to come’ → *mag-dating-an* ‘to come together’
 c. *um-upo* ‘to sit down’ → *mag-upu-an* ‘to sit down together’
 d. *um-iyak* ‘to cry’ → *mag-iyak-an* ‘to cry together.’

There are parallel reciprocals and sociatives with the marker *mag-...-an* derived from the same root-morphemes:

- (213) a. *mag-kamay-an* i. ‘to shake hands with each other’
 ii. ‘to eat collectively with hands (instead of cutlery)’
 b. *mag-sulat-an* i. ‘to write to each other’
 ii. ‘to write collectively’
 c. *mag-tulak-an* i. ‘to push each other’
 ii. ‘to push collectively.’

Disambiguation is achieved by lexical means: the pronominal phrase *isa’t isa* ‘each other’ on the one hand and nominal sociatives used adverbially, mainly *mag-ka-sama* ‘together’ (lit. ‘two companions’), *mag-ka-ka-sama* ‘together, collectively’ (lit. ‘companions’ (for more than two persons)), on the other hand; cf.:

- (214) a. *Nag-sulat-an sila nang liham sa isa’t isa.*
 AG.REC.PFV-write-REC 3PL PAT letter ADR one.and one
 ‘They wrote letters to each other.’
 b. *Mag-ka-sama sila-ng nag-sulat-an nang liham.*
 DU-SOC-together 3PL-LNK AG.SOC.PFV-write-SOC PAT letter
 ‘They wrote a letter together.’

12. Comitative

12.1 Introductory

Comitativity is marked with the prefix *maki-* which forms verbs from various types of verbal bases, including reciprocal and sociative bases. In all cases, valency increase leads to separate encoding of a collaborating counteragent as an oblique object with the case marker *sa* (for common nouns) or *kay* (SG)/*kina* (PL) (for personal names). As a rule, comitatives in *maki-* express joining in an action started earlier by another agent – “this either through interference or by favour of someone else” (Bloomfield 1917:263). As Schachter & Otanes (1972:334) put it, these comitatives “often carry the implication that the performer (expressed by the sentence topic) is taking part in an activity in which another person (expressed by the *sa* phrase) has, in some sense, a prior or more direct involvement”. Besides, according to Wolff (1991:539), comitatives derived from reciproc-

cals (“mutual action forms”) express the meaning ‘engage sb in doing (so and so) together with one’ (see (220b)).

12.2 Comitatives derived from non-reciprocal / non-sociative transitives and intransitives

Comitatives derived from verbs in *mag-* display a regular *mag-* → *pag-* substitution (although the base-forming prefix *pag-* is optional on these comitatives). Compare:

- (215) a. *Um-inom nang alak si Juan at si Jose.*
AG.PFV-drink PAT wine NOM J. and NOM J.
‘Juan and Jose drank wine.’
b. *Naki-inom nang alak si Jose kay Juan.*
AG.COM-drink PAT wine NOM J. OBL J.
‘Jose drank wine with Juan.’
- (216) *T-um-awa ka at ang mundo ay naki-ki-tawa sa iyo.*
-AG.PFV-laugh 2SG.NOM and NOM world LNK AG.COM-IPFV-laugh OBL 2SG
‘You have started laughing and the world is laughing with you.’
- (217) a. *mag-laro* ‘to play’
b. *maki-pag-laro* ‘to play together with sb’, ‘to join sb at play’
- (218) a. *mag-luto* ‘to cook’
b. *maki-(pag-)luto* ‘to cook with sb’, ‘to share cooking facilities with sb’
- (219) a. *mag-dalamhati* ‘to grieve’
b. *maki-(pag-)dalamhati* ‘to grieve with sb.’

12.3 Comitatives derived from reciprocal verbs. Discontinuous constructions only

In contrast to reciprocal constructions dealt with above (which are simple; see reciprocals in *mag-*, *mag-...-an* and *mag-ka-* in Sections 3, 4 and 5 respectively), those considered below may take a subject argument in the singular form. In contrast to comitatives considered in 12.2, comitatives derived from reciprocals necessarily retain the prefix *pag-*.

12.3.1 Derived from reciprocals in *mag-* and *mag-...-an*

Compare:

- (220) a. *Nag-away kami.*
AG.REC.PFV-quarrel 1PL.NOM
‘We quarrelled with each other.’
b. *Naki-pag-away siya sa akin.*
AG.COM-REC-quarrel 3SG.NOM OBL 1SG
‘He picked a quarrel with me.’
- (221) a. *Nag-tulong-an sila.*
AG.REC.PFV-help-REC 3PL.NOM
‘They helped each other.’
b. *Naki-pag-tulong-an siya sa manga Japones.*
AG.COM.PFV-REC-help-REC 3PL.NOM OBL PL J.
‘He entered into cooperation with the Japanese.’

- (222) a. *mag-babag* 'to be in conflict with each other'
 b. *maki-pag-babag* 'to get into a conflict with sb', 'to get into conflicts'
- (223) a. *mag-kamay* 'to shake hands with each other'
 b. *maki-pag-kamay* 'to shake hands together with sb'
- (224) a. *mag-palit-an* 'to exchange sth with each other'
 b. *maki-pag-palit-an* 'to join in the action of exchange.'

An oblique object marked with *sa* may be absent, as in (225):

- (225) *Naki-pag-away si Ben.*
 AG.COM.PFV-REC-quarrel NOM B.
 'Ben got into fights / picked quarrels.'

12.3.2 Derived from involitional reciprocals in *mag-ka-* and *mag-ka-...-an*

Examples:

- (226) a. *Nag-ka-sundo ang dalawa-ng bansa.*
 AG.REC.PFV-REC.INVL-agree NOM two-LNK country
 'The two countries reached an agreement.'
- b. *Ang isa-ng bansa ay naki-pag-ka-sundo. sa iba-ng bansa-ng pa-dalh-an nang armas.*
 NOM one-LNK country LNK AG.COM.PFV-REC-REC.INVL-agree OBL other-LNK
 country-LNK CAUS-carry-ADR PAT arms
 'One country entered into an agreement with another country to get arms (sent to it).'
- (227) a. *mag-ka-sundu-an* 'to reach an agreement (of many agents)'
 b. *maki-pag-ka-sundu-an* 'to enter into an agreement with (of many agents)'
- (228) a. *mag-ka-ibig-an* 'to become friends with each other'
 b. *maki-pag-ka-ibig-an* 'to become friends with sb', 'to win one's way into sb's friendship.'

12.4 Comitatives derived from sociative verbs

In this case the subject argument can also be in the singular, in contrast to non-comitative constructions; cf. (229a) and (229b):

- (229) a. *Nag-inum-an sila.*
 AG.PFV-drink-SOC 3PL.NOM
 'They drank together.'
- b. *Naki-pag-inum-an siya sa manga kaibigan.*
 AG.COM.PFV-PAG-drink-SOC 3PL.NOM OBL PL friend
 'He drank together with friends.'
- (230) a. *mag-tawan-an* 'to laugh simultaneously'
 b. *maki-pag-tawan-an* 'to join in laughing'
- (231) a. *mag-takbuh-an* 'to run a race'
 b. *maki-pag-takbuh-an* 'to join a running race.'

- (232) a. *mag-languy-an* 'to swim collectively'
 b. *maki-pag-languy-an* 'to go swimming with others'

12.5 Polysemy of the prefix *maki-*

Alongside its comitative meaning, this prefix also renders the meaning 'to ask for a permission/agreement to do what is indicated by the root'.

The meaning of obtaining permission or agreement to perform the action together with someone accompanies the comitative meaning of many verbs in *maki-*, but in some contexts these verbs express only the meaning of polite request, as in (233) and (234) (the examples are borrowed from Wolff (1991:370)):

- (233) *Pwede ba-ng maki-gamit ako nang CR.*
 may INT-LNK AG.COM-use 1SG.NOM PAT comfort-room
 'Could I (ask the favour of allowing me to) use the comfort-room?'
 (234) *Maki-ki-inom ako sa kok mo.*
 AG.COM-FUT-drink 1SG.NOM OBL coke 2SG.GEN
 'Let me have a sip of your coke.'

The idea of asking someone to do what the root indicates for the sake of the speaker is mostly expressed by verbs with the prefix *paki-* (a regular correlate of *maki-*) in combination (optionally) with a "passive" voice marker:

- (235) *[I]-paki-gawa mo ako nang tula.*
 BEN-COM-do 2SG.AG 1SG.NOM PAT poem
 'Please, do me the favour of writing a poem for me.'

With roots denoting similarity, the prefix *maki-* forms verbs meaning 'to imitate or follow suit', e.g.:

- (236) a. *gaya* 'similar' → *maki-gaya* 'to imitate'
 b. *tulad* 'similar' → *maki-tulad* 'to emulate' (Panganiban 1969–1972:677).

12.6 Comitative nomina actionis

Nouns of action are derived from all types of comitative verbs with the help of the prefix *paki-* and a reduplication of its second syllable *-ki-*; e.g.:

- (237) a. *maki-ramay* 'to sympathize with'
 b. *paki-ki-ramay* 'sympathizing with sb'
 (238) a. *maki-pag-ka-sundo* 'to enter into an agreement with sb'
 b. *paki-ki-pag-ka-sundo* 'entering into an agreement with sb'

13. Etymology of the reciprocal markers

All affixes used as (non-specialized) means of reciprocal derivation in Tagalog, i.e. *mag-*, *pag-*, *ka-* and *-an*, descend from the core of the morphemic stock of Proto-Austronesian (PAN), with reflexes in numerous Austronesian languages (AN).

Thus, the protoform for the prefix *mag-* is reconstructed as **maR-* regarded as historically derived from **-um-* + **paR-*, where **-um-* is an Agent (Actor) voice/focus marker and **paR-* is a derivational morpheme (Wolff 1973:72–4; Ross 1995:741, 772). This historical derivation of **maR-* is referred to Pre-PAN, which is to say the sets of voice/focus markers (including **maR-*) and of derivational morphemes (including **paR-*) are ascribed to PAN, with an idea that “**maR-* of the protolanguage [is] a surface representation of a deep structure **-um-* + **paR-*”, in the same way as *mag-* in many Philippine languages (including Tagalog) is “the surface representation of a deep structure *-um-* + *pag-*” (Wolff 1973:74).

As for the hypothetical semantic and functional characteristics of PAN **maR-*, the following observation on the functions of its reflexes in some AN languages is informative: according to Ross (1995:772), *mag-* as an Agent (Actor) voice/focus marker (in terms of Ross, pivot marker) is an innovation in Philippine languages, as compared to reflexes of **maR-* in Formosan languages “where they are apparently only marking reciprocal verbs”.

The Tagalog prefix *ka-* is a reflex of PAN **ka-*, another derivational morpheme (alongside **paR-*, **paN-*, **pa-*) ascribed to the protolanguage (see Wolff 1973:72; Ross 1995:741). Since no sufficient comparative work on the PAN derivational morphemes has yet been done, there is little to be said about the functions of PAN **paR-* and **ka-*. To quote Wolff (1973:78), with relation to the Javanese verbs with *ke-...-an* (where *ke-* is a reflex of PAN **ka-*): “*ke-* is a prefix forming verbs which refer to accidental actions”. Another observation by Wolff (1973:82) concerns verbs with *i-ka-* in Samar-Leite (a language of the Philippines) referring to mutual actions: “they have a focus (marked with *i-ka-* – L.Sh., G.R.) which refers to the one with whom (which) the agent engages in the action: ... *i-ka-sakay* ‘... to ride together with’”.

The Tagalog suffix *-an* is recognized by the AN comparativists to be a reflex of PAN **-an*, a location voice/focus marker and at the same time, a nominal derivational morpheme (“a marker of nominalisation”) meaning ‘place where one (root)-s’ (Ross 1995:756).

In his summary of the results achieved by the leading scholars in AN comparative-historical grammar (O.Ch. Dahl, J. Wolff, S. Starosta, A.K. Pawley, L.A. Reid et al.), M. Ross writes: “Daughter languages inherited two functions, nominalising and pivot-marking (voice/focus marking – L.Sh., G.R.) for the reflexes of [...] **-an*” (Ross 1995:758). Note also two observations made by M. Ross concerning the functions of PAN **-an*: “The location pivot (voice/focus) also seems to have served as a benefactive pivot in PAN” (Ross 1995:741), and, further on: “Possible points of investigation are the drift of forms in **an* from marking location pivot (voice/focus) to marking undergoer pivot, the rise of **-an* as the instrumental pivot (atemporal forms)” (Ross 1995:771).

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Reciprocals and sociatives in Udehe

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1. Introduction

1.1 Udehe

Udehe (or: *Udeghe*, *Udihe*, *Ude*) is a Tungus language spoken in the southern part of the Russian Far East. According to the official census data, there were 2,011 Udehe in 1989 among whom 528 (26.2%) have some knowledge of their language. However, the number of people who have Udehe as their first language is considerably smaller and does not seem to exceed 100. Udehe lacks official status and is only used in everyday oral communication. There is no systematic school teaching of Udehe, although there have recently been some attempts to introduce it as an optional subject. The writing system is based on the Cyrillic alphabet.

Udehe is represented by two dialects with several local idioms. The Southern dialect comprises idioms spoken on the rivers Bikin and Iman in the northern part of the Primorye region. The Northern dialect is spoken by the Udehe groups which live on the rivers Khor, Anyui and Samarga in the Khabarovsk region. Divergences between the dialects are minor (cf. Schneider 1936:4) and are mostly observed at the phonological and lexical levels, while the morphological and syntactic differences are insignificant. The most important phonological difference concerns the presence of the so-called pharyngealized vowels, denoted here with the sign *h* after the vowel, in the Northern dialect. In the South-

ern dialect they correspond to simple long vowels, cf. the Northern *ahnta* ‘woman’ and the Southern *a:nta*.

1.2 Overview

In Udehe, reciprocals are always subject-oriented (with the exception of some non-productive reduplicational constructions, see 5.2 and 5.3). Not only objects but also most adjuncts can reciprocalize; reciprocalization is conditioned by semantic rather than syntactic constraints. The reciprocal meaning is expressed in several ways:

- (i) morphologically, by verbs derived by means of the suffix *-masi*; cf. (1a);
- (ii) lexico-syntactically, by means of the reciprocal pronoun *me(n)*- (the allomorph *me-* is used in the nominative and the accusative and *men-* in all the other case forms); cf. (1b);
- (iii) by combination of (i) and (ii), as in (1c);
- (iv) by reduplication.

Types (i), (ii), and (iii) are used to reciprocalize direct objects, indirect objects and some oblique objects. There is no apparent semantic difference between these three types; cf.:

- (1) a. *Nuati aju:-masi:-ti.*
 they love-REC-3PL
 = b. *Nuati me-fei-me-fei aju:-iti.*
 they REC-PL-REC-PL love-3PL
 = c. *Nuati me-fei-me-fei aju:-masi-iti.*
 they REC-PL-REC-PL love-REC-3PL
 ‘They love each other.’

Type (iv) involves reduplication of postpositions, rarely of nouns, adverbs, and adjectives. It typically serves to reciprocalize adjuncts.

- (2) a. *A:nta dā xuli:-ni.*
 woman next walk-3SG
 ‘(He) is walking next to a woman.’
 b. *Dā: dā: xuli:-ti.*
 next next walk-3PL
 ‘They are walking next to one another.’

On intransitive verbs the reciprocal affix *-masi* may have the sociative meaning, or denote an action performed by several participants alternately. In the Southern dialect the sociative meaning is also expressed morphologically by the suffix *-niŋa*, e.g. *taŋi-niŋa-si:-ti* [read-SOC-IPFV-3PL] ‘they read together’, but its usage is rather infrequent.

1.3 Sources

The present description is mostly based on the Southern dialect of Udehe, namely the language of the Bikin Udehe as spoken in the settlement Krasnyi Yar. The data comes

from the field materials collected between 1989 and 1997. In certain cases I refer to data from the Northern dialect extracted from the following published sources: Schneider (1937), Kormushin (1998), Simonov, Kjalundzjuga, and Xasanova (1998), and Simonov and Kjalundzjuga (1998–1999), abbreviated as S, K, SK and SKX respectively. The transcription used in these sources has been modified on phonological grounds.

2. Grammatical notes

These notes are necessarily brief as they are only meant to help the reader understand the Udehe sentences below (for more information on the grammar of Udehe see Nikolaeva & Tolskaya 2001).

2.1 General characteristics of Udehe grammar

Udehe exhibits the typological features of an SOV language. However, head-finality is not rigid: in the main clause the word order is largely motivated by information structure, and there are some instances of non-head-final NPs as well. Major grammatical relations, such as the subject, direct object, and indirect object, can be identified by a cluster of grammatical properties. In particular, the subject is a grammatical constituent associated with the highest syntactic activity and is the main controller of coreferential relations, both within the clause and clause-externally. The case marking is based on the Accusative pattern. The subordinate clause makes extensive use of non-finite verbal forms containing switch-reference markers.

The major open word classes (nouns, verbs, adjectives and adverbs) are rather easily identified by morphological and syntactic criteria. Although synthesis predominates in the expression of grammatical meanings, Udehe also has a few analytical constructions; certain aspectual, temporal, and modal categories are formed by means of auxiliary verbs. The morphological structure is characterized by suffixation exclusively (note there are no prefixes in Udehe) and a rather high level of agglutination. However agglutination is not absolute. In particular, both nouns and verbs fall into two morphological classes, depending on the type of the stem: either vowel-final or *n*-final. Some grammatical categories have two phonologically different exponents, compatible with one or another morphological class. These variants are shown in the tables below with a slash.

Udehe has a dual system of root-controlled vowel harmony based on rounding and height distinctions. In affixal morphemes non-high vowels can only be non-front (*a*, *e*, or *o*) and typically harmonize to the non-high vowels of the root. In the tables below a harmonizing non-high non-front vowel in affixes is schematically indicated by the capital *A*. Two-syllabic affixes are often disharmonic. Another peculiarity of Udehe phonology is that it exhibits a class of laryngealized non-high vowels phonologically opposed to the simple vowels and denoted here by an apostrophe before the vowel: *'a*, *'o*, or *'e*.

2.2 Nominal morphology

Nouns are characterized by grammatical categories of number, case, and possession. The order of inflectional morphemes in the nominal word is as follows: stem – [non-possessive plural] – [alienable possessive] – [possessive plural] – [case] – [possessive]. The case affixes and their major syntactic functions are presented below in (3):

(3) Case	Affix	Functions
Nominative	∅	subject, possessor, object of postpositions, reflexive object, predicate
Accusative	<i>-wA / -mA</i>	direct object, causee
Dative	<i>-du</i>	indirect object, causee, passive agent, locative adjunct
Lative	<i>-tigi</i>	locative adjunct, indirect object
Locative	<i>-lA / -dule</i>	locative adjunct
Prolative	<i>-li / -duli</i>	locative adjunct
Ablative	<i>-digi</i>	locative adjunct, standard of comparison
Instrumental	<i>-zi</i>	manner adjunct, comitative adjunct or modifier
Destinative	<i>-nA-</i>	direct object, beneficiary (the Destinative must be followed by a possessive affix).

The possessive affixes are divided into non-reflexive and reflexive. The non-reflexive possessive affixes are opposed for person and number:

(4)	SG	PL
1SG	<i>-i/-mi</i>	<i>-u/-mu</i> (EXC), <i>-fi</i> (INC)
2SG	<i>-i</i>	<i>-u</i>
3SG	<i>-ni</i>	<i>-ti</i>

The reflexive possessive forms are not opposed for different persons, but only for the singular possessor (*-i/-mi*) and the plural possessor (*-fi*); cf. *agda-i* ‘my/your(SG)/his/her boat’ and *agda-fi* ‘our/your(PL)/their boat’. The so-called alienable possessive *-ŋi-* must be used in combination with a regular possessive affix. It indicates that the relationship between two nouns is not that of ordinary possession, but is rather some kind of situationally determined association, cf. *oloxi-ni* ‘his squirrel (which belongs to him)’ and *oloxi-ŋi-ni* ‘his squirrel (in the meaning: the squirrel he pursued, or shot at, or saw, etc.)’.

The plural is marked with the suffix *-ziga* in non-possessive forms and by *-nA* in possessive forms: *oloxi-ziga* ‘squirrels’ but *oloxi-ne-ni* ‘his squirrels’. The expression of plurality is optional.

2.3 Verbal morphology: Tense/aspect/mood, agreement

The tense system in the Indicative includes the following tenses:

(5) Present	morphologically unmarked
Past	derived by lengthening of the stem-final vowel from stems ending in a non-high vowel; with the suffix <i>-o-</i> from <i>u</i> -final stems; with the suffix <i>-e</i> from <i>i</i> -final stems; or with the suffix <i>-ki</i> from <i>n</i> -final stems

Perfect	derived by laryngealization of the stem-final non-high vowel, with the suffix <i>-ge</i> from stems ending in a high vowel, or with the suffix <i>-kA</i> from <i>n</i> -final stems
Future	<i>-zAŋA</i>

Subject agreement affixes in most cases follow the tense marker. Subject agreement affixes differ slightly in different tenses, as is demonstrated in (6).

(6)	Present	Perfect	Future	Past
1SG	<i>-mi</i>	<i>-i</i>	<i>-i</i>	<i>-mi</i>
2SG	<i>-i</i>	<i>-i</i>	<i>-i</i>	<i>-i</i>
3SG	<i>-ini</i>	∅	<i>-ni</i>	<i>-ni</i>
1PL.INC	<i>-fi</i>	<i>-ti</i>	<i>-fi</i>	<i>-fi</i>
1PL.EXC	<i>-u</i>	<i>-u</i>	<i>-u</i>	<i>-mu</i>
2PL	<i>-u</i>	<i>-u</i>	<i>-u</i>	<i>-u</i>
3PL	<i>-iti</i>	<i>-du</i>	<i>-ti</i>	<i>-ti</i>

In addition, there is the analytic pluperfect, formed with the past participle of the content verb and the copula *bi-* ‘to be’, several synthetic oblique moods (imperative, subjunctive, conditional, and permissive), and the analytic necessitative. Aspectual distinctions are expressed both by analytic constructions (habitual and imperfective aspects) and by numerous aspectual (*Aktionsart*) suffixes.

2.4 Voices and their combinability

The following voices are distinguished: passive, impersonal passive, causative, anticausative, reciprocal, and sociative. The passive, impersonal passive, anticausative, and reciprocal involve valency decrease by one. The causative is a valency-increasing derivation, while the sociative does not affect the valency.

The passive is derived by means of the suffix *-u*, *-w* (which precedes the tense and agreement markers) from all transitive verbs, and from at least four intransitive “meteorological” verbs. In the passive construction the passive agent is encoded by the dative, while the patient/theme argument is either in the accusative or in the nominative, depending on its lexical vs. pronominal status, respectively.

The impersonal passive can be derived both from transitives and intransitives. Its main function is to eliminate or demote the agent, hence the agent argument is absent in such constructions, and so is the grammatical subject. The impersonal passive forms consist of the passive participle of the content verb and a 3SG tense form of the copula *bi-* ‘to be’. Obviously, the passive and the impersonal passive are not compatible.

The causative derivation is marked by the suffix *-wAn* (rarely *-u*). Causatives are productive both with intransitives (7a) and intransitives (7b).

- (7) a. *eme-* ‘to come’ *eme-wen-* ‘to cause to come’
 b. *bu-* ‘to give’ *bu-wen-* ‘to cause to give’

Causatives can be derived from passives and impersonal passives, cf.:

- (8) *Ñ'aula-wa činda-du ña:ma-u-wana:-ni* (K. 168)

child-ACC bird-DAT curse-PASS-CAUS.PAST-3SG

'The children let the bird curse them (literally: caused them to be cursed).'

The anticausative is encoded by the suffix *-ptA*, *-ktA* or *-kpi* on the stem, e.g.:

- | | | | |
|---------------------|-----------------|---------------------|---------------------------|
| (9) <i>mantila-</i> | 'to spill' (vt) | <i>mantila-kpi-</i> | 'to spill' (vi) |
| <i>xolo-mu-</i> | 'to leave' (vt) | <i>xolo-pto-</i> | 'to remain, be left' (vi) |
| <i>ise-</i> | 'to see' | <i>ise-pte-</i> | '(can/could) be seen'. |

The anticausative is not compatible with passives and impersonal passives, but it is compatible with a causative marker, e.g.: *sa-u-* [know-CAUS] → *sa-u-pte-* [know-CAUS-ACAUS] 'to be known (to sb)', *ise-kte-* [see-ACAUS] → *ise-kte-wen-* [see-ACAUS-CAUS] 'to appear (to sb)'.

The reciprocal is derived from transitive and rarely intransitive bases with the suffix *-masi*. Although this suffix is sometimes pronounced as *-mesi* when it follows a stem with *e*, in the pronunciation of most speakers it is disharmonic, i.e. the non-high vowel in the suffix always surfaces as *a*. The reciprocal is definitely incompatible with the passive, the impersonal passive, and the anticausative, and I do not know of any evidence for its co-occurrence with the causative either.

The sociative is formed with the suffix *-niŋa*. Like the reciprocal marker, it does not participate in vowel harmony. Reciprocal and sociative affixes do not co-occur on one verb.

3. Reciprocals with the suffix *-masi*

In the verbal form the suffix *-masi*, which derives morphological reciprocals, typically follows the aspectual affixes and precedes the tense agreement affixes, e.g.: *kaja-sa-masi-e-ti* [send-EXP-REC-PAST-3PL] 'they have sent (her) to one another' (Kormushin 1998: 174). However, certain aspectual affixes, such as the inchoative *-li* or the repetitive *-gi*, may follow the reciprocal *-masi*, cf.: *sauli-masi-li-e-ti* <offer.food-REC-INCH-PAST-3PL> 'they started having a feast together'.

Reciprocalization is always controlled by the clausal subject. Across-clause reciprocalization is impossible, cf.:

- (10) a. *Nuati bele-masi-e-ti.*
 they help-REC-PAST-3PL
 'They helped each other.'
- b. **Aziga-ziga sa-iti bele-masi-e-me-fi.*
 girl-PL know-3PL help-REC-PAST.PART-ACC-SS.PL
 'The girls know that they helped each other.'

Both transitive and two-place intransitive verbs can take *-masi* and thus acquire the reciprocal meaning provided they are not subject to any semantic constraints (see 3.2).

On one-place intransitives the suffix *-masi* has non-reciprocal meanings; these cases are discussed in 3.3.

3.1 Subject-oriented constructions

Morphological subject-oriented reciprocals may have only the “canonical” and the “indirect” diathesis. Reciprocalization of other constituents, such as possessors and adjuncts, does not involve a change in the verbal form and is described in Sections 4.2.1 and 5.

3.1.1 “Canonical” reciprocals

“Canonical” reciprocals can be derived from two-place transitive and intransitive verbs. In the former case the second participant of the reciprocal situation is a direct object of the corresponding non-reciprocal construction, while in the latter case it is an indirect object encoded by various oblique cases.

3.1.1.1 *Derived from two-place transitives.* In (11) I illustrate the derivation of “canonical” reciprocals from some two-place transitive verbs.

(11)	<i>a:kta-</i>	‘to chase’	<i>a:kta-masi-</i>	‘to chase each other’
	<i>bele-</i>	‘to help’	<i>bele-masi-</i>	‘to help each other’
	<i>ekpi-</i>	‘to spray at’	<i>ekpi-masi-</i>	‘to spray at each other’
	<i>ekte-</i>	‘to protect’	<i>ekte-masi-</i>	‘to protect each other’
	<i>galu-</i>	‘to hate’	<i>galu-masi-</i>	‘to hate each other’
	<i>gida-la-</i>	‘to hit with a spear’	<i>gida-masi-</i>	‘to hit each other with spears’
	<i>kala-</i>	‘to replace’	<i>kala-masi-</i>	‘to replace each other’
	<i>keni-</i>	‘to scold’	<i>keni-masi-</i>	‘to scold each other’
	<i>mäusa-si-</i>	‘to shoot’	<i>mäusa-masi-</i>	‘to shoot at each other’
	<i>ɲousi-</i>	‘to smell’	<i>ɲousi-masi-</i>	‘to smell each other’
	<i>pila-</i>	‘to tease’	<i>pila-masi-</i>	‘to tease each other’
	<i>santu-la-</i>	‘to beat with a fist’	<i>santu-masi-</i>	‘to beat each other with fists’
	<i>tugele-</i>	‘to hug’	<i>tugele-masi-</i>	‘to hug each other.’

A sentential example is (12b):

- (12) a. *Nuani ei a:nta-wa ekte-si:-ni.*
 he this woman-ACC protect-IPFV-3SG
 ‘He protects this woman.’
- b. *Nuati ekte-si-masi:-ti.*
 they protect-IPFV-REC-3PL
 ‘They protect each other.’

3.1.1.2 *Derived from two-place intransitives.* Reciprocals derived from two-place intransitives are not numerous. In (13), which contains all the instances at my disposal, I present them together with the indication of the case associated with the reciprocalized object in the corresponding non-reciprocal construction. All the examples at my disposal involve reciprocalization of an instrumental or a lative object.

- | | | | | |
|------|--------------------------|-----------------|---------------------|------------------------------|
| (13) | <i>iñi-</i> + INST | 'to laugh at' | <i>iñi-masi-</i> | 'to laugh at each other' |
| | <i>mosoni-</i> + INST | 'to fight with' | <i>mosoni-masi-</i> | 'to fight with each other' |
| | <i>ñele-</i> + INST | 'to be afraid' | <i>ñele-masi-</i> | 'to be afraid of each other' |
| | <i>xuli-</i> + LAT | 'to go to' | <i>xuli-masi-</i> | 'to go to each other' |
| | <i>zima-</i> + INST, LAT | 'to visit' | <i>zima-masi-</i> | 'to visit each other.' |

An example of the reciprocal construction with one of these verbs is (14b):

- (14) a. *Ei a:nta tutulu nua-tigi-ni xuli:-ni.*
 this woman always he-LAT-INST go-3SG
 'This woman always goes to him.'
- b. *Nuati tutulu xuli-masi:-ti.*
 they always go-REC-3PL
 'They always go to each other.'

3.1.2 "Indirect" reciprocals

"Indirect" reciprocals express the reciprocalization of the third (animate) argument of a transitive verb. Typical "indirect" reciprocals involve verbs of giving, speech, and "taking away". In Udehe, verbs of the first lexical group take the indirect dative object (15a), verbs of speech take either the lative (15b) or the locative object (15c), and verbs of the third group always take the locative object (15d). Note the semantic change which accompanies reciprocal derivation from the verb *ga(da)-* in (15d).

- | | | | | |
|---------|-------------------|------------------------|-----------------------|--------------------------------------|
| (15) a. | <i>nexu-</i> | 'to bring' | <i>nexu-masi-</i> | 'to bring to each other' |
| | <i>bu-</i> | 'to give' | <i>bu-masi-</i> | 'to give to each other' |
| | <i>kaja-</i> | 'to send' | <i>kaja-masi-</i> | 'to send to each other' |
| | <i>suñele-</i> | 'to give as a present' | <i>suñele-masi-</i> | 'to give as a present to each other' |
| b. | <i>jexe-</i> | 'to sing' | <i>jexe-masi-</i> | 'to sing to each other' |
| | <i>teluñu-si-</i> | 'to tell' | <i>teluñu-masi-</i> | 'to tell sth to each other' |
| | <i>dia-na-</i> | 'to say' | <i>dia-masi-</i> | 'to say to each other' |
| | <i>imasi-</i> | 'to tell tales' | <i>imasi-masi-</i> | 'to tell tales to each other' |
| c. | <i>xauntasi-</i> | 'to ask' | <i>xauntasi-masi-</i> | 'to ask from each other' |
| | <i>gele-</i> | 'to ask' | <i>gele-masi-</i> | 'to ask from each other' |
| d. | <i>titi-</i> | 'to take away' | <i>titi-masi-</i> | 'to take away from each other' |
| | <i>ga(da)-</i> | 'to take' | <i>ga-masi-</i> | 'to exchange women (between clans).' |

When reciprocalized, these verbs retain the direct object, cf.:

- (16) a. *Ei a:nta nua-tigi-ni teluñu(-we) teluñu-si-e-ni.*
 this woman he-LAT-3SG story(-ACC) story-VR-PAST-3SG
 'This woman told him stories.'
- b. *Teluñu teluñu-masi-e-ti.* (K. 175)
 story story-REC-PAST-3PL
 'They told stories to each other.'
- (17) a. *Ei a:nta nuan-dule-ni lepeška-we titi:-ni.*
 this woman he-LOC-3SG flat.cake-ACC take.away-3SG
 'This woman takes a flat cake away from him.'

- b. *Lepėška-we titi-masi:-ti.*
 flat.cake-ACC take.away-REC-3PL
 ‘They take the flat cake away from each other.’

3.2 Restrictions on derivation

The derivation of “canonical” reciprocals from transitive verbs is highly productive, provided there are no trivial semantic constraints against it. Apparently reciprocals can be formed from all or most transitive verbs, if they allow an animate (typically human) object participant, but reciprocalization of a non-animate object is also attested.

- (18) *Tokō kala-masi:-ti.*
 cloud replace-REC-3PL
 ‘Clouds replace one another.’

“Indirect” reciprocals are equally productive.

With intransitives the situation is more complex. As mentioned in 3.1, morphological reciprocalization only involves arguments. However, there are some further grammatical restrictions on it, which do not seem to correlate directly with the argument/adjunct status of the secondary participant involved in the reciprocal relationship. Not all arguments of two-place intransitive verbs are subject to reciprocalization, even if they involve animate participants and the corresponding reciprocal situation can in principle be imagined. Two-place intransitive verbs that take a locative or an ablative object do not allow reciprocal derivation, cf.:

- (19) *nagda- + LOC* ‘to get in (while shooting)’ **nagda-masi-*
dekte- + ABL ‘to separate from’ **dekte-masi-*
susa- + ABL ‘to escape from’ **susa-masi-*.

3.3 Non-reciprocal meanings of the suffix *-masi*

The suffix *-masi* with a non-reciprocal meaning occurs fairly infrequently and only on intransitives. In non-reciprocal use it does not involve any valency change.

3.3.1 *Alternative meaning*

The suffix *-masi* may indicate an action performed by two participants alternately.

- (20) a. *Nuati etete-masi:-ti.*
 they work-REC-3SG
 ‘They work by turns (i.e. one sleeps while the other works, and vice versa).’
 b. *Nuati utebe bagdi-si-masi:-ti.*
 they so live-IPFV-REC-3PL
 ‘So they live at each other’s place by turns.’

The alternative meaning is possible only if the base verb is a one-argument intransitive which otherwise is not compatible with the reciprocal marker. This seems to be conditioned by a tendency to avoid semantic ambiguity. The surface expression of the direct

object and the indirect dative object is not obligatory in Udehe, if their identity is recoverable from the context:

- (21) *Nuati bele-si:-ti.*
 they help-IPFV-3PL
 ‘They help (him).’

Therefore the reciprocal construction involving transitive verbs could have been ambiguous in respect of the reciprocal and the alternative interpretations. In practice, however, such an ambiguity does not arise, cf.:

- (22) *Nuati bele-si-masi:-ti.*
 they help-IPFV-REC-3PL
 ‘They help each other’, but not *‘They help (him) alternately.’

I only have one example where the reciprocal form of the verb *xuli-* ‘to go to’ which is normally two-place (see 3.1.1.2) denotes an alternating situation. However in this case it may rather be analyzed as one-place. In addition, the manner adjunct *wakca-mi* ‘hunting’ clearly indicates that the reciprocal interpretation of the situation is ruled out.

- (23) *Nuati wakca-mi xuli-masi:-ti.*
 they hunt-INF go-REC-3PL
 ‘They go hunting by turns.’

3.3.2 Sociative meaning

The sociative meaning of the reciprocal suffix *-masi* is not generally typical of the Southern dialect of Udehe, but is attested in a few instances in the Northern dialect. This is probably due to the fact that the Southern dialect, unlike the Northern dialect, has another grammaticalized means to express the sociative meaning, the sociative affix *-niŋa* (see Section 6). In (24) I present examples of the morphological sociatives derived with *-masi* in the Northern dialect.

- (24) a. *In’ei site-ni-de a:kta-masi-mi bie eni-fei, mafa*
 dog child-3SG-and chase-REC-INF be.PRES.HAB mother-REFL.PL bear
site-ni-de a:kta-masi-mi bagdi. (SK. 89)
 child-3SG-and chase-REC-INF live.PRES.PART
 ‘Puppies chase their mother together, and bear cubs also go chasing together.’
 b. *Teu-ni sauli-masi-li-e-ti.* (SKX. 264)
 all-3SG offer.food-REC-INC-PAST-3PL
 ‘All (of them) started having a feast together.’

The sociative derivation with the suffix *-masi* may involve a slight change of meaning. For example, the non-derived verb *sauli-* is transitive and means ‘to offer (food) to sb’, while its sociative form means ‘to have a feast together’ (24b). The transitive verb *zuza-* means ‘to argue about sth’, and its derivative *zuza-masi-* means ‘to investigate a conflict situation together (in the traditional court of the elders)’, cf.:

- (25) a. Čingese Kimonko sagdimzi-ni zuza-masi-zaŋa-ti mafa xaŋa-zi-ni. (SK. 1335)
 Ch. K. elder-3SG argue-REC-FUT-3PL bear soul-INST-3SG
 ‘Chingese, the elder of (the clan) Kimongko, will investigate (the conflict) together with the bear’s soul.’
- b. Bu utemi geje zuza-masi-u.
 we therefore together argue-REC-1PL.EXC
 ‘That is why we investigate (the case) together.’

3.4 Co-occurrence of the suffix *-masi* with other verbal affixes

Although it need not be so, the reciprocal *-masi* is very frequently combined with the aspectual affix *-si*. This affix conveys a wide range of imperfective meanings: progressive, multiplicative, diversative, and some others. It may also indicate that the situation described involves multiple participants referred to either by the subject (26a) or direct object (26b).

- (26) a. *tiyme-* ‘to fall’ *tiyme-si-* ‘to fall (of several people or objects)’
 b. *nodo-* ‘to lose’ *nodo-si-* ‘to lose (many objects).’

For transitive verbs there may be some ambiguity between these meanings; e.g. (*teti-* ‘to dress’ →) *teti-si-* may mean ‘to dress many children’ or ‘to dress one child many times’. With reciprocal verbs the imperfective *-si* indicates plurality of the subject. For some reciprocal verbs this suffix is optional; thus, there are such pairs as *zima-masi-* and *zima-si-masi-* ‘to visit each other’, *bele-masi-* and *bele-si-masi-* ‘to help each other’, *ŋuga-masi-* and *ŋuga-si-masi-* ‘to kiss each other’. But in at least one case the reciprocal derivation must obligatorily be accompanied by the suffix *-si*: *b’a-* ‘to find, meet’ → *b’a-si-masi-* ‘to meet each other’, but not **b’a-masi-*.

When the verbal stem does not occur in an unbound form and always carries an aspectual marker, the reciprocal suffix replaces the latter. This mostly concerns the singulative *-la* and the imperfective *-si*. For example, the verbs *kata-la-* and *kata-si-* ‘to pull sb’s hair’ are not used without aspectual markers, i.e. the unbound stem **kata-* does not exist. But the corresponding reciprocal form is *kata-masi-* ‘pull each other’s hair’. Similarly, the reciprocal forms of the verbs *gida-la-* ‘to hit with a spear’, *mäusa-la-* ‘to shoot’, and *santu-la-* ‘to hit with a fist’ are *gida-masi-*, *mäusa-masi-*, and *santu-masi-*, respectively. In verbs derived from nouns by means of interclass derivational affixes, the reciprocal marker normally replaces them, cf. *teluŋu* ‘story’ → *teluŋu-si-* ‘to tell stories’ (*-si* is a derivational affix of denominal verbs), but *teluŋu-masi-* ‘to tell stories to each other.’

3.5 Expression of reciprocal arguments

In the reciprocal construction the secondary argument (the co-participant of the reciprocal event) can be expressed in several formal ways. The encoding of the co-participant is formally similar to the encoding of the secondary argument of non-derived symmetrical verbs, considered in 7.4. They may both be encoded homogeneously, i.e. by a plural NP, or heterogeneously, i.e. by an instrumental NP, a coordinated structure, or a postpositional

phrase. The difference, however, is in the verbal form: morphological reciprocals are always in the plural, while non-derived symmetrical verbs take a plural agreement affix only if the subject is formally plural.

3.5.1 Instrumental noun phrase

The instrumental NP is widely used in Udehe as a comitative adjunct semantically associated with the subject participant, see 6.3. The secondary participant of the reciprocal situation may be encoded as an instrumental NP as well, cf.:

- (27) *Gionka Pionka-zi zogzo-masi-e-ti.*
 G. P.-INST quarrel-REC-PAST-3PL
 ‘The Gionkas had a quarrel with the Pionkas.’

There are reasons to think that in these cases the instrumental NP does not have adverbial or object status, but rather has a modifying or coordinative function and forms a complex NP with the subject. First, as mentioned above, the subject always triggers plural agreement on the verb, although it may be semantically and grammatically singular. Moreover, in the case of a person mismatch between the second and the first participants, the 1st and the 2nd person take over the 3rd person (see 6.3 for a similar situation in non-reciprocal comitative constructions). In (28) the first participant is in the 3rd person and the second participant denoted by the instrumental NP is in the 1st person. The verb takes the 1PL agreement. Thus, agreement on the verb is determined by the complex NP rather than by the first participant alone.

- (28) *Ag'a min-zi kusige dieleni ñagda-masi-e-mu.*
 brother me-INST knife because curse-REC-PAST-1PL.EXC
 ‘My brother had a row with me because of the knife.’

Second, if the subject is formally and semantically singular, the instrumental NP cannot be removed from the reciprocal sentence without affecting its grammaticality, which argues against its status as an adjunct.

- (29) **Pakula ñagda-masi-e-ti.*
 P. CURSE-REC-PAST-3PL
 lit. ‘Pakula cursed each other.’

Finally, the instrumental NP must be adjacent to the subject NP, cf. (28) and (30):

- (30) **Pakula ñagda-masi-e-ti tukca-zi.*
 P. CURSE-REC-PAST-3PL hare-INST
 ‘Pakula had a row with the hare.’

Linear separation of the instrumental NP from the subject is only possible in the Northern dialect when the reciprocal suffix on the verb has a sociative meaning (see (25a)). This shows that under normal conditions it forms a single syntactic constituent with the subject.

3.5.2 Postpositional phrase

The secondary participant can be specified by a postpositional phrase with the postposition *mule* ‘with’. This postposition is used outside reciprocal constructions as well (6.3). It indicates that the two participants are related by a close (family) association and constitute a natural pair: a husband and wife, a mother and son, and so on. The object of the postposition cannot bear any possessive markers because the postposition itself indicates the possessive relationship between the two participants. Thus, (31) can be understood only in the sense that the speaker climbed the tree with his own and not someone else’s younger brother.

- (31) *Bi neŋu mule mo:-tigi tukti-e-mi.*
 I younger.brother with tree-LAT climb-PAST-1SG
 ‘I climbed the tree with my younger brother.’

The same meaning of the postposition *mule* is observed in reciprocal constructions, as in (32). Note that in (32) the first participant of the reciprocal situation corresponds to a plural NP.

- (32) *Nuati sita mule ŋa:-masi-e-ti.*
 they son with curse-REC-PAST-3PL
 ‘He had a row with his son.’

In the Northern dialect the postpositional phrase with *mule* can be employed in sociative constructions as well.

- (33) *Belie Biatu-ŋi: mule sauli-masi-li-e-ti.* (SK. 786)
 fairy B.-AL.REFL with offer.food-REC-INC-PAST-3PL
 ‘The fairies started having a feast with their Biatu.’

3.5.3 Plural

All reciprocal arguments may be represented on the surface by one constituent, namely, the plural subject. In this case the reciprocal relation holds between the members of one homogeneous group.

- (34) *B’ata-ziga santu-masi-e-ti.*
 boy-PL fist-REC-PAST-3PL
 ‘The boys beat each other with their fists.’

The subjects are regularly dropped in Udehe, in which case there is no overt antecedent of the reciprocal relationship within the clause. Both reciprocal arguments are represented only by verbal agreement.

- (35) *Gida-zi gida-masi-e-ti.* (K. 177)
 spear-INST spear-REC-PAST-3PL
 ‘They were throwing spears at each other.’

When it is necessary to emphasize that the action is performed by two (and not more) participants, the collective numeral *zuŋe* ‘two, both’ can be used either on its own or following the plural subject.

- (36) a. *Nuati zuŋe jexe-masi:-ti.*
 they both sing-REC-3PL
 ‘The two of them sing to each other.’
 b. *Zuŋe imasi-masi-e-ti.*
 both tell-REC-PAST-3PL
 ‘They were telling (tales) to each other.’

3.5.4 Several participants

The reciprocal situation does not necessarily involve only two participants, although two seems to be the default interpretation. Without an additional indication the construction is in fact ambiguous. In (37) the reciprocal situation pertains to three participants, as is clear from the nearest left context.

- (37) *Omo ni: zu: ni:-we b'a-si-e-ni. Teluŋu teluŋu-masi-e-ti* (K. 175)
 one man two man-ACC find-IPFV-PAST-3SG story story-REC-PAST-3PL
 ‘One man met two men. They told each other stories.’

When it is necessary to emphasize the number of participants, lexical means are used, namely, numerals. In (38) the number of participants is overtly indicated by the collective numeral *di:n-tuŋe* ‘four’.

- (38) *Di:n-tuŋe sa-masi:-ti.*
 four-COLL know-REC-3PL
 ‘The four people know each other.’

4. Constructions with reciprocal pronouns

The reciprocal meaning can be expressed lexico-syntactically, by means of free pronominal expressions (reciprocal pronouns), but without morphological changes in the verb. Like morphological reciprocals, lexico-syntactic reciprocals indicate the referentiality of the subject with a direct or indirect object, and sometimes also with the possessor. In other words, like morphological reciprocals, they are always subject-oriented. However, lexico-syntactic reciprocalization does not affect the valency of the verb, while morphological reciprocalization involves valency reduction.

4.1 Reciprocal pronouns

Morphologically, the reciprocal pronouns are based on the reflexive pronoun *mene/me(n)-* ‘oneself (myself, yourself, him-/herself, itself)’ which is unmarked for person. In the reflexive function this pronoun has the full case paradigm. In the nominative it does not take number inflection, but plurality may be optionally indicated by the reduplication of the stem: *mene-mene* ‘oneselves (ourselves, yourselves, themselves)’. In cases other than the nominative the reflexive pronoun takes the reflexive possessive affixes *-i/-mi* and *-f(e)i*, which indicate the singularity and plurality of its antecedent, respectively. For example, the accusative forms of the reflexive pronoun are *me-mi* (SG) and *me-f(e)i* (PL).

Reciprocal pronouns are derived by reduplication of the reflexive pronoun. In Udehe they occur only in the nominative and accusative, and they are not marked for plural. In the nominative they may be homonymous to the plural reflexive. The accusative is formed by reduplication of the reflexive plural accusative.

- (39) NOM *mene-mene* ‘each other’, lit. ‘self self’
 ACC *me-f(e)i-me-f(e)i* (same).

In what follows I gloss the stem *mene/me(n)-* as REFL in all the cases.

The reciprocal pronouns function as verbal arguments. In addition, nominative reciprocals act as possessive modifiers and can be used adverbially (4.3).

4.2 Subject-oriented reciprocals

Lexico-syntactic reciprocals convey reciprocal situations that are not expressed by morphological reciprocals, namely, the possessive diathesis (4.2.1). Further, the nominative form of the reciprocal pronoun functions as an oblique object (4.2.2), and the accusative form as a direct object (4.2.3). Unlike morphological reciprocals, lexico-syntactic reciprocals do not seem to express the dative diathesis.

4.2.1 “Possessive” reciprocals

When the coreferential relationship holds between the subject and the possessor, this is expressed by the nominative reciprocal pronoun in the modifier function. Udehe does not seem to restrict the syntactic roles available for the head of the possessive reciprocal NP; it can correspond either to an argument or to an adjunct. The verb exhibits plural agreement, for example:

- (40) *Mamaka mafasa mene-mene řukte-le kitiga-si:-ti.*
 old.man old.woman REFL-REFL hair-LOC pull-IPFV-3PL
 ‘The old man and the old woman are pulling each other’s hair.’

As was mentioned in 4.1, the nominative reciprocal pronoun is morphologically identical to the plural form of the reflexive pronoun *mene-mene*. This reflexive pronoun can also function as a possessive modifier, typically with a distributive meaning. In this case the head noun takes a reflexive possessive affix.

- (41) *Uta bede bagdi-e-ti mene-mene na:-di-fei.* (SKX. 326)
 that like live-PAST-3PL REFL-REFL land-DAT-REFL.PL
 ‘They started living like this, each on his own land.’

In contrast to that, in the reciprocal “possessive” construction the head noun does not take possessive affixes (see example (40) above). So the presence vs. absence of possessive marking on the head is the only device that formally differentiates between the reciprocal and reflexive interpretation of the possessive modifier *mene-mene*, cf. (42a) with a reflexive reading and (42b) with a reciprocal reading.

- (42) a. *Mene-mene xokto-zi-fi ηene-kte-gi-e-ti.*
 REFL-REFL road-INST-REFL.PL go-DISTR-REP-PAST-3PL
 ‘They returned along their road.’ or: ‘They returned each along his own road.’
- b. *Mene-mene xokto-zi ηene-kte-gi-e-ti.*
 REFL-REFL road-INST go-DISTR-REP-PAST-3PL
 ‘They returned along each other’s road.’

The “possessive” reciprocal construction is in fact the only non-head-marked possessive construction in Udehe. The lack of head marking here can perhaps be explained by the need to disambiguate between the reflexive and reciprocal readings of the pronoun *mene-mene*. On the other hand, this pronoun may function adverbially with the meaning ‘separately, each on his own’ (4.3). So it is also conceivable that in cases like (42b) it should be analyzed as an adverbial rather than a possessor within a possessive NP, in which case the lack of possessive marking is to be expected.

4.2.2 “Canonical” reciprocals with two-place intransitives

The nominative form of the reciprocal pronoun expresses reciprocalization of an oblique object. Lexico-syntactic reciprocalization applies to two-place intransitive verbs that can also take the morphological reciprocal marker (see 3.1.1.2). For example, the verb *ηele-* takes the instrumental object, and the verb *xuli-* takes the lative object. They derive the morphological reciprocals *ηele-masi-* and *xuli-masi-*, but also co-occur with free reciprocal expressions, as shown below.

- (43) a. *Nuati mene-mene ηele-iti.*
 they REFL-REFL be.afraid-3PL
 ‘They are afraid of each other.’
- b. *Nuati mene-mene zima-mi xuli:-ti.*
 they REFL-REFL visit-INF go-3PL
 ‘They pay visits to each other.’

4.2.3 “Canonical” reciprocals with two-place transitives

The accusative reciprocal pronoun participates in reciprocal constructions with two-place transitive verbs. All these verbs also allow morphological reciprocal derivation with the suffix *-masi* (3.1.1.1). The morphological and the lexico-syntactic constructions seem to be fully synonymous. It should be noted, however, that analytic reciprocal constructions are somewhat more frequent and clearly preferred in the speech of younger informants, probably under the influence of Russian syntax. Examples of lexico-syntactic reciprocal constructions with two-place transitives:

- (44) a. *N’aula-ziga me-fei-me-fei uli-zi ekpisi:-ti.*
 child-PL REFL-PL-REFL-PL water-INST spray-3PL
 ‘Children are spraying water at each other.’
- b. *Me-fei-me-fei dukte-iti.* (SK. 377)
 REFL-PL-REFL-PL lash-3PL
 ‘They lash each other.’

4.3 Adverbial function of reciprocal pronouns

The nominative reciprocal pronoun can be used adverbially with the meaning ‘separately’ or ‘each by himself’, cf.:

- (45) a. *Mene-mene bagdi-ti.*
REFL-REFL live-3PL
‘They live separately (each on his own).’
b. *Bueti mene-mene ηene:-ti..*
they REFL-REFL go.PAST-3PL
‘They left separately.’

Another possible meaning of this construction is ‘in different directions’.

- (46) a. *Teu mene-mene we-si-e-ti.* (SKX. 162)
all REFL-REFL throw.away-IPFV-PAST-3PL
‘They threw everything away in different directions.’
b. *In’ei ηene-isi-ni mene-mene susa-kta, mene-mene.*
dog go-PC-3SG REFL-REFL escape-DISTR REC-REC
‘When the dog came, (the badgers) escaped in different directions.’

4.4 Expression *mene dolo* ‘among themselves’

The reciprocal expression *mene dolo* ‘among themselves’ comprises the reflexive pronoun *mene* and the postposition *dolo* ‘within’. This expression functions adverbially and mostly (though not exclusively) co-occurs with intransitive verbs. Normally it is used when the number of participants involved in the reciprocal situation is more than two.

- (47) *Mene dolo e-iti asa.*
REFL within NEG-3PL respect
‘They don’t respect each other.’

The same expression can be used in possessive reciprocalization, as below. Note that in (48a) the reflexive pronoun is reduplicated, while the nominative reciprocal pronoun in the function of the possessor is absent.

- (48) a. *Nada-niηa tu: mene-mene dolo aka-la-fi bogdo-lo*
seven-COL all REFL-REFL within back-LOC-REFL.PL shoulder-LOC
zawa-si-ga-si. (K. 185)
take-IPFV-PERF-PC
‘All seven hold each other’s backs and shoulders.’
b. *Mene dolo e-iti xuli mene-mene zugdi-tigi.*
REFL within NEG-3PL go REFL-REFL house-LAT
‘They don’t visit each others’ houses.’

4.5 Co-occurrence of reciprocal pronouns with suffixed reciprocals

The accusative reciprocal pronoun *mefei-mefei* is frequently used in combination with the morphological reciprocalization of the verb, but is by no means obligatory in this case. The

examples in (49) show that “pleonastic” reciprocals are available when an argument other than the direct object is involved in the reciprocal relation, for example, an instrumental (49a) or lative object (49b).

- (49) a. *Nuati me-fei-me-fei ŋele-masi:-ti.*
 they REFL-PL-REFL-PL be.afraid-REC-3PL
 ‘They are afraid of each other.’
 b. *Nuati me-fei-me-fei xuli-masi:-ti.*
 they REFL-PL-REFL-PL go-REC-3PL
 ‘They visit each other.’

Pleonastic constructions where the accusative argument of a transitive verb is reciprocalized are questionable. Not all informants accept examples such as (50), and (51) is judged to be ungrammatical.

- (50) a. [?]*Bu me-fei-me-fei nodo-masi-e-mu.*
 we REFL-PL-REFL-PL lose-REC-PAST-1PL.EXC
 ‘We lost each other.’
 b. [?]*Me-fei-me-fei aju:-masi:-ti.*
 REFL-PL-REFL-PL love-REC-3PL
 ‘They love each other.’
 (51) **Nuati me-fei-me-fei sa-masi:-ti.*
 they REFL-PL-REFL-PL know-REC-3PL
 ‘They know each other.’

The nominative reciprocal pronoun *mene-mene* is pleonastically used to indicate the “possessive” reciprocal diathesis. Recall that reciprocalization of the possessor is impossible by purely morphological means, cf. (52a). However, possessive reciprocals can be formed by combination of a morphologically reciprocal verb with the suffix *-masi* and reciprocal pronoun *mene-mene* (52b).

- (52) a. **Kusige-we gele-masi:-ti.*
 knife-ACC ask-REC-3PL
 ‘They ask for each other’s knife.’
 b. *Mene-mene kusige-we gele-masi:-ti.*
 REC-REC knife-ACC ask-REC-3PL
 ‘They ask for each other’s knife.’

Finally, reciprocity may be pleonastically marked by the postpositional expression *mene dolo* ‘among themselves’ which co-occurs with the reciprocal form of two-place transitive verbs (53a), two-place intransitive verbs (53b) or three-place transitive verbs, as in (53c). It indicates that more than two participants are involved in the reciprocal relation.

- (53) a. *Mene dolo aju-masi:-ti.*
 REFL within love-REC-3PL
 ‘They love each other.’
 b. *Nuati mene dolo zima-si-masi:-ti.*
 they REFL within visit-IPFV-REC-3PL
 ‘They visit each other.’

- c. *Nuati mene dolo zeu-we nexu-masi:-ti.*
 they REFL within food-ACC bring-REC-3PL
 ‘They bring each other food.’

4.6 Reciprocal pronoun *za:-* (Northern dialect)

The pronoun *mene-mene* is equally available in both Udehe dialects. In addition, the Northern dialect as recorded by Simonov and Kjalundzjuga has a second reciprocal pronoun, which goes back to the lexical word *za:* ‘relative, friend, associate’. This word exists in both the Southern and the Northern dialects, but only in the Northern dialect it is the base of reciprocal pronouns. In the material at my disposal the corresponding reciprocal pronoun mostly occurs in the accusative formed by reduplication of the plural reflexive possessive form: *za:-fi-za:-fi*, where *-fi* is a possessive-reflexive plural marker. It can be used as the only reciprocal marker, as in (54), or in combination with morphological reciprocals as in (55). In both cases it is compatible with transitive verbs.

- (54) *za:-fi-za:-fi bele-si-mi.* (SK. 310)
 REFL-PL-REFL-PL help-IPFV-INF
 ‘helping each other.’
- (55) a. *Čind’a-da bui-de za:-fi-za:-fi akta-masi-mi bagdi.* (SK. 310)
 bird-and animal-and REFL-PL-REFL-PL chase-REC-INF live.PRES.PART
 ‘Birds and animals live chasing each other.’
- b. *In’ei-ziga za:-fi-za:-fi ikte-masi:-ti.* (SK. 354)
 dog-PL REFL-PL-REFL-PL bite-REC-3PL
 ‘Dogs bite each other.’

I have only one example where the reciprocal pronoun derived from the stem *za:-* takes the oblique lative case. According to the general rule of Udehe (2.2), the case marker is located between the stem and the possessive affix. The construction denotes the reciprocation of the lative argument of the three-place transitive word *ana-* ‘to push sth onto sth’.

- (56) *Za:-tigi-fi-za:-tigi-fi ana-masi:-ti.* (SK. 310)
 REFL-LAT-PL-REFL-LAT-PL push-REC-3PL
 ‘They force work on each other.’

This example suggests that the pronoun *za:fi-za:fi*, unlike *mene-mene*, might have a whole case paradigm and serve to reciprocate various indirect objects and adjuncts, but I do not have the data to support this claim.

4.7 Expression of the second participant

In reciprocal constructions involving free reciprocal expressions the subject is either a plural NP (57) or a coordinated NP (58). As far as my material shows, expression of the second participant by means of an instrumental NP or a postpositional phrase, as is typical of morphological reciprocals (see 3.5.1, 3.5.2), is not available.

- (57) *N'aula-ziga me-fei-me-fei uli-zi ekpisi:-ti.*
 child-PL REFL-PL-REFL-PL water-INST spray-3PL
 'Children are spraying each other with water.'
- (58) *Mamaka mafasa mene-mene nukte-le kitiga-si:-ti.*
 old.man old.woman REFL-REFL hair-LOC pull-IPFV-3PL
 'The old man and the old woman are pulling each other's hair.'

The collective subject may be grammatically singular but semantically plural and trigger plural agreement on the verb. In (59a) the subject is expressed by a noun derived with the collective suffix *-mule* (on this suffix see 7.2). In (59b) a non-derived collective noun corresponds to it. Note that the reciprocal pronoun here does not exhibit reduplication.

- (59) a. *Xunazi-mule me-fei-me-fei aju:-iti.*
 sister-COLL REFL-PL-REFL-PL love-3PL
 'The sisters love each other.'
- b. *Ei zugdiŋke me-fei teu aju-iti.*
 this family REFL-PL all love-3PL
 'In this family everybody loves one another.'

5. Constructions with reduplications

Udehe employs a special reciprocal construction which involves reduplication. These constructions are mostly available when the reciprocal relationship holds between the subject and an adverbial expression, i.e. they may be regarded as an "adverbial" diathesis. Reciprocalization is encoded by reduplication of the postposition, as in (60b). The postposition specifies which non-subject participant is involved in the reciprocal relation. The corresponding non-reciprocal sentence is cited in (60a).

- (60) a. *B'ata aziga dä: te:-ini.*
 boy girl next sit-3SG
 'The boy sits next to the girl.'
- b. *B'ata aziga dä: dä: te:-iti.*
 boy girl next next sit-3PL
 'The boy and the girl sit next to each other.'

Constructions with reduplications typically involve reduplication of postpositions (5.1), but other elements can be reduplicated as well (5.2, 5.3, and 5.4). The verb shows plural agreement, and the plurality of the subject is expressed either morphologically or by coordination.

It should be noted that generally speaking reduplication in Udehe is very frequent. It is quite a productive means used to express intensity of adverbial meanings, e.g. *xele xele* 'very quickly' (← *xele* 'quickly'). Reduplication of numerals (often in the instrumental form) conveys the distributive meaning:

- (61) a. *Ni-du ila ila cä:ze-we obolo:-ni.*
 man-DAT three three money-ACC divide.PAST-3SG
 ‘He divided the money, three roubles to each man.’
 b. *Zu:zi zu:zi nede:-ni.*
 two-INST two-INST put.PAST-3SG
 ‘He put (them) in twos.’

Some reduplicated nominal and adverbial expressions with a non-reciprocal meaning are lexicalized, cf. *emne emne* ‘seldom, sometimes’ (← *emne* ‘once’), *kesem kesem* ‘hardly, with difficulty’ (← *kese-mi* ‘suffering’), *geje geje* ‘equally’ (← *geje* ‘together’), *onobui onobui* ‘various’ (← *onobui* ‘which’), *onodgo onodgo* ‘in all ways’ (← *onodgo* ‘how’), and *j’eu j’eu* ‘all sort of’ (← *j’eu* ‘what, what sort of’).

5.1 Reduplication of postpositions

This phenomenon is highly productive as a means of marking reciprocity, usually chain-ling relations (cf. (62a, b)). The reciprocal construction with reduplicated postpositions is fully productive. Of course it is subject to the usual semantic restrictions, but is generally available with all or most postpositions.

- (62) a. *Amä:ta amä:ta tukä-iti n’aula-ziga.*
 after after run-3PL child-PL
 ‘Children are running after each other.’
 b. *Kil’ai-ziga tene zulefe zulefe-de ηene-i.* (K. 181)
 seagull-PL and before before-FOC go-PRES.PART
 ‘And the seagulls are flying one after another.’
 c. *Nuati geje geje xuli:-ti.*
 they with with go-3PL
 ‘They walk with one another.’

I also have two examples from the Northern dialect where a reduplicated postposition does not have the canonical form, but acquires a suffix *-ktA* or *-ktu*. The usual form of the postposition ‘on top of’ is *we:-le-ni* (*-le* is a locative affix and *-ni* is a possessive inflection), but in (63a) it takes the form *we:-ktu*. The usual form of the postposition ‘after’ is *amä:ta*, but in (63b) it takes the form *amä:-kta*. The meaning of this suffix in these cases is unclear, but remarkably it is formally identical to the verbal distributive suffix *-ktA* which typically denotes the plurality of the subject (and occasionally the object), e.g. *eme-kte-* ‘to come (of several people)’.

- (63) a. *To:to:-ni we:-ktu we:-ktu-de.* (K. 185)
 sit.on.the.back.PAST-3SG top-DISTR top-DISTR-FOC
 ‘They sat on top (not on the back) of each other.’
 b. *amä:-kta amä:-kta.*
 after-DISTR after-DISTR
 ‘one after another.’

5.2 Reduplication of adverbs, adjectives and numerals

The reduplicative reciprocal construction is also available when the subject is cross-coreferential with an argument of an adjective. Udehe has several adjectives that take arguments, e.g. *bejeku* ‘alike, similar to’ (+ NOM), *xoŋto* ‘different from’ (+ ABL), and *das’a* ‘close to’ (+ LAT). Reduplication of an adjective indicates that the participants (at least two) of a stative situation stand in a symmetrical relationship to each other. Like all adjectives in Udehe, a reduplicated adjective may be used predicatively (64a) or as a prenominal modifier (64b).

- (64) a. *Xa:-mule bejeku bejeku bi:-ni.*
 relative-COLL similar similar be-3SG
 ‘Relatives look like each other.’
 b. *bejeku bejeku b’ata-ziga.*
 similar similar boy-PL
 ‘boys looking like each other.’

Note that unlike in constructions where an immediate constituent of the clause or a possessor is reciprocalized, in constructions with the reciprocalized object of an adjective the finite verb (the copula) does not necessarily show plural agreement (64a). But when a reduplicated adjective is used attributively, the head noun typically receives the plural marker *-ziga*.

Example (65) illustrates the reciprocalization of an argument of an adverb. The adverb *pazi* ‘separately from’ normally takes an ablative argument:

- (65) a. *Ei a:nta-digi pazi bagdi:-ni.*
 this woman-ABL separately live-3SG
 ‘He lives separately from this woman.’
 b. *Pazi pazi bagdi-li-e-ti.* (SK. 463)
 separately separately live-INCH-PAST-3PL
 ‘They started living separately from each other.’

In some cases a reduplicated adjective has the distributive rather than the reciprocal meaning. This is only observed with one-argument adjectives. For example, in (66) reduplication of the quantifying adjective *wac’a* ‘a little’ results in the meaning ‘a little of each’. The head remains in the singular.

- (66) *Wac’a wac’a okto-wo jeugie-mi tu: okto-si-e-ni.* (SK. 214)
 little little medicine-ACC bring-INF all medicine-VR-PAST-3SG
 ‘He brought a little of each medicine and cured (him) with them all.’

The lexicalized reciprocal *omonzi omonzi* is formed from the instrumental case of the numeral *omo* ‘one’ and means ‘one after another’ and is used to refer to chaining situations. It may express both the subject-oriented and the object-oriented reciprocal diathesis. The latter is illustrated below.

- (67) *Sigi-li-e-ni beliente, omon-zi omon-zi wo:-si-e-ni.* (K. 191)
 shuffle-INCH-PAST-3SG fairy ONE-INST ONE-INST make-IPFV-PAST-3SG
 ‘The fairy started shuffling them one after another.’

5.3 Reduplication of nouns. Object-oriented reciprocal construction

Reciprocal reduplication of nouns is not productive, it only occurs very marginally. Interestingly, this seems to be the only instance of object-oriented reciprocals in Udehe. Reduplication of a noun in the instrumental may have the meaning ‘(beating) against each other’; cf. (68a) where the instrumental marker is repeated on each component of the reduplicated noun. It is also possible that only the second component bears the instrumental affix, as in (68b).

- (68) a. *Sagdi bu:-we b'a ut'asi zolo-zi zolo-zi kakta-sie nekce-iti.*
 big flint-ACC find then stone-INST stone-INST split-IPFV.PRES.PART keep-3PL
 ‘When they find a big flint, they split it (hitting) one stone against another, and keep it.’
- b. *Bi abuga-i suala suala-zi ima:-wa giugi:-ni.*
 I father-1SG ski ski-INST snow-ACC shake.off-3SG
 ‘My father is shaking the snow off by (beating) the skis against one another.’

Reduplication of certain nouns in the nominative also expresses the adverbial meaning ‘against each other’. These are nouns denoting part of the whole, such as *kakt'a* ‘half’ and *k'ä* ‘edge’; e.g.:

- (69) a. *Zolo kakt'a kakt'a gekti-wene-mi.* (K. 124)
 stone half half freeze-CAUS-1SG
 ‘I make the stones freeze against one another.’
- b. *bu:-zi k'ä-fa k'ä-fa sikti-si-mi.* (SK. 470)
 flint-INST edge-ACC edge-ACC hit-IPFV-INF
 ‘to hit flints against one another.’

In the following example the reduplicaton of the noun *bua* ‘place, nature, forest’ has a dispersive meaning: ‘in all directions (in the forest)’. The second reduplicant is marked by the lative affix and the 3rd person personal inflection, which seems to indicate definiteness in this case, as is generally typical of Udehe. The first noun remains uninflected.

- (70) *Bua bua-tigi-ni tukä:-ti.* (SKX. 291)
 place place-LAT-3SG escape.PAST-3PL
 ‘They escaped in different directions (in the forest).’

5.4 Clausal reduplications

Clausal reduplications occur very rarely; in my material I only have two examples. They involve reduplication of the whole clause (the subject and the predicate). The resulting meaning can be characterized as competitive. In (71a) the reduplicated clause falls under the scope of an indirect question ‘who will win in X-ing’, where X corresponds to the predicate of the reduplicated clause.

- (71) a. *Ni maje ni maje, ana-masi-ti.* (SKX. 302)
 who strong who strong push-REC-3PL
 ‘They push each other (trying to see) who is stronger.’

- b. *Gusi:-ti b'ata-ma sita-ziga, ni ete-i ni ete-i.* (SKX 302)
 play-3PL boy-ADJ child-PL who win-PRES.PART who win-PRES.PART
 'The boys play with each other (trying to see) who will win.'

6. Sociatives

The Southern dialect of Udehe employs sociatives derived morphologically by means of the suffix *-niŋa*. There is no evidence of them in the Northern dialect.

6.1 Origin of the sociative suffix

The sociative suffix *-niŋa* is homonymous to and likely to be etymologically related to the affix of collective numerals *-niŋa*. The latter derives non-attributive collective numerals from 'three' to 'ten', cf.: *ila-niŋa* 'all three together', *di:-niŋa* 'all four together', and so on. In the Northern dialect collective numerals employ the suffix *-ŋAħA*, but it is not used in verbal derivation. The collective suffix *-niŋa* also occurs in several quantificational words such as *xufa-niŋa* 'all together' (cf. *xufa* 'group') and *teu-niŋa* 'all' (cf. *teu* 'all'). A similar formant may be present in the collective numeral *zu-ŋe* 'both' (← *zu*: 'two') and the homonymous postposition with the meaning 'with'. Neither the sociative affix nor the suffix of collective numerals have harmonic variants.

6.2 Sociative verbs

Sociatives are only subject-oriented. The sociative suffix *-niŋa* indicates that the action is performed by at least two equally involved participants together. In the verbal form it typically precedes the aspectual affixes, e.g. the imperfective and the inchoative.

- (72) *Soŋo-niŋa-si-li-e-ti jazata uti.*
 cry-SOC-IPFV-INC-PAST-3PL of.course that
 'Of course they began to cry together.'

In fact, in all the examples at my disposal the sociative is followed by the imperfective affix *-si* (cf. 3.4), so it is perhaps possible to speak about the complex sociative marker *-niŋa-si*.

The sociative verbs take only plural agreement and normally co-occur with the subject in the plural or the coordinated subject. Sociatives can be derived from basically every verb, both transitive and intransitive, that requires an animate subject; e.g.:

- (73) *gusi-niŋa-si* 'to play together'
jexe-niŋa-si 'to sing together'
ise-niŋa-si 'to see together'
oŋo-niŋa-si 'to write together'
te-niŋa-si 'to sit together'
umi-niŋa-si 'to drink together.'

At least in one case a verb with the sociative marker conveys the reciprocal meaning. The sociative *diana-niŋa-si-* is derived from the intransitive verb *diana-* ‘to talk’. The meaning of the derivate is ‘to talk to each other’ rather than ‘to talk together’, so it is synonymous with the morphological reciprocal *diana-masi-*.

It should be noted that although morphological sociatives are fully productive in the Southern dialect, they are very infrequent. In most cases speakers express the sociative meaning by means of a free sociative marker (see 6.3).

6.3 Other means of expressing the sociative and comitative meanings

The sociative is rendered by the free marker *geje* ‘together’; the comitative is rendered by (i) the postposition *geje* ‘together with’ homonymous to it, with an instrumental object; (ii) by the instrumental NP; and (iii) by the postpositional phrase with the postposition *mule* ‘with’. The instrumental NP and the postpositional phrase also mark reciprocal situations (see 3.5 and 7.4).

The free sociative marker *geje* ‘together’ is the main sociative marker, since, as mentioned in 6.2, morphological sociatives are infrequent even in the Southern dialect. In sentences with an inanimate subject it is the only available option, but even for animate subjects this construction is generally preferred. The subject is expressed either by a plural NP (74a) or a coordinated group (74b), but in both cases the verb takes the plural agreement.

- (74) a. *Minti geje etete-fi.*
 we together work-1PL.INC
 ‘We work together.’
 b. *Bula mo:-ni xulu mo:-ni geje bagdi:-ti.*
 poplar tree-3SG ash.tree tree-3SG together live-3PL
 ‘The poplar and the ash trees grow together.’

The postpositional phrase with the postposition *geje* and an instrumental object is compatible with both singular and plural agreement markers on the verb. In the first case the syntactic status of the postpositional phrase can be defined as an adjunct. Such a phrase is located fairly freely in the sentence, that is, it does not have to be adjacent to the subject. The subject controls agreement on the verb.

- (75) *Bi susu-i tineŋi sin-zi geje we:-tigi xuli-se:-ni.*
 I uncle-1SG yesterday you-INST together mountain-LAT travel-EXP.PAST-3SG
 ‘Yesterday my uncle went to the mountains together with you.’

In the second case, the postpositional phrase has the status of a postnominal modifier, or it forms a coordinative group with the subject, just like the instrumental NP in reciprocal constructions (see 3.5.1). There is an adjacency requirement for such a postpositional phrase: it must immediately follow the subject and form a single syntactic constituent with it.

- (76) *Bi mamasa-i (*zugdi:) sita-na-zi: geje zugdi: amä:sa:-ti*
 I wife-1SG at.home child-PL-INST.1SG together at.home remain.PAST-3PL
 'My wife remained at home together with the children.'

In this case the verb takes a plural affix. Remarkably, the person agreement on the verb is not controlled by the nominative NP, but is rather determined by the person hierarchy: 1st person > 2nd person > 3rd person. If the two participants are the 1st and 2nd or the 1st and 3rd persons the verb takes the 1PL agreement, as in (77a) and (77b). If the participants are the 2nd and 3rd persons, the verb takes the 2PL agreement, as in (77c). This does not depend on the grammatical status of the participants (nominative NP vs. instrumental NP), nor on their linear position. The inclusive/exclusive opposition in the 1PL is conditioned by the general rule: the inclusive is used when two participants are of the 1st and 2nd person and the exclusive is used when they are of the 1st and 3rd person.

- (77) a. *Ag'a min-zi geje mo:-du te-u.*
 brother I-INST together tree-DAT sit-1PL.EXC
 'My brother is sitting with me on a tree', lit. 'brother with me together are sitting ...'
 b. *Si mun-zi geje ei baraka-du añasi-e-fi.*
 you we.EXC-INST together this hut-DAT spend.night-PAST-1PL.INC
 'You spent a night in this hut together with us', lit. 'You with us together spent ...'
 c. *Ei aziga sin-zi geje te-u kluba-du.*
 this girl you-INST together sit-2PL club-DAT
 'This girl is sitting with you in the club', lit. 'This girl with you together are ...'

Similar properties are exhibited by the instrumental NP with the comitative meaning and the postpositional phrase with *mule*: they either have an adverbial status or form a complex NP with the nominative subject. So the verb agrees either with the nominative NP alone or shows plural agreement. In the latter case person agreement seems to be determined by the same rules as in constructions with the postposition *geje*.

- (78) a. *Bi ogzo-zi na: xegiele-ni bi-si-mi.*
 I devil-INST earth under-3SG be-PAST-1SG
 'I was under the earth together with the devil.'
 b. *Bi mamasa-zi: mo:-lo anči bi-u.*
 I wife-INST.1SG tree-PART no be-1PL.EXC
 'My wife and I (lit. 'I with my wife') live without wood.'
- (79) a. *Bi anda mule ŋäixi ŋene-mi.*
 I friend with to.riverbank go-1SG
 'I am going to the riverbank with my friend.'
 b. *Bi anda mule ŋäixi ŋene-u.*
 I friend with to.riverbank go-1PL.EXC
 'I am going to the riverbank with my friend', lit. 'I with (my) friend are going ...'

In sum, in constructions describing non-reciprocal comitative situations, verbal agreement depends on the syntactic status of the secondary participant: if it corresponds to an adjunct, agreement is controlled by the subject alone; if it forms one constituent with the subject, agreement is triggered by the complex subject NP. A similar situation is ob-

served with lexical reciprocals as well (7.4.1). In contrast, in morphological and syntactic reciprocal constructions only the second option is available.

7. Lexical reciprocals

Lexical reciprocals do not take reciprocal and sociative affixes, unlike in Evenki where the reciprocal affix can emphasize the reciprocal meaning of the lexical reciprocal verb (Nedjalkov & Nedjalkov, Ch. 38, §11).

7.1 Non-derived symmetrical verbs

Although symmetrical verbs are not morphologically marked by reciprocal markers and are not compatible with reciprocal pronouns, their meaning is inherently reciprocal. They are mostly two-place intransitives, except for the three-place transitive verb *xefisi-* ‘to discuss sth with each other’.

- (80) *andata-* ‘to be friends with each other’
b’agd- ‘to meet each other’
čuli- ‘to talk to each other’
dekte- ‘to separate from each other’
diasi- ‘to talk to each other’
koilan- ‘to copulate’
ńa:ma- ‘to quarrel with each other’
w’ali- ‘to fight with each other.’

I have no two-place transitive lexical reciprocals in my material.

7.2 Lexical reciprocals in copular clauses

Udehe has several nouns derived from other nouns by means of the derivational suffix *-mule* tentatively glossed as PL here. This suffix is homonymous with the comitative postposition *mule* (see 3.5.2) and is obviously related to it. However, as distinct from the postposition *mule*, it is phonologically bound to the stem and does not bear an independent stress, although it is disharmonic with respect to vowel harmony. Further, as distinct from postpositional phrases, the derived nouns take case inflection (81a) and the plural (81b), and can be modified by an adjective (81c) or a numeral (81d). Example (82d) additionally shows that they may refer to more than two people.

- (81) a. *Uŋta tie-mule-du siŋe ono-no-mi wo:-ni.*
 boot pair-PL-DAT mouse nest-DEST-REFL make.PAST-3SG
 ‘A mouse made a nest in the pair of boots.’
 b. *xa:-mule-ziga.*
 sibling-PL-PL
 ‘brothers.’

- c. *Bueti ketu aja anda-mule bi-ti.*
 they very nice friend-PL be-3PL
 ‘They are a very nice couple.’
- d. *ila xunazi-mule.*
 three sister-PL
 ‘three sisters.’

The suffix *-mule* derives the next closed class of nouns denoting a close symmetrical relationship between two or more people from reciprocal (in the broad sense) nouns and an adjective:

(82)	<i>anda</i>	‘friend’	→	<i>anda-mule</i>	‘friends, couple’
	<i>ag’a</i>	‘elder brother’	→	<i>ag’a-mule</i>	‘brothers’
	<i>bagäbu</i>	‘similar’	→	<i>bagäbu-mule</i>	‘doubles’
	<i>gagda</i>	‘the other’	→	<i>gagda-mule</i>	‘(married) couple’
	<i>getu</i>	‘comrade’	→	<i>getu-mule</i>	‘comrades’
	<i>neŋu</i>	‘younger sibling’	→	<i>neŋu-mule</i>	‘siblings’
	<i>nimeŋke</i>	‘neighbour’	→	<i>nimeŋke-mule</i>	‘neighbours’
	<i>seŋgite</i>	‘relative’	→	<i>seŋgite-mule</i>	‘relatives by marriage’
	<i>ue</i>	‘a wife taken from a different clan in exchange for another woman’	→	<i>zue-mule</i>	‘wives of one man’
	<i>uil’e</i>	‘a little girl who lives in the house of her future husband’	→	<i>uil’e-mule</i>	‘wives of one man’
	<i>xa:</i>	‘sibling’	→	<i>xa:-mule</i>	‘brothers’
	<i>xunazi</i>	‘elder sister’	→	<i>xunazi-mule</i>	‘sisters’
	<i>za:</i>	‘relative’	→	<i>za:(lä)-mule</i>	‘relatives.’

The word *tie-mule* ‘pair’ (← *tie* ‘pair’) refers to an inanimate entity.

In the predicative function these nouns are combined with the copular verb *bi-* ‘to be’. They express a symmetrical state, e.g. *anda-mule bi-* ‘to be friends’, *xa:-mule bi-* ‘to be brothers’. Similar properties are typical of the copular predicate *aja bi-* ‘to be friends’ (*aja* ‘good, nice’).

7.3 Lexicalized reciprocals

Some verbs derived from nominals with the reciprocal suffix *-masi* have undergone lexicalization; cf.:

(83)	<i>gagda</i>	‘second, another’	→	<i>gagda-masi-</i>	‘to do half (of the work) make one of the pair; divide in two’
	<i>kakt’a</i>	‘half’	→	<i>kakt’a-masi-</i>	‘to do half (of the work), make one of a pair; divide in two’ (K. 115)
	<i>za:</i>	‘relative, friend’	→	<i>za:-masi-</i>	‘to be related’ (S. 30)
	<i>zule:-</i>	‘before, in front’	→	<i>zule-masi-</i>	‘to overtake.’

For the following formally reciprocal verbs the base word is unknown.

- (84) *geu-masi-* ‘to flirt’ (SK. 267)
dabdu-masi- ‘to compete’ (SK. 267).

7.4 Encoding of the second participant

Verbs referring to a symmetrical naturally reciprocal situation allow alternative expressions of the secondary argument. They are basically similar to those used to express the second participant of morphological reciprocals (see 3.5), but the rules of number agreement on the verb differ.

7.4.1 Instrumental noun phrase

The co-participant of a symmetrical situation is commonly expressed by the instrumental noun with an argument function. It cannot be omitted from the clause and so differs from the formally identical instrumental NP functioning as a comitative adjunct to non-symmetrical verbs. However, the instrumental NP is not characterized by any grammatical properties of the subject. Most importantly, the subject in Udehe controls switch-reference indicators in subordinate clauses based on non-finite verbal forms, but this is not characteristic of the instrumental NP. In (85) I demonstrate that it cannot control the infinitival adverbial clause, available only in same-subject sentences.

- (85) *Wakca-mi Pakula tukca-zi ná:ma-si-e-ti.*
 hunt-INF P. hare-INST quarrel-IPFV-PAST-PL
 Pakula_i and a hare_j had a quarrel while he_{i/*j} was hunting.’

If the first participant is singular, the main verb is normally in the singular, and thus it agrees only with the subject both in person and number.

- (86) *Bi Iwana-zi w’ali-mi.*
 I Ivan-INST fight-1SG
 ‘I am fighting with Ivan.’

Alternatively, the verb may take plural agreement even if the first participant is singular.

- (87) a. *Bi zube n’aula-zi w’ali-se:-mu.*
 I two boy-INST fight-EXP-1PL.EXC
 ‘I have fought with two boys.’
 b. *Kuti kejge-zi anana aja bi-si-ti.*
 tiger cat-INST earlier good be-PAST-3PL
 ‘The tiger and the cat used to be friends.’

If the predicate exhibits plural agreement, it does not necessarily agree with the subject in person. I do not have enough material to decide whether person agreement on symmetrical verbs is controlled by the linearly first NP (the subject) or is conditioned by other factors. However, evidence from non-symmetrical verbs combined with the comitative adjunct (the postpositional phrase with the postposition *geje* ‘together with’) suggests that agreement may rather be determined by the person hierarchy (see 6.3).

7.4.2 Postpositions *mule* and *zunje* ‘with’

The secondary participant can be expressed by a phrase with the postposition *mule* or *zunje* ‘with’. The postposition *mule* is only possible with two participants who form a natural

pair of relatives or friends (cf. 3.5.2). The postposition *zuŋe* does not necessarily involve a close (family) relationship between the two participants.

In constructions with the postposition *mule* both the subject and the verb may be in the singular or plural, and this does not affect the meaning. Thus, (88a) and (88b) are practically synonymous.

- (88) a. *Nuani mamasa mule dekte-gi-e-ni.*
 he wife with separate-REP-PAST-3SG
 ‘He and his wife separated again.’
 b. *Nuati mamasa mule dekti-gi-e-ti.*
 they wife with separate-REP-PAST-3PL
 (same translation).

In constructions with the postposition *zuŋe* the verb always takes the plural agreement although the subject is in the singular. As shown in (89b), the subject may be dropped from the surface. This makes it impossible to analyze the comitative postpositions as coordinators. Example (89a) demonstrates that when the subject is 1st person, the verb takes 1PL agreement. Again, it remains unclear whether this is conditioned by its status as subject or by its highest position on the person hierarchy (cf. 7.4.1). But the question is actually irrelevant in this case since, because the personal pronouns cannot function as objects of the postposition *zuŋe*, they are always encoded as subjects in such constructions.

- (89) a. *Bi Iwana zuŋe xefisi-e-mu.*
 I I. both discuss-PAST-1PL.EXC
 ‘We had a discussion with Ivan,’ lit. ‘I with Ivan had a discussion.’
 b. *Gä:ŋa neŋi-ni w’ali:-ti mafasa zuŋe.*
 every day-3SG fight-3PL old.man with
 ‘Every day she fights with her husband.’

7.4.3 Plural

The alternative encoding of two participants is by means of the homogenous NP, either grammatically plural (90a) or semantically plural but grammatically singular (90b).

- (90) a. *Minti b’agdi-e-fi.*
 we meet-PAST-1PL.INC
 ‘We met each other.’
 b. *Zu: ni: zä: diele-ni w’ali:-ti.*
 two man money because-3SG fight-3PL
 ‘Two men are fighting because of money.’

Southern Udehe has a special 1st person dual inclusive form of personal pronouns (the grammatical dual is otherwise absent in the language). It is formed from the oblique stem of the 1SG pronoun *min-* by means of the element *-zuŋe* ‘both, two’, which functions as an affix here: *min-zuŋe*. The dual form occurs only in the nominative and may be employed as a subject of a naturally reciprocal verb. It triggers the 1PL inclusive agreement.

- (91) *Min-zuŋe za:lä-mule bi-fi.*
 I-both relative-PL be-1PL.INC
 ‘We (you and I) are relatives.’

When the number of participants is more than two, this can be indicated by means of the reciprocal expression *mene dolo* ‘among themselves’ (see 4.4), but the reciprocal pronoun *mene-mene* is also possible in this function.

- (92) a. *Sanŋa-ziga mene dolo čuli-e-ti.* (SK. 1079)
 old.man-PL REFL within discuss-PAST-3PL
 ‘The old men (more than two) talked among themselves.’
 b. *Mene-mene dekte-li-e-ti.* (S. 28)
 REFL-REFL separate-INC-PAST-3PL
 ‘They [four clans] started separating from one another.’

7.4.4 Coordinated noun phrase

When the subject is expressed by a complex coordinated NP, the verb obligatorily takes the plural agreement.

- (93) a. *Waŋba oloxi anda-mule bi-si-ti.* (K. 137)
 tortoise squirrel friend-PL be-PAST-3PL
 ‘Tortoise and Squirrel were friends.’
 b. *Kimonŋko se:-ni Kälunziga se:-ni bagu-masi:-ti mamas-fai dieleni.*
 K. clan-3SG K. clan-3SG enemy-REC-3PL wife-REFL.PL because
 ‘The clans Kimongko and Kyalunziga are enemies because of their women.’

8. Udehe and other Tungus languages

Udehe belongs to the Southern Tungus group. With respect to reciprocals and sociatives, it shows both striking similarities and considerable differences with the Northern Tungus languages, Evenki and Even.

1. In all three languages, the principal morphological means to express the reciprocal meaning are the etymologically related verbal affixes *-maat/-mat/-masi*. However, morphological reciprocals function rather differently. In Udehe they are strictly subject-oriented, but in Even regular object-oriented reciprocals within causative-reciprocal constructions also exist (Malchukov, Ch. 39, §3.1.2). In Evenki, causative derivation from reciprocals is much more restricted than in Even: it is marginally accepted only by some speakers and in some dialects (Nedjalkov & Nedjalkov, Ch. 38, §3.2). In Udehe it is altogether impossible.

2. Further, the languages in question differ in the diathesis types available in reciprocal constructions. In Udehe, morphological subject-oriented reciprocals are only employed for the reciprocalization of a verbal argument (the second and the third argument) and are not used for the reciprocalization of possessors or adjuncts, as distinct from Even (Malchukov, Ch. 39, §3.1.1.4) and to some extent from Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.4). These reciprocal meanings are regularly expressed in Udehe

by non-morphological reciprocal constructions: the “possessive” diathesis by means of a free reciprocal marker (see 4.2.1), and the reciprocalization of adjuncts by means of reduplication (Section 5). There are further minor differences in the availability of morphological reciprocals. For example, as distinct from Even (Malchukov, Ch. 39, §3.1.1.1), and in the same way as Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.1.4), in Udehe some intransitive verbs of motion allow reciprocal derivation. I do not have evidence for the reciprocalization of the direct object in three-place transitive verbs, as attested, for instance, in Even (Malchukov, Ch. 39, §3.1.1.1.3). Generally speaking, with respect to derivation and the function of the morphological reciprocals, Udehe seems to be closer to Evenki than to Even.

3. Reciprocal pronouns in Even and Evenki take all or most of the cases available for nouns. Thus in these languages constructions with reciprocal pronouns are employed in various diathesis types of reciprocals, and the grammatical status of the reciprocalized element is indicated by the morphological form of the reciprocal pronoun. In contrast, in Udehe reciprocal pronouns only have nominative and accusative forms. The nominative form is marginally available when two-place intransitives are reciprocalized, and in “possessive” reciprocals. As mentioned above, this situation is opposite to that observed in Even and Evenki, where the “possessive” reciprocal diathesis is expressed morphologically and is impossible with free reciprocal expressions. The accusative reciprocal pronoun in Udehe forms “canonical” reciprocals from two-place transitives and may be pleonastically used with morphologically reciprocal verbs. This is typical of Northern Tungus languages as well (Nedjalkov & Nedjalkov, Ch. 38, §7.4; Malchukov, Ch. 39, §4.3.2).

4. The most peculiar property of reciprocalization in Udehe is reduplication. Reduplicational reciprocals are completely absent from the Northern Tungus languages, and, as far as I know, are not attested in any Southern Tungus language other than Udehe. In other words, reduplication as a grammatical means of reciprocalization is altogether atypical of Tungus languages, and its emergence in Udehe requires special investigation. The main function of reduplicational constructions is reciprocalization of adjuncts, typically expressed by adverbials and postpositional phrases. In contrast, Evenki (Nedjalkov & Nedjalkov, Ch. 38, §12) and Even (Malchukov, Ch. 39, §9.2) use derived reciprocal adverbs in this function, and these are unknown in Udehe.

5. The expression of reciprocal arguments seems to be rather similar in all three languages in question, with the proviso that Udehe does not have a special comitative case found in Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.5.1) and Even. It uses the instrumental NP instead, as well as some postpositional constructions. In short, the instrumental has more functions in Udehe than in the Northern Tungus languages.

6. Another important difference concerns verbal agreement. In Evenki (Nedjalkov & Nedjalkov, Ch. 38, §3.1.5) and Even (Malchukov, Ch. 39, §2.6) morphologically reciprocal verbs can show both singular and plural agreement, depending on the syntactic status of the second participant (a conjoint element vs. a part of the subject NP). In Udehe the same ambiguity arises only in sociative constructions (6.3) and with lexical reciprocals (7.4), while morphologically reciprocal verbs obligatorily take plural agreement. In other words, in Udehe morphological reciprocals are available only if both reciprocal arguments

are represented by one subject constituent (be it a plural subject or a complex NP), while in Northern Tungus the second reciprocal argument (the object) may be represented by a discontinuous (coordinated) construction.

7. In Udehe the morphological means specializing in the expression of the sociative meaning are more restricted than in Evenki and Even. Both Northern Tungus languages have productive morphological sociatives in *-lda/-ldə* (Nedjalkov & Nedjalkov, Ch. 38, §5; Malchukov, Ch. 39, §8). In Udehe the morphological sociative in *-niŋa* is only used in one of the dialects and even in this dialect it is typically dispreferred by speakers in favor of constructions with free sociative markers. This may reflect a general preference for analytical constructions in Udehe compared to Evenki and Even. In addition, in Udehe the sociative meaning (as well as the alternative meaning) is partly taken over by morphological reciprocals with the suffix *-masi* (see 3.3.1 and 3.3.2). This is also attested in a related Southern Tungus language Nanai (Avrorin 1961:43), but is not typical of Northern Tungus, probably due to the presence of the productive sociative affix on its own.

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Reciprocal, sociative and competitive constructions in Karachay-Balkar*

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Acknowledgments

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1. Introduction

1.1 Karachay-Balkar

This language is represented by two dialects, Karachay (150,000 speakers) and Balkar (85,000 speakers). They are separated by a mountain range which hinders communication. The differences between these dialects are very slight and mostly concern phonetics, and what can be said about Karachay applies to Balkar. There are four subdialects in Balkar and none in Karachay (the Karachay *džol* ‘road’ corresponds to the Balkar dialectal *džol*, *žol* and *zol*). Karachay-Balkar boasts of rich folklore, it is also a written language with orthography based on the Cyrillic alphabet.

The Karachay-Balkar language belongs to the Western Turkic group, viz. to the Kipchak-Polovtsian subgroup (the other two subgroups are (a) Kipchak-Bulgar including Tatar and Bashkir and (b) Aralo-Caspian (or Central Turkic) including Karakalpak, Kazakh, Kirghiz and Noghai). The Kipchak-Polovtsian subgroup also includes Kumyk spoken mostly in Dagestan (around 280,000 speakers), extinct Cuman (Polovtsian), and Karaim (around 500 first-language speakers in Lithuania (about 290 individuals) and Southern Ukraine (around 1,400 persons), apart from around 20,000 Karaims who live in Israel). (See Comrie 1992: 187–90; Tishkov (ed.) 1994: 102–5, 181–2, 184–6, 214–6; Pritsak 1959: 340–4).

For centuries the Karachay and Balkars have lived in the Central Caucasus out of contact with other Turkic peoples. Their neighbours are Georgians, Svans and Abkhazians in the south, Kabardians, Adyghe and Cherkess in the north, Abaza in the west, and Ossete in the east. Karachay and Balkar migrants live in Turkey, Syria and Jordan. Culturally and anthropologically they are closer to the neighbouring peoples of the Caucasus, especially to the Ossete, rather than to the other Turkic peoples. With regard to their ethnogenesis there are several hypotheses. There is an opinion that they are descended from a mixture of the indigenous Northern Caucasian tribes with Iranian and Turkic tribes; of the latter, the most important role seems to have belonged to the “Black Bulgars” and especially to one of the western Kipchak tribes (see Aliev 1972: 5–8).

In ancient times (approximately until the 11th century), the Karachay and Balkar people were under the cultural influence of Alani with whom they entered into a political union. It is pointed out in specialist literature that their ethnonym was Alan. “Alan” is the common address of the Karachay and Balkar to each other. The Mengreli and Noghai also call them Alani (Habichev 1971a: 126).

1.2 Overview

In Karachay-Balkar, the reciprocal meaning is expressed in two ways, by the suffix *-š* and the reciprocal pronoun *biri biri-n* (ACC) ‘each other’ inflected for person and case. The latter device is the principal one, the former being in the process of losing its productivity as a reciprocal marker and being ousted by the pronoun, which drastically distinguishes

Karachay-Balkar from the other Turkic languages. Both markers frequently co-occur in the same sentence. Examples:

- (1) a. *Ol-Ø an-ə at-də.*
 he.NOM he-ACC shoot-PAST.3SG
 'He shot at him.'
- b. *Ala-Ø at-əš-də-la.*
 they.NOM shoot-REC-PAST-3PL
 'They shot at each other' (at a duel, etc.).
- c. *Ala-Ø biri biri-n at-də-la.*
 they.NOM each other-ACC shoot-PAST-3PL
 (same translation).
- d. *Ala-Ø biri biri-n at-əš-də-la.*
 they-NOM each other-ACC shoot-REC-PAST-3PL
 (same translation).

Another feature that distinguishes Karachay-Balkar from other Turkic languages (Yakut, Kirghiz, Tuvan) is the high productivity of the suffix *-š* in the *competitive* meaning. It may be assumed that a form in *-š* with this meaning can be derived from any verb that allows it pragmatically (including some rather unexpected verbs). One and the same derived form may express both a reciprocal (or sociative) and a competitive meaning; in the latter case substitution of the reciprocal pronoun for the suffix *-š* is ruled out. Compare:

- e. *Ala-Ø [qara-Ø¹] at-əš-də-la.*
 they.NOM target.NOM shoot-REC-PAST-3PL
 'They competed in shooting.'

Being generally much less productive than in some other Turkic languages (cf. Yakut, Tuvan and Kirghiz), the reciprocal suffix has no assistive meaning (as in Azerbaijani and Karaim), while the sociative meaning is expressed almost exclusively on intransitive verbs (in this respect Karachay-Balkar is similar to Tatar; see Zinnatullina 1969: 187, 193–5) and it is not very productive, which fact is related to the near loss of the comitative meaning (cf. Kirghiz (Nedjalkov, Ch. 28, §1.2) where the sociative meaning is practically lost along with the comitative).

- (2) a. *Čəpčəq-la səzyər-a-dəla.*
 bird-PL whistle-PRES-3PL
 'Birds are whistling.'
- b. *Čəpčəq-la səzyər-əš-a-dəla.*
 bird-PL whistle-REC-PRES-3PL
 i. 'Many (various) birds are whistling.'
 ii. 'Birds whistle as if *vying* with each other.'
 iii. 'Birds whistle to *each other*', etc.
- c. *Džaš-la səzyər-əš-a-dəla.*
 youth-PL whistle-REC-PRES-3PL
 'The youths *compete* in whistling.'

1. Henceforth, the zero endings are not marked and glossed.

Another peculiarity of Karachay-Balkar is that the suffix *-laš* used in the Turkic languages to derive reciprocal verbs from nouns and highly productive in Yakut and Kirghiz, is of very low productivity. The reciprocal pronoun in the 3rd p. form is used as a generalized form in “possessive” reciprocal constructions, and sometimes in other constructions, for the 1st and 2nd persons as well.

1.3 Database

The main source of the language data is the *Karachay-Balkar-Russian Dictionary* (KB, 1989; 30,000 entries); our verb-list comprises most of the forms in *-š* registered in this dictionary. Examples from specialist literature are also used. Estimations of the data reflect the intuitions of Azret Ali Hasanov, a native speaker of the Karachay dialect. Examples without attribution are also his. It should be stressed that not infrequently our informant does not quite accept the data of KB or rejects them as archaic or out of use; nevertheless we have considered it possible to use some of these data here.

In the lists below, verbs are quoted in the stem form (while in KB they are entered in the infinitive form), the latter coinciding with the 2SG imperative form; but for convenience these stems are translated as infinitives.

2. Grammatical notes

2.1 Introductory

In Karachay-Balkar, sentence structure is verb final; the predicate may be preceded by one or more converbs, most commonly the so-called converb of priority (marked by *-b/-ab/-ib/-ub/-üb*; cf. (15), (16b, c), (61), etc.) and the so-called converb of simultaneity (marked by the suffix *-a/-e/-j*; cf. (16d), (60c)). Vowel harmony is observed, root vowels determining the subsequent vowels in a word (all the eight vowels are phonemically short). Progressive assimilation of consonants is observed. There are no prepositions, postpositions being used instead. Of special importance is the postposition *bla* with the instrumental (if the noun is nominative) and comitative (if the noun is genitive) meaning ‘with’ (cf. (16e), (30c)), and also with the meaning ‘instead’; its homonym functions as a conjunction ‘and’ (cf. (26b), (30b, c)). Personal pronouns in subject position, when unstressed, are usually omitted. In the examples of this paper they are usually given for clarity. The cluster *dž* denotes a front voiced affricate.

2.2 Case and number. Possessivity

There are seven cases; the genitive case (denoting possessivity) is mostly identical in form with the accusative; the case endings follow the markers of plurality and possessivity. The latter represent the possessive declension. The marker of plurality is the suffix *-la/-le*; as a possessive 3PL suffix it appears as *-lar/-ler*. The nominative case of the subject (see (1a–

d)) and sometimes a non-referential direct object (cf. *qara* in (1e)) have zero marking; henceforth it is not as a rule glossed in the examples. Here is the case paradigm of the noun *tala* ‘glade’:

(3)	NOM	<i>tala-Ø</i>	LOC	<i>tala-da</i>
	GEN	<i>tala-nə</i>	ABL	<i>tala-dan</i>
	ACC	<i>tala-nə</i>	TRNSL	<i>tala-tən</i>
	DAT	<i>tala-ya</i>		

The case markers have allomorphs determined by vowel harmony and consonant assimilation (accusative: *-nə/-ni/-nu/-nü/-ə/-i/-u/-ü*; ablative: *-dan/-den/-tan/...*; dative: *-na/-ga/-ya/-ηa/-ge/-ne/-xa/-a*, etc.); between the 3rd person possessive marker and an ablative and locative markers the consonant *-n-* (glossed as *-n-*) is inserted: *-n-dan*, *-n-de*, etc.

An attributive possessive phrase is expressed by the *izafet* construction: an attributive noun is genitive, and the head noun has a possessive marker and agrees in person and number with the attribute (see also (48b–d)); e.g.:

(4)	<i>ata-m-ə</i>	<i>qarnaš-ə</i>
	father-my-GEN	brother-his
	‘my father’s brother.’	

The following are possessive suffixes on the nominative case of the noun *ata* ‘father’ (they may have variants determined by the preceding phonemes):

(5)	<i>ata-m</i>	‘my father’	<i>ata-bəz</i>	‘our father’
	<i>ata-η</i>	‘your father’	<i>ata-γəz</i>	‘your father’
	<i>ata-sə</i>	‘his father’	<i>ata-larə</i>	‘their father’ (see (6)).

2.3 Tense/aspect system. Agreement. Negation

Karachay-Balkar has two sets of agreement markers on the verb. There are numerous tense/aspect forms, both simple and periphrastic, the latter containing an auxiliary and a converb or participle of the lexical verb; e.g. *džaz-də-m* ‘I wrote’ (past; cf. (1)), *džaz-yan-ma* ‘I have (already) written’ (perfect; cf. (20)), *džaz-yan edi-m* ‘I had written (a long time ago)’ (pluperfect), etc. The perfect suffix is in fact the suffix of the past participle.

Examples are mostly cited in the present tense (the marker is *-a/-e/-j*), or in the past tense (the marker is *-də/-di/-du/-dü*), and sometimes in perfect (the marker is *-gan/-yan/-xan /-ηan/-gen*); there is also a durative form comprised of a converb in *-b/-ib/-ub/-əb* and the auxiliary *tur-* ‘to exist/live, stay’ (see (15), (19)). Note the homonymy of suffixes: *bar-a-dəla* ‘they go’ (*-a* = PRES and *-dəla* is a 3PL inflection) and *bar-də-la* ‘they went’ (*-də* is the past tense suffix and *-la* is a 3PL inflection). The suffix of negation is *-ma/-me* (cf. (16a)). The suffix of the infinitive is *-(ə)rya*.

2.4 Reflexive and reciprocal pronouns

These pronouns are formed on different stems. The reflexive pronoun is formed on the base *kes-* (practically all its forms contain the possessive marker); cf. the nominative case

forms: *kesi* '(s/he) her/himself', *kesi-m* '(I) myself', *kesi-ŋ* '(you) yourself', *kesi-biz* '(we) ourselves', *kes-leri* '(they) themselves', etc. (cf. the accusative *kesi-n qor-du* 'he defended himself').

The reciprocal pronoun is a reduplication of the numeral *bir* 'one'. Both pronouns are inflected for person and case; the reflexive pronoun has both singular and plural forms, and the reciprocal plural forms only, which is only to be expected. Both pronouns take the case endings of the possessive declension. The reflexive pronoun has the nominative case, while the reciprocal pronoun does not. The reciprocal pronoun has two variants for the 3rd person: one without the possessive suffix *-leri* (a more common variant) and the other with it (cf. (6b), (57a)). Here are the accusative case forms of the reflexive and the reciprocal pronouns.

(6)	a. Reflexive pronoun	b. Reciprocal pronoun
	SG <i>kesi-m-i</i>	–
	2SG <i>kesi-ŋ-i</i>	–
	3SG <i>kesi-n</i>	–
	1PL <i>kesi-biz-ni</i>	<i>biri biri-biz-ni</i>
	2PL <i>kesi-giz-ni</i>	<i>biri biri-giz-ni</i>
	3PL <i>kes-leri-n</i>	<i>biri biri-n / biri biri-leri-n</i>

The base of the reciprocal pronoun also occurs as *bir biri* and *bir bir* (this form appears in the attributive function; see 4.2.3). The latter variant may determine the choice of the allomorph of the case marker. Thus the dative of this form is *bir bir-ge* (cf. (63f)) instead of *bir biri-ne* (cf. (63b)). The spelling of this pronoun varies, and the hyphenated form (cf. *bir-biri-ne*) is sometimes used below, as in the source.

2.5 Voices (means of valency change)

Like other Turkic languages, Karachay-Balkar has three valency-decreasing voices and one valency-increasing voice. Needless to say, each of the valency-decreasing suffixes is polysemous and not infrequently the derivatives undergo lexicalization ((7) and other examples below illustrate only some of the meanings, of course).

1. The passive suffix *-əl/-il/-ul/-ül/-l*; it may also encode a number of other meanings, e.g. anticausative and autocausative; cf.:

(7)	a.	<i>ajər-</i> 'to separate', 'to elect' → <i>ajər-əl-</i> i. 'to be elected' (passive)
		ii. 'to get separated' (anticausative) (KB. 39)
	b.	<i>qəs-</i> 'to press' → <i>qəs-əl-</i> i. 'to be pressed/closed/tied' (passive)
		ii. 'press oneself to sth/sb' (autocausative) (KB. 449)
	c.	<i>at-</i> 'to throw sth' → <i>at-əl-</i> i. 'to throw oneself' (autocausative)
		ii. 'to explode' (lexicalization) (KB. 90).

2. The reflexive suffix *-ən/-in/-un/-ün/-n*; forms with this marker can also express a number of other meanings, e.g. passive, anticausative, etc. Contrary to Yakut, Tuvan and Kirghiz, the Karachay-Balkar reflexive suffix does not have a possessive-reflexive meaning. The reflexive suffix can be synonymous to the reflexive pronoun; cf. (8c):

- (8) a. *džuw-* ‘to wash’ → *džuw-un-* ‘to wash oneself’ (KB. 262) (reflexive)
 b. *urla-* ‘to steal’ → *an-ə ašxa-sə urla-n-də* ‘his money is stolen’ (passive)
 c. *maxta-* ‘to praise’ → *maxta-n-* ‘praise oneself’, cf. *kesi-n maxta-* (same) (KB.463)
 d. *džalya-* ‘to join/link sth’ → *džalya-n-* ‘to join/get linked’ (KB. 220) (anticausative)
 e. *čulya-* ‘to wrap/roll up sth’ → *čulya-n-* ‘to coil’ (e.g. of snakes) (KB. 738)
 (autocausative)

3. The reciprocal suffix *-əš/-iš/-uš/-üš/-š*; as mentioned above, it can also encode a sociative and a competitive meaning (see, for instance, (1b, d), (2b, c)), and it can be used as an anticausative marker (see 9.2).

4. The causative suffixes *-dər/-dir/-dur/-dür, -t*, etc. They express both factitive and permissive causation (cf. (9a-b)) and may also render a permissive-passive meaning, cf. (9c):

- (9) a. *bar-* ‘to walk’ → *bar-dər-* ‘to lead sb’, ‘to cause/allow sb to walk’ (KB. 111)
 b. *išle-* ‘to work’ → *išle-t-* ‘to cause/allow sb to work’ (KB. 311)
 c. *urla-* ‘to steal’ → *ol ašxa-nə urla-t-də* ‘he had his money stolen (by his own fault)’ (KB. 682).

To complete the survey, we shall mention the suffix *-lan/-len* (see Habichev 1966:223) which cannot be regarded as a combination of the passive and reflexive suffixes from the viewpoint of Modern Karachay-Balkar (though not diachronically), because the latter does not have variants *-an/-en*. It seems to be used mostly to derive verbs from nouns, sometimes from adjectives.

- (10) a. *awuz* ‘mouth’ → *awuz-lan-* i. ‘to have a snack’, ii. ‘to promise’ (KB. 95)
 b. *sayəš* i. ‘meditation’, ii. ‘care’ → *sayəš-lan-* ‘to become thoughtful’ (KB. 781)
 c. *üj* i. ‘house’, ii. ‘family’ → *üj-len-* ‘to get married’ (KB. 782)
 d. *gərxə* i. ‘rough’, ii. ‘roughly’ → *gərxə-lan-* ‘to be rough with sb’ (KB. 194).

2.6 Combinability of voice markers

The voice markers may co-occur in the same verbal form in various combinations. At least three cases can be distinguished (if we disregard lexicalization).

1. In some cases each of the markers retains (one of) its standard meaning(s); e.g.:

- (11) a. *at-* ‘to throw’
 → *at-əl-* ‘to throw oneself’ (autocausative)
 → *at-əl-əš-* ‘to throw oneself into a race’ (competitive)
 b. *bil-* ‘to know’
 → *bil-dir-* ‘to teach sb’ (causative)
 → *bil-dir-t-* ‘to make sb teach sb’ (KB. 142) (causative)
 c. *čab-* ‘to run’
 → *čab-əš-* i. ‘to race’, ii. ‘to run (all together)’ (i. competitive, ii. sociative)
 → *čab-əš-dər-* ‘to organize horse races’ (KB. 718-20) (causative)
 d. *tay-* ‘to tie’
 → *tay-əl-* ‘to be tied’ (passive)
 → *tay-əl-əš-* ‘to be tied to each other’ (KB. 596) (reciprocal)

2. In some cases the causative marker may, in a way, cancel the meaning of the preceding marker, which makes the causative form synonymous to the base form (see (12b, c)), or it does not (practically) change the meaning (see (12a)):

- (12) a. *buy-* 'to hide' (vi)
 → *buy-un-* (same translation (vi)) (reflexive)
 → *buy-un-dur-* 'to hide sb' (KB. 165) (causative)
- b. *džəj-* 'to gather' (vt)
 → *džəj-əš-* 'to compete in gathering sth for speed' (competitive)
 → *džəj-əš-dər-* (same translation as *džəj-* (vt)) (KB. 265, 269) (causative)
- c. *džuw-* 'to wash sb/sth'
 → *džuw-un-* 'to wash oneself' (reflexive)
 → *džuw-un-dur-* (same translation as *džuw-*) (KB. 260, 262) (causative)

3. Finally, the most interesting case: the “sum” of the meanings rendered by the suffixes produces an unpredictable result; this occurs in derivatives with a causative suffix; cf. the derivational chain for *čab-* ‘to run’ → *čab-əš-* ‘to race’ in (11c) and the following derivatives mentioned in specialist literature (the form *čab-dər-* ‘to make sb run’, ‘to chase sb’ is a causative derivative from *čab-* ‘to run’).

- (13) a. *čab-dər-əš-* ‘to set out at a gallop competing with each other’ (U. 56)
 b. *čab-əš-dər-əš-* (same translation) (U. 56).

The reflexive form (with an anticausative meaning) is sometimes possible from derivatives in *-š* unless they have a reciprocal meaning (in (14) this suffix is desemanticized); e.g.:

- (14) a. *Endi iš-ni tol-u aŋəla-də-m /*
 at.last work-GEN essence-3SG.POSS understand-PAST-1SG /
/aŋəla-š-də-m. (KB. 68, 69)
 /understand-REC-PAST-1SG
 ‘At last I understood the essence of the matter.’
- b. *Endi iš tol-u aŋəla-š-ən-də.* (KB. 68, 69)
 at.last work essence-3SG.POSS understand-REC-REFL-PAST
 ‘At last the essence of the matter became clear.’

3. Diathesis types of reciprocals with the suffix *-š* only

3.1 Subject-oriented reciprocal constructions

3.1.1 “Canonical” reciprocals

3.1.1.1 *Derived from two-place transitives.* This is the most numerous group of reciprocals registered in the dictionary. It comprises not less than 40 items. The following examples as well as (1) illustrate this type.

- (15) a. *Ol men-i džawla-b tur-a-də.* (KB. 236)
 he I-ACC resent-CONV AUX-PRES-3SG
 ‘He resents me.’

- b. *Ala džawla-š-əb tur-a-dəla.*
they resent-REC-CONV AUX-PRES-3PL
'They resent each other/have quarrelled.'
- (16) a. *Biz kör-üš-me-genli dzəl bol-du.* (KB. 344)
we see-REC-NEG-since.CONV year AUX-3SG
'We haven't seen each other for a year', lit. 'Since we met a year has passed.'
- b. *Qoltuqla-š-əb bar-a-dəla.* (KB. 412)
walk.arm.in.arm-REC-CONV go-PRES-3PL
'They walk arm in arm.'
- c. *Qučaqla-š-əb bar-a-lla.* (KB. 432) (-lla < -dəla)
embrace-REC-CONV go-PRES-3PL
'They walk embracing each other.'
- d. *Sabij-le ojna-š-a arqala-š-ərya öč-dü-le.* (KB. 74)
child-PL play-REC-CONV take.on.back-REC-INF like-PAST-3PL
'When playing the children liked to take each other on their backs.' (play leap-frog)
- e. *Ala tajaq-la bla sal-əš-də-la.* (KB. 538)
they stick-PL with hit-REC-PAST-3PL
'They hit each other with sticks.'
- f. *Buya-la tut-uš-a-dəla.* (KB. 655)
bull-PL grasp-REC-PRES-3PL
'The bulls fight.'

Here belong the following verbs (the list contains all those registered in KB) which fall into two main lexical groups according to the feature "hostile/non-hostile", the most numerous being verbs of hostile actions. The meaning of the underlying transitives is mostly recoverable from the meaning of the reciprocals. In a number of instances, a slight degree of typologically predictable lexicalization is observed, like 'to beat' → 'to fight/quarrel'.

- (17) *at-əš-* 'to fire at each other' (KB. 91)
bekle-š- 'to fight' (← *bekle-* 'to hit') (KB. 130)
buw-uš- 'to come to blows/fight' (← *buw-* 'to press/strangle') (KB. 171)
čanč-əš- 'to stab each other'
čimde-š- 'to pinch each other' (KB. 734)
dawla-š- 'to argue with each other' (← *dawla-* 'to lay claim to sth') (KB. 199)
džayala-š- 'to fight/squabble' (← *džayala-* 'to take sb by the collar') (KB. 236)
džawla-š- 'to quarrel' (← *džawla-* 'to be at odds with sb') (KB. 236)
džərt-əš- 'to fight' (← *džərt-* 'to pluck (hair)') (KB. 269)
malta-š- 'to slash each other' (KB. 458)
mara-š- 'to lie in wait for each other' (KB. 460)
qab-əš- 'to bite each other' (KB. 371)
qay-əš- i. 'to fight/hit each other, quarrel', ii. 'to clink (of glasses)'
(← *qay-* 'to knock/hit') (KB. 373)
qəjpa-š- 'to chop/slash each other' (KB. 440)
samarqawla-š- 'to jeer at each other' (KB. 538)
serme-š- i. 'to come to blows/grapple'
ii. 'quarrel' (← *serme-* 'to grasp sb/sth') (KB. 554)
soy-uš- 'to scratch/torment each other' (KB. 569)
sopala-š- 'to fight/grapple' (← *sopala-* 'to beat') (KB. 566)

<i>sög-üş-</i>	‘to abuse each other’ (← <i>sög-</i> ‘to curse/abuse’) (KB. 555)
<i>sürtü-š-</i>	‘to whip each other’
<i>tabanla-š-</i>	‘to kick each other’ (KB. 593)
<i>tajaqla-š-</i>	‘to beat/hit each other with sticks’ (KB. 614)
<i>tala-š-</i>	‘to fight (about dogs), wrangle, bicker’ (← <i>tala-</i> ‘to bite sb’) (KB. 599)
<i>teber-iš-</i>	‘to push/shove each other’ (KB. 615)
<i>topala-š-</i>	‘to fight/hit each other’ (← <i>topala-</i> ‘to beat/thrash’) (KB. 645)
<i>topuldat-aš-</i>	‘to fight’ (← <i>topulda-</i> ‘to beat/thrash’) (KB. 646)
<i>toqmaqla-š-</i>	‘to fight with clubs’ (KB. 642)
<i>tərna-š-</i>	‘to scratch each other’ (KB. 663)
<i>tüj-üş-</i>	‘to fight/struggle’ (← <i>tüj-</i> ‘to beat’) (KB. 671, 667)
<i>türt-üş-</i>	‘to push/shove each other’ (KB. 675)

In a number of cases the relationship between a reciprocal and its base verb is somewhat different from the standard semantic relationship. Thus the reciprocal *džanəwla-š-* ‘to be angry with each other’ is formally but not semantically derived from *džanəwla-* ‘to make sb angry’ (otherwise it would mean ‘to make each other angry with sb’); in fact, it is semantically related to the anticausative derivative *džanəwla-n-* ‘to be angry with sb’ (KB. 226). The reciprocal verb *sal-aš-* ‘to fight/quarrel’ is derived from *sal-* i. ‘to put sth’, ii. ‘to hit’ (cf. *džumduruq-nu sal-* ‘to hit with a fist (ACC)’ (KB. 538)), but the underlying syntactic construction cannot contain a direct object only because in this case the meaning ‘to put’ would be realized; the underlying sentence must contain the name of a body part for the meaning ‘to hit’; e.g.: *Ol džaš-nə qulaq artəna sal-da* ‘He boxed his son (ACC) on the ears’ (*qulaq* ‘ear’, *artəna* ‘behind’).

Reciprocals of “non-hostile” actions are far from numerous:

- (18) *čaqər-aš-* ‘to call, invite each other’
džoqla-š- ‘to visit each other’ (KB. 250)
ijnaqla-š- ‘to caress each other’ (KB. 298)
kör-üş- ‘to see each other’ (KB. 343)
qoltuqla-š- ‘to take each other by the arm’ (KB. 412)
qučaqla-š- ‘to embrace each other’ (KB. 432)
tanə-š- ‘to get acquainted with each other’ (← *tanə-* ‘to know’) (KB. 604).

3.1.1.2 Derived from two-place intransitives. In KB, the reciprocal pronoun occurs much more frequently with two-place intransitives (with or without the reciprocal suffix) than with transitives considered in 3.1.1.1. These intransitives registered with the reciprocal pronoun noticeably outnumber reciprocals with the suffix *-š* only. Therefore all the verbs (about 20) considered here in 3.1.1.2 are repeated in 4.2.1.2, where constructions with the reciprocal pronoun are discussed. Typical intransitives of this group denote negative emotions (‘to be angry’, ‘to be sulky’, etc.), hostile actions (e.g. ‘to fly at sb’), physical contact or parting (e.g. ‘to lean on sb’, ‘to part’), speech (e.g. ‘to shout’, ‘to whisper’), meeting and seeing (e.g. ‘to meet’, ‘to see’), etc.

- (19) a. *Ol men-ŋe gammojlan-əb tur-a-da.*
s/he I-DAT be.angry-CONV AUX-PRES-3SG
‘He is angry with me.’

b. *Kes-leri allarəna gammojlan-əš-əb tur-a-dəla.* (KB. 181)
 self-their.NOM by.themselves be.angry-REC-CONV AUX-PRES-3PL
 ‘They themselves are angry with each other (without reason).’

(20) *Mal-la qoš-dan üz-ül-üş-üb qawum-qawum tüš-gen-dile.* (KB. 781)
 cattle-PL pasture-ABL tear-PASS-REC-CONV group-group appear-PERF-3PL
 ‘The cattle dragged slowly in groups (lit. torn from each other) from the pasture.’

The base verbs (including two-place anticausatives derived from lexical reciprocals by the suffixes *-I* and *-n*; see (119), (130)–(132)) of these reciprocals fall into three groups.

1. The underlying verbs of the reciprocals under (21) require a dative object (unlike verbs in 3.1.1, these reciprocals sound awkward when used with the phrase *biri biri bla* ‘with each other’ and they are preferable with the dative form *biri biri-ne* ‘to/at each other’):

(21) *džekir-iš-* ‘to shout at/attack each other’ (KB. 240)
džoluy-uš- ‘to meet, associate’ (← *džoluy-* ‘to meet sb, meet’) (KB. 252)
gammojlan-əš- ‘to be sulky with each other’ (KB. 182)
öšünle-š- ‘to press each other with one’s breast’ (KB. 283)
qajna-š- ‘to be angry with each other’ (KB. 378)
qara-š- ‘to glance at each other’ (KB. 393)
qatəl-əš- ‘to badger each other’ (KB. 401)
qəčər-əš- ‘to shout at each other’ (KB. 450)
qəz-əš- ‘to fly at each other’ (← *qəz-* i. ‘to heat up/blaze up’) (KB. 435)
temirçile-š- ‘to be angry with each other’ (KB. 619)
temirçile-n-iš- ‘to be angry with each other’ (KB. 619)
tübe-š- ‘to meet, associate’ (← *tübe-* ‘to meet sb, meet’) (KB. 666)
uč-uš- ‘to pounce on each other’ (KB. 691)
əšar-əš- ‘to smile at each other’ (KB. 761).

2. The base verb of the reciprocal under (22) takes an ablative object:

(22) *suw-uš-* ‘to be disappointed in each other’ (KB. 577).

3. The base verbs of the reciprocals in (23) take an object with the postposition *bla* ‘with’:

(23) *dəyərdə-š-* ‘to mutter to each other’ (KB. 212)
ojna-š- ‘to play with each other’ (KB. 493)
qurqurla-š- ‘to whisper to each other’ (KB. 424).

3.1.2 “Indirect” reciprocals

A distinctive feature of these reciprocals is the retention of a direct object of the base constructions with three-place transitives. “Indirect” reciprocals in *-š* are also preferable with the reciprocal pronoun (see 4.2.2), both *biri biri bla* and *biri biri-ne* being possible, though with a certain degree of selectivity. The possibility of the use without the reciprocal pronoun increases with a non-referential direct object, i.e. when a direct object is unmarked. This is a small group, with the base verb of most derivatives taking a dative object (verbs with the meanings like ‘to give’, ‘to tell’, ‘to throw’, etc.), and some (like ‘to ask’, ‘to take’) taking an ablative object, alongside an accusative one.

- (24) a. *Ol an-ηa taš džiber-di.*
 he he-DAT stone throw-PAST.3SG
 ‘He threw a stone at him.’
 b. *Ala taš džiber-iš-di-le.*
 they stone throw-PAST-3PL
 ‘They threw stones at each other.’
- (25) a. *Ol an-dan kitab-nə səjər-də.*
 he he-ABL book-ACC take.from-PAST.3SG
 ‘He took a book away from him.’
 b. *Ala kitab səjər-əš-də-la.*
 they book take.from-REC-PAST-3PL
 ‘They take book[s] away from each other.’

A few more examples of both types:

- (26) a. *Ata-sə bla džaš-ə xapar ajt-əš-də-la.*
 father-his and son-his news tell-REC-PAST-3PL
 ‘Father and son told each other the news.’
 b. *Ala qol uzat-əš-də-la.*
 they hand shake-REC-PAST-3PL
 ‘They shook hands [with each other].’
 c. *Ala köz qəs-əš-də-la.*
 they eye wink-REC-PAST-3PL
 ‘They winked at each other’, lit. ‘They winked eyes to each other.’
 d. *Ata-sə bla džaš-ə xapar sor-uš-du-la.*
 father-his and son-his news ask-REC-PAST-3PL
 ‘Father and son asked each other about the news.’

3.1.3 “Possessive” reciprocals

In this case the direct object of the underlying construction with a two-place transitive is retained and the possessive attribute is deleted. As in the previous case (see 3.1.2), the use of “possessive” reciprocals is linked to a direct object, mostly without a case marker; anyway, sentences with an unmarked direct object sound better than those with a possessive and case markers on the direct object denoting mostly inalienable possession. The reciprocal pronoun, namely *biri biri bla*, cannot be used with “possessive” reciprocals. The informant allows the following sentences with “possessive” reciprocals:

- (27) a. *Ol an-ə xali-si-n səna-də.*
 he he-GEN nature-his-ACC put.to.test-PAST.3SG
 ‘He put his character to the test.’
 b. *Ala xali / xali-leri-n səna-š-də-la.*
 they character / character-their-ACC put.to.test-REC-PAST-3.PL
 ‘They put each other’s characters to the test.’
- (28) a. *Ol bet-i-n sədər-də.*
 he face-his-ACC scratch-PAST.3SG
 ‘He scratched his face.’

- b. *Ala bet / bet-leri-n sädär-äš-dä-la.*
 they face face-their-ACC scratch-REC-PAST-3PL
 ‘They scratched each other’s faces.’
- (29) a. *Ol taxsa-nə čučx-ub küreš-di.*
 he secret-ACC find.out-CONV try-PAST.3SG
 ‘He tried to worm out the secret.’
- b. *Ala taxsa / taxsa-larə-n čučx-uš-ub küreš-di-le.*
 they secret secret-their-ACC find.out-REC-CONV try-PAST-3PL
 ‘They tried to worm out each other’s secrets.’

3.1.4 Discontinuous reciprocal constructions with the postposition *bla* ‘with’

In Karachay-Balkar, subject-predicate agreement in person and number is obligatory, therefore in the simple reciprocal construction the predicate is necessarily plural. Thus (30b) is a simple construction in which both arguments are conjoined by the conjunction *bla* ‘and’ and the predicate agrees with both in the plural.

In the discontinuous construction, with the second argument expressed by an object with the postposition *bla* ‘with’ the number of the predicate is dependent on the number of the first argument, i.e. it may be either singular or plural. (30c) is a discontinuous construction in which the subject, i.e. the first argument, is singular and the predicate agrees with it in number (cf. also (31b, c)). In (31d) the agreement is plural. It may be pointed out in passing that constructions with the reciprocal pronoun, including those with *biri biri bla* ‘with each other’, cannot be discontinuous.

Almost all of “canonical” suffixed reciprocals derived from two-place transitives may occur in the discontinuous construction, the second argument with the postposition *bla* ‘with’ being in the genitive case (as in other Turkic languages, this postposition is materially identical with the conjunction *bla*).

- (30) a. *Ata-sə džaš-ə-n qučaqła-də.*
 father-his son-his-ACC embrace-PAST.3SG
 ‘Father embraced his son.’
- b. *Ata bla džaš-ə qučaqła-š-də-la.*
 father and son-his embrace-REC-PAST-3PL
 ‘Father and son embraced [each other].’
- c. *Ata-sə džaš-ə-nə bla qučaqła-š-də.*
 father-his son-his-GEN with embrace-REC-PAST.3SG
 (same translation as (b)); lit. ‘Father embraced with his son.’

The following are discontinuous constructions with reciprocals from 3.1.1.1:

- (31) a. *Men an-ə bla sal-əš-də-m.* (KB. 538) ‘I quarrelled with him.’
 b. *Men an-ə bla tan-əš-də-m.* (KB. 603) ‘I got acquainted with him.’
 c. *Ol džaw-la-nə bla serme-š-di.* (KB. 554) ‘He fought with the enemy.’
 d. *Ala men-i bla dawla-š-ma-j-dəla.* (KB. 199) ‘They do not argue with me.’

It follows from the assertion above that there are restrictions on transformation of simple constructions into discontinuous. Thus “indirect” and “possessive” reciprocals as well as “canonical” reciprocals derived from two-place intransitives (excepting those under (23)

because their base verbs take an object with *bla*) are used in the simple construction only. The discontinuous construction with these reciprocals sounds unnatural; cf.:

- (32) **Men an-ə bla gammojlan-əš-əb tur-a-ma.*
 I he-GEN with be.angry-REC-CONV AUX-PRES-1SG
 (intended meaning:) lit. 'I with him am angry with each other.'

3.1.5 *Biri biri bla* 'with each other' in the simple construction

Three cases are distinguished here: the *bla* noun phrase can be either a free adjunct (cf. (33c)) or an argument (cf. (34a)) or (with the reciprocal pronoun) a lexical specifier of a reciprocal verb (cf. (37d)). This reciprocal phrase has the following personal forms: *biri biri-biz bla* 'we with each other', *biri biri-giz bla* 'you with each other', *biri biri-Ø bla* 'they with each other'.

3.1.5.1 *The bla noun phrase as a free adjunct.* The comitative postposition *bla* 'with' has the properties of a lexical reciprocal in that (33a) entails (33b), and vice versa. These constructions are discontinuous, and the simple construction is formed with the help of the reciprocal pronoun in (33c). Here the comitative meaning of *bla* combined with the reciprocal meaning of the pronoun results in a meaning close to the sociative. All these constructions differ in topicalization (note that omission of *biri biri bla* in (33c) also allows non-simultaneous interpretation of the subevents, unlike in (33a) and (33b)); cf. (note that *-də* = 3SG and *-dəla* = 3PL):

- (33) a. *Soltan [Aminat bla] bar-a-də.* 'Soltan goes [together with Aminat].'
 = b. *Aminat [Soltan bla] bar-a-də.* 'Aminat goes [together with Soltan].'
 = c. *Soltan bla Aminat [biri biri bla] bar-a-dəla.* 'S. and A. go [together/with each other].'

The phrase *biri biri bla*, roughly synonymous to the adverb *birge* 'together, jointly' with the sociative meaning whose distribution displays subtle selectivity (cf. (33e)), may in principle be used with many verbs that allow expression of joint action; *birge* may be added to the comitative phrase: moreover, it may be advisable, as in (33h); cf.:

- d. *Ala biri biri bla / birge bar-a-dəla.* 'They go together.'
 e. *Ala biri biri bla / birge işle-j-dile.* 'They work together' (*birge* is preferable).

Sentences containing *biri biri bla* seem to presuppose existence of corresponding non-reciprocal noun phrases with *bla* or *bla birge*; e.g.:

- f. *Ol an-ə bla [birge] bar-a-də.* 'He goes [together] with him.'
 g. *Ol an-ə bla [birge] işle-j-di.* 'He works [together] with him.'
 h. *Ol qart-la bla birge tur-a-də.* (KB. 147) 'He lives together with his parents.'

3.1.5.2 *The bla noun phrase as an argument.* In this case its use is conditioned by the lexical meaning of the verb. We have in mind verbs (most of which are lexical reciprocals) with meanings like 'to play with sb', 'to talk with sb', 'to wrestle with sb', 'to quarrel with sb', 'to agree with sb', etc. (see the list under (23) and examples (34)–(35) with these verbs). Thus, in examples (35a), (35b) and (35c), unlike in the above cases (see (33)), the meaning of

the co-participant (expressed by a comitative phrase with *bla* ‘with’) is usually implied in the lexical meaning of the base verbs as well.

- (34) a. *Soltan Aminat bla ojna-də.* ‘Soltan played with Aminat.’
 b. *Aminat Soltan bla ojna-də.* ‘Aminat played with Soltan.’
 c. *Ala biri biri bla ojna-də-la.* ‘They played with each other.’
- (35) a. *Ala biri biri bla ojna-š-də-la.*
 they each other with play-REC-PAST-3PL
 ‘They played with each other.’
 b. *Ala biri biri bla kes-leri-ča dəγərd-əš-də-la.* (KB. 112)
 they each other with self-their-ča chatter-REC-PAST-3PL
 ‘They began to chatter with each other in their language.’
 c. *Ala bir biri bla qurqurla-š-də-la.* (KB. 424)
 they each other with whisper-REC-PAST-3PL
 ‘They whispered between themselves.’

This type also includes many lexical reciprocals (in the broad sense (see Sections 6, 7, 8), i.e. reciprocals that have no non-reciprocal counterparts, among them verbs with the final *-š* which have lost their base verb (cf. (36’a, b)) or relate semantically to it in a non-standard way (cf. (36’c): *kel-* ‘to come’, *tart-* ‘to pull, hit’). The simple constructions under (36’) have discontinuous counterparts with the postposition *bla* ‘with’ with all the participants named (cf. (36) and (36’)), whereas the constructions in (36’) without the reciprocal pronoun allow dual interpretation: (a) as simple with all the participants named by the subject and, though less likely, (b) as discontinuous with an omitted second participant. The reciprocal pronoun in (36’) clearly points to the first interpretation (this also pertains to (35); *-me* in (36c) and (36’c) = NEG and *-j* = CONV).

- (36) a. *Ala an-ə bla küreš-di-le.* ‘They quarrelled with him.’
 b. *Ala an-ə bla demleš-di-le.* ‘They abused him.’
 c. *Ala an-ə bla kel-iš-me-j, tart-əš-a-də-la.* ‘They don’t get on with him, quarrel.’
- (36’) a. *Ala bir biri bla küreš-di-le.* ‘They quarrelled with each other.’ (KB. 365)
 b. *Ala bir biri bla demleš-di-le.* ‘They abused each other’ (KB. 201)
 c. *Bir biri bla kel-iš-me-j, tart-əš-a-də-la.* ‘They don’t get on with each other, quarrel.’
 (KB. 607).

3.1.5.3 *Biri biri bla* as a lexical specifier. Frequent use of *biri biri bla* ‘with each other’ is a specific feature of Karachay-Balkar in comparison with Yakut, Tuvan and Kirghiz. All of the reciprocals dealt with in 3.1.1.1 allow *biri biri bla* in the simple construction. This phrase seems to be pleonastic in most cases, though sometimes, as is noted above, it serves to highlight the reciprocal meaning and rule out discontinuous interpretation with an omitted object (see above).

Some of the pronominal reciprocals with *biri biri bla* are derivatives from verbs with a comitative object with the postposition *bla* (see 3) in §3.1.1), i.e. there is a kind of parallelism between (37a)–(37b) on the one hand and (37c)–(37d) on the other:

- (37) a. *Ol an-ə bla ojna-də.* ‘He played with him.’ (cf. (34a))
 b. *Ala biri biri bla ojna-də-la.* ‘They played with each other.’ (cf. (34c)).

- c. *Ol an-a qay-da.* 'He hit him.'
 d. *Ala biri biri-n qay-da-la.* 'They hit each other.'

If, however, we use the reciprocal form in (37b) and (37d) the second sentence will be less acceptable than the first:

- b'. *Ala biri biri bla ojna-š-də-la.* (same as (37b))
 d'. *Ala biri biri-n* (better without it) *qay-aš-də-la.* (same as (37d); cf. (1c, d)).

But substitution of *biri biri bla* for *biri biri-n* in (37d'), though not in (37d), sounds natural. Addition of *biri biri-n* in (37e) or, which is the same, of *biri biri bla* in (37d) does not make the sentence grammatical.

- d". *Ala biri biri bla qay-aš-də-la.* lit. 'They hit each other among themselves.'
 e. **Ala biri biri bla qay-da-la.* lit. 'They hit (whom?) among themselves.'
 f. **Ala biri biri bla biri biri-n qay-da-la.* lit. 'They hit each other among themselves.'

Substitution of the semantically contiguous adverb *birge* 'together' for *biri biri bla* 'with each other' in a construction with a reciprocal verb may involve reinterpretation: the subject referent comes to be interpreted as only one of the participants of the situation, and the construction sounds unfinished, with the second participant being unnamed; this adverb is made necessary by the second participant; e.g.:

- g. *Ala birge ojna-š-də-la.* 'They played together ... [with whom?]'
 h. *Ala Ali bla birge ojna-š-də-la.* 'They played together with Ali.'

A few more examples of the (37d") type with reciprocals from 3.1.1.1:

- (37') a. *Ala bir biri bla kör-üş-di-le.* 'They met with each other' (KB. 344)
 b. *Biz biri biri bla soj-ul-uš-du-q.* 'We quarrelled with each other' (KB. 569)
 c. *Ala bir biri bla samarqawla-š-də-la.* 'They jeered at each other' (KB. 538)
 d. *Ala bir biri bla serme-š-di-le.* 'They quarrelled with each other' (KB. 554)
 e. *Ala biri biri bla sög-üş-dü-le.* 'They abused each other' (KB. 555).

The possibility of *biri biri bla* in type (37') constructions with suffixed reciprocals seems to correlate, to some extent, with the possible use of the same reciprocals in discontinuous constructions with *bla* (see 3.1.4). As noted above, discontinuous constructions do not sound right with (a) "canonical" reciprocals from two-place intransitives, (b) "possessive" reciprocals and (c) "indirect" reciprocals. It is only in case (c) that the phrase *biri biri bla* sounds acceptable. This is probably related to the fact that because of the non-referential object the transitivity of these reciprocals is weakened and they become closer to intransitive reciprocals from 3.1.1.1.

3.1.5.4 *Biri biri bla* 'with each other' ≠ *birge* 'together'. As a rule, adverbs with the meaning 'together' (and also affixed sociative markers, it seems) do not combine with reciprocals, while the semantically close expression 'with each other' does combine with many reciprocals without changing the meaning of a reciprocal construction in any noticeable way, as is shown in the above sections. When added in a reciprocal construction the adverb *birge* may change its meaning. Note that (38) is ungrammatical if only two participants

are involved in the situation. But it can be interpreted as discontinuous with an ellipted second group of participants which may be introduced by the postposition *bla* ‘with’, i.e. the subject names only one group of participants. In another interpretation the meaning ‘together’ implies several pairs of participants who are embracing simultaneously.

- (38) *Ala birge qučakla-š-əb bar-a-dəla.*
 they together embrace-REC-CONV go-PRES-3PL
 i. *‘They (two persons) walk embracing *each other together*.’
 ii. ‘They (two persons) walk embracing *each other with someone else*.’
 iii. ‘They (more than one pair) walk embracing *each other together*.’

3.2 Object-oriented reciprocals

3.2.1 Causatives from subject-oriented reciprocals

Causativization is a common way of forming object-oriented reciprocals; cf.:

- (39) a. *Rümka-larə qay-əš-də-la.*
 glass-their clink-REC-PAST-3PL
 ‘Their glasses clinked.’
 b. *Ala rümka-la-nə qay-əš-dər-də-la.* (KB. 373)
 they glass-PL-ACC clink-REC-CAUS-PAST-3PL
 ‘They clinked their glasses together’; cf. also:
 c. *Ala bokal-la-nə tij-iš-dir-di-le.* (KB. 633)
 they glass-PL-ACC clink-REC-CAUS-PAST-3PL
 ‘They clinked their glasses together.’

Characteristically, most of the examples of this type registered in KB contain *biri biri bla* ‘with each other’ and, naturally, they are simple reciprocal constructions (cf. discontinuous (40a) and simple (40b)–(40g)). Not uncommonly such causative formations function as set phrases (sometimes they correspond to non-derived lexical reciprocals of other languages; cf. ‘to acquaint’, ‘to compare’, ‘to introduce’ in the translations below); cf. (40c.ii), (40d). Here are examples with reciprocals listed in (17) and (18):

- (40) a. *Ol kəz bla džaš-ən kör-üş-dür-dü.* (KB. 44)
 he girl with youth-ACC see-REC-CAUS-PAST
 ‘He acquainted the youth with the girl.’
 b. *Ol ala-nə bir biri bla qay-əš-dər-də.* (KB. 373)
 he they-ACC each other with beat-REC-CAUS-PAST.3SG
 ‘He provoked a fight between them.’
 c. *Ol ala-nə bir biri bla sal-əš-dər-də.* (KB. 538)
 he they-ACC each other with hit-REC-CAUS-PAST.3SG
 i. ‘He *caused* them to *fight between themselves*.’
 ii. ‘He *compared* them *with each other*.’
 d. *Men ala-nə bir biri bla tan-əš-dər-də-m.* (KB. 603)
 I they-ACC each other with know-REC-CAUS-PAST-1SG
 ‘I introduced them *to each other*.’

- e. *Ol ala-nə biri biri bla buw-uš-dur-du.* (KB. 171)
 he they-ACC each other with press-REC-CAUS-PAST.3SG
 ‘He set them on each other.’
- f. *Ol ala-nə bir biri bla soy-uš-dur-du.* (KB. 563)
 he they-ACC each other with beat-REC-CAUS-PAST.3SG
 ‘He made them fight between themselves.’
- g. *Ol ala-nə bir biri bla dawla-š-tər-də.* (KB. 199)
 he they-ACC each other with dispute-REC-CAUS-PAST.3SG
 ‘He provoked a quarrel between them.’

3.2.2 Object-oriented lexical reciprocals

The following verb is the only example of a lexical reciprocal which can be used optionally with the reciprocal suffix without any perceptible change of meaning. This case is not quite clear. The meaning of growing smaller in size or space taken up is sometimes expressed by a marker one of whose basic meanings is ‘joining together’ (reciprocal meaning proper) not only in Karachay-Balkar. These meanings are on the periphery of the proper reciprocal meaning.

- (41) a. *džəjər-* i. ‘to wrinkle (forehead), screw up (eyes)’ (vt)
 ii. ‘to press sth to/under oneself’, ‘draw in (head)’ (vt)
 b. *džəjər-əš-* i. (same), ii. (same) (cf. also (132)) (KB. 264) (vt)
- (42) a. *Köz-leri-n džəjər-əš-əb qara-j-dəla.* (KB. 264)
 eye-PL-ACC screw-REC-CONV look-PRES-3PL
 ‘[They] look screwing their eyes.’
 b. *[Ol] ajaq-lar-ə-n džəjər-əš-əb džat-a-də.* (KB. 264)
 he foot-PL-his-ACC press-REC-CONV lie-PRES-3SG
 ‘He lies with his feet pressed underneath.’

In (41) the suffix *-š* does not change the meaning of the transitive lexical reciprocal. But generally, when added to a lexical reciprocal, it produces an intransitive anticausative verb from which a causative suffix can form a three-place derivative; cf.:

- (43) a. *čal-* ‘to braid’(vt) → *čal-əš-* ‘to intertwine/cross’(vi) → *čal-əš-dər-* ‘to cross sth’(vt)
 b. *Ol ajaq-lar-ə-n čal-əš-dər-əb oltur-a-də.* (KB. 725)
 he leg-PL-his-ACC braid-REC-CAUS-CONV sit-PRES-3SG
 ‘He sits with his legs crossed.’ (see also 8.3).

3.3 Restrictions on reciprocals with the suffix *-š*

As mentioned above, suffixed reciprocals are of low productivity in Karachay-Balkar, being probably the least productive among all the Turkic languages. On the whole, productivity of the suffix *-š* in the Turkic languages seems to diminish from east to west. Geljaeva (1982:53) claims that reciprocals in *-š* “are derived from a rigidly limited set of transitive verbs and a few intransitives”. Below are lists of some of the verbs which (probably with one or two exceptions) form reciprocals in some other Turkic languages but not in Karachay (some of these verbs do allow formation of suffixed reciprocals, usually on condition that they are combined with the reciprocal pronoun: *alda-*, *džoqla-*, *maxta-*, *süj-*, *qozu-*, *əsar-*,

ajt-; these verbs are entered in lists (44)–(46)). The borderline between the acceptable and unacceptable suffixed reciprocals is rather vague: sometimes the informant hesitates in his evaluation of the same sentences when asked at intervals, and this may find expression in some inconsistencies in this paper.

1. Two-place transitives:

(44)	<i>alda-</i>	‘to deceive’	<i>qozu-</i>	‘to tease’
	<i>çaqər-</i>	‘to call sb’	<i>qutxar-</i>	‘to save’
	<i>džala-</i>	‘to lick’	<i>qəjna-</i>	‘to torment’
	<i>džazəqsən-</i>	‘to pity’	<i>saqla-</i>	‘to await’
	<i>džoqla-</i>	‘to visit’	<i>süj-</i>	‘to love’
	<i>džuw-</i>	‘to wash’	<i>tile-</i>	‘to beg/ask’
	<i>ešit-</i>	‘to hear’	<i>töze-</i>	‘to tolerate’
	<i>(uppa) ete-</i>	‘to kiss’, lit. ‘to do (a kiss)’	<i>tüş(ür)-</i>	‘to recall’
	<i>ker-</i>	‘to forgive’	<i>unut-</i>	‘to forget’
	<i>maxta-</i>	‘to praise’	<i>əsar-</i>	‘to smile.’

2. Two-place intransitives:

(45)	<i>inan-</i>	‘to believe sb (DAT)’	<i>qara-</i>	‘to look after sb (DAT)’
	<i>išan-</i>	‘to trust sb (DAT)’	<i>ujal-</i>	‘to be ashamed of sb (ABL).’

3. Three-place transitives:

(46)	<i>ajt-</i>	‘to say’		
	<i>ašat-</i>	‘to feed’	<i>ičir-</i>	‘to give to drink’
	<i>ber-</i>	‘to give’	<i>ije-</i>	‘to send’
	<i>de-</i>	‘to say’	<i>sat-</i>	‘to sell.’

Practically no morphological causatives with productive suffixes form reciprocals. Thus there are no reciprocals from causatives such as *quwan-dər-* ‘to make happy/merry’ (← *quwan* ‘to be happy/merry’), *ačəwlan-dər-* ‘to make angry’ (← *ačəwlan*). A number of such reciprocals are registered in KB: *öl-tür-üş-* ‘to kill each other’ (← *öl-* ‘to die’) (KB. 277), *kül-dür-üş-* ‘to make each other laugh’ (← *kül-* ‘to laugh’) (KB. 362). But the informant does not accept them though he considers them possible in careless speech (nevertheless, he approves the reciprocal from a causative in (74a) as entirely correct; the suffixed reciprocal is combined with the reciprocal pronoun here).

Suffixed reciprocals cannot be derived from the following two-place intransitives; even in combination with the reciprocal pronoun they are rejected by the informant, and without the pronoun the meaning of these derivatives is not clear.

- (47) a. *Ol an-dan ilgen-di* / *qorq-du.*
 he he-ABL get.scared-PAST.3SG be.afraid-PAST.3SG
 ‘He got scared/was afraid of him.’
- b. **Ala ilgen-iš-di-le* / *qorq-uš-du-la.*
 they get.scared-REC-PAST-3PL be.afraid-REC-PAST-3PL
 (intended meaning:) ‘They got scared/were afraid of each other.’

3.4 Nomina actionis

This section concerns nouns derived from both verbal and nominal stems, and derived nouns whose relation to any stem is not quite clear.

3.4.1 *With the suffix -w*

This suffix can be used to derive *nomina actionis* from any derived verb with any number of suffixes. There are practically no restrictions on its use. In KB, they occur several times per page. In the process of nominalization of reciprocal constructions a direct object is retained and the subject becomes an attribute in the genitive case; e.g.:

- (48) a. *Ala kör-üş-dü-le.*
 they see-REC-PAST-3PL
 'They met.'
- b. *Ala-nə kör-üş-üw-leri.*
 they-GEN see-REC-NR-their
 'Their meeting/date.'
- c. *Ala-nə an-ə bla kör-üş-üw-leri.*
 they-GEN he-ACC with see-REC-NR-their
 'Their meeting with him.'
- d. *An-ə ala-nə bla kör-üş-üw-ü.*
 he-GEN they-GEN with see-REC-NR-his
 'His meeting with them.'
- (49) *Dawla-š-əw iš-ge boluš-maz.* (KB. 198)
 dispute-REC-NR work-DAT help-NEG.3SG
 'Quarrelling won't improve things.' (cf. (40g))

3.4.2 *With the suffix -š*

In some of the Turkic languages, e.g. in Kirghiz (see Nedjalkov, Ch. 28, §4.3), this suffix is highly productive (though less so than the suffix *-uu/-ii/...*) in forming nouns of action. In Karachay-Balkar it is unproductive, and nouns in *-š* are rather few in KB. But it is of interest from the viewpoint of its material coincidence with the reciprocal marker (genetic relatedness is possible; cf. Nedjalkov & Nedjalkov, Ch. 26 on Yakut, §14). If we take into account a broader domain than *nomina actionis*, the following cases of the use of *-š* on nouns can be distinguished. Most of the cited forms in *-š* are reciprocal in meaning and denote mostly hostile actions.

1. The meaning of the word (noun and verb) in *-š* is reciprocal.

1.1. The stems of verb and noun coincide; there is a base verbal stem but the derivational relationship between the first two forms is not straightforward; as well as in the other cases, a noun with the suffix *-w* can be formed, e.g.:

- (50) a. *soy-* 'to beat, torment'
 b. *soy-uš-* 'to fight'
 c. *soy-uš* 'fight, battle, struggle'
 d. *soy-uš-uw* 'beating' (KB. 563).

- (51) a. *dawla-* 'to dispute, call in question'
 b. *dawla-š-* 'to argue/dispute with each other'
 c. *dawla-š* 'argument, quarrel'
 d. *dawla-š-əw* 'arguing, quarrelling' (KB. 198).

The semantic relation between (b) and (d) is more regular than between (b) and (c). Nouns in *-š* are more concrete in meaning than those in *-w* which are as a rule more actional in meaning; cf. 'a fight' and 'fighting', 'a quarrel' and 'quarrelling', though they are sometimes treated as synonyms in KB, as in the case of *qeqeš* = *qeqeš-ıw* 'conference, meeting' (but they are not synonymous in the meaning 'an exchange opinions' (*biri biri bla qeqeš-ıw*)). Following are additional examples. As nouns in *-w* are derived automatically, only the first three members of the derivational chains are quoted here:

- (52) a. *džəq-* 'bring sb down' → *džəq-əš-* 'to wrestle'; *džəq-əš* 'fight/struggle' (KB.262, 814)
 b. *sög-* 'to scold' → *sög-üş-* 'to scold each other'; *sög-üş* 'swearing/abuse' (KB. 555)
 c. *tüj-* 'to beat' → *tüj-üş-* 'to fight/struggle'; *tüj-üş* 'fight, brawl' (KB. 671)
 d. *ur-* 'to beat' → *ur-uš-* 'to scold/quarrel'; *ur-uš* 'battle', 'scandal' (KB. 686)
 e. *tart-* 'to pull' → *tart-əš-* 'to quarrel'; *tart-əš* 'wrestling' (B. 262)
 f. *tut-* 'to hold, grasp' → *tut-uš-* 'to wrestle'; *tut-uš* 'wrestling' (KB. 655).

The middle member of a derivational chain may be absent or unrelated to the other two semantically; e.g.:

- g. *ajər-* 'to disjoin' → [*ajər-əš-*]; *ajər-əš* 'discord, dissention' (KB. 34, 40).

1.2. The base stem is non-existent: it is mostly likely lost, and thus the verbs and nouns listed below are lexical reciprocals, namely, *reciproca tantum* and as such they are included in 6.3. Here belong:

- (53) a. *eriš-* 'to compete/be rivals' – *eriš* 'arguing' (KB. 771)
 b. *keqeš-* 'to exchange opinions' – *keqeš* 'conversation' (KB. 324)
 c. *küreš-* 'to struggle/wrestle' – *küreš* 'wrestling/struggle' (KB. 365)
 d. *öčeš-* i. 'to argue', ii. 'bet', iii. 'compete' – *öčeš* 'arguing' (cf. *öç* 'bet') (KB. 282)
 e. *üleş-* 'to divide/share' – *üleş* 'share/part' (KB. 784).

2. The meaning of a noun in *-š* is not reciprocal.

The respective verbs in *-š* are semantically unrelated to the nouns listed: *bol-uš-* 'to help', *kir-iš-* and *tig-iš-* are defined as sociatives (with the explanation 'of many') and *quw-uš-* has the reciprocal meaning 'to chase/pursue each other', and *qary-əš-* 'to curse, damn each other'. The verb *džür-* does not take the suffix *-š*.

- (54) *bol-* 'to be, happen' → *bol-uš* 'result' (KB. 158)
džür- 'to walk, move' → *džür-üş* 'gait' (KB. 274)
kir- 'to enter' → *kir-iš* 'entrance' (KB. 814)
qary- 'to curse/damn' → *qary-əš* 'damnation' (KB. 394)
quw- 'to drive/pursue' → *quw-uš* 'persecution' (KB. 432)
tig- 'to sew' → *tig-iš* '(way of) embroidering' (KB. 631).

3. Related issues.

To complete the survey, here are a few nouns denoting persons and not actions. As we see, the nouns are derived from suffixed reciprocals.

- (55) a. *teŋ* 'equal'
 b. *teŋ-iš-* 'to be equal'
 c. *teŋ-iš* 'person of the same age' (KB. 621).
- (56) a. *tan-* 'to know/recognize'
 b. *tan-əš-* 'to get acquainted'
 c. *tan-əš* '(an) acquaintance' (KB. 603-4).

4. Diathesis types of constructions with the reciprocal pronoun *biri biri-n* 'each other'4.1 Introductory. *Bir biri* in the meaning 'some of them'

This section is devoted to constructions with the reciprocal pronoun only and those with both markers of reciprocity. The point is that in Karachay-Balkar the suffixed expression of reciprocity is being ousted, it seems, by the mixed pronominal-suffixed and even pronominal only expression. There are practically no restrictions on the pronominal expression of reciprocity. The main exception may be a limited number of stable suffixed reciprocals dealt with in 3.1.1.1. This is probably due to the areal influence: it is only Adyge languages that display affixed expression of reciprocity, while other neighbouring languages use reciprocal pronouns. The following table shows those case forms of the reciprocal pronoun for all the three persons (see also (6)) that have occurred in our material; note that the case endings are preceded by a reflexive-possessive suffix: *-biz* 'our', *-giz* 'your', and *-Ø* or, seldom, reflexive-possessive *-leri* (see (63a), (66b)). In the 3PL genitive, locative and ablative forms there appears the consonant *-n-* without any particular meaning. The reciprocal pronoun may appear as *bir biri-* (see (60a, b), etc.) or *bir bir-* (cf. (63f)). In (63f) it contains no reflexive-possessive suffix for some reason, i.e. the form *bir bir-ge* is used instead of *biri biri-biz-ge*.

(57) a.	1PL	2PL	3PL	3PL
NOM	<i>biri biri-biz</i>	<i>biri biri-giz</i>	<i>biri biri-Ø</i>	<i>biri biri-leri-Ø</i>
GEN	<i>biri biri-biz-ni</i>	<i>biri biri-giz-de</i>	<i>biri biri-n-de</i>	<i>biri biri-leri-n-de</i>
DAT	<i>biri biri-biz-ge</i>	<i>biri biri-giz-ge</i>	<i>biri biri-ne</i>	<i>biri biri-leri-ne</i>
ACC	<i>biri biri-biz-ni</i>	<i>biri biri-giz-ni</i>	<i>biri biri-n</i>	<i>biri biri-leri-n</i>
LOC	<i>biri biri-biz-de</i>	<i>biri biri-giz-de</i>	<i>biri biri-n-de</i>	<i>biri biri-leri-n-de</i>
ABL	<i>biri biri-biz-den</i>	<i>biri biri-giz-den</i>	<i>biri biri-n-den</i>	<i>biri biri-leri-n-den</i>
TRNSL	<i>biri biri-biz-tin</i>	<i>biri biri-giz-tin</i>	<i>biri biri-tin</i>	<i>biri biri-leri-tin</i>

The "nominative" case form of the reciprocal pronoun seems to appear only as an attribute in "possessive" reciprocal constructions, the form *biri biri* or *bir biri* being generalized for all the persons (see 4.2.3). Less frequently, such generalized forms are used in other diathesis types of reciprocal constructions (see (58b) where *bir bir-den* is used instead of *bir biri-biz-den*).

The form *bir biri* (only with *bir* and not *biri* as the first component) of the reciprocal pronoun is homonymous to one of the indefinite pronouns.

- b. *bir biri-biz* 'some of us'
bir biri-giz 'some of you'
bir biri/bir biri-leri 'some of them'; cf.:
 c. *Bir biri-biz an-ə at-də-q*
 'Some of us fired at him.'

The reciprocal pronoun can be separated from the predicate by other words; e.g.:

- (58) a. *Ala biri biri-ne səna-š-əb qara-də-la.* (KB. 584)
 they each other-DAT size.up-REC-CONV look-PAST-3PL
 'They looked at each other sizing each other up.'
 b. *Bir bir-den, köl-übiz tol-a, ajər-əl-əš-də-q.* (G. 54)
 each other-ABL lake-our fill-CONV divide-PASS-REC-PAST-1PL
 'We parted [lit. 'from each other'], our eyes full of tears.'

4.2 Subject-oriented constructions

4.2.1 "Canonical" reciprocals

4.2.1.1 *With two-place transitives.* As mentioned above, this is the principal type of reciprocal constructions with transitive verbs: suffixed reciprocals cannot be derived from most transitives. In KB, sometimes on the same page, examples containing a reciprocal pronoun with and without a suffixed reciprocal are entered; e.g.:

- (59) a. *Ala an-ə bayalat-əb söleş-di-le.*
 they he-ACC respect-CONV speak-PAST-3PL
 'They spoke of him with respect.'
 b. *Ala biri biri-n bayalat-əb söleş-di-le.* (KB. 110)
 they each other-ACC respect-CONV speak-PAST-3PL
 'They spoke of each other with respect.'
 c. *Ala biri biri-n bayalat-əš-əb söleş-di-le.* (KB. 110)
 they each other-ACC respect-REC-CONV speak-PAST-3PL
 (same translation).

1. The following examples contain the reciprocal pronoun only. In the reciprocals listed in (17) and (18) the suffix is interchangeable with the reciprocal pronoun, with no change or a slight change of the overall meaning.

- (60) a. *Bir-leš-ej-iq, bir biri-biz-ni zoqla-j-əq.* (G. 58)
 one-leš-HORT-1PL each other-GEN take.care-HORT-1PL
 'Let's unite, take care of each other.'
 b. [*Ala*] *bir biri-n oza-rya küreš-di-le.* (KB. 365, 490)
 they each other-ACC overtake-INF try-PAST-3PL
 'They tried to overtake each other.'
 c. ... *bir biri-n dzoqla-j...* (KB. 250)
 each other-ACC call-CONV
 '... calling to each other...'

- d. *Ala biri biri-n soy-du-la.* (KB. 569)
 they each other-ACC beat-PAST-3PL
 ‘They beat each other.’
- e. *Ala bir biri-n uppa et-di-le.* (KB. 684)
 they each other-ACC kiss do-PAST-3PL
 ‘They kissed each other.’
- f. *Ala biri biri-n sənaj-də-la.* (KB. 584)
 they each other-ACC size.up-PAST-3PL
 ‘They sized each other up.’

2. The following examples contain two markers of reciprocity. Most of transitive verbs can be used in this way. But the reciprocals listed in (17) and (18) are preferable without the reciprocal pronoun, probably due to customary use. With these verbs the reciprocal pronoun *biri biri-n* seems to be redundant in most cases, though, as noted above, this pronoun with the postposition *bla*, i.e. *biri biri bla* ‘with each other’, sounds natural enough (cf. 3.1.5.3).

- (61) a. *Köb kün-le aq-də-la bir biri-n quw-uş-ub.* (KB. 432)
 many day-PL pass-PAST-3PL each other-ACC pursue-REC-CONV
 ‘Many days passed one after another’, lit. ‘pursuing one another.’
- b. *Ala biri biri-n səndər-əş-əb söleş-di-le.* (KB. 585)
 they each other-ACC offend-REC-CONV speak-PAST-3PL
 ‘They spoke offending each other.’

Despite the tendency noted above, there occur verbs with all the three variants of encoding reciprocity being more or less equally acceptable:

- (62) a. *Ala an-ə dżanəwla-də-la.* ‘They make him angry (with sb).’
 b. *Ala biri biri-n dżanəwla-ş-də-la.* ‘They are angry with each other.’
 c. *Ala biri biri-n dżanəwla-də-la.* (same translation).
 d. *Ala dżanəwla-ş-də-la.* (same translation) (KB. 226).

4.2.1.2 *With two-place intransitives.* The reciprocal pronoun is used with the same three syntactic types of base intransitives as in 3.1.1.2. A tentative generalization for this class may be proposed: sentences with a reciprocal pronoun only (without the reciprocal suffix on the predicate) are always acceptable; sentences with both markers are acceptable, too, although sometimes the informant considers them slightly less acceptable; sentences with a suffixed reciprocal without the pronoun are very often either less acceptable or unacceptable. Let us consider these three groups.

1. Reciprocals of base verbs with a dative object. In dictionary entries and in specialist literature, constructions with these intransitives taking the reciprocal suffix usually contain the reciprocal pronoun as well; cf.:

- (63) a. *Ala bir bir-leri-ne aılan-əş-əb oltur-a-dəla.* (KB. 33)
 they each other-their-DAT turn-REC-CONV sit-PRES-3PL
 ‘They sit facing each other.’

- b. *Ala bir biri-ne ačəwlan-əš-əb tur-a-dəla.* (KB. 102)
 they each other-DAT be.angry-REC-CONV AUX-PRES-3PL
 ‘They are angry with each other.’
- c. *Tereze-ler-ibiz bir biri-ne bay-əš-əb tur-a-dəla.* (KB. 111)
 window-PL-our each other-DAT look-REC-CONV AUX-PRES-3PL
 lit. ‘Our windows look at each other.’
- d. *Ala bir biri-ne tayəl-əš-əb kel-e-dile.* (KB. 596)
 they each other-DAT tie-REC-CONV walk-PRES-3PL
 ‘They walk as if tied to each other.’
- e. *Sabij-le biri-biri-ne uša-š-əb bar-a-dəla* (KB. 692)
 child-PL each-other-DAT be.alike-REC-CONV AUX-PRES-3PL
 ‘The children are becoming alike.’
- f. *Batər bla men bir bir-ge ilin-iš-di-q.* (G. 53)
 B. and I each other-DAT seize-REC-PAST-1PL
 ‘Batyr and I seized each other.’

We have found only a few verbs that occur with the reciprocal pronoun alone:

- (64) a. *Eki šar bir biri-ne tij-di-le.* (KB. 632)
 two ball each other-DAT hit-PAST-3PL
 ‘Two balls collided one against the other.’
- b. *Buya-la bir biri-ne məŋaj-a-dəla.* (KB. 476)
 bull-PL each other-DAT butt-PRES-3PL
 ‘The bulls are on the point of starting to butt each other.’
- c. *Ala biri biri-ne qəsəl-də-la.* (KB. 449)
 they each other-DAT snuggle-PAST-3PL
 ‘They snuggled up to each other.’
- d. *Ala biri biri-ne džetdir-me-j-dile.* (KB. 145)
 they each other-DAT trust-NEG-PRES-3PL
 ‘They don’t trust each other.’

In most cases, however, the informant prefers variants with the reciprocal pronoun only: he either rejects constructions with a suffixed reciprocal only or estimates them as less acceptable (see below (65b)) or hardly acceptable (“the meaning is clear, but it is not used in speech” or, rarely, “the meaning is not clear”); cf.:

- (65) a. *Ol an-ŋa qatəl-də.*
 he he-DAT pester-PAST.3SG
 ‘He pestered him.’
- b. [?]*Ala qatəl-əš-də-la.*
 they pester-REC-PAST-3PL
 ‘They pestered each other.’
- c. *Ala biri biri-ne qatəl-əš-də-la.*
 they each other-DAT pester-REC-PAST-3PL
 ‘They pestered each other.’ (“correct, but (d) is better”)
- d. *Ala biri biri-ne qatəl-də-la.*
 (same translation).

Generally, however, some of the suffixed reciprocals are accepted by the informant as (almost) equally correct. The causes of this selectivity are not clear. Moreover, in the dic-

tionary and specialist literature, there occur instances like (65b) and (65c), i.e. with one and the same suffixed reciprocal; cf.:

- (66) a. *Osman bla Fazilat-čaq bosaya-dan təšəna qara-š-də-la.* (G. 53)
 O. and F.-DIM threshold-ABL out glance-REC-PAST-3PL
 ‘Osman and little Fazilat glanced at each other from the threshold.’
 b. *Džaš-la bir bir-leri-ne qara-š-də-la.* (G. 53)
 child-PL each other-their-DAT glance-REC-PAST-3PL
 ‘The children glanced at each other.’

Sentences like (66a) and (66b) with the following verbs are assessed by the informant as almost equally acceptable (these and semantically contiguous suffixed reciprocals are considered in 3.1.1.2 under (21) and (22)).

- (67) *džekir-iš-* ‘to shout at each other’ (KB. 27)
gammojlan-əš- ‘to be sulky with each other’ (KB. 182)
ilin-iš- ‘to grapple with each other’ (KB. 300)
kiršelen-iš- ‘to fume before each other’ (KB. 350)
qara-š- ‘to look/glance at each other’ (KB. 397)
qəčər-əš- ‘to shout at each other’ (KB. 450)
qəsəl-əš- ‘to huddle/press oneself to each other’ (KB. 449)
supulan-əš- ‘to flaunt one’s decency to each other’ (KB. 573).

Here is a list of suffixed reciprocals (most of which are related to intransitives with a dative object) that have also occurred with the reciprocal pronoun in KB and specialist literature. This list and the one under (66) subsume all the verbs discussed in 3.1.1.2.

- (68) *ačawlan-əš-* ‘to be angry with each other’ (KB. 102)
aılan-əš- ‘to turn to/face each other’ (KB. 32)
ajrəl-əš- ‘to part from each other’ (KB. 39)
bay-əš- ‘to look at each other’ (KB. 111)
čamlan-əš- ‘to get angry with each other’ (KB. 725)
ičgisiñ-iš- ‘to confide in each other’ (KB. 308)
qəsəl-əš- ‘to snuggle up to each other’ (KB. 449)
öšünle-š- ‘to pounce/fall upon each other’ (KB. 283)
keril-iš- ‘to lift up one’s hand against each other’ (KB. 326)
kirpilen-iš- ‘to get angry with each other’ (KB. 349)
qajna-š- ‘to be angry with each other’ (KB. 378)
qajrəl-əš- ‘to wrangle with each other’ (KB. 379)
qatəl-əš- ‘to pester each other’ (KB. 401)
məqaj-əš- i. ‘to resent each other’, ii. ‘to butt each other’ (KB. 474)
tayan-əš- ‘to lean upon each other’ (KB. 614)
tayəl-əš- ‘to be tied to each other’ (KB. 596)
temirçile-š- ‘to threaten/be angry with each other’ (KB. 612)
uč-uš- ‘to fall upon/attack each other’ (KB. 691)
uša-š- ‘to resemble each other’ (KB. 692)
xagoklan-əš- ‘to show off to each other’ (KB. 699)
əsar-əš- ‘to smile at each other’ (KB. 761).

2. Reciprocals of verbs with an ablative object. This group is much smaller than the first one. The same tendencies are observed here as with verbs with an underlying dative object. Thus, for instance, in the following examples suffixed reciprocals are hardly acceptable without the reciprocal pronoun. Other reciprocals of this type are *suw-uš-* ‘to get disappointed in each other’ (KB. 577), *üzül-üş-* ‘to tear away from each other’ (KB. 781).

- (69) a. *Ol an-dan uzaj-də.*
 he he-ABL move.away-PAST.3SG
 ‘He moved away from him.’
 b. *Ala biri biri-n-den uzaj-əš-də-la.*
 they each other-n-ABL move.away-REC-PAST-3PL
 ‘They moved away from each other.’
- (70) *Alqən bir biri-biz-den tartən-əš-əb tur-a-bəz.* (KB. 607)
 still each other-ABL be.shy-REC-CONV AUX-PRES-1PL
 ‘We are still shy with each other.’

The reciprocal constructions under (71c, d, e) are more or less equally acceptable. Moreover, the underlying verb is also semantically close. The point is it is a lexical reciprocal, which probably accounts for the acceptability of the three marked constructions, and the reciprocal devices are pleonastic here.

- (71) a. *Ol adam-la-dan ajərəl-də.*
 he man-PL-ABL part-PAST.3SG
 ‘He parted from the people.’
 b. *Ala ajərəl-də-la.*
 they part-PAST-3PL
 ‘They parted.’
 c. *Ala küçden ajərəl-əš-də-la.*
 they hardly part-REC-PAST-3PL
 ‘They could hardly part from each other.’
 d. *Ala bir biri-n-den küçden ajərəl-də-la.*
 they each other-n-ABL hardly part-PAST-3PL
 (same as (c)).
 e. *Bir biri-n-den küçden ajərəl-əš-də-la.* (KB. 39)
 each other-n-ABL hardly part-REC-PAST-3PL
 (same as (c) and (d)).

3. Reciprocals of verbs taking an object with the postposition *bla* ‘with’. For these verbs all the three variants seem to be more or less acceptable; cf.:

- (72) a. *Ol an-ə bla ojna-də.* ‘He played with him.’
 b. *Ala biri biri bla ojna-š-də-la.* ‘They played with each other.’
 c. *Ala biri biri bla ojna-də-la.* (same translation as (b)).
 d. *Ala ojna-š-də-la.* (same translation as (b) and (c); KB. 493–4)
 (cf. (23), (34), (35)).

4.2.2 “Indirect” reciprocals

All the suffixed reciprocals derived from verbs with a dative or ablative object alongside a direct (preferably non-referential) object and discussed in 3.1.2 can also be used with the reciprocal pronoun. The pronoun can be omitted, but its use is preferable, though with some exceptions. Thus in (73) all the three reciprocal constructions are correct though variant (d) is somewhat better than (b) and (c). This is due to the fixed use of the suffixed reciprocal, though in most other cases the reciprocal pronoun is used.

- (73) a. *Ata-sə džaš-ə-n-dan xapar sor-du.*
 father-his son-his-*n*-ABL news ask-PAST
 ‘Father asked his son about the news.’
- b. *Ata-sə bla džaš-ə biri biri-n-den xapar sor-uš-du-la.*
 father-his and son-his each other-*n*-ABL news ask-REC-PAST-3PL
 ‘Father and son asked each other about the news.’
- c. *Ata-sə bla džaš-ə biri biri-n-den xapar sor-du-la.*
 father-his and son-his each other-*n*-ABL news ask-PAST-3PL
 (same translation).
- d. *Ata-sə bla džaš-ə xapar sor-uš-du-la.*
 father-his and son-his news ask-REC-PAST-3PL
 (same translation).

The latter claim is based on the fact that all the relevant examples in KB contain the reciprocal pronoun as well as the reciprocal suffix; here are some of these examples:

- (74) a. *Ulaq-la müjüz-leri-n biri biri-ne ur-dur-uš-ub*
 kid-PL horn-their-ACC each other-DAT beat-CAUS-REC-CONV
ojna-j-dəla. (KB. 684)
 play-PRES-3PL
 ‘The kids play butting each other with their horns.’
- b. *Ala biri biri-ne qol uzat-əš-də-la.* (KB. 679)
 they each other-DAT hand stretch-REC-PAST-3PL
 ‘They shook hands.’ (cf. (25))
- c. *Ala bir biri-ne köz qəs-əš-də-la.* (KB. 449)
 they each other-DAT eye wink-REC-PAST-3PL
 ‘They winked (lit. ‘winked an eye’) at each other.’ (cf. (26))
- d. *Ala biri biri-n-den kitab-nə səjər-əš-də-la.* (KB. 582)
 they each other-*n*-ABL book-ACC take.away-REC-PAST-3PL
 ‘They tried to take books away from each other.’
- e. *Sabij-le bir biri-ne qar dzummaq borya-š-də-la.* (KB. 174)
 child-PL each other-DAT snow ball throw-REC-PRES-3PL
 ‘The boys throw snowballs at each other.’
- f. *Ala biri biri-ne qol ber-iš-di-le.*
 they each other-DAT hand give-REC-PAST-3PL
 ‘They gave each other hands.’

4.2.3 “Possessive” reciprocals; generalized use of *biri biri* for all persons

4.2.3.1 *With two-place transitives.* In all the example sentences in 3.1.3 the attributive form *biri biri* of the reciprocal pronoun preceding the retained direct object can be added.

A peculiarity of Karachay-Balkar in comparison with the three other Turkic languages considered in this volume is the use of the 3rd p. form of the reciprocal pronoun, i.e. a form with zero marking of the 3rd p., for the 1st and 2nd persons as well (cf. (57a)); in Kirghiz and Tuvan, the genitive case of the reciprocal pronoun and in Yakut the unmarked case form of the reciprocal pronoun with a possessive suffix are used in this function (see Ch. 28, §5.2.3, Ch. 26, §4.2.4 and Ch. 24, §5.2.3 respectively). Compare Karachay-Balkar:

- (75) a. *Ala biri biri xali-n səna-j-dəla.* (KB. 584)
 they each other character-ACC size.up-PRES-3PL
 lit. 'They size up each other's character.'
- b. *Biz biri biri (*biri biri-biz) xali-n səna-j-bəz.*
 we each other each other-our character-ACC size.up-PRES-3PL
 lit. 'We size up each other's character.'
- c. *Siz biri biri (*biri biri-giz) xali-n səna-j-səz.*
 you.PL each other each other-your character-ACC size.up-PRES-3PL
 lit. 'You size up each other's character.'

Sentences (75) contain the reciprocal pronoun and unsuffixed predicates, and (76) contain both reciprocal markers (on *aŋəlaš-* see (14)):

- (76) a. *Bir biri söz-übüz-nü aŋəla-š-ərya kerek-biz.* (KB. 69)
 each other word-our-ACC understand-REC-INF necessary-1PL
 'We should understand each other.' (lit. 'each other's words').
- b. *Ala biri biri bet-leri-n sädər-əš-də-la.* (KB. 579)
 they each other face-their-ACC scratch-REC-PAST-3PL
 'They scratched each other on the face.' (lit. 'each other's faces'.)
- c. *Ala biri biri taxsa-nə čučx-uš-ub küreš-di-le.* (KB. 739)
 they each other secret-ACC find.out-REC-CONV try-PAST-3PL
 'They tried to find out each other's secrets.'

4.2.3.2 *With two-place intransitives.* In the following sentences the reciprocal pronoun is an attribute to an oblique object, while in the above examples it is dependent on a direct object:

- (77) a. *Džaš qəz-nə qulay-ə-na süjmeklik söz-le šəbərda-də.*
 youth girl-GEN ear-her-DAT love word-PL whisper-PAST.3SG
 'The youth whispered words of love into the girl's ear.'
- b. *Džaš bla qəz biri biri qulay-ə-na süjmeklik söz-le*
 youth and girl each other ear-her/his love word-PL
šəbərda-[š-]də-la.
 whisper-[REC-]PAST-3PL
 'The youth and the girl whispered love words into each other's ears.'

Compare also:

- (77') a. *Ala bir biri džan-ə-na tij-iš-di-le.* (KB. 633)
 they each other soul-their-DAT touch-REC-PAST-3PL
 'They offended each other.' (lit. 'each other's soul.')

- b. *Ala biri biri bet-i-ne qara-j-dəla.* (KB. 145)
 they each other face-their-DAT look-PRES-3PL
 ‘They looked each other in the face.’

4.3 Object-oriented constructions

4.3.1 Causatives from subject-oriented reciprocals

As well as in 3.2, these constructions can be derived from subject-oriented constructions by causativization (cf. (75b)).

- (78) a. *Xuna-nə taş-lar-ə bir biri-ne tab-əş-xan-dəla.* (KB. 595)
 fence-GEN stone-PL-its each other-DAT find-REC-PERF-3PL
 ‘The stones of a stonewall are fixed tightly’, lit. ‘... have found each other.’
 b. *Ala xuna-nə taş-lar-ə-n bir biri-ne tab-əş-dər-xan-dəla.* (KB. 595)
 they fence-GEN stone-PL-its-ACC each other-DAT find-REC-CAUS-PERF-3PL
 ‘They laid the stones of the stonewall tightly on each other.’ (cf. 3.3.1)

4.3.2 With three-place transitives of joining

4.3.2.1 *Without a postposition.* The reciprocal pronoun can also be used with three-place transitives, especially if they are lexical reciprocals (at least in one of their meanings). Respective constructions with suffixed reciprocals are not found (cf., however, 3.2.2).

- (79) a. *Qanitat eki džumduruy-un bir biri-ne qay-əb tebre-di.* (A. 143)
 Q. two fist-ACC each other-DAT hit-CONV begin-PAST.3SG
 ‘Qanitat began hitting her fists against one another.’
 b. *Bir biri-ne əşə!* (KB. 762)
 each other-DAT rub
 ‘Rub [them] against each other!’
 c. *Ol adam-la-nə bir biri-ne et-di.* (KB. 778)
 he person-PL-ACC each other-DAT set-PAST.3SG
 ‘He set people on each other.’
 d. ... *bir emegen bələj eki qol-nu bir-biri-ne tut-dur-urya,*
 one she.giant thus two ravine-ACC each-other-DAT join-CAUS-INF
žama-rya küreš-e tur-yanlaj bar-yan-də. (B. 63)
 fix-INF try-CONV AUX-CONV AUX-PERF-3SG
 ‘... one she-giant tried to join two ravines together.’

4.3.2.2 *With a postposition.* With a limited number of three-place transitives denoting placing one object on another, the reciprocal pronoun is dependent on a locative auxiliary noun (in the function of a postposition). It is not clear whether *bir biri* here is part of the object governed by the postposition or an attribute. In the first instance *bir biri* should be seen as a nominative case form, i.e. in the case form of the subject, but this form does not occur in subject position, therefore it is an attribute rather than an object. In (80a) the auxiliary noun *üs* ‘top’ is the head word of the genitive case form *kitab-la-nə* in the attributive function (probably an izafet construction; cf. *-ü-* ‘their’ in agreement with the attribute); the noun *stol* ‘table’ in the nominative case is also an attribute in the phrase *stol üs-ü-ne sal* ‘put [it] on the table’, lit. ‘... on the table top’ (KB. 786).

- (80) a. *Ol gitče kitab-la-nə ullu kitab-la-nə üs-ü-ne sal-də.*
 he small book-PL-ACC big book-PL-GEN top-their-DAT put-PAST.3SG
 'He put small books on top of the big books.'
- b. *Ol kitab-la-nə bir biri üs-ü-ne sal-də.*
 he book-PL-ACC each other top-their-DAT put-PAST.3SG
 'He put books on one another', lit. '... on each other's top.'

4.4 Nomina actionis

Such derivatives are formed without restrictions from pronominal reciprocals. As usual, the underlying subject is in the genitive case and the object, if present, retains its case form. Examples with the suffix *-əw*, the main marker of deverbal nouns (the reflexive-possessive suffix on a deverbal noun agrees with the underlying subject):

- (81) a. *Ala-nə bir biri-n aḡəlaš-əw-larə.* (KB. 69)
 they-GEN each other-ACC understand-NR-their
 'Their mutual understanding.'
- b. *Ala-nə biri biri-n-den suw[-uš]-uw-larə.* (KB. 577)
 they-GEN each other-n-ABL disappoint-REC-NR-their
 'Their mutual disappointment.'

5. The suffix *-š* as a sociative and competitive marker

5.1 Introductory

The verbs considered in this section do not as a rule coincide with those from which reciprocals with the suffix *-š* can be formed, though some of the derivatives may have both a reciprocal and a competitive meaning, and some of the competitive verbs may also have a sociative meaning.

5.2 The sociative meaning

In the dictionary (KB) about 140 sociative verbs are registered. With a few exceptions, they are formed from intransitives (our informant, however, does not accept some of the verbs defined as sociatives in the dictionary). To quote Geljaeva (1982:54), "the majority of verbs in *-š* with the sociative meaning are formed from intransitives expressing various active purposeful actions". Many intransitives, however, do not have a respective sociative form (e.g., *džaša-* 'to live', *termil-* 'to suffer'; see Urusbiev 1963:52). The reasons of selectivity are not quite clear. The meaning most commonly added by the suffix *-š* on these verbs (in the dictionary and by the informant) is 'many (at least more than one)', or it may be 'all together', 'all at once', 'all those present', with the following semantic nuances: 'disjointedly (here and there, first one then another, overlapping)', 'interrupting each other without waiting for one's turn', 'in a hurry', 'feverishly (as if in competition)', 'competing in speed' (cf. 5.3). All these components often imply an intensive action. If it is a verb of

speech it may acquire an additional reciprocal meaning of intercommunication. Sometimes, the borderline between the sociative and reciprocal as well as comitative meanings is vague (the reciprocal meaning is on the whole more clear-cut semantically than the sociative which is sometimes elusive). In some cases the sociative meaning implies very subtle semantic nuances which are hard to render adequately in English: this may be due to the fact that if the meaning of the suffix is translated by means of a separate word it acquires undue emphasis which is absent in the original. For instance, in (82) the sociative meaning is more or less rendered in the translation by means of the pronoun ‘all’, but in (83) the English translation of the sociative sense is not quite adequate. (In (82b) the suffix is added to an aspectual verb.)

- (82) a. *Üj-ge kir-iš-ib ket-di-le.* (KB. 349)
 house-DAT enter-REC-CONV AUX-PAST-3PL
 ‘All (the people) entered the house.’
 b. *Saban işle-ge kir-iš-di-k.* (KB. 349)
 spring work-DAT enter-REC-PAST-1PL
 ‘We all started spring field work.’ (lexicalized verb).

Not infrequently, two sentences, one with a base verb and the other with the sociative derivative, are translated in the same way in KB; cf.:

- (83) *Turna-la qurulda-š-əb / qurulda-b bar-a-dəla.* (KB. 426)
 crane-PL cry-REC-CONV cry-CONV go-PRES-3PL
 ‘The cranes fly crying.’

A derivative in *-š* from some two-place intransitives may sometimes allow two readings, reciprocal and sociative. The former reading may be supported by the reciprocal pronoun; e.g.:

- (84) *Ala [bir biri-ne] oňsun-uš-ub tur-a-dəla.* (KB. 499)
 they each other-DAT be.pleased-REC-CONV AUX-PRES-3PL
 i. ‘They are pleased *with each other*.’
 ii. ‘They [*all, many*] are pleased’ (without *bir biri-ne*).

Sociatives can be divided into two groups.

5.2.1 Sociatives with a singular subject

The less numerous group of sociatives allows a singular subject, but with an implication that the referent does not act alone, i.e. in the meaning which can be viewed as comitative (this meaning is very rare and may be regarded as going out of use). A comitative object indicating a co-participant can be added in the construction. Its absence, as has been mentioned above, presupposes some other participants inferred from the context. The nuances of the sociative meaning mentioned above may be retained.

- (85) a. *Ol dəbərtla-də.* ‘He set off at a gallop.’
 b. *Ala dəbərtla-də-la.* ‘They set off at a gallop.’
 c. *Ala dəbərtla-š-də-la.* ‘They all set off at a gallop [in a hurry, without order].’

- d. *Ol dābərtila-š-dā.* ‘He set off at a gallop [in company, as if competing with sb, etc.]’
 e. *Ol an-ə bla dābərtila-š-dā.* ‘He set off at a gallop with him [in a hurry, etc.]’
- (86) a. *Ala dabərda-də-la.* ‘They were making noise.’
 b. *Ala dabərda-š-də-la.* ‘They all were making noise [vying with/interrupting e. o.]’
 c. *Ol dabərda-š-dā.* ‘He was making noise [taking part in the general hubbub]’
 d. *Ol an-ə bla dabərda-š-dā.* ‘He was making noise with him [taking part in the general hubbub]’
- (87) a. *Bu qatən [an-ə bla] zampəlda-š-dā.* (KB. 287)
 that woman he-ACC with chatter-REC-PAST.3SG
 ‘That woman chattered [with him].’
 b. *Ol [ata-sə bla birge] awuzlan-əš-dā.* (KB. 95)
 he father-his with together eat-REC-PAST.3SG
 ‘He had a meal [together with his father].’

In a limited number of cases, the suffix seems to be semantically empty on intransitives in -š with a singular subject, unless there is a subtle change of meaning which is difficult to define or pinpoint, as in (88a) and (88b), or unless lexicalization takes place, as in (88d). Another case of a singular subject with sociatives is (88c) where the subject is a *nomen actionis* implying a plural agent.

- (88) a. *Qart čokunla-š-əb bar-a-dā.* (KB. 735)
 old.man hobble-REC-CONV go-PRES-3SG
 ‘The old man walks hobbling.’
 b. *Šorpa sor-uš-xan-dā.* (KB. 568)
 soup grow.cold-REC-PERF-3SG
 ‘The soup has grown cold.’
 c. *Džəlaw bir kesek seriwünle-š-di.* (KB. 554)
 crying little.by.little calm.down-REC-PAST.3SG
 ‘The crying calmed down little by little.’
 d. *Qol-um quru-š-xan-dā.* (KB. 427)
 arm-my dry.up-REC-PERF-3SG
 ‘My arm has become numb.’

5.2.2 Sociatives with a plural subject only

With another group of forms in -š the subject cannot be singular unless a comitative phrase with the postposition *bla* is used (but if the verb allows competitive reading a singular subject is possible):

- (89) a. *Ol awuzlan-dā.* ‘He had a snack.’
 b. *Ala awuzlan-əš-də-la.* (KB. 95) ‘They (all of them, in a hurry, etc.) had a snack.’
 c. **Ol awuzlan-əš-dā.* (intended meaning:) ‘He had a snack with sb.’
 d. *Ol an-ə bla awuzlan-əš-dā.* ‘He had a snack with him (in a hurry, etc.)’
- (90) a. *Ala džutlan-də-la.* ‘They fell upon their food.’
 b. *Ala džutlan-əš-də-la.* (KB. 260) ‘They fell upon the food (many of them, in a hurry).’
 c. **Ol džutlan-əš-dā.* (intended meaning:) ‘He fell upon his food with sb else.’
 d. *Ol an-ə bla džutlan-əš-dā.* ‘He fell upon his food with him.’

A singular subject, even co-occurrent with a comitative phrase, is usually wrong or pragmatically unnatural unless it is human. This concerns cases like the following:

- (91) a. *Tögerekde bal čibin-le duwulda-š-a-dəla.* (KB. 210)
 around honey fly-PL buzz-REC-PRES-3PL
 ‘Bees are buzzing around.’
- b. *Oq-la džuwulda-š-a-dəla.* (KB. 261)
 bullet-PL whistle-REC-PRES-3PL
 ‘Bullets are whistling by.’ (it implies “more noise” than the non-reciprocal form).
- c. *Džulduz-la džəltəra-š-əb čəq-də-la.* (KB. 267)
 star-PL twinkle-REC-CONV appear-PAST-3PL
 ‘Stars came out (fig. ‘one after another as if competing’) twinkling.’

The meaning ‘many’ should not be taken literally, because not infrequently the subject denotes two referents. In these cases the prevalent meaning is of joint and simultaneous action. The following examples can be added to the above (cf. *ol an-ə bla* lit. ‘he with him’):

- (92) a. *Eki-biz da sət-əš-də-q.* (KB. 587)
 two-our EMPH shed.tears-REC-PAST-1PL
 ‘We both shed a few tears.’ (the particle *da* stresses the preceding word)
- b. *Eki-si da səzəl-əš-əb ket-di-le.* (KB. 588)
 two-their EMPH rush-REC-CONV go.away-PAST-3PL
 ‘Both of them rushed away together.’
- c. *But-lar-əm qəjəl-əš-də-la.* (KB. 441)
 leg-PL-my give.way-REC-PAST-3PL
 ‘My legs gave way under me.’

5.2.3 Lexical groups of registered sociatives

The examples below give an idea of the lexical range of intransitive verbs from which sociatives derive. In view of the sociative use going out, we have decided to give the maximum number of the examples registered in KB. They are not subdivided into the above two types (see 5.2.1 and 5.2.2). The subject may be any of the three persons. Note the prevalence of the converbal form of sociative verbs in dependent predication. Characteristically, the Russian translations in KB do not as a rule reflect the sociative meaning, and this in turn is reflected in the English translations. The lexical meanings are:

- (a) producing sounds (e.g. ‘to snore’, ‘to cluck’, etc.),
- (b) emitting light (e.g. ‘to sparkle’);
- (c) motion (e.g. ‘to sit down’, ‘to hobble’);
- (d) physiological processes (e.g. ‘to grow thin’, ‘to grow old’);
- (e) psychological states and processes (e.g. ‘to get scared’, ‘get confused’, ‘rejoice’);
- (f) natural states (e.g. ‘to hang down’, ‘to burst into leaf’, ‘to grow green’).

Of course, this does not mean that sociatives can be derived from all verbs of these lexical groups.

- (93) a. *Bir-er šintik al-əp, oltur-uš-du-la.* (G. 55)
 one-DISTR stool take-CONV sit.down-REC-PAST-3PL
 ‘Taking each a stool, they took seats (all together).’

- b. *Tawuq-la qanqalda-š-də-la.* (G. 56)
hen-PL cackle-REC-PAST-3PL
'The hens started cackling all at once.'
- c. *Xalq qəcər-əš-də.* (G. 56)
people make.noise-REC-PAST.3SG
'The people raised a noise.'
- d. *Qatən-la zampəlda-š-əb baš-əm-ə awru-t-du-la.* (KB. 287)
woman-PL chatter-REC-CONV head-my-ACC ache-CAUS-PAST-3PL
'The women gave me a headache with their chatter.'
- e. *Ašəy-əš-əb bar-a-dəla.* (KB. 105)
hurry-REC-CONV go-PRES-3PL
'Everybody is in a hurry.'
- f. *Gezen-de čəcxan-la dəyərdə-š-a-dəla.* (KB. 112)
pantry-LOC mouse-PL make.noise-REC-PRES-3PL
'The mice in the pantry are making noise.'
- g. *Qajrə guzabalan-əš-xan-səz?* (KB. 191)
where hurry-REC-PERF-2PL
'Where have you all started to hurry?'
- i. *Qatən-la dəbəlda-š-ərga bol-ub zamanə-bəz-nə al-də-la.* (KB. 211)
woman-PL chatter-REC-INF AUX-CONV time-our-ACC take-PAST-3PL
'The women got engrossed in chattering and took our time.'
- j. *Ala džasan-əš-də-la.* (KB. 234)
they smarten.oneself-REC-PAST-3PL
'They (many of them) smartened themselves up.'
- k. *Kösew-le dziltinde-š-ib džan-a-dəla.* (KB. 249)
log-PL sparkle-REC-CONV burn-PRES-3PL
'The logs (many of them) burn breaking into sparkles.'
- l. *At-la džort-uš bar-a-dəla.* (KB. 253)
horse-PL trot-REC go-PRES-3PL
'The horses are going at a trot.'
- m. *Džas-la čalqə-da džuqara-š-əb qal-də-la.* (KB. 256)
youth-PL haymaking-LOC grow.thin-REC-CONV AUX-PAST-3PL
'The youths grew thin during haymaking.'
- n. *Bar-əb qaja-ya tirl-iš-di-q.* (KB. 636)
go-CONV rock-DAT run.into-REC-PAST-1PL
'On our way we ran into a rock.'
- o. *Ertdebla küčden tiril-iš-di-q.* (KB. 636)
morning hardly get.up-REC-PAST-1PL
'In the morning we could hardly get up.'
- p. *Art džəl-la-da ala ullaj-əš-əb qal-də-la.* (KB. 680)
last year-PL-LOC they grow.old-REC-CONV AUX-PAST-3PL
'In the past years they grew old.'
- q. *Alma-la terek-le-den salən-əš-əb tur-a-dəla.* (KB. 537)
apple-PL tree-PL-ABL hang-REC-CONV AUX-PRES-3PL
'Apples (many, here and there) hang on from trees.'
- r. *Ölgen-ni ereč-leri sarna-š-əb toxta-də-la.* (KB. 542)
sister-GEN deceased-their wail-REC-CONV cease-PAST-3PL
'The sisters of the deceased wailed and then went quiet.'

- s. *Čəpčəq-la səzyər-əš-a-dəla.* (KB. 579)
bird-PL whistle-REC-PRES-3PL
'Birds are whistling/exchanging whistles.' (cf. (2b))
- t. *Nege səmpaj-əš-əb tur-a-səz?* (KB. 584)
why become.sad-REC-CONV stand-PRES-2PL
'Why are you standing so sad?'
- u. *Mušulda-š-əb džuqla-j-dəla.* (KB. 474)
snore-REC-CONV sleep-PRES-3PL
'They sleep snoring.'
- v. *Ala ojumlan-əš-əb oltur-a-dəla.* (KB. 508)
they be.lost.in.thoughts-REC-CONV sit-PRES-3PL
'They sit lost in thoughts.'
- w. *At-la bla čajqal-əš-əb bar-a-bəz.* (KB. 721)
horse-PL with rock-REC-CONV go-PRES-1PL
'We are riding horses rocking slightly in our saddles.'
- (93') a. *Ala iš-den čaləkla-š-əb ajlan-a-dəla.* (KB. 725)
they work-ABL shirk-REC-CONV AUX-PRES-3PL
'They are shirking work.'
- b. *Barə da jüjürsün-üš-üb oltur-a edi-le.* (KB. 783)
all DA get.used-REC-CONV sit-CONV AUX-3PL
'All sat feeling themselves at home.'
- c. *Qoj-la jürk-üš-üb qač-də-la.* (KB. 785)
sheep-PL get.scared-REC-CONV run.away-PAST-3PL
'The sheep got scared and ran away.'
- d. *Sekir-iš-ib at-dan tüš-dü-le.* (KB. 550)
jump-REC-CONV horse-ABL fall-PAST-3PL
'They jumped off their horses.'
- e. *Qorq-yan-dan barə simsir-eš-ib qal-də-la.* (KB. 560)
be.afraid-PART-ABL all lose.head-REC-CONV AUX-PAST-3PL
'Out of fear all lost their heads.'
- f. *Ijil-iš-ib salam ber-di-le.* (KB. 297)
Bow-REC-CONV greeting give-PAST-3PL
'They greeted [sb] bowing.'
- g. *Suwuq-dan qaltəra-š-də-q.* (KB. 384)
cold-ABL tremble-REC-PAST-1PL
'We trembled with cold.'
- h. *Barə-bəz xazərlan-eš-əb tur-du-q.* (KB. 700)
all-our get.ready-REC-CONV AUX-PAST-1PL
'All of us were ready.'
- i. *Kereksizge nege xaxajla-š-əb ajlan-a-səz?* (KB. 709)
in.vain why shout.for.help-REC-CONV AUX-PRES-2PL
'Why are you shouting for help?'
- j. *Dzaš-la čančəl-əš-əb bar-a-dəla.* (KB. 726)
youth-PL dance-REC-CONV AUX-PRES-3PL
'The youths are dancing [all of them together].'
- k. *Sabij-le buruw-nu üsü bla čəŋa-š-əb qač-də-la.* (KB. 744)
child-PL fence-ACC over with jump-REC-CONV run-PAST-3PL
'The children ran jumping over the fence.'

- l. *Sabij-le ata-larə-n-dan ajərəl-yan unuy-uş-ub*
 child-PL father-their-*n*-ABL part-PART be.depressed-REC-CONV
qal-yan-dəla. (KB. 683)
 AUX-PERF-3PL
 ‘The children, on parting with their father, felt depressed.’

A sociative verb may co-occur with the reciprocal pronoun. In (93'm) the latter is dependent on the verb which in its turn is dependent on the sociative verb. In (93'n) the reciprocal pronoun is an attribute to a denominal adverb dependent on the sociative verb.

- (93') m. *It-le biri biri-ne eriş-ib ul-uş-a-dəla*. (KB. 682)
 dog-PL each other-DAT rival-CONV howl-REC-PRES-3PL
 ‘The dogs [all together] howl rivalling with each other.’
 n. *Ala biri biri əzərdan uş-uş-du-la*. (KB. 677)
 they each other after rush-REC-PAST-3PL
 ‘They [all together] started rushing one after another.’

5.3 The competitive meaning

It seems that no other Turkic language has such a number of reciprocally marked verbs with the meaning of competition² (among the languages of our list, it is only the reciprocal affix in Japanese that is productive as a competitive marker; incidentally, the sociative meaning is as unproductive in Japanese as in Karachay-Balkar). Thus, for instance, Urusbiev (1963: 51) claims that alongside the meanings of sociativity and reciprocity the suffix *-ş* clearly expresses the competitive meaning, and he gives the following examples: *sana* ‘to count’ → *sana-ş* ‘to count together competing in speed or precision of counting’, *at* ‘to shoot/fire’ → *at-əş* ‘to fire at each other or compete in shooting’. This same fact is noted by Geljaeva (1982: 55) who quotes the following examples: *čab* ‘to run’ → *čab-əş* ‘to race with each other’, *sekir* ‘to jump’ → *sekir-iş* ‘to compete in jumping’, *kötür* ‘to lift’ → *kötür-iş* ‘to compete in weight-lifting’. Sometimes, competition may involve pragmatically unlikely actions. KB registers around 20 such verbs, and another 20 have been elicited from the informant. The list may be continued, it seems. Any verb can be used in the competitive form provided it implies comparison of the participants with regard to any action, quality/feature, etc. As a rule, the competitive suffix does not affect the verbal valency, but transitives tend to be used absolutely, without an object. Of course, the reciprocal pronoun cannot substitute for the suffix *-ş* when it is used in the competitive sense (as well as in the sociative meaning) but sometimes it can be added to a suffixed competitive (see (99c)). The phrase *biri biri bla* ‘with each other’ can be used in simple constructions. This is determined by the possibility of introducing an argument denoting a rival by means of the postposition *bla*. Compare.:

2. Note that this development of the competitive meaning is attested in one Turkic language only, viz. Karachay-Balkar, very much like the competitive meaning of the reflexive clitic in one Indo-European language only, viz. Bulgarian (see Penchev, Ch. 13, §10). Curiously enough, both peoples, according to some opinions, are genetically descended from the ancient Bulgar tribes.

- (94) *Kel, dabərtla-š-aj-aq!* (KB. 211)
 now rush-REC-PRES-IMP.1PL
 ‘Now, let’s race with each other!’
- (95) *Džaš-la üj-nü oyarə džanənda qol taš ata-š-əp,*
 youth-PL house-GEN at.top near hand stone throw-REC-CONV
džəy-əš-əp ojna-j edi-le. (G. 53)
 wrestle-REC-CONV play-CONV AUX-3PL
 ‘Behind the house, the youths threw stones and wrestled competing with each other.’
- (96) *Džaš-la tut-uš-a-dəla, čab-əš-a-dəla, sekir-iš-e-dile, awur*
 youth-PL hold-REC-PRES-3PL run-REC-PRES-3PL jump-REC-PRES-3PL heavy
taš-la-nə kötür-üş-e-dile. (G. 55)
 stone-PL-ACC lift-REC-PRES-3PL
 ‘The youths wrestle, compete in running and jumping and lifting heavy stones.’

Competitive verbs in -š at our disposal can be subdivided into a number of groups.

5.3.1 Competitives denoting sporting events

They derive from both intransitives and transitives.

1. Derived from intransitives:

- | | | |
|----------------------------------|---|---|
| (97) <i>biji-</i> ‘to dance’ | → | <i>biji-š-</i> ‘to compete in dancing’ |
| <i>čab-</i> ‘to run’ | → | <i>čab-əš-</i> ‘to compete in running’ (KB. 720) |
| <i>čəŋa-</i> ‘to jump’ | → | <i>čəŋa-š-</i> ‘to compete in jumping’ (KB. 744) |
| <i>dəbərtla-</i> ‘to rush’ | → | <i>dəbərtla-š-</i> ‘to compete in speed’ (KB.211) |
| <i>džərla-</i> ‘to sing’ | → | <i>džərla-š-</i> ‘to compete in singing’ (KB. 268) |
| <i>džüz-</i> ‘to swim’ | → | <i>džüz-üş-</i> ‘to compete in swimming’ (KB. 271) |
| <i>kijin-</i> ‘to dress oneself’ | → | <i>kijin-iš-</i> ‘to compete in fast dressing’ |
| <i>ojna-</i> ‘to play’ | → | <i>ojna-š-</i> ‘to compete in playing a game’ |
| <i>sekir-</i> ‘to jump’ | → | <i>sekir-iš-</i> ‘to compete in jumping’ (KB. 550) |
| <i>səzyər-</i> ‘to whistle’ | → | <i>səzyər-əš-</i> ‘to compete in whistling’ (KB. 579) |
| <i>tepsə-</i> ‘to dance’ | → | <i>tepsə-š-</i> ‘to compete in dancing’ (KB. 622) |
| <i>uč-</i> ‘to fly, roll, dance’ | → | <i>uč-uš-</i> ‘to compete in flying/dancing’ (KB. 691). |

2. Derived from transitives:

- (98) *kötür-* ‘to raise/lift’ → *kötür-üş-* ‘to compete in weight lifting’
mara- ‘to shoot’ → *mara-š-* ‘to compete in shooting’
sür- ‘to pursue/chase’ → *sür-üş-* ‘to compete in racing’ (KB. 592)
tart- ‘to draw/pull’ → *tart-əš-* ‘to compete in rope pulling.’ (KB. 607).
- (99) a. *Ala barmaq taš džiber-iš-di-le.*
 they finger stone throw-REC-PAST-3PL
 ‘They competed in pushing pebbles with fingers (national sport).’
- b. *Ala basuk səndər-əš-də-la.*
 they bone break-REC-PAST-3PL
 ‘They competed in breaking a sheep’s bone.’
- c. *Ala [biri biri-n] sür-üş-üb bar-a-dəla.* (KB. 592)
 they each other-ACC chase-REC-CONV go-PRES-3PL
 i. ‘They ran competing in speed’, ii. ‘They chased each other.’

5.3.2 *Competitives denoting household activities*

These are derived mostly from transitives:

(100) <i>art</i> - ‘to peel (potatoes)’	→	<i>art-əš</i> - ‘to compete in peeling potatoes’
<i>čal</i> - ‘to mow/make hay’	→	<i>čal-əš</i> - ‘to compete in mowing’
<i>džaj</i> - ‘to gather sth’	→	<i>džaj-əš</i> - ‘to compete in gathering’ (KB. 265)
<i>džaz</i> - ‘to write’	→	<i>džaz-əš</i> - ‘to compete in writing’
<i>išle</i> - ‘to work’	→	<i>išle-š</i> - ‘to compete in work’ (Ba. 177)
<i>oqu</i> - ‘to read’	→	<i>oqu-š</i> - ‘to compete in reading’ (Ba. 177)
<i>or</i> - ‘to reap’	→	<i>or-uš</i> - ‘to compete in reaping’
<i>qarq</i> - ‘to shear’	→	<i>qarq-əš</i> - ‘to compete in shearing’ (KB. 447)
<i>sana</i> - ‘to count sth’	→	<i>sana-š</i> - ‘to compete in counting’ (KB. 539)
<i>saw</i> - ‘to milk’	→	<i>saw-š</i> - ‘to compete in milking’
<i>soj</i> - ‘to skin’	→	<i>soj-uš</i> - ‘to compete in skinning (sheep)’ (KB. 569)
<i>tazala</i> - ‘to groom/tidy’	→	<i>tazala-š</i> - ‘to compete in grooming’
<i>tig</i> - ‘to sew’	→	<i>tig-iš</i> - ‘to compete in sewing’
<i>tomur</i> - ‘to chop’	→	<i>tomur-uš</i> - ‘to compete in chopping’
<i>tut</i> - (<i>balyq</i>) ‘to fish’	→	<i>tut-uš</i> - ‘to compete in fishing’
<i>tuwra</i> - ‘to chop/shred’	→	<i>tuwra-š</i> - ‘to compete in chopping/shredding.’

5.3.3 *Occasional competitives*

These are *ad hoc* derivations elicited from the informant and showing productivity of competitives. Most of them may have a reciprocal meaning as the main one.

(101) a. <i>ajt</i> - ‘to speak’	→	<i>ajt-əš</i> - i. ‘to speak to each other’ ii. ‘to try to surpass sb in talking’
<i>čimd</i> - ‘to pinch’	→	<i>čimd-iš</i> - i. ‘to pinch each other’ (KB. 734) ii. ‘to try to surpass sb in pinching’
<i>čəy</i> - ‘to climb (a mountain, etc.)’	→	<i>čəy-əš</i> - ‘to climb (a mountain) competing’
<i>džab</i> - ‘to close/cover sth’	→	<i>džab-əš</i> - i. ‘to stick to sth’ (lexicalization) ii. ‘to compete in closing/covering at speed’
<i>džulq</i> - ‘to pluck/tear out’	→	<i>džulq-uš</i> - i. ‘to fight/quarrel’ (lexicalization) ii. ‘to pluck fowl competing in speed’
<i>qara</i> - ‘to look/stare’	→	<i>qara-š</i> - i. ‘glance at each other’ (KB. 397) ii. ‘to surpass sb in staring at each other’
<i>seb</i> - ‘to pour/sow/sprinkle’	→	<i>seb-iš</i> - ‘to pour/sow/sprinkle competing’
<i>tuwra</i> - ‘to chop/cut’	→	<i>tuwra-š</i> - i. ‘to fight with swords’ ii. ‘to compete in chopping sth’
<i>tükür</i> - ‘to spit’	→	<i>tükür-üş</i> - i. ‘to spit at each other’ ii. ‘to try to surpass each other in spitting farther.’
b. “Zür, <i>qart kiši, üfgür-üş-ej-əq.</i> ” (B. 60)		
come.on old man blow-REC-IMP.1PL		
‘Come on, old man, let’s compete in blowing.’ (to see which one blows the other away’)		

5.3.4 *Lexicalized competitives*

These are competitives semantically related to the base verbs in a non-standard, individual way: the meaning of competition may be figurative, and polysemy is possible.

- (102) *ajt-* ‘to speak’ → *ajt-əš-* ‘to compete in wit’ (KB. 37)
al- ‘to take’ → *al-əš-* i. ‘to compete in wrestling, dancing’
 ii. ‘to take sth by competing with sb’ (KB. 58)
at- ‘to throw sth’ → *at-əš-* i. ‘to bandy sth’
 ii. ‘to compete in throwing sth’ (KB. 91), cf. (1b), (1d)
kes- ‘to cut/cross’ → *kes-iš-* i. ‘to cut/knife each other’
 ii. ‘to wrestle/compete’ (KB. 330).

5.3.5 Nominal derivation

Nouns may be derived from competitiveness and sociatives in the same way as they are derived from reciprocals (cf. 3.4):

- (103) *ajt-əš-əw* i. ‘competition in wit’, ii. ‘quarrel, argument’ (KB. 37)
at-əš-əw i. ‘shooting competition’, ii. ‘exchange of fire’ (KB. 91)
džarla-š-əw ‘singing competition’. (KB. 268)

6. Lexicalization of verbs with the suffix -š

In case of lexicalization, a derived verb is related to the base verb in a non-standard way semantically. The common feature of lexicalized verbs is that the suffix -š cannot be replaced by the reciprocal pronoun, at least without a perceptible change of meaning. As a rule, lexicalization is a result of diachronical semantic development. In these verbs a lexicalized meaning may be reciprocal (though related to the meaning of the base in an individual way) and non-reciprocal. Thus, *džara-š-* ‘to be on good terms, to get on’ (as in *Ala džara-š-ma-j-dala* ‘They do not get on with each other’) is not related in a standard way to *džara-* ‘to suit, do (for), be good (for)’ (as in *Bu darman džara-j-da* ‘This medicine relieves/is helpful’) (KB. 229-30). Another example is the verb *bol-uš-* ‘to help’ < *bol-* ‘to be/take place/happen’. It is used to express an assistive meaning with infinitives (we remind the reader that the suffix -š is not used to mark the assistive meaning in Karachay-Balkar); e.g. *oqu-rya bol-uš-* ‘to help to learn/read’ (*-rya* = INF; KB. 159).

An interesting case of lexicalization is the verb *ur-uš-* i. ‘to quarrel/squabble’, ii. ‘to scold’ from *ur-* ‘to beat/hit’ (vt). In its second, non-reciprocal meaning it takes a dative object:

- (104) a. *Ata-m sen-i ur-uruq-du.*
 father-my you-ACC beat-FUT.PART-3SG
 ‘My father will beat you.’
 b. *Ata-m sen-ŋe ur-uš-uruq-du.*
 father-my you-DAT beat-REC-FUT.PART-3SG
 ‘My father will scold you.’ (KB. 686)

Some reciprocals, along with the standard semantic relation to the base stem, may have a meaning which is not related in a standard way to any of the meanings of the base verb (cf. the meanings of the base and the derivative in the following examples). Thus, for instance,

in (105b) meaning (i) alone is related in a standard way to meaning (i) in (105a), while (ii) and (iii) are lexicalized meanings.

- (105) a. *qab-* i. 'to bite'; ii. 'to win (e.g. in chess)'; iii. 'to spend'; iv. 'to lose'; v. 'to eat'
 b. *qab-əš-* i. 'to bite each other'; ii. 'to stop/fall silent'; iii. 'to die' (KB. 369, 371).
- (106) a. *tala-* i. 'to bite (of dogs, horses)'; ii. 'to torment'; iii. 'to wash away (of river banks)'
 b. *tala-š-* i. 'to bite each other (of dogs, horses)'; ii. 'to quarrel'; iii. 'to strive for sth' (KB. 599).

The largest group of lexicalized reciprocals denotes hostile and "competitive-aggressive" actions. (107a) is a list of derivatives that are reciprocal in meaning and (107b) is a derivative that retains the meaning of the base verb:

- (107) a. *aw-* i. 'to fall'; ii. 'to cross (a mountain range)' → *aw-uš-* 'to alternate' (KB. 92, 96)
džara- 'to suit' → *džara-š-* 'to be on good terms' (KB. 230)
džulq- 'to pluck/tear out' → *džulq-uš-* 'to quarrel/abuse each other' (KB. 257)
kel- 'to come' → *kel-iš-* i. 'to suit'; ii. 'come to agreement' (KB. 321)
qəzar- i. 'to redden'; ii. 'to be angry' → *qəzar-əš-* 'to quarrel' (KB. 436)
suy- 'to stick/thrust (into)' → *suy-uš-* coll. vulg. 'to fight'
tart- 'to pull/drag', 'beat' → *tart-əš-* 'to argue/quarrel' (KB. 607)
toxta- i. 'to stop'; ii. 'to abate' → *toxta-š-* 'to come to an agreement' (KB. 648)
tur- 'to stand (up)/rise' → *tur-uš-* 'to fight (of bulls)' (KB. 654)
tut- 'to hold, grasp' → *tut-uš-* 'to fight, struggle' (KB. 665)
 b. *soruwla-* 'to inquire' → *soruwla-š-* 'to inquire' (KB. 568).

Discontinuous constructions are usually formed with the postposition *bla* (see (108b, c)). An unexpected phenomenon is the use of the reciprocal pronoun in the accusative with lexicalized reciprocals in *-š* (see (108d)).

- (108) a. *Buya-la tur-uš-a-dəla.* (KB. 654)
 bull-PL stand-REC-PRES-3PL
 'The bulls fight.'
- b. *Ol xonšu bla kel-iš-me-di.* (KB. 321)
 he neighbour with come-REC-NEG-PAST.3SG
 'He did not get on with his neighbour.'
- c. *Seni amaltən an-ə bla qəzar-əš-də-m.* (KB.436)
 you because.of he-GEN with be.angry-REC-PAST-1SG
 'Because of you I quarrelled with him.'
- d. *Ala bir bir-in džulq-uš-də-la.* (KB. 257)
 they each other-ACC pluck-REC-PAST-3PL
 'They quarrelled.'

Less frequent is lexicalization unlinked to the reciprocal or a contiguous meaning. The example with *aŋəla-š-* 'to understand' in (14) above can be amplified by the following cases. In the second of the examples the verb expressing a wish is used only in the imperative sentence quoted. It is not clear why the reciprocal suffix is used. This also applies to (110).

- (109) a. *Škaf ornu-n-dan taj-aš-xan-də / taj-yan-də.* (KB. 598, 614)
wardrobe place-*n*-ABL move-REC-PERF-3SG / move-PERF-3PL
'The wardrobe moved from its place.'
- b. *Tüš-iiŋ igi-ge džorala-š-sən!* (KB. 253)
dream-your good-DAT wish-REC-IMP.3SG
'Let your dream promise good!'
- (110) a. *ojla-* 'to think, ponder'
b. *ojla-š-* i. 'to think, ponder', ii. 'to change one's mind'
c. *ojla-n-* 'to fall to thinking (about sth)'
d. *ojla-n-aš-* (same)
e. *ojla-š-ən-* (same) (KB. 491-2).

7. *Reciproca tantum*

Here belong two-place intransitive verbs and one or two transitive verbs, both reciprocal, and those that imply a response action (cf. 'to resist'), which contain the final *-š* but do not have any underlying verb, though they may be related to materially identical nouns or adverbs with similar meanings.

- (111) a. *Ala öčeš-ib čal-a-dəla.* (KB. 282)
they compete-CONV mow-PRES-3PL
'They compete in cutting hay', lit. 'They cut hay competing.'
- b. *Ala eriš-ib işle-j-dile.* (KB. 771)
they compete-CONV work-PRES-3PL
'They compete in work', lit. 'They work competing.'
- c. *Budaj bla nartüx bir biri-ne qatəš-xan-dəla.* (KB. 402)
wheat and maize each other-DAT mix-PERF-3PL
'Wheat and maize got mixed.'

Verbs of this set are listed in (112). Their non-reciprocal meanings are given along with the reciprocal. On the right, materially identical and semantically close nouns and adverbs are given (see also Zhappuev 1982: 168–70):

- (112) *adžaš-* i. 'to get lost/lose one's way', ii. 'to make a mistake' (KB. 25)
almaš- 'to alternate/replace each other'; cf. *almaš* 'by turns/alternating' (KB. 54-5)
aralaš- 'to alternate'; cf. *aralaš* 'alternating/by turns' (KB. 70, 71)
awuš- 'to alternate' (KB. 96)
demleš- 'to abuse each other/threaten each other with fists' (KB. 201)
eriš- 'to compete' (KB. 771)
eš- 'to plait, weave, roll together' (KB. 779)
keŋeš- 'to exchange opinions' (KB. 324)
küreš- i. 'to wrestle/struggle', ii. 'to try to do sth', iii. 'to be busy with sth'
öčeš- i. 'to argue', ii. 'to compete', iii. 'to bet'; cf. *öč* 'bet' – *öč-eš* 'argument' (KB. 282)
qaraš- i. 'to resist', ii. 'to clutch', ii. 'to become rigid' (KB. 398)
qatəš- i. 'to get mixed', ii. 'to get dishevelled', 'to be confused'; cf. *qat* 'layer' (KB.402)
söleš- 'to talk/speak' (KB. 557)
üleš- 'to divide' (vt) (KB. 784).

8. Denominal reciprocals

8.1 Verbs with the suffix *-la-š*

In comparison with some other Turkic languages, the number of these derivatives is rather small in Karachay-Balkar. The lists below contain all the derivatives of these types we could find in KB and specialist literature. Most of the verbs in (113) are derived from nominal stems (cf. Geljaeva 1982: 57–9).

1. Verbs with reciprocal meanings. Their lexical meanings are typical of lexical reciprocals across languages: ‘to fight’ – ‘to become friends/agree’, ‘to unite’ – ‘to separate’, ‘to exchange greetings’ – ‘to say goodbye to each other’, ‘to approach’ – ‘to move away’, etc. The latter meanings, like the meaning ‘to resist’ (which implies a previous action), are peripheral rather than reciprocal proper, but it is not accidental that in different languages verbs with these meanings may contain a reciprocal marker.

- (113) *ajaq-laš*- ‘to lie down feet to head (of two)’ ← *ajaq* ‘foot’ (KB. 107)
aqal-laš- ‘to discuss’ ← *aqal* ‘viewpoint, opinion’ (KB. 44)
arqa-laš- ‘to live in peace with each other’ ← *arqa* ‘back’ (G. 58)
bir-leš- ‘to get united’ ← *bir* ‘one’ (KB. 149) (cf. (60a))
džaya-laš- ‘fight/take each other by the scruff of the neck’ ← *džaya* ‘collar’ (KB.215)
džan-laš- ‘to approach’ ← *džan* ‘thigh’ (KB. 224)
džuwab-laš- ‘to object/quarrel’ ← *džuwab* ‘reply’ (KB. 260)
džuwuq-laš- ‘to approach’ ← *džuwuq* ‘close, nearby’ (KB. 261)
džəjən-laš- ‘to gather in groups’ ← *džəjən* ‘group, crowd’ (KB. 264)
mammət-laš- arch. ‘to gather for help’ ← *mammət* ‘(collective) help’ (KB. 458)
nöger-leš- arch. ‘to unite/rally’ ← *nöger* ‘partner, comrade, ally’ (KB. 484)
onow-laš- ‘to take counsel’ ← *onow* ‘advice’ (KB. 497)
qarəw-laš- ‘to resist’ ← *qarəw* ‘strength, power’ (KB. 397)
qazan-laš- ‘to live/eat together/live in peace’ ← *qazan* ‘pot, copper’ (KB. 375)
qoltuq-laš- ‘to join arms’ ← *qoltuq* ‘armpit’ (KB. 412)
qoš-laš- i. ‘to mate’, ‘to lie in a pile’ ← *qoš* ‘double, twin’ (adj.) (KB. 417)
salam-laš- ‘to greet/exchange greetings’ ← *salam* ‘greeting’ (KB. 536)
sawda-laš- ‘to bargain’ ← *sawda* ‘bargaining, trade’ (KB. 545)
sawqaldə-laš- ‘to say goodbye to each other’ ← *sawqaldə ajt-* ‘to say goodbye’ (545)
tatax-laš- ‘to become friends’ ← *tatax* ‘bosom friend’ (KB. 608)
til-leš- ‘to come to an agreement’ ← *til* ‘language, speech’ (KB. 635)
uzaq-laš- ‘to move off/away’ ← *uzaq* ‘faraway/distant’ (KB. 479).

2. Verbs with non-reciprocal meanings:

- (114) *džer-leš*- ‘to settle (somewhere)’ ← *džer* ‘place, earth’ (KB. 243)
murat-laš- ‘to intend to do sth’ ← *murat* ‘aim, intention’ (KB. 472)
orun-laš- ‘to be situated/located’ (= *orna-š*-) ← *orun* ‘place’ (KB. 504)
qəjən-laš- ‘to become complicated/difficult’ ← *qəjən* ‘work, difficult’ (KB. 441).

A number of verbs have parallel forms with the suffix *-lan*; cf.:

- (115) *aqəl-laš-* = *aqəl-lan-* ‘to intend to do sth’ (KB. 44); cf. *aqəl-laš-* in (113)
džuwuq-laš- = *džuwuq-lan-* ‘to approach’ (KB. 261); cf. *džuwuq-laš-* in (113)
murat-laš- = *murat-lan-* ‘to intend’ (KB. 472)
orun-laš- = *orun-lan-* (see (115)).

It is probably not accidental that there is a verb *džer-iš-* ‘to be situated/located’ derived from the noun *džer* ‘place, earth’ and semantically close to *džer-leš-* ‘to settle (somewhere)’ with the same root, and also *orna-š-* synonymous to *orun-laš-* ‘to be situated/located’ derived from *orun* ‘place’. It is not clear why these verbal derivatives contain the suffix *-š* or *-laš* though semantically they are not reciprocal.

The suffix *-lan* also occurs on derivatives that are typical of the suffix *-laš*; cf.:

- (116) *qarnaš-lan-* ‘to fraternize’ ← *qarnaš* ‘brother’. (KB. 395)

8.2 Nouns with the suffix *-d-aš*

The suffix *-daš* genetically related to *-laš* is also retained on a small number of nouns derived from nouns (in earlier times these suffixes used to be allomorphs, and they are still allomorphs in Yakut and Kirghiz). There seems to have existed a tendency to formally differentiate the functions of one suffix which has become *-laš* on verbs and *-daš* on nouns (cf. distribution of the suffixes *-la* and *-da* between different verbs; these suffixes form denominal verbs and they are genetically related to the first component of *-la-š* and *-da-š*). Currently both suffixes are unproductive, judging by the KB data and in comparison with Yakut and Kirghiz (cf. also Habichev 1971b: 199–202). The meanings of the nouns in *-daš* are typical of non-derived lexical reciprocals:

- (117) *džer-deš* ‘compatriot’ (Balkar) ← *džer* ‘place, earth’ (KB. 243)
džol-daš ‘comrade, fellow-traveller’ ← *džol* ‘road’ (KB. 251)
kün-deš ‘rival (of women)’ ← *küni* ‘concubine’ (KB. 815)
qarən-daš ‘brother’ (Balkar) ← *qarən* ‘belly’ (KB. 397)
emil-deš ‘foster-brother’ ← cf. *em* ‘breast’, *em-* ‘to suckle’, (*-il-* = PASS)
(KB. 767, H. 201).

9. Lexical reciprocals and their derivatives

9.1 Introductory

This section is an amplification of Section 5, as it concerns polysemy of the suffix *-š*, namely, its anticausative function. But first we shall consider verbs from which anticausatives can be derived. There are numerous three-place lexical reciprocals (which are lexical causatives at the same time) that are used in object-oriented constructions either with or without the reciprocal pronoun. Most commonly they denote connecting things and, less commonly, disconnecting. They retain the lexical reciprocal meaning of the base verb and it is intensified by the suffix *-š*. Semantically close to these verbs are two-place lexical reciprocals taking a plural object, like ‘to gather sth’; they may be tentatively included

in the class of three-place reciprocals, especially because anticausatives can be derived from them by means of a reciprocal marker in a number of languages. Let us consider constructions with the underlying verb *ajər-* 'to separate A from B' (discontinuous construction) or 'to separate A and B / (A+A)' (simple construction) and with its two-place intransitive anticausative derivative with the suffix *-l*.

1. In the discontinuous construction, if the reciprocal arguments (= object referents) are of the same semantic class their positions can be reversed (this is a distinctive feature of lexical reciprocals); cf. (118a) and (118b). In the simple construction the reciprocal pronoun has to be used in order to avoid its elliptical discontinuous interpretation (see (118c)).

- (118) a. Qazawat *biz-ni üjdegi-leri-biz-den ajər-yan-də*. (KB. 40)
 war we-ACC family-PL-OUR-ABL separate-PERF-3SG
 'The war separated us from our families.'
- b. Qazawat *biz-den üjdegi-leri-biz-ni ajər-yan-də*.
 war we-ABL family-PL-OUR-ACC separate-PERF-3SG
 'The war separated our families from us.'
- c. Qazawat *üjdegi-leri-biz-ni [bir biri-n-den] ajər-yan-də*.
 war family-PL-OUR-ACC each other-n-ABL separate-PERF-3SG
 'The war separated our families from each other.'
- d. Qazawat *biz-ni bla üjdegi-leri-biz-ni [bir biri-n-den] ajər-yan-də*.
 war we-ACC and family-PL-OUR-ACC each other-n-ABL separate-PERF
 'The war separated us and our families from each other.' (cf. also (71))

2. In the derived constructions with the anticausative *ajər-əl-* 'to get separated' (cf. (7) and the discussion) the behaviour of the reciprocal arguments is analogous to that in (118). This anticausative can be used with the suffix *-š* to denote reciprocity.

- (119) a. Qazawat *baryan zaman-da biz üjdegi-leri-biz-den ajər-əl-də-la*
 war during time-LOC we family-PL-OUR-ABL separate-PASS-PAST-3PL
 / *ajər-əl-əš-də-la*.
 separate-PASS-REC-PAST-3PL
 'During the war we separated from our families.'
- b. Qazawat *baryan zaman-da üjdegi-leri-biz biz-den ajər-əl-də-la*
 war during time-LOC family-PL-OUR we-ABL separate-PASS-PAST-3PL
 / *ajər-əl-əš-də-la*.
 separate-PASS-REC-PAST-3PL
 'During the war our families separated from us.'
- c. Qazawat *baryan zaman-da üjdegi-leri-biz [bir biri-n-den]*
 war during time-LOC family-PL-OUR each other-n-ABL
ajər-əl-də-la / ajər-əl-əš-də-la.
 separate-PASS-PAST-3PL separate-PASS-REC-PAST-3PL
 'During the war our families separated from each other.'
- d. Qazawat *baryan zaman-da biz bla üjdegi-leri-biz [bir biri-n-den]*
 war during time-LOC we and family-PL-OUR each other-n-ABL
ajər-əl-də-la / ajər-əl-əš-də-la.
 separate-PASS-PAST-3PL separate-PASS-REC-PAST-3PL
 'During the war we and our families separated from each other.' (cf. (58b))

9.2 The suffix *-š* as an anticausative marker. Verbs of joining

Thus, the reciprocal arguments can be discontinuous (see (118a, b), (119a, b)) or simple (see (118c, d) and (119c, d)). In (119), the anticausative carries the suffix *-əl*. Similar anticausatives can be derived from lexical reciprocals by means of the suffix *-š* (these forms seem to be less numerous in Karachay-Balkar than in Yakut). Examples ((120a) and (121a) are analogous to (118c), and (120b) and (121b) are analogous to (119c):

- (120) a. *Ol tiš-ler-i-ni [bir biri-ne] qada-də.* (KB. 373)
 he tooth-PL-his-ACC each other-DAT clench-PAST.3SG
 ‘He clenched his teeth.’ (i.e. the upper and the lower jaws)
- b. *Tiš-ler-i [bir biri-ne] qada-š-əb tur-a-dəla.* (KB. 374)
 tooth-PL-his each other-DAT clench-REC-CONV AUX-PRES-3PL
 ‘His teeth (upper and lower jaws) are clenched.’
- (121) a. *Ol qoj-lar-ə-n [bir biri-ne] džoppula-də.* (KB. 252)
 he sheep-PL-his-ACC each other-DAT gather-PAST.3SG
 ‘He gathered his sheep.’
- b. *Qoj-la [bir biri-ne] džoppula-š-əb džat-a-dəla.* (KB. 253)
 sheep-PL each other-DAT gather-REC-CONV lie-PRES-3PL
 ‘The sheep are lying huddled together.’

(122) is a list of relevant anticausatives. From these derivatives, causative verbs with meanings close to the meaning of the base verbs of these derivational chains can be formed (see (123)).

- (122) *čal-* ‘to spin, twine sth’ → *čal-əš-* ‘to intertwine’ (of sth) (KB. 725)
čulya- ‘to roll up/wrap sth’ → *čulya-š-* ‘to intertwine/get entangled’ (KB. 738)
džalya- ‘to join/combine sth’ → *džalya-š-* ‘to join/combine’ (of sth) (KB. 220)
džoppula- ‘to gather sth’ → *džoppula-š-* ‘to gather’ (KB. 252, 253)
qadawla- ‘to clench sth’ → *qadawla-š-* ‘to get clenched’ (KB. 374)
qawumla- ‘to group sth’ → *qawumla-š-* ‘to group oneself’ (KB. 403)
tizginle- ‘to line sb up’ → *tizginle-š-* ‘to line up’ (KB. 632)
tögerekle- ‘to put in a circle’ → *tögerekle-š-* ‘to stand in a circle/around sth’ (KB.627).

9.3 Derivational chains

Above, we have considered the case when an anticausative verb, i.e. a derivative, is formed from a morphologically unmarked lexical reciprocal. This may be denoted as $L \rightarrow A$ where L stands for a lexical reciprocal, and A for an anticausative. There is another morphological device for analogous semantic oppositions, namely, derivation of a causative verb from an anticausative (or non-causative, i.e. a non-marked intransitive verb). A causative derivative (= C) from an anticausative verb may be roughly synonymous to the base lexical reciprocal (cf. (12) and the text above). In this case the derivational chain is $L \rightarrow A \rightarrow C$ where $L \rightarrow A = C \leftarrow A$, i.e. we observe two synonymous causative oppositions within this chain. Note that in the second opposition (when the valency increases) more standard relations hold than in the first one with valency decrease.

This three-member derivational chain may be termed a standard chain. Besides this, the following incomplete derivational chains are possible:

1. L only.
 2. A only (A here denotes only the presence of the reciprocal suffix or final -š; here belong *reciproca tantum* which have lost the base verb and have no related causatives).
 3. C only (an unlikely chain).
 4. L → A, when there is no C derived from A.
 5. L → A + C, when a lexical reciprocal takes two morphemes simultaneously.
 6. L – A → C, when there is no standard semantic opposition between L and A.
- The following examples illustrate the chains we have registered in Karachay-Balkar.

I. Chain L → A → C.

- | | | | | |
|-------|----|--------------------------|---|------|
| (123) | a. | <i>čal-</i> | ‘to spin/twine sth’ | (vt) |
| | → | b. <i>čal-əš-</i> | ‘to intertwine (of sth)’ | (vi) |
| | → | c. <i>čal-əš-dər-</i> | (same as (a); cf. (12)) (KB. 725) | (vt) |
| (124) | a. | <i>qadawla-</i> | ‘to clench (e.g. teeth)’ | (vt) |
| | → | b. <i>qadawla-š-</i> | ‘to clench’ (e.g. of teeth) (see (120)) | (vi) |
| | → | c. <i>qadawla-š-dər-</i> | (intended meaning same as (a)) | (vt) |

II. Chain L → A.

(No examples so far.)

III. Chain L → A + C.

This case seems to indicate that the sequence *-š-dər-* may function as a single morpheme. Thus this complex derives a causative verb roughly synonymous to the base verb. As a result, a lexical reciprocal which is at the same time a lexical causative though neither meaning is marked formally acquires markers for both meanings without a significant change in its lexical meaning. Similar cases are observed in other Turkic languages as well.

- | | | | | |
|-------|----|------------------------|---|------|
| (125) | a. | <i>bajla-</i> | ‘to tie sth together/into a bundle’ | (vt) |
| | → | b. <i>*bajla-š-</i> | | |
| | → | c. <i>bajla-š-dər-</i> | ‘to tie/link/join sth together’ (KB. 113-4) | (vt) |

IV. Chain L – A → C.

Here an intransitive derivative in *-š* is not semantically related in a standard way to the underlying verb, and the causative semantic opposition is comprised of A and C; e.g.:

- | | | | | |
|-------|----|------------------------|--------------------------------------|------|
| (126) | a. | <i>džab-</i> | ‘to close (e.g. a door)’ | (vt) |
| | → | b. <i>džab-əš-</i> | ‘to get stuck/adhere (to)’ | (vi) |
| | → | c. <i>džab-əš-dər-</i> | ‘to glue/paste sth to sth’ (KB. 214) | (vt) |

V. Chain “A” → C.

Here the symbol A is used arbitrarily – to indicate the semantic node of the underlying verb. This verb may either contain the final *-š* or not. The term “anticausative” here stands for a two-place lexical non-causative reciprocal.

- (127) a. *qatəš-* 'to get mixed'
 b. *qatəš-dər-* 'to mix, stir' (KB. 402) (cf. (11b)).

VI. Chains III and V.

This is an intermediate case: as in Chain V, the underlying verb is a two-place lexical reciprocal (but it is transitive, unlike in Chain V); on the other hand, as in Chain III, the underlying verb takes on the complex suffix, which assumes the form *-uš-dur* in this case, the result being a three-place transitive reciprocal. The form *tut-uš-* does relate semantically to *tut-uš-dur-*. Cf.:

- (128) a. *tut-* 'to correspond to sth, coincide with sth' (see (129a, b)) (vt)
 b. *tut-uš-dur-* 'to let/make sth coincide with sth' (vt)

Sentential examples:

- (129) a. *Anə söz-ü iş-i tut-ma-j-də.* (discontinuous)
 he.GEN word-his deed-ACC coincide-NEG-PRES.3SG
 lit. 'His words do not coincide with his deeds.'
- b. *Anə söz-ü bla iş-i-n bir biri-n*
 he.GEN word-his and deed-his-ACC each other-ACC
tut-ma-j-də-la. (KB. 654) (simple)
 coincide-NEG-PRES-3PL
 'His words and deeds are at variance', lit. '...do not coincide with each other.'
- c. *Ol söz-ü bla iş-i-n tut-uš-dur-ma-j-də.*
 he word-his and deed-his-ACC coincide-REC-CAUS-NEG-PRES-3SG
 'His words and deeds are at variance.'
 lit. 'He does not let his words and deeds coincide.'

9.4 Competition of anticausatives in *-š*, *-l*, *-n*, *-l-əš* and *-n-əš*. Desemantization

It has been mentioned above that, as in the other Turkic languages, anticausatives are also formed by means of *-l* (see (119)) and *-n*, which sometimes results (a) in synonymy with anticausatives in *-š* (we disregard subtle semantic differences), and also (b) in a combination of competing suffixes. Thus when used as an anticausative marker, the suffix *-š* enters into complex relations with the other two voice markers (cf. 2.5 and 2.6). Following are illustrations of some of these cases. In (130) the suffixes *-əl* and *-əl-əš* compete in anticausative derivation (L → A), and in (131) three suffixes *-š*, *-n* and *-nəš* are competing. The complex suffixes *-ləš* and *-nəš* each may be regarded as a result of contamination of two suffixes with similar meanings.

- (130) a. *džəj-* 'to gather' (vt)
 b. *džəj-əl-* i. 'to be gathered', ii. 'to gather' (vi)
 c. *džəj-əl-əš-* 'to gather' (KB. 264) (vi)

Although (131b) is autocausative rather than anticausative in meaning, nevertheless its combination with *-š*, namely (131d), is anticausative:

- (131) a. *čulya-* ‘to roll up/wrap/wind (round sth)’ (vt)
 b. *čulya-n-* ‘to roll/wind itself/oneself’ (vi)
 c. *čulya-š-* ‘to intertwine/get entangled’ (vi)
 d. *čulya-n-əš-* ‘to get tangled (e.g. thread)’ (KB. 738) (vi)

From each of the derived anticausatives (see (130), (131)), a causative form may be derived and these latter forms, judging by the dictionary definitions, are also synonymous to each other and to the base form (132a), i.e. their meaning is ‘to join/combine/couple sth’ (this translation is omitted below). (132) illustrates three variants of the standard three-member chain $L \rightarrow A \rightarrow C$ (cf. (123)).

- (132) a. *džalya-* ‘to join/combine/couple’ vt (*uč-larə-n džalya-* ‘to join the ends of sth’)
 b. *džalya-š-* ‘to join/combine’ (vi), also fig. → *džalya-š-dər-* (vt)
 c. *džalya-n-* ‘to join/combine’ (vi), also fig. → *džalya-n-dər-* (vt)
 d. *džalya-n-əš-* ‘to join/combine’ (vi), also fig. → *džalya-n-əš-dər-* (vt)
 (KB. 220–1).

Compare their figurative use:

- (133) a. *Ol tiširəw-ya džalya-š-də / džalya-n-də / džalya-n-əš-də.*
 he woman-DAT join-REC PAST.3SG join-REFL-PAST.3SG join-REFL-REC-PAST.3SG
 ‘He got married’, lit. ‘He joined each other/himself with a woman.’
 b. *Ata-sə džaš-ə-n tiširəw-ya džalya-š-dər-də / džalya-n-dər-də / džalya-n-əš-dər-də.*
 ‘Father married his son’ (KB. 220–1), lit. ‘Father joined his son with a woman.’

In conclusion, we shall cite the oddest derivational chain where the suffix *-š* is used twice. This is evidence of lexicalization of this suffix and a weakening of its reciprocal meaning (see also (41)–(42)).

- (134) a. *žəjər-/ džəjər-əš-/ džəjər-tər-* ‘to wrinkle (one’s forehead)’ (vt)
 b. *žəjər-əl-* ‘to wrinkle (of face)’ (vi)
 c. *žəjər-əl-əš-* ‘to wrinkle/get distorted (of face)’ (vi)
 d. *džəjər-əl-tər-* i. ‘to wrinkle (one’s face)’ (vt)
 ii. ‘to fry (meat)’ (KB. 264) (vt)

For another example of desemantization of the suffix *-š* appearing in an unclear meaning and co-occurring with the suffix *-n* in either sequence see (110) above. This synonymy of morphologically marked derivatives is truly amazing.

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Reciprocal, sociative and competitive constructions in Japanese

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1. Introduction

1.1 Japanese

It is the language spoken by the population of the Japanese Islands (about 124 million). There are over a million of native speakers of Japanese in Brazil, the United States and elsewhere. In accordance with the most widely accepted viewpoint, Japanese is an isolated branch of the Altaic language family. It has a long literary history which goes back to the 8th century. It is extremely rich in dialect variation due to the mountainous character of the country, the dialects often being mutually unintelligible. Moreover, the Ryukyuan

dialects (often mutually entirely unintelligible) can be viewed as an independent language (see Shibatani 1990: 89–118, 191).

1.2 Overview

In Japanese, the reciprocal meaning is expressed morphologically by the suffix *-aw/-at/-a*. Reciprocals with this affix form all the subject-oriented diathesis types of constructions. They are used in both simple and discontinuous constructions (see (1b) and (1c) respectively). Compare (on the morphemic division *-te-ita* see 2.4):

- (1) a. *Taroo wa Akiko o hagemasi-te-ita.*
 T. TOP A. ACC encourage-CONT.PAST
 ‘Taro was encouraging Akiko.’
 a’. *Akiko wa Taroo o hagemasi-te-ita.*
 A. TOP T. ACC encourage-CONT.PAST
 ‘Akiko was encouraging Taro.’
 b. *Taroo to Akiko wa hagemasi-at-te-ita.*
 T. and A. TOP encourage-REC-CONT.PAST
 ‘Taro and Akiko were encouraging each other.’
 c. *Taroo wa Akiko to hagemasi-at-te-ita*
 T. TOP A. with encourage-REC-CONT.PAST
 (same translation as (b)).

The second reciprocal device is the auxiliary noun *otagai/tagai* ‘each other’ which may take case markers and which may be used instead of the reciprocal suffix, with a subtle difference in meaning, (see (1d)) or pleonastically with suffixed reciprocals (see (1e): with this verb it sounds better than (1d)).

- d. *Taroo to Akiko wa otagai o hagemasi-te-ita.*
 T. and A. TOP each.other ACC encourage-CONT.PAST
 (same translation as (b)).
 e. *Taroo to Akiko wa otagai o hagemasi-at-te-ita.*
 (same translation).

Verbs differ in respect of the possibility (and preference) of their use in constructions of types (1b) to (1e).

The noun *otagai* may also render the distributive meaning (‘each of the set of subject/object referents’) which may be its only possible interpretation or a possible interpretation alongside the reciprocal (see also (2b)); cf. (without *-at* this example allows both readings, and with *-at* it allows reading (ii) only):

- f. *Taroo to Akiko wa otagai no kodomo o hagemasi-te-i-ta.*
 T. and A. TOP each.other GEN child ACC encourage-CONT-PAST
 i. ‘Taro and Akiko each were encouraging his/her/their child(ren).’
 ii. ‘Taro and Akiko were encouraging each other’s children.’
 g. *Taroo to Akiko wa otagai no kodomo o hagemasi-at-te-ita.*
 (same translation as (ii), but the subject referents are obligatorily in the same place, while in (f) this is optional).

The reciprocal suffix seems to be of low productivity (or unproductive at all?) as a sociative marker, though it is registered in specialist literature and sometimes turns up in the informants' evaluations.

- h. *Taroo to Akiko wa zibun-tati no kodomo o hagemasi-at-te-ta.*
 T. and A TOP REFL-PL GEN child ACC encourage-REC-CONT-PAST
 'Taro and Akiko were encouraging their own child(ren) together.'
 (We owe the information on sentences (1) to F. Endoo, H. Narrog and T. Takiguchi.)

More productive is the competitive meaning which may be the only meaning of a reciprocal form or one of its possible meanings. Example (2) illustrates both of these meanings (moreover, this derivative may be interpreted as reciprocal with the meaning 'to laugh at each other' if it is related to the transitive meaning 'to laugh at sb' of the base verb). A laughing contest is held annually in certain localities in Japan (T. Tsunoda, p.c.; see (43)).

- (2) a. *Gakusei wa warai-at-ta.*
 student TOP laugh(vi)-REC-PAST
 i. 'The students laughed *together*.' (sociative)
 ii. 'The students *competed* in laughing.' (competitive)
 b. *Gakusei wa otagai-ni warat-ta.*
 student TOP mutually laugh-PAST
 'The students laughed (each separately).' (T. Tsunoda, p.c.) (distributive)
 c. *T. to M. wa T. no yuuzin no si o otagai-ni nageki-at-te-ita.*
 T. and M. TOP T. GEN friend GEN death ACC mutually mourn-REC-CONT
 'T. and M. were mourning the death of T.'s friend together.' (F. Endoo, p.c.)

Forms in *-aw* from certain verbs are polysemous or they are vague. This is particularly characteristic of transitive reciprocals, i.e. when the valency does not undergo any change, and also of embedded reciprocals. These cases cause disagreement among the informants, especially with regard of the number of meanings established and their acceptability (see, for instance (21), (35b), (48)).

Causative verbs are not formed from suffixed reciprocals, as a rule. Thus Japanese does not possess the common way of deriving object-oriented reciprocal constructions. However, there is a limited group (about 85 items) of unproductive mostly lexicalized derivatives with the complex suffix *-aw-ase* (where *-ase* is a causative suffix) commonly used with the meaning 'to bring together' (see 6.1); cf. *nu-u* 'to sew sth' → *nui-aw-ase-ru* 'to sew sth together'. There is also a group of unproductive reciprocal formations – verbs, nouns and adverbs – with an archaic prefix *a-i-* which is genetically identical with the reciprocal suffix *-aw/-at/-a*; cf. *omo-u* 'to love' → *omoi-a-u* 'to love each other' and *ai-omo-u* (same) (see Section 8), and also semantically similar groups with the prefix *soo-* borrowed from Chinese (see Section 12).

Most of Japanese lexical reciprocals do not combine with the reciprocal suffix. Another characteristic feature of Japanese (at least in comparison with the description of other languages in this monograph) is the existence of distant reciprocal constructions (cross-reference takes place not directly but via a third party; see 3.4) and double reciprocal constructions (which describe situations with two or more pairs of participants; see

10.3.2). There is some doubt, however, whether the latter two meanings ever occur in natural discourse of native speakers, and not only in the specialist literature.

1.3 Database

The language data are drawn from dictionaries and specialist literature (see Sources) and also elicited from native speakers (see Acknowledgments). It is interesting to note that the information obtained from the latter sometimes contradicts and does not confirm the data from the Sources. On the other hand, the informants sometimes disagree on various points, which may probably be due to subdialectal differences. It may also reflect individual variation in the use of reciprocals in Japanese. But the main cause of contradictions in evaluations of different speakers and even of the same speaker when asked at intervals (“the best variant” vs. “does not sound right” with regard to one and the same sentence) is, as is usual in such cases, the subtlety of semantic differences between the sentences given for evaluation and, secondly, the relative rarity of constructions under consideration in speech and probably the somewhat unnatural character of the situations described. But sometimes the authors were driven to despair. . . Examples without attribution are elicited from the native speakers or approved by them.

Note that the asterisk on a verb (usually a derivative, including those registered in the dictionaries) or on its meaning signifies that the verb or this meaning is obsolete or unknown to most of the informants asked. On sentences, the asterisk shows that the sentence is considered ungrammatical by most of the informants. The question mark denotes that most of them doubt the acceptability of a verb, or a sentence, or its interpretation. Note that, inevitably, the choice of an asterisk or a question mark or their use in general is sometimes arbitrary.

2. Grammatical notes

2.1 Sentence structure. Case relations. Possessivity

The basic word-order is SOV, the OSV order being possible too. An indirect object usually precedes a direct object. The subject-object relations are marked by adnominal case markers (postpositions, or postpositional particles); there is no subject-predicate agreement. In the case of coordinated noun-phrases the case marker follows the last noun phrase, the preceding noun phrases being marked by a coordinating conjunction or by intonation; the most common conjunction is *to* ‘and’.

The subject marker is *ga*; the direct object marker is *o*; the universal indirect object marker is *ni*. There are also markers for more specialized relations, e.g. the postposition *to* ‘with’ (homonym of the conjunction *to*; see (1c) and (1b) respectively) for the counteragent which is frequent in reciprocal constructions. The markers *ga* and *o* may be replaced by the topic marker *wa* and by a number of other markers (*mo* ‘too’, *demo* ‘even’, etc.).

Possession (alienable and inalienable) is signified by the particle *no* in post-position to the possessor (3b). The same marker is used to indicate attributive relations (3a). It is glossed as GEN:

- (3) a. *Koobe no sensei* b. *sensei no atama*
 Kobe GEN teacher teacher GEN head
 ‘the teacher from Kobe.’ ‘the teacher’s head.’

2.2 Word classes

There is a sharp distinction between nouns and verbs. Nouns are not inflected. Verbs display a complicated inflectional paradigm. A verbal form consists of (a) a stem, (b) one or more non-syntactic suffixes (the reciprocal affix *-aw* is one of them), (c) an ending which signals syntactic position (finite, attributive, adverbial) and denotes tense (for finite and attributive forms) and mood (for finite forms). Verbs are not marked for number and person. The paradigm contains many periphrastic verb forms with auxiliary verbs. Deverbal nouns are formed by means of the suffix *-i*. Among Japanese verbs, there is a large group of denominal derivations with the verb ‘to do’: *su-ru* (NPAST) and *si-ta* (PAST). In this paper, they are spelt together with the base stem; cf. *kekkon* ‘marriage, wedding’ → *kekkonsu-ru* ‘to marry, be married’. The principal process of new word creation both for verbs and nouns is compounding (see Shibatani 1990:237–47). In compound verbs the first component usually has the form of a deverbal noun, cf. *kukur-u* ‘to tie, bind’ → *kukur-i* ‘the act of binding’ + *tuke-ru* ‘to fasten sth to sth’ → *kukuri-tuke-ru* ‘to fasten, tie, bind’ (B. 785, 784, 1523) (see also 2.5.4 and (28)). Formations with the reciprocal marker *-aw/-at/-a* are also regarded by some Japanese linguists as compounds with the verb *a-u* ‘to meet’ whose allomorphs are entirely identical with those of the reciprocal suffix.

Nouns have plural forms indicated by the suffix *-tati*, but expression of plurality is not always obligatory, and a sentence like (4) can be interpreted both ways depending on the context, or it may remain unclear:

- (4) *Inu wa neko o oikake-te-iru.*
 dog TOP cat ACC chase-CONT-NPAST
 ‘The dog chases a cat/cats,’ ‘The dogs chase a cat/cats.’

2.3 Verb classes

There are two main verb classes: verbs proper and qualitative verbs (predicative adjectives). Verbs proper denote actions, states and qualities, while qualitative verbs denote states and qualities only. These two verb classes have distinct sets of affixes. The lexicographic (non-past indicative finite) form of verbs proper has the ending *-ru/-u*, the respective form of qualitative verbs being marked with the ending *-i*. Nearly all qualitative verbs are one-place verbs, the two-place qualitative verbs, e.g. *hitosi-i* ‘equal’, being lexical reciprocals (see (128c) in 11.2.1.1.1).

Verbs proper are divided into the following principal valence classes:

1. One-place intransitives (with the subject marked by the postposition *ga*);
2. Two-place intransitives (the subject is marked by *ga*, and the object by the postposition *ni* roughly corresponding to the European dative case, and by other postpositions);
3. Two-place transitives (the subject – direct object markers are *ga – o*);
4. Three-place transitives (subject – indirect object – direct object markers: *ga – ni – o*).

For the reader's convenience, the syntactic markers are glossed in the examples by the respective European case names (*ga* as NOM, *ni* as DAT, *o* as ACC, *no* as GEN, *de* as LOC).

Attributive verb forms coincide with predicative verb forms in the indicative mood; thus *kai-ta* means 'wrote' as well as '[the one] who has written'.

2.4 Tense/aspect markers

In the examples, the following markers occur:

1. *-u/-ru* for the non-past,
2. *-ta/-da* for the past,
3. *-te-i-ru* for the continuous non-past (and perfect-resultative), and
4. *-te-i-ta* for the continuous past (note that for brevity the latter two sequences are segmented as *-te-iru* and *-te-ita* in examples).

In the latter two forms *-te* (which alternates with *-de*) is a converb marker and *-i-* is the auxiliary verb 'to be' in the non-past and past form respectively. In the lists further below, the verbs are cited in the non-past tense in accordance with tradition; they are translated by the infinitive.

Linking vowels are attached to the preceding or following morpheme at random, as this is irrelevant for our purposes.

2.5 Valency-changing means

Besides the devices of valency change enumerated below, there are a limited number of unproductive devices of increasing and decreasing the verb valency which result in such oppositions as the following (see Kholodovich 1979:28–54; Shibatani 1990:235–7):

- | | | | |
|-----|--|---|--------------------------------------|
| (5) | Intransitive | | Transitive |
| a. | <i>karam-u</i> 'to coil, twine (around)' | → | <i>karam-e-ru</i> 'to (en)twine sth' |
| b. | <i>maz-ar-u</i> 'to get mixed' | ↔ | <i>maz-e-ru</i> 'to mix sth' |
| c. | <i>or-e-ru</i> 'to be broken' | ← | <i>or-u</i> 'to break sth' |
| d. | <i>a(w)-u</i> 'to meet' | → | <i>aw-as-u</i> 'to unite sb/sth' |
| e. | <i>ar-e-ru</i> 'to be ruined' | ↔ | <i>ar-as-u</i> 'to ruin sth' |
| f. | <i>hirak-u</i> 'to open' | = | <i>hirak-u</i> 'to open.' |

2.5.1 Valency-increasing means

There are two principal means of valency increase.

1. The causative suffix *-sase/-ase* (the first allomorph occurs after vowels and the second after consonants). Causativization of intransitive sentences allows two forms of the

causee, *o*-marked and *ni*-marked (the first form is used in the case of coercive causation, like the English ‘make’, and the second for non-coercive causation, rendered by ‘have’). Causativized transitives allow only the *ni*-marked causee which is used with both types of causation (Shibatani 1976:243–5). Compare:

- (6) a. *Taroo ga arui-ta.* ‘Taro walked.’
 → *Ziroo ga Taroo o / ni aruk-ase-ta.* ‘Jiro made/had Taro walk.’
 b. *Taroo ga hon o yon-da.* ‘Taro read a book.’
 → *Ziroo ga Taroo ni / *o hon o yom-ase-ta.* ‘Jiro made/had Taro read a book.’

2. The passive suffix *-rare/-are* (the first allomorph occurs after vowels and the other after consonants) when used in adversative meaning, e.g.:

- (7) a. *Tuma ga yam-u.* ‘(His) wife is ill.’
 b. *Otto ga tuma ni yam-arer-u.* ‘The husband has his wife ill [on him]’, i.e.
 ‘The husband is adversely affected by his wife’s illness.’

2.5.2 Valency-decreasing means

These are:

1. The reciprocal suffix *-aw/-at/-a* (the morphophonemic form is *-aw*; /w/ drops out before all vowels but /a/; it is assimilated before the following /t/). It does not decrease valency in the case discussed in 3.3.

This suffix is added to the verb roots with the help of the meaningless connective suffix *-i* or \emptyset (see example (1)). Generally, the suffix *-i* is added to root-final consonant and also roots with final *-a* and *-o*. There is however a small number of reciprocals in *-aw* derived immediately from consonant-final roots without *-i*; these are probably the most ancient formations; they often have regular correlates, cf., for instance, *tatak-u* ‘to beat, hit’ → *tatak-a-u* ‘to fight’ and *tataki-a-u* ‘to beat/hit each other’, *katar-u* ‘to speak, tell’ → arch. *katar-a-u* ‘to converse’ and *katari-a-u* ‘to converse’.

2. The resultative marker comprised of the converb suffix *-te-* and the auxiliary *ar-u* (this form is polysemous: it also serves as a perfect marker), e.g.:

- (8) a. *Kare wa heya ni e o kake-ta.*
 he TOP room DAT picture ACC hang-PAST
 ‘He has hung a picture in his room.’
 b. *Heya ni e ga kake-te ar-u.*
 room DAT picture NOM hang-CONV have-NPAST
 ‘The picture is hanging in the room.’

3. The passive marker *-rare/-are* when used in a non-adversative meaning, the underlying subject becoming optional; e.g.:

- (9) a. *Sensei wa kodomo-tati o sikat-ta.*
 teacher TOP child-PL ACC scold-PAST
 ‘The teacher scolded the children.’
 b. *Kodomo-tati wa [sensei ni] sikar-are-ta.*
 child-PL TOP teacher DAT scold-PASS-PAST
 ‘The children were scolded [by the teacher].’

There is no morphological reflexive marker which usually decreases valency, as is the case in the Turkic languages (cf. the chapters on Turkic reciprocals in this volume). Instead, the reflexive pronoun *zibun* ‘oneself’ is used (in this respect Japanese is similar to Mongolic and Tungusic languages; see Nedjalkov et al., Ch. 29; Malchukov, Ch. 39; Nedjalkov & Nedjalkov, Ch. 38); e.g.:

- (10) a. *Kare wa Taroo o aisi-te-iru.*
 he TOP Taro ACC love-CONT-NPAST
 ‘He loves Taro.’
 b. *Kare wa zibun [dake] o aisi-te-iru.*
 he TOP oneself only ACC love-CONT-NPAST
 ‘He loves [only] himself.’

2.5.3 Valency-retaining means

Most of the non-syntactic verbal affixes (markers of negation, desire, politeness, etc.) do not change valency. In the “possessive” diathesis type (see 3.3), the reciprocal suffix does not change the verb valency either.

Combinations of several such markers are possible; e.g.:

- (11) *Kare wa ik-ase-rare-taku-nai-des-u.*
 he TOP GO-CAUS-PASS-DES-NEG-POL-NPAST
 ‘He does not want to be made to go.’

2.5.4 Reciprocals and verb compounding

In Japanese linguistics, reciprocals with the component *-aw* which is obviously descended from the verb *a-u* ‘to meet’, ‘to fit’, etc. are usually regarded as compounds of two verbs. It is not accidental that this reciprocal marker is not mentioned among verbal suffixes, such as passive, causative, potential, etc. in Rickmeyer (1995:95–102) (curiously enough, the reciprocal marker *a-i-* (see 9.1) descended from the verb *a-u* is mentioned among the six verbal prefixes in the same book; *ibid.*, 103–4). The point is, verb compounding is extremely widespread in Japanese, and all verbs that occur as recurrent auxiliary components are also used as lexical verbs on their own. It is reasonable to mention these compounds as a background for the development of reciprocals in Japanese and as a system they belong to. Productivity of compounding is witnessed by the fact that Hasselberg (1996) names about 75 verbs that appear in at least 20 compounds each. In this book, about 4,000 compounds are cited. Among them, verbs in *-aw* constitute about 285 compounds (over 400 of such compounds are listed in Himeno (1982:47–50); this list is certainly far from exhaustive) and verbs in *-aw-ase-ru/-aw-as-u* (see Section 6) make up 85 compounds. Sometimes, both components of a compound are close in meaning. These verbs render numerous meanings, most commonly spatial, aspectual and intensifying. Many of these verbs display in these compounds meanings which they do not have when used as independent predicates.

Out of the 75 verbs only 8 appear in the initial position as the first component of compounds. Here are examples with the first recurrent component *ut-u* ‘to beat’, ‘to shoot’ (over 130 compounds):

- (12) a. *koros-u* ‘to kill’ → *uti-koros-u* ‘to shoot sb down, to kill’
or-u ‘to break sth’ → *uti-or-u* ‘to break sth by hitting’
atar-u ‘to correspond’ → *uti-atar-u* ‘to correspond exactly’
ate-ru ‘to hit (the aim)’ → *uti-ate-ru* ‘to hit (the aim) exactly.’

67 verbs out of the 75 mentioned occur in the final position. Here are examples with two *second* recurrent components *kaer-u* ‘to return’ (over 60 compounds) and *kir-u* ‘to cut, tear’ (over 250 compounds):

- b. *mi-ru* ‘to look’ → *mi-kaer-u* ‘to look back’
hibik-u ‘to sound, ring’ → *hibiki-kaer-u* ‘to be reflected (of sounds)’
sak-u ‘to blossom’ → *saki-kaer-u* ‘to blossom again’
sinabi-ru ‘to wilt’ → *sinabi-kaer-u* ‘to wilt completely’
c. *ake-ru* ‘to dawn’ → *ake-kir-u* ‘to dawn completely’
kakuse-ru ‘to hide sb/sth’ → *kakusi-kir-u* ‘to hide everybody/everything’
o-u ‘to pursue’ → *ow-are-kir-u* ‘be pursued to the end’ (-are = PASS)
kam-u ‘to bite’ → *kami-kir-u* ‘to bite through.’

In order to complete the picture, we shall list some of the compounds based on the verb *nu-u* ‘to sew’:

- d. *nui-kaer-u* ‘to alter (a dress, etc.), lit. ‘to re-sew’
nui-kom-u ‘to sew carefully’
nui-age-ru ‘to finish sewing’
nui-awase-ru ‘to sew sth and sth together’
nui-kake-ru ‘to be engaged in sewing’
nui-naos-u ‘to sew sth anew’, etc.

Note that both the verb *a-u* ‘to meet, etc.’ and practically all the other verbs in question are used in these compounds in various meanings. On the whole, these (semi-auxiliary?) verbs can be compared to the detachable and non-detachable first components of German compounds and derivatives (e.g. *hinaus-*, *hinunter-*, *hinauf-*, *auseinander*, *zer-*).

3. Reciprocals with the suffix *-aw/-at/-a*. Subject-oriented reciprocals only

The three diathesis types of subject-oriented reciprocals, “canonical” (derived from two-place transitives and two-place intransitives), “indirect” (derived from three-place transitives) and “possessive” (derived from two-place transitives which partly overlap with the base verbs of the “canonical” type), can be grouped in two overlapping ways with regard to the type of cross-coreferentiality and intransitivity/transitivity:

1. Constructions with subject-object cross-co-referentiality (“canonical” and “indirect” reciprocals) vs. constructions with subject-attribute cross-coreferentiality (“possessive” reciprocals)

2. Intransitive reciprocal constructions (“canonical” reciprocals) vs. transitive reciprocal constructions (“indirect” and “possessive” reciprocals).

3.1 “Canonical” reciprocals

These reciprocals derive from numerous verbs. Their distinctive feature is omission of a direct or the only non-direct object co-referential with the subject. The derived construction is intransitivized if the direct object is deleted and it remains intransitive in the second case. In both cases the derived construction is one-place (see, however, discontinuous constructions in 4.2).

3.1.1 *Derived from two-place transitives*

This is the main type of reciprocals statistically prevalent in texts, which is only to be expected given the prevalence of two-place transitives among the verbs which may serve as source verbs for reciprocals. The underlying verb is intransitivized by the reciprocal suffix:

- (13) a. *Taroo wa Akiko o aisi-te-iru.*
 T. TOP A. ACC love-CONT-NPAST
 ‘Taro loves Akiko.’
 b. *Taroo to Akiko wa aisi-at-te-iru.*
 T. and A. TOP love-REC-CONT-NPAST
 ‘Taro and Akiko love each other.’

Derivations in (1) and (13) can be supplemented by the following:

- | | | |
|-------------------------------------|---|---|
| (14) <i>dak-u</i> ‘to embrace’ | → | <i>daki-a-u</i> ‘to embrace each other’ |
| <i>damas-u</i> ‘to deceive’ | → | <i>damasi-a-u</i> ‘to deceive each other’ |
| * <i>hes-u</i> ‘to press’ | → | <i>hesi-a-u</i> ‘to push each other aside’ |
| <i>hiansu-ru</i> ‘to criticize’ | → | <i>hiansi-a-u</i> ‘to criticize each other’ |
| <i>kakae-ru</i> ‘to embrace’ | → | <i>kakae-a-u</i> ‘to embrace each other’ |
| <i>kobusu-ru</i> ‘to inspire sb’ | → | <i>kobusi-a-u</i> ‘to inspire each other’ |
| <i>koros-u</i> ‘to kill’ | → | <i>korosi-a-u</i> ‘to kill each other’ |
| <i>massaazisu-ru</i> ‘to massage’ | → | <i>massaazisi-a-u</i> ‘to massage each other’ |
| <i>nade-ru</i> ‘to touch, stroke’ | → | <i>nade-a-u</i> ‘to touch/massage each other’ |
| <i>nagur-u</i> ‘to hit’ | → | <i>naguri-a-u</i> ‘to hit each other’ |
| <i>nonosir-u</i> ‘to scold’ | → | <i>nonosiri-a-u</i> ‘to scold each other’ |
| <i>osinoke-ru</i> ‘to push sb away’ | → | <i>osinoke-a-u</i> ‘to push each other away’ |
| <i>os-u</i> ‘to push’ | → | <i>osi-a-u</i> ‘to push each other’ |
| <i>seme-ru</i> ‘to reproach’ | → | <i>seme-a-u</i> ‘to reproach each other’ |
| <i>sonkeisu-ru</i> ‘to respect’ | → | <i>sonkeisi-a-u</i> ‘to respect each other’ |
| <i>syukusu-ru</i> ‘to congratulate’ | → | <i>syukusi-a-u</i> ‘to congratulate each other’ |
| <i>tasuke-ru</i> ‘to help’ | → | <i>tasuke-a-u</i> ‘to help each other.’ |

3.1.2 *Derived from two-place intransitives*

The underlying verb takes an indirect object, most commonly with the dative particle *ni*, which is deleted in the derived construction:

- (15) a. *Taroo wa Ziroo ni ozigisi-ta.* ‘Taro greeted Jiro (by bowing).’
 b. *Taroo to Ziroo wa ozigisi-at-ta.* ‘Taro and Jiro greeted each other.’

(16) is a list of this type of derivations. It contains many verbs denoting an action which presupposes another action or reaction (e.g., if A greets B, B usually reciprocates the greeting).

(16)	<i>aisatusu-ru</i> ‘to greet sb’	→	<i>aisatusi-a-u</i> ‘to greet each other’
	<i>hanare-ru</i> ‘to move away from sb’	→	<i>hanare-a-u</i> ‘to move away from each other’
	<i>hantaisu-ru</i> ‘to object to sb’	→	<i>hantaisi-a-u</i> ‘to object to each other’
	<i>kamituk-u</i> ‘to bite’	→	<i>kamituki-a-u</i> ‘to bite each other’
	<i>kansyasu-ru</i> ‘to thank sb’	→	<i>kansyasi-a-u</i> ‘to thank each other’
	<i>motare-ru</i> ‘to lean against sb/sth’	→	<i>motare-a-u</i> ‘to lean against each other’
	<i>ozigisu-ru</i> ‘to make a bow’	→	<i>ozigisi-a-u</i> ‘to make a bow to each other’
	<i>renrakusu-ru</i> ‘to contact sb’	→	<i>renrakusi-a-u</i> ‘to communicate’
	<i>somuk-u</i> ‘to rebel against sb’	→	<i>somuki-a-u</i> ‘to revolt against each other’
	<i>tayor-u</i> ‘to depend on sb/sth’	→	<i>tayori-a-u</i> ‘to depend on each other’
	<i>tikazuk-u</i> ‘to approach sb/sth’	→	<i>tikazuki-a-u</i> ‘to approach each other.’

3.2 “Indirect” reciprocals

The base verbs are three-place transitives: they take two objects, direct and indirect (mostly dative; hence the name of this type, but this term should be regarded as a cover label). The latter object is deleted in a reciprocal construction while the direct object is retained; cf.:

- (17) a. *Taroo ni kai-ta mono o minna-de mise-masi-ta.*
 T. DAT write-PAST thing ACC all show-POL-PAST
 ‘All (of them) showed the writing to Taro.’
- b. *Kai-ta mono o minna-de mise-a-imesi-ta.* (Kh. 11)
 write-PAST thing ACC all show-REC-POL-PAST
 ‘All (of them) showed each other the writing’; cf. also:
- c. *Taroo to Akiko ga zibun no kangae o osie-at-ta.* (N. 170)
 T. and A. NOM self GEN idea ACC tell-REC-PAST
 ‘Taro and Akiko told about their (lit. ‘self’s’) ideas to each other.’

In contrast to some other languages whose “indirect” constructions may be two-diathesis (subject- and object-oriented) and thus allow two interpretations (see, for instance, Malchukov, Ch. 39 on Even, §3.1.1.3), Japanese “indirect” constructions do not allow object-oriented interpretation: cross-reference is possible only between the subject referents. Thus in (17d) the subject cannot be singular and reading (ii), which is possible and common with a singular subject, is ruled out (see Nishigauchi 1992: 161); this example is followed by its underlying construction:

- d. *Taroo to Ziroo ga Akiko to Noriko o syookaisi-at-ta.*
 i. ‘Taro and Jiro introduced to each other Akiko and Noriko.’
 ii. *‘Taro and Jiro introduced Akiko and Noriko to each other.’ (i.e. Akiko to Noriko and Noriko to Akiko.)

Reading (ii) is possible only as a result of causative transformation; see (25).

- e. *Taroo wa Ziroo ni Akiko o syookaisi-ta.*
 T. TOP Z. DAT A. ACC introduce-PAST
 'Taro introduced Akiko to Jiro.'

Here is a list of this type of derivations:

- | | | |
|---|---|--|
| (18) <i>abise-ru</i> 'to pour sth on sb' | → | <i>abise-a-u</i> 'to pour sth on each other' |
| <i>atae-ru</i> 'to give sth to sb' | → | <i>atae-a-u</i> 'to give sth to each other' |
| <i>hakensu-ru</i> 'to direct sb to sb' | → | <i>hakensi-a-u</i> 'to direct sb to each other' |
| <i>kakus-u</i> 'to hide sth from sb' | → | <i>kakusi-a-u</i> 'to hide sth from each other' |
| <i>mise-ru</i> 'to show sth to sb' | → | <i>mise-a-u</i> 'to show sth to each other' |
| <i>nage-ru</i> 'to throw sth to sb' | → | <i>nage-a-u</i> 'to throw sth to each other' |
| <i>nusum-u</i> 'to steal sth from sb' | → | <i>nusumi-a-u</i> 'to steal sth from each other' |
| <i>okur-u</i> 'give sth as a present to sb' | → | <i>okuri-a-u</i> 'to give presents to each other' |
| <i>osie-ru</i> 'to explain sth to sb' | → | <i>osie-a-u</i> 'to explain sth to each other' |
| <i>syookaisu-ru</i> 'introduce sb to sb' | → | <i>syookaisi-a-u</i> 'to introduce sb to each other' |
| <i>uba-u</i> 'to take sth away from sb' | → | <i>ubai-a-u</i> 'to take sth away from each other.' |

3.3 "Possessive" reciprocals

They differ from the above two types in that they do not change their valency: the direct object is retained and its possessive attribute is deleted; the list of these verbs overlaps with that under 3.1.1 (e.g. *naguri-a-u*, *hiansi-a-u*, *syukusi-a-u*, *massaazisi-a-u* occur in both lists).

- (19) a. *Boku wa kare no te o nigit-ta.*
 I TOP he GEN hand ACC grasp-PAST
 'I grasped his hand.'
- b. *Karera wa te o nigiri-at-te-ita.*
 they TOP hand ACC grasp-REC-CONT-PAST
 'They were holding each other's hands.'
- (20) a. *Taroo to Akiko wa te o tori-at-ta.*
 T. and A. TOP hand ACC take-REC-PAST
 'Taro and Akiko took each other's hands.'
- b. *Taroo to Mitiko wa zibun-tati no senaka o massaazisi-at-ta.*
 T. and M. TOP one's.OWN-PL GEN back ACC massage-REC-PAST
 'Taro and Mitiko massaged each other's backs.'
- c. *Taroo to Akiko ga atama o naguri-at-ta.* (N. 178)
 T. and A. NOM head ACC hit-REC-PAST
 'Taro and Akiko hit each other on the head.' (lit. 'each other's head.')
- d. *Taroo to Akiko ga kai-ta ronbun o hinansi-at-ta.* (N. 179)
 T. and A. NOM write-PAST paper ACC criticize-REC-PAST
 'Taro and Akiko each criticized the paper that the other wrote.'
- e. *Karera wa seikoo o syukusi-at-ta.* (Kh. 11)
 they TOP success ACC congratulate-REC-PAST
 'They congratulated each other on their success.'

3.4 Distributive meaning; distant reciprocal constructions by default

Judging by the interpretation of example (21) cited by Nishigauchi (1992:176), this type of construction with a suffixed reciprocal is found in a sentence containing an embedded clause (placed between subject and predicate of the matrix clause). It describes a situation where the subject referents of the main clause in (21e) (Akiko and Noriko) interact with each other *via a third party* (the boys) and *not immediately with each other*; cf. (21c) and (21d). The verb *siraberu* in the meaning ‘to check’ combines with names of situations, phenomena, things, etc., but not with human nouns (cf. (21a) and (21b)). Besides reading (i) in (21e) suggested by Nishigauchi (1992:176), two more readings are possible: (ii) and (iii) (p.c. M. Shibatani). It seems possible to subsume these readings in reading (iv). Interpretations (ii), (iii) and (iv) are assessed by some of our informants as possible though not preferable.

- (21) a. **Akiko to Noriko ga sirabe-at-ta.*
 A. and N. NOM check-REC-PAST
 (intended meaning:) ‘Akiko and Noriko checked each other.’
- b. *Akiko to Noriko ga heya no naka o sirabe-ta.*
 A. and N. NOM room GEN inside ACC check-PAST
 ‘Akiko and Noriko checked the room.’
- c. *Akiko ga {dono otokonoko ga Noriko o sasot-ta ka} sirabe-ta.*
 A. NOM which boy NOM N. ACC invite-PAST Q check-PAST
 ‘Akiko checked {which boy asked Noriko out}.’
- d. *Noriko ga {dono otokonoko ga Akiko o sasot-ta ka} sirabe-ta.*
 ‘Noriko checked {which boy asked Akiko out}.’
- e. *Akiko to Noriko ga {dono otokonoko ga sasot-ta ka}*
 A. and N. NOM which boy NOM ask.out-PAST Q
sirabe-at-ta.
 check-REC-PAST
- i. ‘Akiko and Noriko *each* checked which boy asked the *other* out.’ (N. 176)
 ii. ‘Akiko_i and Noriko_j *each* checked which boy asked Akiko_i and Noriko_j out.’
 iii. ‘Akiko and Noriko *each* checked which boy asked *someone else* out.’
 iv. ‘Akiko and Noriko *each* checked which boy asked *them or someone else* out.’

(21e) in reading (i) is an example of a “canonical” reciprocal construction; distant “indirect” and “possessive” constructions are not accepted by the informants; even reading (iv) of (21e) is rather exotic though grammatical. Two more readings of (21e), competitive and sociative have also been added by one of our informants who rejected the previous four readings:

- v. ‘Akiko and Noriko *competed* in checking which boy asked them out.’
 vi. ‘Akiko and Noriko *together* checked which boy asked out someone else.’
 (Y. Nagayama, p.c.; see also Nishigauchi (1992:176))

Constructions like (21e) are not registered (so far?) in the other languages of this collective monograph.

3.5 Simultaneity and succession

Subevents within a situation expressed by a morphological reciprocal can be simultaneous or successive, i.e. happening one after another immediately or at different times. This depends on the lexical meaning of a reciprocal verb and on some pragmatic factors. Thus the reciprocal under (22a) denotes simultaneous actions of two participants (A hugs B and B hugs A at the same time), while the reciprocals under (22b) cannot, as a rule, denote simultaneous actions; the reciprocal under (22c) may have both readings depending on the situation. Himeno (1982: 24–5) even claims that practically all reciprocals may express both simultaneous and successive actions depending on the context, and only a few verbs allow one of the readings.

- (22) a. *kakae-a-u* 'to hug each other'
 b. *hakari-a-u* 'to weigh each other'
 iki-ikisi-a-u 'to visit each other'
 katagurumasi-a-u 'to give each other a "ride" on the back'
 oikake-a-u 'to pursue each other'
 okosi-a-u 'to wake each other up'
 tazune-a-u 'to visit each other'
 c. *keri-a-u* 'to kick each other.'

The actions are not simultaneous if a reciprocal verb denotes transference to or from the position of the counteragent, an exchange of positions or influence on the counteragent (Himeno 1982: 26–7).

Succession of reciprocal subevents may be explicated by adverbs indicating alternate performance of the actions by two or more subject referents: *kootai-ni* 'by turns, in turn', *zyunban-ni* 'one after another' or *tugi-tugi-ni* 'one after another'. The latter adverb seems to be more acceptable in (23a) for the informants (some of whom rejected the use of the first two adverbs in (23a)).

- (23) a. *Taroo to Akiko wa zyunban-ni / kootai-ni / tugi-tugi-ni damasi-at-ta.*
 'Taro and Akiko deceived each other in turn/by turns.' (see also 5.3)
 b. *Taroo to Akiko wa zyunban-ni / kootai-ni / tugi-tugi-ni hakari-at-ta.*
 i. (with *zyunban-ni*) 'Taro and Akiko weighed each other in turn/by turns.'
 (subevents follow immediately one after another).
 ii. (with *kootai-ni*) 'Taro and Akiko weighed each other.'
 (not necessarily immediately, may be on different days.' (H. Narrog, p.c.)

In some instances, collocation with *zyunban-ni* is determined by the type of construction (three participants in (23d)).

- c. **Taroo to Akiko wa zyunban-ni daki-at-ta.*
 (intended meaning:) 'Taro and Akiko embraced each other in turn.'
 d. *Taroo to Akiko wa sono gaikoku-zin to zyunban-ni daki-at-ta.*
 'Taro and Akiko embraced with this foreigner in turn.' (cf. also 5.3)

As a rule, reciprocals do not take the sociative adverb *issyō-ni* 'together' which presupposes simultaneity and cooperation (in many other languages, adverbs with this meaning

behave in the same way), but the informants allow the adverb *tomo-ni* (which does not presuppose simultaneity) with some reciprocals.

- e. **Taroo to Ziroo wa issyo-ni naguri-at-te-ita.*
lit. ‘Taro and Jiro were hitting each other together/in collaboration.’

Collocation with the adverb of simultaneity *doozi-ni* is not clear: the informants differ on this point.

- f. ?*Taroo to Ziroo wa doozi-ni naguri-at-te-ita.*
‘Taro and Jiro were hitting each other simultaneously.’

3.6 Unproductivity of causatives from reciprocals and reciprocals from causatives

3.6.1 Object-oriented constructions

With the exception of a limited number of mostly three-place reciprocals derived by means of the unproductive lexicalized reciprocal-causative complex suffix *-aw-ase* (see Section 6; but this sequence is not as a rule a “sum” of the components), suffixed reciprocals have no causative derivatives with the suffixes *-sase/-ase*, i.e. they have no related object-oriented constructions. Thus, for instance, the reciprocals *nirami-a-u* ‘to glare at each other’ and *nonosiri-a-u* ‘to curse each other’ when causativized into *nirami-aw-ase-ru* and *nonosiri-aw-ase-ru* with the intended meanings ‘to make/let sb glare at each other’ and ‘to make/let sb berate each other’ are not readily acceptable (Y. Yamakoshi points out that lexicalized *nirami-aw-ase-ru* is used in dog and cock fighting when the animals are brought together before a fight). Possible, but still awkward versions are *nirami-awa-s-ase-ru*, etc. with epenthetic *-s-* with the transitive ending used for the verb *a-u-* (‘to meet’) related to the reciprocal suffix. But this *-s-* does not occur with the reciprocal verbs like those cited (M. Shibatani, p.c.). Causatives from reciprocals, however, seem to be grammatical, as they are mentioned in specialist literature (see, for instance, Nishigauchi (1992: 173); cf (24c)) but most of our informants say “they do not sound right” though they understand the intended meaning. In the examples that follow the verb *nagur-u* ‘to hit’ and its derivatives can be replaced by other verbs from (14), e.g. by *dak-u* ‘to embrace’, *tasuke-ru* ‘to help’ and their derivatives.

- (24) a. *Taroo wa Ziroo o nagut-ta.*
‘Taro hit Jiro.’
→ b. *Karera wa naguri-at-ta.*
‘They hit each other.’
→ c. ?*Kare wa karera o naguri-aw-ase-ta.*
he TOP they ACC hit-REC-CAUS-PAST
‘He made them hit each other.’

Though type (24c) constructions, i.e. causative derivations from suffixed reciprocals, are regarded by our informants as not quite acceptable or unacceptable, a causative construction with the intended meaning as in (24c) can be formed from a different type of reciprocal, namely from a construction with *otagai o* according to the general rule of causative derivation from transitive constructions (the underlying subject is marked with

ni in the causative construction; see (6b) and the discussion). It is interesting to note that a causative construction is accepted even by those informants who do not accept the underlying construction with *otagai o*. It is not quite clear why the informants accept (24f), i.e. a construction with reversed case markers on the objects in (24e) (which entails a slight shift in meaning). As mentioned above, (24e) is definitely derived from (24d); but there seems to be no analogous underlying structure for (24f), which is also probably descended from (24d).

- d. ²*Karera wa otagai o nagut-ta.*
 they TOP each.other ACC hit-PAST
 'They hit each other.'
- e. ²*Kare wa karera ni otagai o nagur-ase-ta.*
 he TOP they DAT each.other ACC hit-CAUS-PAST
 'He made them hit each other.'
- f. *Kare wa karera o otagai ni nagur-ase-ta.*
 'He let them hit each other.' (T. Takiguchi and F. Endoo, H. Narrog, p.c.)

Here is one more example violating the above mentioned restriction on causative derivation from suffixed reciprocals (cf. also (17d) and (25a)). Besides, constructions like (24e) (see (25b)) and (24f) (see (25c)) are possible here:

- (25) a. *Taroo ga Akiko to Noriko o syookaisi-aw-ase-ta.*
 'Taro made Akiko and Noriko introduce themselves to each other.' (F. Endoo, p.c.)
- b. *Taroo ga Akiko to Noriko ni otagai o syookais-ase-ta.*
 (same translation).
- c. *Taroo ga Akiko to Noriko o otagai ni syookais-ase-ta.*
 (same translation; F. Endoo, H. Narrog, p.c.)

3.6.2 Subject-oriented constructions

On the other hand, reciprocals derived from three-place causatives (see (26c)) which are in their turn derived from two-place transitives (Himeno 1982:42; Martin 1988:451) are considered by our informants as even less acceptable than (24c). As a substitute for (26c) they suggest a sentence with *otagai ni* 'mutually', 'each other' though they describe it as "a bit OK but not perfect"; see (26).

- (26) a. *yom-u* 'to read sth'
- b. *yom-ase-ru* 'to cause sb to read sth'
- c. *yom-ase-a-u* 'to cause each other to read sth' (HI. 42)
- d. *Karera wa otagai-ni mazimena hon o yom-ase-ru.*
 they TOP mutually serious book ACC read-CAUS-NPAST
 'They make each other read serious books.' (T. Tsunoda, p.c.)

3.7 Other restrictions on reciprocal derivation

Morphological reciprocals are not derived from many lexical reciprocals (see 11.1). By definition, they are not derived from one-place intransitives (e.g. *sin-u* 'to die', *umare-ru* 'to be born', etc.) and two- and three-place verbs without human objects (e.g. *kansokusu-ru*

‘to observe sth, not sb’, *sirabe-ru* ‘to check sth’; see, however, 3.3 and (21)). Some of these restrictions are non-trivial from the viewpoint of speakers of European languages. Thus, for instance, the sentence ‘They forgot each other’ cannot be translated into Japanese literally, but only as ‘They forgot each other’s affairs’, without a morphological reciprocal; in this case the nominal reciprocal with *otagai* is used:

- (27) *Taroo to Akiko wa otagai no koto o wasure-ta* /**wasure-at-ta*.
 T. and A. TOP each.other GEN affair ACC forget-PAST/forget-REC-PAST
 ‘Taro and Akiko forgot each other.’ (M. Shibatani, p.c.)

This construction is formally identical with the “possessive” type (see 10.2.3.2)

It is difficult to suggest any generalizations for those cases when reciprocals cannot be derived. In 3.6 a morphological cause is named, viz. the causative suffix *-sase/-ase* in the verb structure. We might add to this the absence of reciprocals from many combined verbs composed of two roots (M. Shibatani, p.c.), e.g.:

- (28) *aite-dor-u* (lit. ‘opponent+take’) ‘to treat sb as an opponent’
keri-age-ru (lit. ‘kick+raise’) ‘to kick sb up’
naguri-taos-u (lit. ‘hit+fell’) ‘to knock sb down/off his feet’
tobi-kaka-ru (lit. ‘jump+hang’) ‘to attack sb’
tuite-yuk-u (lit. ‘after+go’) ‘to follow sb’
oi-tuk-u (lit. ‘pursue+stick’) ‘to catch up with sb’

Semantic causes cannot be the main ones since reciprocals can be formed from verbs denoting pragmatically rare or unlikely situations; e.g.:

- (29) *taihosu-ru* ‘to arrest sb’ → *taihosi-a-u* ‘to arrest each other’
mitibik-u ‘to lead sb’ → *mitibiki-a-u* ‘to lead each other.’

From the following verbs, reciprocals are not formed. We have no explanation why; these may be individual restrictions which do not submit to generalization (in brackets, the intended meaning of the derivatives is given). For verbs with meanings like ‘to overcome sb’, ‘to catch up with sb’, ‘to follow sb’, the absence of a reciprocal is accounted for pragmatically, though some other languages allow reciprocals from verbs with similar meanings (see, for instance, Kuular, Ch. 27 on Tuvan, examples (55), (58); and Penchev, Ch. 13 on Bulgarian, §10).

- (30) a. *katu/utikat-u* ‘to overcome sb’ → **kati-a-u*/**utikati-a-u* (‘to overcome each other’,
 e.g. by turns, etc.)
sar-u ‘to leave’, ‘to go away from sb’ → **sari-a-u* (‘to leave each other’)
toozakar-u ‘to keep distance from sb’ → **toozakari-a-u* (‘to keep distance from
 each other’)
kure-ru ‘to give’ → **kure-a-u* (to give sth to each other’) (Hi. 40)
i-ru ‘to shoot, fire’ → **i-a-u* (‘to shoot at each other’) (Hi. 40)
 ?*war-u* ‘to divide sth into several parts’ → **wari-a-u* (though there is a corre-
 sponding deverbal nominal *wari-a-i* ‘proportion’).

The expected meaning for **wari-a-u* is ‘to divide sth among themselves’, by analogy with reciprocals in some other languages. The verb *wakat-u* ‘to divide’, ‘share with sb’ has a

form in *-aw* but it is sociative in meaning; cf. *wakati-a-u* ‘to divide sth together’ (Hi. 25); the latter reading is probably not far different from the reading ‘to divide sth among themselves’).

As is often the case, the informants’ opinions diverge: some of them find the following reciprocals (cited from the dictionaries) more or less acceptable (but rarely used) while the others reject them without hesitation:

- | | | | |
|----|-------------------------------|---|--|
| b. | <i>mi-ru</i> ‘to look, see’ | → | <i>mi-a-u</i> ‘to look at each other’ (M. 1087) |
| | <i>mat-u</i> ‘to wait for sb’ | → | <i>mati-a-u</i> ‘to wait for each other’ (B. 859). |

4. Expression of reciprocal arguments

There are two ways of expressing reciprocal arguments. All morphological reciprocals allow both ways though not in equal measure, i.e. different lexical groups may differ in this respect. By way of anticipating the discussion, we shall note that as a rule *otagai o* (see (1d)) occurs in simple constructions (see 10.2.4).

4.1 Simple reciprocal constructions

In this case both reciprocal arguments are expressed by the subject with the subject marker *ga* or with the topic marker *wa*. In reciprocal constructions, the subject should be semantically plural; as in non-reciprocal constructions, the subject can be a single word with a plural meaning (see, for instance, (4)) or by two or more words linked by the coordinative conjunction *to* (see (1b), etc.) and other means (see Kholodovich 1978: 10–2). The former may be termed homogeneous reciprocal arguments, and the latter heterogeneous reciprocal arguments. Both types of subject expression are equal pragmatically. The conjunction *to* may be repeated after each noun (see (32)).

4.2 Discontinuous reciprocal constructions; comitative only

This heading means that the discontinuous reciprocal construction contains only a noun phrase with the postposition *to* ‘with’ (but a noun phrase of this type occurs not only in reciprocal constructions). Thus the first argument is marked by the nominative marker *ga* (or by *wa* in its place), and the second by the comitative marker *to* with the main comitative meaning (as mentioned above, homonymous to the coordinative conjunction *to*; similar homonymy of comitative and coordinative markers is attested in many other languages: Turkic, Quechua, Swahili, Fula, etc.; cf., among others, Kuular, Ch. 27 on Tuvan, §1.2; van de Kerke, Ch. 31 on Bolivian Quechua, §3.1). This meaning is defined by a Japanese researcher as follows: “A person or a thing having a form of existence which has equal relations with a form of existence of his (her, its) partner” (Kaneko 1984: 33). The comitative meaning may be emphasized by the adverb *issyoni* ‘together’. In both cases,

i.e. with and without *issyo-ni*, the first participant is topicalized. (In (31a) the case marker *e* denotes direction.)

- (31) a. *Taroo to Akiko wa Nara e it-ta.* 'Taro and Akiko went to Nara.'
 b. *Taroo wa Akiko to [issyo-ni] Nara e it-ta.* 'T. went to Nara [together] with A.'

Sentence (31a) allows the reading that they went separately. Insertion of *issyo-ni* 'together' resolves the ambiguity. (31b) is not ambiguous with or without this adverb. In (31b), the semantic roles of the subject referent and the comitative phrase referent are identical and they are in symmetrical relation. The postposition *to* 'with' is a lexical reciprocal: *A is going with B* implies that *B is going with A*. However, as mentioned above, the arguments are unequal pragmatically, and/or grammatical difference can be observed. The reciprocal remains two-valent semantically. Compare:

- (32) a. *Ozi to sono hito to wa hanasi-te-ita.*
 uncle and this man and TOP talk-CONT-PAST
 'Uncle and this man were talking.'
 b. *Ozi to sono hito to wa hanasi-at-te-ita.*
 uncle and this man and TOP talk-REC-CONT-PAST
 'Uncle and this man were talking with each other.'

It is but natural that the subject of a reciprocal verb should be plural. In (32c) the noun preceding the topic marker is singular; therefore the comitative *to* phrase, as Nishigauchi (1992: 162) points out, "behaves as part of the subject", but substitution of *to issyo-ni* ('together with') for *to* 'with' is impossible in this case (ibid., with reference to Miyake), i.e. the comitative group here is a full-fledged subject; cf. (31b); but the comitative group can be separated from the subject by other words (see *itizikan* 'for one hour' in (32d); cf. Nishigauchi (1992: 162)), which makes it intermediate between subject proper and a complement.

- c. *Ozi wa sono hito to [*issyo-ni] hanasi-at-te-ita.*
 uncle TOP this man with together talk-REC-CONT-PAST
 'Uncle was talking with this man.'
 d. *Ozi wa itizikan sono hito to hanasi-at-te-ita.*
 'Uncle talked with this man for an hour.'

Reciprocals formed from different lexical groups of verbs demonstrate individual predisposition to the use in discontinuous constructions. Thus, for instance, *korosi-a-u* 'to kill each other' is equally acceptable in both simple and discontinuous constructions, whereas *aisi-a-u* 'to love each other' and *nikumi-a-u* 'to hate each other' are preferable in the simple construction. This is probably determined by the first being an activity verb and the latter two being stative verbs (M. Shibatani, p.c.; see also 10.2.4).

The discontinuous construction is especially characteristic of lexical reciprocals (see 11.1).

5. Non-reciprocal meanings of the suffix *-aw*

5.1 Sociative

Sociatives are of restricted productivity and seem to be formed from a limited set of verbal stems. Thus, for instance, there are no sociatives based on the verbs in (33a) (brackets contain ungrammatical forms with intended meanings). Himeno (1982:40) notes that sociatives are formed with difficulty from passives though sometimes they are allowed (33b). In this connection he also notes that sociatives are not derived from verbs denoting unobservable inner states. If a state is observable the verb allows sociative derivation (33c). Forms in *-aw* from two-place verbs can be interpreted either as reciprocal or sociative depending on the construction (Himeno 1982:25; see (33d)).

- (33) a. *sin-u* 'to die' (→ **sini-a-u* 'to die together')
tob-u 'to fly' (→ **tobi-a-u* 'to fly together')
- b. *tatak-u* 'to beat/hit sb' (→ **tatak-are-a-u* 'to be beaten together with sb')
syookaisu-ru 'to invite sb' → *syookais-are-a-u* 'to be invited together with sb'
- c. *unadare-ru* 'to drop one's eyes' → *unadare-a-u* 'to drop one's eyes together'
iradat-u 'to get irritated' → *iradati-a-u* 'to get irritated together'
- d. *o-u* 'to chase sb' → *oi-a-u* i. 'to chase sb together' (if there is an object),
 ii. 'to chase each other' (if there is no object).

Our goal here is only to show how complicated the sociative use of *-aw* is. It is noteworthy that sentences (33b) and (33d) are considered by some of our informants as "bad", and (33d) is considered "possible" only in the competitive sense (M. Shibatani, p.c.).

We have examples of subject-oriented sociatives only. The suffix *-aw* renders the sociative meaning on those verbs which mostly cannot be used reciprocally, i.e. two-place transitives with a second inanimate argument (see *ki o* in (35) and *otiba o* in (36) with the verb *ue-ru* 'to plant sth') (Himeno 1982:23–5); thus the sociative meaning is not expressed by the following forms in *-aw*:

- (34) a. *ue-ru* 'to plant' → *ue-a-u* 'to plant sth together' (see also (35)–(36))
 b. *aisi-a-u* 'to love each other', but not 'to love sb together'
seme-a-u 'to reproach each other', but not 'to reproach sb together'
home-a-u 'to praise each other' but not 'to praise sb together', etc.

Sociative constructions retain the valency properties of the underlying verbs. In the examples of §5, the gloss REC identifies the morpheme *-aw* without referring to its meaning. (35d) and (36b) are discontinuous sociative constructions; the latter are interpreted as comitative by definition (cf. Nedjalkov, Ch. 1). For lack of material, we do not consider comitative constructions specially (cf. in this respect Nedjalkov & Nedjalkov, Ch. 26 on Yakut, §9.2.2). In the examples with the alleged sociative meaning below, other interpretations suggested by the informants are also given (they are mostly competitive and alternative).

- (35) a. *Akiko to Taroo ga ki o ue-ru.*
 A. and T. NOM tree ACC plant-NPAST
 'Akiko and Taro plant trees' (together or not together).

Our informants reject (35b) and (35d) in the sociative meaning, but two of them regard it as correct in the alternative or benefactive-reciprocal reading.

- b. *Akiko to Taroo ga ki o ue-a-u.*
 A. and T. NOM tree ACC plant-REC-NPAST
 i. 'Akiko and Taro plant trees *together*.'
 ii. 'Akiko and Taro *compete* in planting trees.' (M. Shibatani, p.c.)
 iii. 'Akiko and Taro plant trees *by turns*.' (Y. Takahashi, p.c.)
 iv. 'Akiko and Taro plant trees for each other.' (Y. Nagayama, p.c.)
- c. *Akiko ga Taroo to ki o ue-ru.*
 A. NOM T. with tree ACC plant-NPAST
 'Akiko plants trees together with Taro.'
- d. *Akiko ga Taroo to ki o ue-a-u.* (cf. Hi. 23)
 A. NOM T. with tree ACC plant-REC-NPAST
 i. 'Akiko plants trees with Taro.'
 ii. 'Akiko and Taro plant trees by turns.' (Y. Takahashi, p.c.)
 iii. 'Akiko and Taro plant trees for each other.' (Y. Nagayama, p.c.)
- (36) a. *Miyoko wa ityoo no otiba o hirot-te-ita.*
 M. TOP ginkgo GEN fallen.leaves ACC pick.up-CONT-PAST
 'Miyoko picked up fallen ginkgo leaves.'
- b. *Miyoko wa, Tomoko to futaride, ityoo no otiba o hiroi-at-te-ita.* (K. 4/2. 20)
 M. TOP T. with both ginkgo GEN fallen.leaves ACC
 pick.up-REC-CONT-PAST
 i. 'Miyoko picked up fallen ginkgo leaves *together* with Tomoko.'
 ii. 'Miyoko picked up ... leaves *by turns* with Tomoko.' (Y. Takahashi, p.c.)
 iii. 'Miyoko and Tomoko *competed* in picking up ... leaves.' (Y. Yamakoshi, p.c.)
- (37) a. *?Taroo to Jiroo wa hagemi-at-ta.*
 'Taro and Jiro did their best together.'
- b. *Taroo to Jiroo wa karada o kitae-at-ta.*
 i. 'Taro and Jiro trained their bodies *together*.' (M. Shibatani, p.c.)
 ii. 'Taro and Jiro *competed* in training their bodies.' (Y. Yamakoshi, p.c.)
 iii. 'Taro and Jiro trained *each other's* bodies.' (M. Matsumoto, p.c.)
- c. *Taroo to Akiko wa zibun-tati no kodomo o hagemasi-at-te-iru.*
 i. 'Taro and Akiko were encouraging *their own* child(ren) *together*.' (T. Takiguchi, p.c.)
 ii. 'Taro and Akiko were encouraging *each other's* children.' (M. Matsumoto, p.c.)
- d. *Taroo to Akiko wa te o tori-at-te, yorokobi-at-ta.*
 T. and A. TOP hand ACC take-REC-CONV rejoice-REC-PAST
 'Taro and Akiko took each other's hands and rejoiced together.' (M. Shibatani, p.c.)
- e. *Taroo to Akiko wa akambo o zyunban-ni daki-at-ta.*
 'Taro and Akiko embraced the baby by turns.' (cf. also Himeno 1982: 19)

In (37d), a sociative verb is co-ordinated with a semantically reciprocal verb. The context for (37e), is described as follows: “Taro was looking at how Akiko embraced the baby, and wanted to embrace the baby himself. So he asked Akiko to pass the baby to him, and he embraced the baby in turn. Probably they are a husband and wife, family members, or very close friends. The point is that they did these actions with shared affection, not just embraced the baby in turn” (T. Takiguchi, F. Endoo, p.c.). Collocation with the adverb *zyunban-ni* ‘in turn, by turns’ extends the meaning of simultaneity which is usually common to sociativity: it may cover successive actions within the limits of one and the same situation. The situation described by (37e) is characterized by the fact that the referent who is awaiting his turn is nevertheless involved in the action (*Taro was looking... wanted to embrace*).

Sociative verbs require certain contextual conditions, such as plural expression of the subject, etc., though the conditioning factors are not clear. A verb with the sociative meaning does not combine with *otagai-ni* ‘mutually’ (also translated as ‘together’ in the dictionaries), but it combines with *issyo-ni* ‘together’. Compare the following series of examples with the native speakers’ evaluations (judging by the situations the informants suggest, the sociative meaning is intertwined with the reciprocal in the sentences with the verb *nak-u*):

- (38) a. *Suzume wa nai-ta.* ‘A sparrow chirped’, ‘Sparrows chirped.’
 b. *Suzume-tati wa nai-ta.* ‘Sparrows chirped.’
 c. *Suzume wa otagai-ni nai-ta.* lit. ‘Sparrows chirped mutually.’ (“an odd sentence”)
 d. *Suzume wa issyo-ni nai-ta.* ‘Sparrows chirped together.’ (“acceptable, though a little strange”; possible situation: “nestlings chirped together when their mother-bird brought some food”)
 e. *Suzume wa naki-at-ta.* ‘Sparrows chirped together.’ (“acceptable”; possible situation: “(many) sparrows chirped together (loudly) towards other sparrows”)
 f. *Suzume-tati wa [issyo-ni] naki-at-ta.* (same as (e); M. Shibatani, F. Endoo, p.c.).

Hesitation in evaluating sentences with the sociative meaning may be illustrated by the following examples from Nishigauchi (1992: 161) which, though grammatical, nevertheless according to our informants, “are difficult to accept”:

- (39) *John to Mary wa Bill o naguri-at-ta.*
 ‘John and Mary hit Bill in collaboration.’

The suffix *-aw* in the sociative meaning enters into complex relations with *otagai*. Thus, (40b) is not acceptable pragmatically (because people usually admit their own mistakes). In (40b) *otagai no* has a possessive-reciprocal meaning ‘each other’s’ (and is an attribute to the noun *mitigai*); in (40c) this meaning is neutralized by the suffix *-aw*, and *otagai no* renders a distributive meaning ‘each respectively’ and it may be replaced by *otagai-ni* ‘mutually’ (and is an adverbial dependent on the verb *mitome-at-ta*).

- (40) a. *Taroo to Akiko wa mitigai o mitome-ta.*
 T. and A. TOP mistake ACC admit-PAST
 ‘Taro and Akiko admitted their mistakes’ (naturally, each his/her own).

- b. ?*Taroo to Akiko wa otagai no matigai o mitome-ta.*
 ‘Taro and Akiko admitted each other’s mistakes.’
- c. *Taroo to Akiko wa [otagai no/otagai-ni] matigai o mitome-at-ta.*
 ‘T. and A. admitted [respectively/mutually] their mistakes together.’ (F. Endoo, p.c).

It may be interesting to note that the corpus-based list of 285 forms in *-aw* cited in Hasselberg (1996: 37–46) contains only 19 (mostly intransitive) items with the sociative meaning (see (41)). This ratio is indicative of the low productivity of the sociative function of this suffix.

- (41) *hibiki-a-u* ‘to sound together’
huzake-a-u ‘to fool about together’
kangae-a-u ‘to ponder over sth together’
kaziri-a-u ‘to gnaw sth together’
koe-a-u ‘to overcome together’
kui-a-u ‘to eat together’
kyooryokusi-a-u ‘to work together’
musebi-a-u ‘to cry together’
nomi-a-u ‘to drink together’
rakuruisi-a-u ‘to cry with each other’
seikatusi-a-u ‘to live together’
seri-a-u ‘to fight for sth together’
sonzaisi-a-u ‘to exist together’
syaburi-a-u ‘to suck together’
tabe-a-u ‘to eat together’
tate-a-u ‘to build together’
umeki-a-u ‘to suffer together’
warai-a-u ‘to laugh together.’

In Himeno’s opinion (1982:25), sociatives may denote both simultaneous and non-simultaneous actions of the participants; e.g.:

- (42) *wakati-a-u* ‘to divide sth together’ (simultaneously)
ki-a-u ‘to dress sb together’ (by turns)
ne-a-u ‘to plant (e.g. trees) together’ (either simultaneously or by turns).

On sociative nouns see (81).

5.2 Competitive

This meaning is closely related to the reciprocal and sociative. It occurs in derivatives in *-aw* as the only meaning or one of possible meanings. (We have found only two more languages where a reciprocal marker also has a competitive meaning: Bulgarian where the reciprocal marker also has a reflexive meaning, and especially Karachay-Balkar where the reciprocal marker has a sociative meaning as well; see Penchev, Ch. 13, §10; and Nedjalkov & Nedjalkov, Ch. 24, §5.3).

- (43) *Gakusei wa warai-at-ta.*
 i. ?‘The students laughed *together*.’
 ii. ‘The students *competed* in laughing.’

Laughing contests are held annually in certain localities in Japan. The competitive meaning is realized in this situation. If we add *issyoni* the sociative meaning, i.e. (i), will be retained and the competitive meaning will become marginally possible. (T. Tsunoda, p.c.).

According to T. Tsunoda, in (44a) the competitive reading is possible and the more acceptable (though it is questioned by some other informants); the reciprocal reading seems marginally acceptable (the sociative interpretation was suggested by Y. Takahashi, p.c.). In (44b) both readings are acceptable (competition in this case is typical of Japanese tourists; T. Tsunoda, p.c.). In (45a) and (45b) the competitive reading alone is possible.

- (44) a. *Gakusei wa tegami o kaki-at-ta.*
 students TOP letter ACC write-REC-PAST
 i. ?‘The students *competed* in writing letters.’
 ii. ?‘The students wrote letters (in order to send) *to each other*.’
 iii. ?‘The students were writing a letter *together*.’ (Y. Takahashi, p.c.)
 b. *Kankookyaku wa miyage o kai-at-ta.*
 sightseer TOP souvenir ACC buy-REC-PAST
 i. ‘The sightseers bought souvenirs *for each other*.’
 ii. ‘The sightseers bought souvenirs *as if in competition*.’
- (45) a. *Gakusei wa sake o nomi-at-ta.*
 ‘The students *competed* in drinking sake.’
 b. *Siken de gakusei wa ten o tori-at-ta.*
 exam LOC student TOP mark ACC take-REC-PAST
 ‘In an examination, the students *competed* in getting (higher) marks.’

The competitive meaning seems to be more common than sociative. This claim is supported by the fact that the informants confronted with the following rather unusual sentences are ready to interpret them, under pressure, as competitive only, though some of our informants prefer the “possessive” reciprocal and benefactive-reciprocal interpretation for them (as well as in other cases). The distributive *otagai* is compatible with the competitive meaning. The examples below and their competitive interpretation are questioned by some of our informants.

- (46) a. *Taroo to Akiko wa [otagai no] ie o tate-at-ta.*
 i. ?‘Taro and Akiko *competed* in building *houses*.’ (without the bracketed words)
 ii. ?‘Taro and Akiko *competed* in building *their respective houses*.’ (this reading requires the use of *otagai no*; M. Shibatani, p.c.)
 iii. ‘Taro and Akiko built *each other’s* houses.’ (Y. Nagayama, p.c.)
 iv. ‘Taro and Akiko built houses *for each other*.’ (Y. Nagayama, p.c.)
 b. *Taroo to Akiko wa kodomo o nirami-at-ta.*
 ‘Taro and Akiko *competed* in glaring at the child.’ (T. Tsunoda, p.c.) (see also iii. in (91d)).

Similarly, when faced with the form *nui-a-u* (← *nu-u* ‘to sew’) the informant said: ‘I’ve never heard this, it may mean ‘to sew as if in a competition’. The following transitive re-

reciprocal forms are also interpreted as competitive (though marginally): *kangae-a-u* ‘to compare sth as if in competition’ (← *kangae-ru* ‘to consider, compare’; cf. (41) where it means ‘to think, ponder, consider’), *kui-a-u* ‘to compete in eating sth (e.g. cakes)’ (← *ku-u* ‘to eat sth’), *maze-a-u* ‘to compete in mixing sth’ (← *maze-ru* ‘to mix sth’), *nori-a-u* ‘to compete in taking a ride’ (← *nor-u* ‘to take a ride’) (M. Shibatani, p.c.). Some of our informants regard the competitive meaning as the only one possible or one of the possible in examples (21e) (see reading (v)), (35b) (see reading (ii)), (36b) (see reading (iii)), and (47) as well.

5.3 The meaning of alternation

Some of the authors consider succession (the meaning of alternation) as one of the possible readings of a number of reciprocal forms (some of our informants doubt this meaning in the following example with the reciprocal form of the verb *syootaisu-ru* ‘to invite’, though they say that some native speakers may accept this), the competitive reading was suggested by one informant:

- (47) *John to Bill ga Mary o syootaisi-at-ta.*
 J. and B. NOM M. ACC invite-REC-PAST
 i. ‘John and Bill invited Mary *alternately*.’
 ii. ‘John and Bill *competed* in inviting Mary.’ (M. Matsumoto, p.c.)

According to Nishigauchi (1992:174; with reference to Miyake), “this sentence ... designates a series of events, where John and Bill invited Mary in an alternative order”. In his analysis of this sentence, Nishigauchi argues that “... while John’s and Bill’s invitations of Mary are separate, individual events, there is some sense of collaboration or competition that results from the activities” (ibid. p. 175). In (48), the reading may be alternate as well as “possessive” reciprocal or sociative:

- (48) *A ga B to inu o daki-a-u.*
 i. ‘A and B hold the dog in their arms *by turns*.’ (Hi. 52).
 ii. ‘A and B embrace *each other’s* dogs.’ (H. Narrog, p.c.; cf. 3.5)
 iii. ‘A and B embraced the dog *together*.’ (Y. Takahashi, p.c.)
- (49) *A ga B to kuruma o umpansi-a-u.*
 ‘A and B drive the car *by turns*.’ (Hi. 26) (see also (23), (35b, c), (36b), (37e)).

A pragmatic explanation of the meaning ‘by turns’ may probably lie in the technical difficulty in performing the action by both participants simultaneously.

5.4 The meaning of unexpectedness

It seemed expedient to consider the relevant material in 6.3.2.2, i.e. immediately after the discussion of verbs with the analogous meaning derived by means of the reciprocal-causative suffix *-aw-ase*. A more detailed definition of this meaning is also proposed there.

6. Verbs of conjoining with the unproductive reciprocal-causative suffix *-aw-ase*

6.1 Introductory

This suffix is a combination of the reciprocal suffix *-aw* and causative suffix *-ase*. The complex *-aw-ase* is viewed by a number of linguists as a single morpheme with the meanings ‘to bring together’, ‘to do together at the same time’ (Himeno 1982: 52). As it follows from the first meaning, certain derivatives may be expected to denote putting together, connecting, combining, mixing of two or more objects (see (50d) where *-aw-ase* has a very strong meaning of joining), including considering or comparing two or more things or phenomena – a kind of mental conjoining. There are about 85 forms with this suffix (nearly all of them are listed in this section). These derivatives without additional lexicalization are rare (Himeno 1982: 41–2). The base verbs are mostly transitive, many of them three-place lexical reciprocals with the meaning of joining in a narrow or broad sense, too.

The language data for this section are borrowed mostly from Himeno (1982: 17–52) and Hasselberg (1996: 37–51).

Many derivatives (as well as base verbs) are not intelligible to native speakers though they are registered in dictionaries and quoted in specialist literature. They are also entered in the lists below, since they are relevant for the semantic characterization of the derivational groups. This symbol marks also forms which have been ousted as a result of (possible) competition of semantically contiguous forms.

Thus, semantic competition between the *-aw* and *-aw-ase* derivatives has resulted in the loss of *-aw* forms (see (50a) and (50b)) and semantic similarity between the base verb and the *-aw-ase* form has resulted in the loss of the respective meaning of the base form (see (50c)). Some of the derivatives are not related semantically to the base verb (have lost it?) and/or do not have the meaning of joining or connecting proper (see (50c) again):

- (50) a. *mat-u* ‘to wait’
 → [?]*mati-a-u* ‘to wait for each other’, ‘to wait for, meet another by appointment’
 → *mati-aw-ase-ru* ‘to wait for the coming of the other, for each other by appointment’ (B. 786)
- b. *kum-u* i. ‘to braid, knit together, entwine’(vt)
 ii. ‘to fit into each other, join, unite’(vi) (B. 788)
 → [?]*kumi-a-u* i. [?]‘to knit or link together, interlace’
 ii. *‘to join together in company, unite’ (vi) (B. 786)
 → *kumi-aw-ase-ru* i. ‘to knit together, interlace’ ii. ‘join together’ (B. 786)
- c. *teras-u* i. ‘to shine upon’, ii. *‘to compare sth/sb with sth/sb’
 → **terasi-a-u* (not registered in dictionaries; our informants accept it in the meaning ‘to shine (e.g. with a torch) in each other’s face’)
 → *terasi-aw-ase-ru* ‘to examine sth by comparing it with sth’ (B. 1469)
- d. *nu-u* ‘to sew sth’ → *nui-aw-ase-ru* ‘to sew two things together’ (B. 1046).

Below, we shall be concerned mostly not with such derivatives but with those that retain or are more or less related to the reciprocal meaning, in order to give an idea of the semantic content of this group. The semantic behaviour of causatives from reciprocals is of typo-

logical interest. Verbs, especially those of conjoining have specific features in combination with a reciprocal-causative complex or with a reciprocal and/or sociative affix in other languages as well. Thus, for instance, three-place transitives of conjoining in Kirghiz are mostly causatives derived from anticausatives which are in their turn derived from three-place lexical reciprocals by means of the reciprocal suffix, the first and the last members of the derivative chain being semantically similar and sometimes closely synonymous; cf.

- (51) a. *čapta-* ‘to glue sth to sth’ → *čapta-š-* ‘to get glued together’
 → *čapta-š-tər-* ‘to glue sth together.’ (cf. Nedjalkov, Ch. 28 on Kirghiz, §13.2)

Compare the analogous derivational chain in Mongolic languages:

- b. Buryat *xolbo-* ‘to tie, join sth together’ → *xolbo-ldo-* ‘to be tied, joined together’
 → *xolbo-ld-uul-* (same as *xolbo-*). (see Nedjalkov et al., Ch. 29, §4.8)

In Evenki, three-place transitive lexical reciprocals of joining combine with the sociative (not reciprocal) suffix, while retaining their meaning – in this case the sociative suffix serves as an overt reciprocal marker; in a few cases, when attached to non-reciprocal transitives it is the only marker of the reciprocal meaning; e.g.:

- c. *dalbu-* ‘to glue sth to sth’ → *dalbu-ldə-* ‘to glue sth together’
ulli- ‘to sew sth’ → *illi-ldə-* ‘to sew sth together’ (cf. (57);
 see Nedjalkov & Nedjalkov, Ch. 38 on Evenki, §6.3; Kazenin, Ch. 17 on Kabardian, §§3.2.2.1.2 and 3.2.2.2).

Incidentally, the meaning ‘to inquire’ in (43d) does not sound accidental if we take into consideration analogous data from some other languages:

- d. *to-u* ‘to inquire, ask’ → *toi-aw-ase-ru* ‘to inquire (about sth)’ (M. 1811);
 ‘to inquire (here and there)’ (Ha. 48)
kik-u ‘to hear, listen, inquire’ → [?]*kiki-aw-ase-ru* ‘to inquire about’ (B. 666)
tazune-ru ‘search, inquire’ → [?]*tazune-aw-ase-ru* ‘inquire (here and there).’
 (Ha. 48)

Compare Kirghiz (e) and Karachay-Balkar (f) respectively:

- e. *aŋda-* ‘to understand’, ‘to notice’ → *aŋda-š-tər* ‘to find out’, ‘to make inquiries’
 (see Nedjalkov, Ch. 28, §10.2)
 f. *soruwla-* ‘to inquire’ → *soruwla-š-* ‘to inquire’ (see Nedjalkov & Nedjalkov,
 Ch. 24, ex. (107b)).

It seems possible that historically this suffix is an aborted attempt to create a marker for object-oriented reciprocals denoting conjoining but the process did not develop and only a limited number of formations have been preserved. At the same time, it is possible that in some cases the derivatives do not contain the suffix *-aw-ase* but they are compounds with the verb *aw-ase-ru/aw-as-u* (a causative derived from the verb *a-u* by means of the causative suffix; cf. 2.5.1). The verb *a-u* is represented in dictionaries by two different characters with the following respective meanings:

- (52) a. 1) i. 'to see, meet, etc.', ii. 'to meet with (an accident), etc.' and
 2) i. 'to suit, fit, etc', ii. 'agree (with); accord (with); coincide (with); tally (with); square (with), etc.', iii. 'to keep good time'.

In both cases the verb is a typical lexical reciprocal. The meanings of the causative *aw-ase-ru* derived from the first verb are i. 'to let (sb) see, arrange a meeting'; ii. 'to expose (to)'.

Note that the second verb *aw-ase-ru* covers most of the meanings of the three-place derivatives with the suffix *-aw-ase*. Thus, on the basis of semantics, we cannot determine whether we are faced with a derivative in *-aw-ase* or a compound with the verb *aw-ase-ru*. Here are all the meanings of the verb *aw-ase-ru* as they are registered in (M. 60):

- (52) b. 1) 'to put (bring) together; unite; combine; connect; join together; amalgamate; merge, annex; join [fold, clasp] (one's hands)'
 2) 'to sum up, add up, total'
 3) 'to mix, compound'
 4) 'to set, fit, suit, adjust, adapt, conform, square, gear (one thing to another), tune [tailor] (sth to the purpose); bring (a thing) into line (with another)'
 5) 'to match (colors)'
 6) 'to put (one thing) upon (another), overlap'
 7) 'to compare, check (up) (with), tally (with)'
 8) 'to strike (a fish)'.

One may assume from the list of meanings in (52b) that different meanings of the verbs in *-aw-ase* are most likely descendants from these meanings rather than a result of independent development within the derivatives.

6.2 Object-oriented reciprocals

The verbs in question enter into two types of derivational chains. In the first chain (see 6.2.1), the base verbs are two-place transitives or intransitives; in the second (which is much more numerous; see 6.2.2) they are three-place or two-place transitives. In both chains, the final members with a few exceptions are three-place transitives.

6.2.1 Three- and four-member chains. Causatives in *-ase* from reciprocals

We have in mind derivational chains illustrated by (24), where (24c) is an object-oriented reciprocal construction. This type of causative reciprocal meaning is possible though rare (Himeno 1982:42), but it is this type with the standard semantic relations that is historically the earliest among derivatives in *-aw-ase*. The base verbs can be of two types, two-place transitives and two-place intransitives (with a dative object).

6.2.1.1 With two-place transitive bases. Here, the first, reciprocal stage of derivation entails intransitivization (but the number of participants is retained); at the second, causative stage of derivation, transitivity is restored (and one more participant, viz. Causer, is added) but the direct object must be semantically plural and denote two or more participants named by one or two NPs. As mentioned, at present this type is represented by a few exam-

ples at best. The (partially lexicalized; see bold type in the translations) final derivatives in these chains denote conjoining, comparing, etc. The base verbs denote aggressive actions:

- (53) a. *tuk-u* 'to stab'
 → *tuki-a-u* i. 'to keep company' (B. 1524)
 ii. ?'to push each other'
 → *tuki-aw-as-u/tuki-aw-ase-ru* i. 'to compare/collate'
 ii. *'to bring sb face to face with sb' (M.1876–7)
- b. *tatak-u* 'to beat, stab'
 → *tataki-a-u* 'to beat, stab each other' (B. 1442)
 → *tataki-aw-ase-ru* i. ?'to hit sth against each other' (Ko2. 249)
 ii. *'to strike (things) together' (M. 1748)
- c. *tatak-u* 'to beat, stab'
 → *tatak-a-u* 'to struggle/fight' (B. 1442)
 → *tatak-aw-as-u* i. 'to cause sb to fight' (B. 1442)
 ii. 'to argue/debate' (with object 'argument, opinion')
 iii. ?'to compete with sb' (M. 1747)
- d. *ut-u* 'to beat'
 → *uti-a-u* 'to beat each other' (B. 1546)
 → ?*uti-aw-ase-ru* i. ?'to join by beating' (B. 1546)
 ii. ?'to strike (a thing) against another' (N. 1902)
- e. *tur-u* 'to hang/suspend'
 → *turi-a-u* 'to balance', 'be in harmony with each other' (Ha. 43)
 → *turi-aw-ase-ru* 'to balance sth and sth' (Ha. 47).

6.2.1.2 *With two-place intransitive bases.* In this case causatives are derived from lexical reciprocals with a dative object (*if you are opposite me then I am opposite you*). In the causative opposition the semantic relation is more regular than in the reciprocal opposition where the difference between the base and the derivative is lexicalized. (54b) is probably a unique four-member derivational chain in which the first reciprocal *muk-a-u* is formed in a non-standard way (not from a verbal noun in *-i-*) and retains the main meaning of the base verb. From this form with the fossilized reciprocal suffix *-aw-*, a standard reciprocal verb *mukai-a-u* is derived which serves as base for a causative derivative.

- (54) a. *ni-ru* 'to be/look like'
 → *ni-a-u* 'to suit, be like sb, be suitable for' (M. 1219)
 → ?*ni-aw-ase-ru* 'to make suit/fit', 'to adopt' (B. 1021)
- b. *muk-u* 'to be facing sb/sth'
 → *muk-a-u* 'to face sb/sth and come in this direction'
 → *muk-a-i-a-u* 'to be opposite (to), face each other' (M. 1146)
 (used mostly as *muk-a-i-at-te* 'opposite each other')
 → *muk-a-i-aw-ase-ru* 'to oppose (A to B)' (M. 1146).

6.2.2 Two-member chains. Derivatives in *-aw-ase*. With three- and two-place transitive bases

In these chains a derivative in *-aw* is either non-existent or unrelated in the standard way semantically to the reciprocal-causative derivative. Most of the derivatives of this type are three-place verbs with the meaning of conjoining (from three-place lexical reciprocals). Both reciprocal arguments of these verbs are expressed either by a plural object or by two coordinated objects (one of which may be ellipted), while the subject can be singular (the meaning may be weakened if one of the reciprocal arguments is presented as stationary and the other as mobile (see (55b)). These verbs are in a way intermediate between morphological and lexical reciprocals. On the one hand, they are derivatives and on the other, they are unproductive and entered in dictionaries as lexicalized items. In many of the chains both verbs are close in meaning and the suffix is either pleonastic or emphasizes plurality of interrelating objects. With *-aw-ase* verbs, a comitative object seems to be preferable to dative (cf. (56a) and (56b)):

- (55) a. *Taroo wa kono paipu o ano paipu ni tunai-da.*
 T. TOP this pipe ACC that pipe DAT join-PAST
 ‘Taro joined this pipe to that pipe.’
- b. *Taroo wa kono paipu to ano paipu o tunagi-aw-ase-ta.*
 T. TOP this pipe and that pipe ACC join-REC-CAUS-PAST
 ‘Taro joined this pipe and that pipe.’ (M. Shibatani, p.c.); cf. also:
- (56) a. *Aokiko no baai o kangae-aw-ase-temo...* (MK. 121)
 lake.Aoki GEN case ACC consider-REC.CAUS-although
 ‘Although [he] took into consideration the [different] cases at lake Aoki.’
- b. *²Niku o yasai to take-aw-ase-ru.* (Hi. 43)
 meat ACC vegetables COM add-REC-NPAST
 ‘[He] adds meat to vegetables.’

Two main groups, each with two subgroups, can be distinguished according to the meaning of the base verbs.

6.2.2.1 Derivatives with the meaning of physical joining. They fall into two subgroups.

6.2.2.1.1 *Group A. Verbs of fixing things together.* In this group most of the bases are three-place transitive verbs of joining or two-place transitives denoting actions that involve joining or mixing of parts (cf. ‘to sew’, ‘to knit’, ‘to knead’, etc.); one base verb is a two-place intransitive. Their derivatives are more or less similar in meaning to or share an essential semantic component with the base verbs and also denote joining sth together, or mixing; the base verb (along with the derivative) may be either active or going out of use in Modern Japanese (the meaning of *-aw-ase* in this group is similar to that of the separable German prefix *zusammen-*; see Wiemer & Nedjalkov, Ch. 10, §7.2.2); cf.:

- (57) *am-u* ‘to knit’ → *²ami-aw-ase-ru* ‘to knit together’ (M. 25)
*hag-u** ‘to patch, join together’ → *²hagi-aw-ase-ru* (same) (B.274), (M. 370)
har-u ‘to paste over’ → *hari-aw-ase-ru* ‘to paste sth together’ (M. 404)
ire-ru ‘to put sth into sth’ → *ire-aw-ase-ru* ‘put sth and sth together into sth’ (Ha. 46)

- kagar-u* ‘to lace together by sewing’ → [?]*kagari-aw-ase-ru* ‘to sew sth together’ (HN)
kam-u i. ‘to bite’, ii. ‘to gnash (one’s teeth)’ → *kami-aw-ase-ru* ‘to clench one’s teeth’
 (M. 697)
- karam-u* (vi) ‘to coil, twine around’ → *karami-aw-ase-ru* ‘to coil, twine sth’ (Ha. 47)
kasane-ru ‘to pile sth up’ → *kasane-aw-ase-ru* ‘to lay one on top of another’ (Ha.48)
kone-ru ‘to knead, mix up together’ → *kone-aw-ase-ru* ‘to knead together’ (HN)
[?]*kuke-ru* ‘sew the edges of two pieces together’ (B.783) → **kuke-aw-ase-ru* (same)
kum-u i. ‘to braid, knit together, entwine’; ii. ‘to fit into each other, join, unite’ →
 → *kumi-aw-ase-ru* i. ‘to knit together, interlace’; ii. ‘to join together’ (B. 786)
maze-ru ‘to mix, add’ → *maze-aw-ase-ru* ‘to compound, mix together, mingle, blend’
 (M. 1067)
- mom-u* ‘to rub/crumple’ → [?]*mom-i-aw-ase-ru* ‘rub (one’s hands) together’ (M.1124)
musub-u ‘to tie (up), knot together’ → *musubi-aw-ase-ru* ‘to tie/link/fasten sth
 together’ (M. 1157)
- na-u* ‘to entwine’ → **nai-aw-ase-ru* ‘to entwine together into a rope, etc.’ (HN)
ner-u ‘to knead (dough)’ → *neri-aw-ase-ru* ‘to knead together, mix by kneading’
 (M. 1214)
- nezir-u* ‘to screw, twist, wrench’ → [?]*neziri-aw-ase-ru* ‘to twist together’ (HN)
nigir-u ‘to grasp, hold’ → *nigiri-aw-ase-ru* ‘to make sth closely intertwined’ (Ha. 47)
nu-u ‘to sew sth’ → *nui-aw-ase-ru* ‘to sew two things together’ (B. 1046)
or-u ‘to weave’ → [?]*ori-aw-ase-ru* ‘to weave/interweave’ (M. 1312)
sibar-u ‘to tie (with a cord)’ → [?]*sibari-aw-ase-ru* ‘to bind/tie together’ (Ha. 47)
tabane-ru ‘to tie, bind into sheaves’ → *tabane-aw-ase-ru* ‘to bind together (into a
 bundle)’ (HN)
- tatam-u* ‘to fold’ → [?]*tatami-aw-ase-ru* ‘put one upon another, fold together’ (Ha. 47)
tozi-ru ‘to bind/sew/stitch (a book)’ → *tozi-aw-ase-ru* ‘to stitch/bind together’ (Ha. 47)
tug-u ‘to join two things’ → *tugi-aw-as-u* ‘to join two things’ (B. 1516)
tuke-ru ‘to attach/add sth to sth’ → [?]*tuke-aw-ase-ru* ‘to join together, add (some
 vegetable to meat)’ (M. 1874)
- tunag-u* ‘to tie, link’ → *tunagi-aw-ase-ru* ‘to join/tie together’ (M. 1888)
tuzur-u ‘to sew sth together’ → [?]*tuzuri-aw-ase-ru* ‘to sew sth together’ (B. 1544)
yor-u ‘to twist (thread, etc.)’ → *yori-aw-ase-ru* ‘to twist together (as threads)’
 (B. 1642; Ko.1. 243).

6.2.2.1.2 Group B. Verbs of bringing things into contact. In this group most of the base verbs are two-place transitives most of which do not denote joining, i.e. they are not lexical reciprocals (with one exception). The derivatives acquire the meaning of joining due to the suffix *-aw-ase*. They presuppose two objects or a mass object. Here is a list of these verbs:

- (58) *buttuke-ru* ‘dash against, collide with’ → *buttuke-aw-ase-ru* ‘to make collide’ (HN)
kosur-u ‘to rub’ → *kosuri-aw-ase-ru* ‘to rub sth against each other’ (Ha. 47)
nuk-u ‘to draw/pull sth out’ → [?]*nuki-aw-ase-ru* ‘to draw and cross swords’ (B. 1047)
sur-u ‘to rub’ → *suri-aw-ase-ru* ‘to rub one’s hands together’ (Ha. 51)
tor-u ‘to take’ → [?]*tori-aw-ase-ru* ‘to take and put together, combine, mix together’
 (B. 1497)

- tume-ru* ‘to pack, shorten’ → *tume-aw-ase-ru* ‘to pack an assortment, to assort’ (M. 1884)
ut-u ‘to beat’ → *uti-aw-ase-ru* ‘strike sth against sth’ (Ha. 47); cf. (53d).

6.2.2.2 Derivatives with the meaning of non-physical, mostly “mental” joining. Two subgroups are also distinguished here of which the first is semantically homogeneous and the second is rather mixed.

6.2.2.2.1 Group C. Verbs of comparison. This group subsumes three-place derivatives with the meaning named. Note that comparison is one of the meanings of the verb *aw-ase-ru*. (see 7) in (52b)). Most of the base verbs do not have this meaning and most of them are two-place transitives, with the exception of the three-place *kurabe-ru* ‘to compare’ which is synonymous both to *aw-ase* and also to the derivative in *-aw*, namely *kurabe-a-u*. Here is a list of these verbs:

- (59) *hik-u* ‘to pull, etc.’ → [?]*hiki-aw-ase-ru* i. ‘to compare’, ii. ‘to introduce’ (B. 338)
kangae-ru ‘to consider sth’ → *kangae-aw-ase-ru* ‘to take sth into consideration with sth’ (M. 708)
kurabe-ru ‘to compare’ → *kurabe-aw-ase-ru* ‘to compare with each other’ (Na)
mi-ru ‘to see, look’(vi) → [?]*mi-aw-as-u* /*mi-aw-ase-ru* ‘to compare with’ (B. 916); currently used in the meanings i. ‘to postpone’, ii. ‘to exchange glances’ (Y. Takahashi, M. Matsumoto, etc., p.c.)
niram-u ‘to glare, estimate, suspect (sb of a crime)’ → *nirami-aw-ase-ru* ‘to take sth for comparison’ (M.1235)
omo-u ‘to think’ → [?]*omoi-aw-as-u* (vi) ‘to call to mind (as some previous event by the association of the present case)’ (B. 1079); ‘consider by comparing sth’ (Ha. 48)
teras-u i. ‘to illuminate’, ii. ‘to compare sb/sth with sb/sth’ → *terasi-aw-ase-ru* ‘to examine sth by comparing it with sth’ (B. 1469)
ter-u ‘to shine’ → ^{*}*teri-aw-ase-ru* ‘to compare’ (Ha. 48)
tuk-u ‘to stick. attach’ → *tuki-aw-as-u*/*tuki-aw-ase-ru* ‘compare/collate’ (M. 1876) cf. (53a)
yom-u ‘to read’ → *yomi-aw-ase-ru* ‘to read out and collate (one copy with another)’ (M. 199) (see also (26c)).

6.2.2.2.2 Group D. Verbs of adjusting, compensating, etc. This mixed group comprises mostly three-place derived verbs with various meanings, such as coming to an agreement, achieving consensus, fitting, arranging, following a pattern, compensating, involving two homogeneous objects, etc., i.e. meanings on the periphery of reciprocity. The base verbs are mostly two-place transitives.

- (60) *dak-u* ‘to embrace, hold in one’s arms’ → *daki-aw-ase-ru* ‘to sell good and bad goods together / at the same time’ (Ha. 46)
ire-ru ‘to pay in’ → *ire-aw-ase-ru* ‘to compensate, pay off’ (Ha. 48)
kake-ru ‘to multiply’ → *kake-aw-ase-ru* i. ‘multiply’, ii. ‘cross/breed (with)’ (M.679)
kak-u ‘to scratch sth’, ‘to gather’ → *kaki-aw-as-u* ‘to adjust, put in order (as one’s clothes)’ (B. 548)

- kur-u* 'to roll up/over' → *kuri-aw-ase-ru* 'to manage or adjust one's business so as to get time for sth else' (B. 794).
- ku-u* 'to eat' → **kui-aw-ase-ru* i. 'to eat two things at the same time' (B. 781)
 ii. 'to fit (two things) into each other' (M. 973)
- matur-u* (vi) 'to worship (as a God), deify' → **maturi-aw-ase-ru* 'to worship (two or more deities) together' (HN)
- moos-u* 'to speak' → *moosi-aw-ase-ru* 'to settle/arrange sth' (Ha. 48)
- mor-u* 'to serve, dish up' → **mori-aw-ase-ru* 'to dish up sth together' (Ha. 47)
- simes-u* 'to show', 'point out', 'inform' → *simesi-aw-ase-ru* 'to collude', 'to preconcert' (M. 1539), 'to coordinate sth with sb', 'to arrange things' (Ha. 48)
- tak-u* 'to cook' → *taki-aw-ase-ru* 'to cook different ingredients' (M. Shibatani, p.c.)
- tat-u* 'to cut off, divide' → *tati-aw-ase-ru* 'to cut out precisely according to a pattern' (Ha. 48)
- tur-u* 'to hang up' → *turi-aw-ase-ru* 'to (counter)balance' (Ha. 48)
- ume-ru* 'to fill up', 'make (amends) for' → *ume-aw-ase-ru* 'to compensate' (B. 1563)
- ut-u* 'to beat/hit' → *uti-aw-ase-ru* 'to (counter)balance, compensate' (Ha. 48).

It seems that in these four groups of derivatives the same tendency was beginning to develop as the one attested in a number of Turkic languages, namely, morphological reciprocal-causative marking of three-place verbs with symmetrical (or quasi-symmetrical) objects. This tendency was probably active at some time in the past, as is shown by the formation of *nui-aw-as-u* 'to sew two things together' immediately from *nu-u* 'to sew sth' (note that this action usually involves joining parts into a whole): in this case it is difficult to imagine a reciprocal **nui-a-u*; in other words, by the time of the derivation of *nui-aw-as-u* it was perceived as a single semantic whole (*nui-awa-se-ru* may also be regarded as a compounding of two verbs, *nu-u* 'to sew' and *awa-se-ru* 'to join, match sth'; M Shibatani, p.c.). This is probably supported also by the replacement of *teras-u* 'to compare sb/sth with sb/sth' (it is registered in the dictionaries but the informants do not know it) by *terasi-aw-ase-ru* with the same meaning. The intermediate form **terasi-a-u* is not registered in the dictionaries either.

A curious detail: the reciprocal suffix loses its reciprocity and does not essentially change the meaning of the base verb when affixed on the verb meaning 'to think' not only in Japanese, as in

- (61) *omo-u* 'to think' → **omoi-aw-as-u* 'to call to mind' (see (59)),

but also, for instance, in Karachay-Balkar (Nedjalkov & Nedjalkov, Ch. 24, ex. (110)):

- (62) *ojla-* 'to think, ponder' → *ojla-n-* 'to fall to thinking' → *ojla-n-əš-* (same).

An even closer parallel is attested in Kirghiz where the reciprocal (-*əš-/uš*) and the causative (-*tur*) suffixes are affixed simultaneously without adding the reciprocal and the causative meanings (Nedjalkov, Ch. 28, §10.2):

- (63) *ojlo-* 'to think, ponder' → *ojlo-n-* 'to fall to thinking' → *ojlo-n-uš-tur-* 'to think'; cf. also *ojlo-š-* i. 'to think', ii. 'to change one's mind' (-*n* = REFL).

The associative link between a reciprocal marker, or a reciprocal and a causative marker, and a verb with the meaning 'to think' is not clear, but its occurrence in genetically unrelated languages makes it typologically relevant. Incidentally, the following Japanese case probably belongs here as well:

- (64) *hakar-u* (vt) 'to think about, consider, reflect upon ...' → *hakar-a-u* (vt) (same; B. 281); cf. also semantically close derivatives in (51d, e, f).

6.3 Subject-oriented reciprocals

Subject-oriented constructions are based almost exclusively on intransitive (two- or one-place) verbs. Two semantic groups can be distinguished.

6.3.1 Group E. Derivatives with the reciprocal meaning

Here is an example followed by a list of derivatives which includes a number of lexicalized reciprocals (some are non-reciprocal in meaning):

- (65) a. *Onna futari ga kao o mi-aw-ase-te warat-ta.* (MK. 58)
 woman two.persons NOM face ACC look-REC-CAUS-CONV laugh-PAST
 'The two women looked at each other and laughed.'
 lit. 'The two women caused (their) faces to look at each other.'
- b. *i-u* 'to speak/say' → *ii-aw-ase-ru* (vt) 'to discuss sth with each other' (Ha.48),
 'to make a previous agreement' (M.517)
mat-u 'to wait' → *mati-aw-ase-ru* 'to wait for the coming of another, for each other by appointment' (B. 859), 'to make an appointment' (Ha. 51)
moos-u 'to say' (humble) → *moosi-aw-ase-ru* 'to agree, consent or unite together' (B. 959)
mi-ru 'to see, look' → *mi-aw-ase-ru* i. 'to exchange glances' (B. 916) (cf. (59))
 ii. 'to put sth off, postpone sth' (M.1087)
saso-u 'to invite' → *sasoi-aw-ase-ru* 'to invite each other' (Ka.)
yose-ru 'to gather sth/sb' (← *yo-ru* 'to gather' (vi)) → *yose-aw-ase-ru* i. 'to gather in a certain place', ii. 'to love each other clandestinely' (Na).

6.3.2 Derivatives with the meaning of unexpectedness

6.3.2.1 Group F. Verbs with the suffix *-aw-ase*. Himeno (1982:52) defines this meaning as 'to do together at the same time'. In fact, these verbs denote either motion (e.g. 'to travel', 'to ride', 'to come', 'to pass by') or location or position (e.g. 'to sit', 'to be', 'to stay'), a few verbs with other meanings being close to these verbs (e.g. 'to have', 'to be born'). The derivatives acquire the meaning of unexpectedness ('happen' and 'by chance' in the translations). Its relatedness to the meaning of joining may be discerned in the implication of encounter (in a broad sense) in most of these derivatives. An example and a list of relevant derivatives follow:

- (66) a. *Hikooki no naka de, guuzen nori-aw-ase-ta.* (MK. 65)
 plane GEN inside LOC by.chance travel-REC-CAUS-PAST
 '[They] travelled by chance in the same plane.'

- b. *ar-u* 'to be/have' → **ari-aw-as-u* 'to happen to be/have' (*ari-a-u* (same)) (B. 38)
ik-u 'to go' → ?(*i*)*ki-aw-ase-ru* 'to happen to come/be present' (B. 655)
i-ru 'to be' → *i-aw-ase-ru* 'to happen/chance to be (present)' (M. 504)
mot-u 'to possess/have/hold' → ?*moti-aw-ase-ru* i. 'to happen to have'
 ii. 'to have ready at hand' (B. 943)
nor-u 'to take a ride (in a train, car, etc.)' → *nori-aw-ase-ru* 'to happen to ride in the same train, car, etc.' (M. 1251)
suwar-u 'sit on a quilt' → ?*suwari-aw-ase-ru* 'happen to sit next to each other' (HN)
tomar-u 'to stop at a hotel' → ?*tomari-aw-ase-ru* 'stop/stay/happen to put up at same hotel' (M. 1821)
tonar-u 'to lie next to' → *tonari-aw-ase-ru* 'to happen to sit next to each other' (Ha. 49)
toor-u 'to pass by' → ?*toori-aw-ase-ru* 'to happen to pass/come by' (M. 1838)
umare-ru 'to be born' → **umare-aw-ase-ru* i. 'to be born together in one family' (B. 1561), ii. 'to be born under a lucky star' (M. 1915).

6.3.2.2 *Group G. Verbs with the suffix -aw.* The meaning of unexpectedness in derivatives in *-aw-ase* cannot be semantically related to the causative suffix because there is a group of verbs with the same general meaning of unexpectedness but with *-aw* alone, most of these verbs being derived from the same roots (the meaning of unexpectedness is probably descended from the lexical meaning of the verb *a-u* 'to meet' which generally implies an unplanned, unexpected event). Many of these verbs have been ousted by the respective verbs with the causative suffix. As mentioned above, this is possibly due to the fact that most of the verbs in *-aw-ase* denote joining, and the meaning of being present or meeting with someone can also be interpreted as a kind of joining, though unintentional (the derivatives *tati-a-u* and *oti-a-u* are an exception). Following is a list of these verbs borrowed from Hasselberg (1996:45) who defines their meaning as "V₁ + f (zufällig) gerade auch (dort)", i.e. "(accidentally), just + Verb (without *-aw*) + as well (there)". The definitions in (67) are our translations from German, and the comments in square brackets have been suggested by M. Shibatani (p.c.). The asterisk and the question mark in the lists below (including words in square brackets) reflect the (sometimes) more liberal evaluations of Y. Takahashi, M. Matsumoto, Y. Yamakoshi, T. Takada and Y. Nagayama.

In the list of derivatives in *-aw-ase* under (66b), three subgroups can be distinguished:

- (67) a. Verbs with *-aw* which are ousted by verbs in *-aw-ase* (some of the latter sound "old-fashioned" as well, or they are used in set phrases, especially as attributes)
- **ari-a-u* 'to happen to be there, happen to be handy, happen to be also there' [only **ari-aw-ase-ru* is used instead, usually as an attribute; cf. *ari-aw-ase no mono o tabe-ru* 'to eat what happens to be available']
 - **i-a-u* 'to be/exist next to/along with each other' [only ?*i-aw-ase-ru* is used; cf. *soko ni i-aw-ase-ta* '(we) happen to be there']
 - iki-a-u* 'to meet by chance, come upon by chance' [only *iki-aw-ase-ru* is used]
 - kati-a-u* 'to appear at the same time by accident' [only *kati-aw-ase-ru* is used]
 - nori-a-u* 'travel by the same means of transportation' [only *nori-aw-ase-ru* is used]
 - yuki-a-u* 'to meet by accident while travelling, come across by chance' [the *yuki-aw-ase-ru* form is the norm, though this itself is a bit old-fashioned].

b. Verbs in *-aw* which are not ousted by *-aw-ase* forms:

**deki-a-u* 'to (happen to) come into existence at the same time' [used only in the nominal form as an attribute: *deki-a-i no huku* 'ready-made clothes']

meguri-a-u 'to come across sb by chance, meet by accident' [is used as such along with *meguri-aw-ase-ru*, the latter emphasizing a chance encounter]

oti-a-u 'to meet' [an intentional action]

tati-a-u 'to be present as an eyewitness, be present' [is used regularly but it indicates intentional participation, i.e. it does not contain the sense 'by accident'].

c. Verbs in *-aw* that have gone out of use without replacement by synonymous *-aw-ase* verbs:

?*sonzaisi-a-u* 'to exist in the same place at the same time'

**omoi-a-u* 'also to think by chance' (in Modern Japanese this form has only one meaning 'to love each other').

6.4 Deverbal nouns

Some of the verbal derivatives with the suffix *-aw-ase* are much less frequently used (if at all) than the nouns derived from them. Some of the latter "sound better" than the verbs; cf.

1) *tuke-aw-ase-ru* 'to join together, add (some vegetables to meat)' (57) and the respective noun *tuke-aw-ase*;

2) *tori-aw-ase-ru* 'to take and put together, combine, mix together' (58) and the noun *tori-aw-ase*;

3) *tume-aw-ase-ru* 'to pack an assortment, to assort' (58) and the noun *tume-aw-ase*;

4) *kui-aw-ase-ru* 'to eat two things at the same time' (60) and the noun *kui-aw-ase*;

5) *mori-aw-ase-ru* 'to dish up sth together' (60) and the noun *mori-aw-ase*;

6) *taki-aw-ase-ru* 'to cook different ingredients together' (60) and the noun *taki-aw-ase*;

7) **ari-aw-asu* 'to happen to be/have' (66b) and the noun *ari-aw-ase*;

8) **moti-aw-ase-ru* i. 'to happen to have', ii. 'to have ready at hand' (66b) and the noun *moti-aw-ase*.

7. Lexicalization

There is a fair number of lexicalized reciprocals with the suffix *-aw*, i.e. lexicalized reciprocals proper. These forms are registered in dictionaries as separate items. Most of them are derived from transitive verbs. Lexicalized meanings are mostly reciprocal (some derivatives may retain the standard reciprocal meaning alongside the lexicalized reciprocal meaning). The typical meanings are 'to compete', 'to argue', 'to meet', 'to come to an agreement', 'to fight', etc. The speakers do not connect some of these reciprocals with their base verbs (which is witnessed by the fact that different characters are used for them, e.g. for *kataru* vs. *katarau* or *tataku* vs. *tatakau*). Here is a list of these verbs (as mentioned above, most of the verbs in *-aw-ase* discussed in Section 6 are lexicalized and can be added to this

list). If we take into account the case frames of lexicalized reciprocals, at least four groups can be distinguished (we owe this information to M. Shibatani and F. Endoo).

1. Two-place intransitives with the case frames *A to B ga* or *A ga B to*:

- (68) *ayum-u* 'to go, walk' → **ayumi-a-u* 'to compromise, concede to each other' (B. 53)
der-u 'to go out, issue forth' → *de-a-u* i. 'to meet (with)', ii. 'to agree' (B. 167)
hanas-u 'to speak' → *hanasi-a-u* i. 'to speak together', ii. 'consult together'
har-u i. 'to spread/strain', ii. 'to rival' → *hari-a-u* 'to rival/compete'
i-u 'to say, speak, tell' → *ii-a-u* 'to dispute with each other' (B. 414)
kake-ru i. 'to hang', ii. 'to bet' → *kake-a-u* 'to communicate on business' (B.544)
kam-u 'to bite' → *kami-a-u* 'to be harmonious'
kane-ru i. 'to combine', ii. 'to substitute' → *kane-a-u* 'to balance'
katar-u 'to talk, speak, tell' → *katar-a-u* arch. i. 'to talk together, confer with', ii. 'to promise or agree' (B. 607) (cf. the regular derivative *katari-a-u* 'talk, speak with each other')
megur-u 'to go round' → *meguri-a-u* 'to meet by chance'
nagur-u 'to hit' → *naguri-a-u* i. 'to hit each other', ii. 'to fight'
nare-ru i. 'to be accustomed', ii. 'to become familiar' → *nare-a-u* 'to conspire together' (B. 1005)
os-u 'to push' → *osi-a-u* i. 'to push each other', ii. 'to throng'
sas-u (obs.) 'to point out, indicate' → **sasi-a-u* i. (obs.) 'to meet together', ii. 'to obstruct each other' (B. 1190)
tatak-u 'to hit, stab' → *tatak-a-u* 'to struggle' (cf. the regular derivative *tataki-a-u* 'to hit, stab each other')
toke-ru 'to melt', 'to dissolve' (vi) → *toke-a-u* 'to be reconciled to each other', 'to come to mutual understanding, harmonize' (B. 1483)
tug-u i. 'to join sth', ii. 'to follow' → *tug-a-u* 'to copulate (of animals)' (B. 1516)
tuk-u 'to stick/adhere' → *tuki-a-u* 'to associate/keep company with sb'
yar-u 'to do sth' → *yari-a-u* 'to quarrel'
yuzur-u i. 'give up', ii. 'sell' → *yuzuri-a-u* 'compromise, settle a dispute' (B. 1666);
mom-u 'to crumple, rumple, jumble together' → *momi-a-u* 'to contend/struggle together (as in fighting or wrestling)' (B. 950).

2. Two-place intransitives with the case frame *A ga B to* only:

- (69) *kakawar-u* 'to be involved' → *kakawari-a-u* 'to be involved'
or-u 'to break sth' → *ori-a-u* i. 'to be on good terms with sb'
 ii. 'to come to an agreement.'

3. Two-place intransitives with the case frame *A ga B ni*:

- (70) *mi-ru* 'to see, look' → *mi-a-u* 'to counterbalance each other' (M. 1087)
ni-ru 'to be like sb, resemble' → *ni-a-u* 'to be suitable' (M. 1219)
sakar-u 'to be apart' → *sakar-a-u* 'to go against, oppose' (B. 1163).

4. Three-place transitives with the case frame *[A to] B ga C o* or *A ga [B to] C o*:

- (71) *das-u* 'to pay out/for sth' → *dasi-a-u* 'to split the bill'
mot-u 'to have' → *moti-a-u* 'to split the bill'
uke-ru i. 'to rent', ii. 'to redeem' → *uke-a-u* 'to contract' (B. 1557).

Sentential examples:

- (72) a. *Inu ga tug-at-ta* (B. 1516) 'The dogs have coupled.'
 b. ... *Sooiu sensei ni wa, meguri-at-ta koto nai desu.* (H. 264)
 such teacher DAT TOP encounter-REC-PAST fact not COP
 '... [I] never did meet the kind of teacher [you say].'

As is seen from the latter example, some verbs of group 1 can also have the case frame of group 3. Our informants say that example (72b) is correct, and the marker *ni* is also possible instead of *to*. Himeno (1982:26) asserts that the marker *ni* is used only if a construction with a verb in *-aw* has a reciprocal (not sociative) meaning and the actions of two participants are simultaneous.

The meaning of intensivity is represented by a single example registered in a dictionary which is nevertheless accepted by a number of informants, who noted that the derivative implies greater density of the plants and greater surface:

- (73) a. *siger-u* (vi) 'to grow in profusion'
 b. *sigeri-a-u* (vi) 'to cover all the surface abundantly (of plants)' (Ko. 2, 72).

Note that verbal nouns with the suffix *-i* are generally formed from lexical and lexicalized reciprocals; cf.:

- (74) *hanasi-a-u* 'to discuss' → *hanasi-a-i* 'discussion, negotiation'
hari-a-u 'to rival/compete' → *hari-a-i* 'rivalry/competition'
kane-a-u 'to balance' → *kane-a-i* 'balance, equilibrium'
meguri-a-u 'to meet by chance' → *meguri-a-i* 'chance meeting'
ori-a-u 'to be on good terms with sb' → *ori-a-i* 'interrelations'
toke-a-u 'to come to an agreement' → *toke-a-i* 'compromise.'

By way of overstepping the boundaries of lexicalization proper, we might as well mention the following. The noun *si-a-i* 'competition, contest, fight' is possibly derived immediately from the verb *su-ru* 'to do' without an intermediate reciprocal **si-a-u* 'to compete' (the latter verb is not registered in the dictionaries and it is rejected by the informants).

8. *Reciproca tantum*

If we identify the final *-a* as a historically reciprocal suffix on the verbs in (75), they can be regarded as *reciproca tantum*, because they do not have base forms without this component (or they are archaic and gone out of use, as, for instance, *semeg-u* 'to quarrel,' 'to fight', *tonar-u* 'to adjoin, lie next to'). In some cases, a tendency to pleonastically mark lexical reciprocals seems to be at play. This is particularly obvious in the derivative *muk-a-u* 'to be facing sb/sth' which retains the main meaning of the base verb *muk-u* (see (54b)). Attribution of some verbs to the class of *reciproca tantum* is not self-evident, i.e. the final

-a may be a part of the root (in this case these verbs should be placed in Section 11, among lexical reciprocals proper). Moreover, the meaning of some of the verbs cannot be regarded as reciprocal proper but as peripheral (characteristic meanings are those of response actions (cf. ‘to condole’ < ‘to die, etc.’) or, on the contrary, actions implying a response action (cf. ‘to inquire’ > ‘to answer’). When compiling the list below, we took into account the fact that in some languages these meanings are expressed by *reciproca tantum* or by lexicalized reciprocals. The relevant verbs have the following case frames:

(a) *A to B ga* or *A ga B to*

- (75) a. **aibia-u* ‘to compromise, yield mutually in settling a transaction’ (B. 9)
 **araga-u* ‘to dispute, contend with, resist’ (B. 35)
 **isaka-u* ‘to quarrel, wrangle, dispute’ (B. 45)
semegia-u ‘to struggle’
tiga-u (= *taga-u*) i. ‘to be different from sb/sth’, ii. ‘be mistaken’, iii. ‘to cross, pass by’,
 iv. (vt!) ‘to put things cross-wise’ (B. 111, M. 1699).

(b) *A ga B ni*

- b. *kana-u* ‘to match’, ‘to be equal’, ‘to rival’ (M. 702)
maga-u ‘to resemble, be similar to’ (M. 1140)
muka-u ‘to stand opposite to’ (M. 1546)
nara-u ‘to imitate sb’ (M. 1192)
tekita-u ‘to be hostile, contend, fight with’ (B. 1459);
tonaria-u ‘to be next to each other’ (M.1832).

(c) *A ga [B to] C o*

- c. *agana-u* ‘to buy (back)’ (B. 6)
akina-u ‘to drive commerce, to trade, to buy and sell’ (B. 20)
 **asana-u* ‘to twist (a rope)’ (B. 53)
 **mika-u* ‘to change one favorite for another’ (B. 921)
mima-u ‘to inquire (after sb’s health), condole’ (B. 924)
na-u ‘to twist (together), twine’ (M. 1201)
ogina-u ‘to compensate’ (cf. *oginai-a-u* ‘to complement each other’ (Hi. 41))
tika-u ‘to make an oath’ (B. 116)
tomura-u ‘to mourn (over a person’s death), condole’ (M. 1831)
tuguna-u ‘to compensate, repay’ (B. 1517)
ukuna-u ‘to ask, inquire’ (B. 1555).

9. Reciprocals with the archaic prefix *a-i-* (< *aw-*)

9.1 Introductory

The meaning of this prefix is defined as ‘mutually, each other’ (B. 9). Formations with this prefix may be regarded as a failed attempt of Japanese to create at least one derivational verbal prefix (though by origin it is a deverbal noun with the suffix *-i* (cf. (74)), which makes these formations compounds by origin). Most Japanese prefixes are affixed

to nouns and only the honorific prefix *o-* also attaches to verbs, though in the adverbial or infinitival form only (Shibatani 1990:218). It is typologically significant that in the case of success the prefix *ai-* would have been reciprocal (as it happens, the only prefix proper in Nivkh (Gilyak) and the only infix in Mundari are reciprocal in meaning). In Modern Japanese the prefix *ai-* is absolutely unproductive. Moreover, most Japanese do not understand most of the formations with it, both verbs and nouns (and sometimes even their base verbs) though they are registered in the dictionaries. Most of them are archaic and even obsolete, and additional marking with an asterisk is redundant. Bookishness is mostly characteristic of verbs in *ai-*, while nouns and adverbs are not infrequently neutral, cf. *ai-te* ‘mate, fellow’, *ai-kawarazu* ‘as usual’. Nevertheless, we shall list below most of these formations because they are of interest typologically. It may be useful to give an idea of the lexical range of these derivatives. But this prefix is used not only to express the reciprocal meaning: it is sometimes used for stylistic purposes, to make the words sound bookish, or formal, or archaic, or “important”. Thus, for instance, in the dictionary the verb *ai-nar-u* ‘to become’ (← *nar-u* ‘to become’) is defined as “the emphatic form of “*nar-i*”, “*ai*” having no special meaning. This form is invariably used in epistolary writings or on the stage; but not in conversation” (see B. 11). Compare also: “This word is often used as a meaningless prefix to verbs, especially in epistolary writings: *Ai ukagai* ‘enquiry’, *Ai motome* ‘request’” (B. 9).

9.2 Verbs

It is a very interesting case when genetically related and semantically similar affixes are used as suffixes and prefixes. As mentioned above, the prefix *ai-* is retained in a limited number of verbs. Some derivatives in *ai-* have synonymous forms with the suffix *-a-*; cf.:

- (76) a. *ham-u* arch. ‘to eat, devour’ → *ai-ham-u* ‘to devour each other’ (Ko.1. 11)
suku-u ‘to save, help’ → *ai-suku-u* ‘to save, help each other’ (Ko.1. 11)
- b. *koros-u* ‘to kill’ → *ai-koros-u* ‘to kill each other’ (Ko.1. 9), *korosi-a-u* (same)
omo-u ‘to love’ → *ai-omo-u* ‘to love each other’ (B. 9), *omoi-a-u* (same)
muka-u ‘to stand opposite’ → *ai-muka-u* ‘to face each other’ (R. 104), *mukai-a-u* (same) (M. 1146) *sinzi-ru* ‘to trust’ → *ai-sinzi-ru* ‘to trust each other’ (M. 7),
sinzi-a-u (same)
tuguna-u ‘to compensate’ → *ai-tuguna-u* ‘compensate to each other’ (Ko.1. 11),
tugunai-a-u (same)
yorokob-u ‘to rejoice’ → *ai-yorokob-u* ‘to share joy’ (M. 7), *yorokobi-a-u* (same)
kasanar-u ‘to put sth upon sth’ → *ai-kasanar-u* ‘to be piled on top of each other’
(Ko.1. 8), *kasanari-a-u* ‘to be piled on top of each other’ (Ko.1. 366).

The underlying verbs are often lexical reciprocals (cf. *A faces B = B faces A*) or converses (cf. *A succeeds B = B follows A*). In the first case the prefix *-ai-* occurs sometimes pleonastically (or as an intensifier?); see (77b).

- (77) a. *hansu-ru* ‘to oppose’ → *ai-hansu-ru* ‘be contrary to each other’ (M. 8; Ko.1. 8)
mat-u ‘to depend on’ → *ai-mat-u* arch. ‘to be interdependent’ (Ko.1. 9)
sar-u ‘to be apart from sb’ → *ai-sar-u* ‘to be/stand apart from each other’ (B. 9)

- taisur-u* ‘to face’ → *ai-taisur-u* ‘to face each other’ (M. 11)
tug-u ‘to succeed’ → *ai-tug-u* ‘to succeed one another’ (M. 12)
toozakar-u ‘separate/get detached from sb’ → *ai-toozakar-u* ‘to avoid each other’
 (Ko.1. 9);
- b. *Karera wa araso-u / ai-araso-u* ‘They argue with each other’
Karera wa hakutyuusuu-ru/ ai-hakutyuusuu-ru ‘They equal each other in strength’
Karera wa maziwar-u / ai-maziwar-u ‘They keep company with each other’
Karera wa tomona-u / ai-tomona-u ‘They accompany each other’
Kono sen to ano sen wa kono titen de sessu-ru/ai-sessu-ru ‘This line and that line meet
 at this point’ (M. Shibatani, p.c.).

A few more sentential examples:

- (78) a. *Titoku ai-mat-te hazimete kanzen-na zinkaku*
 knowledge.and.virtue REC-depend-CONV for.the.first.time perfect person
ga deki-ru. (M. 10)
 NOM be.possible-NPAST
 ‘Wisdom and virtue are interdependent to make a perfect personality.’
- b. *Kondo no siai de wa A to B ga ai-taisuru koto ni*
 next GEN competition in TOP A and B NOM REC-oppose that ADV
nat-ta.
 became
 ‘It turned out that A and B are to oppose [each other] in the next competition.’
 (M. Shibatani, p.c.)

9.3 Nouns

In some cases the prefix is probably fused with the root. Four semantic groups of nouns can be distinguished. Among the formations below the majority are rejected by most of our informants as archaic or incomprehensible.

1. Nouns with the reciprocal meaning proper (animate participants are implied):

- (79) *ba* ‘place, surface’ → **ai-ba* ‘a joint surface’ (M. 7)
dootjaku ‘contradiction’ → *ai-dootjaku* ‘contradiction’ (Ko.1. 8)
hore-ru ‘to fall in love’ → *?ai-bore* ‘mutual (reciprocal) love’ (M. 7)
**kakusitu* ‘hostility’ → *?ai-kakusitu* ‘mutual hostility’ (Ko.1. 8)
kanren ‘relation, connection’ → *?ai-kanren* ‘interconnection’ (Ko.1. 8)
**ko* ‘?’ → *?ai-ko* i. ‘a tie’, i. ‘a draw, a drawn game’ (M. 9)
koō ‘co-ordination’ → **ai-koō* ‘co-ordination’ (Ko.1.8)
mi-tagai ‘mutual help’ → *?ai-mi-tagai* ‘helping each other’, ‘mutual sympathy’
 (B. 11)
moti ‘share’ → *?ai-moti* ‘mutual share, joint ownership’ (M. 10)
syaku ‘dipper’ → *?ai-syaku* ‘mutual helping (when drinking sake)’, ‘filling
 each other’s cup’ (M. 9)
ut-u ‘to beat’ → *ai-uti* ‘cutting, killing, hitting each other at the same
 time’ (M.12).

2. Nouns denoting joint class membership (mostly of persons):

- (80) *ban* 'guard' → **ai-ban* 'fellow guard'
boo 'stick' → *ai-boo* 'one's pal, partner, mate, fellow' (M. 7)
desi 'pupil, disciple, follower' → **ai-desi* 'a fellow pupil, fellow apprentice' (M. 8)
go 'go (a game like draughts)' → **ai-go* 'go players of equal skill' (M. 8)
kata 'person' → *ai-kata* 'one's girl, partner (for the night)' (M. 9)
kyaku 'guest' → *ai-kyaku* 'a guest who has come at the same time with another' (Ko 1. 9)
muko 'brother-in-law, bridegroom' → **ai-muko* 'the husbands of sisters' (M. 10; B. 11)
te 'hand' → *ai-te* 'companion, mate, fellow; opponent' (M. 11)
yaku 'service, post' → *ai-yaku* 'colleague'
yome 'wife' → **ai-yome* 'the wives of two brothers' (B. 13).

3. Nouns with the sociative meaning:

- (81) *heya* 'room, chamber' → *ai-beya* 'living together in the same room' (B. 9)
hiki 'withdrawing (military)' → ?*ai-biki* 'mutual retreat (withdrawal)' (M. 7)
kasa 'umbrella' → *ai-gasa* 'together under one umbrella' (B. 9)
nori 'riding' → *ai-nori* 'riding in the same carriage' (B. 11)
oi 'growing old, old age' → **ai-oi* 'two growing [old] together' (B. 11)
yado 'flat, apartment' → **ai-yado* 'lodging together' (M. 12)
tuti 'hammer' → **ai-zuti* i. 'hammering together', ii. 'alternate hammering (by two blacksmiths)' (M. 12).

4. Nouns denoting an object in between two entities (close to the reciprocal meaning: if X is situated between A and B it is also between B and A) (*ai-* is rendered here by a different character, however, with the literal meaning 'merging, crossing, meeting'; M. Shibatani, p.c.); in this meaning *ai-* also occurs in final position, e.g. *yama-ai* 'area between mountains' (lit. '(area) crossing mountains'). In some nouns, *ai-* is combined with the genitive marker *no* (see (82b)). In fact, it cannot be regarded as a prefix in this case.

- (82) a. *han* 'typing size' → **ai-ban* 'medium size' (M. 7) (*h > b* – diachronic alternation)
ki-ru 'to wear' → **ai-gi* 'between-season wear' (M. 8)
han 'seal' → **ai-han* 'joint seal' (M. 8)
ko 'child' → *ai-no-ko* 'half blood, half breed, mulatto' (M. 10)
ma 'interval of time/space' → *ai-ma* 'interval (of, in between), interstice' (M. 9)
tai 'contrast, opposition' → **ai-tai* 'between two parties'
- b. *ma* 'room' → *ai-no-ma* 'an intermediate room' (M. 10)
syuku 'post station' → ?*ai-no-syuku* 'a half way town, a half way stop' (M. 10)
te 'hand' → *ai-no-te* 'interlude'.

9.4 Adverbs

The underlying adverbs (there occur forms with the adverbializers *-ni* and *-te*) have a converse or reciprocal meaning. Examples:

- (83) *tagai-ni* 'mutually' → *ai-tagai-ni* (same) (M. 11) arch.
mukai-ni 'on the opposite side' → ?*ai-mukai-ni* 'on opposite sides, 'face to face' (B. 11)
mukat-te 'face to face' → *ai-mukat-te* 'face to face with each other' (Ko1. 9)

<i>tazusae-te</i> ‘carrying in one’s hand’	→	<i>ai-tazusae-te</i> ‘hand in hand’ (Ko1. 10)
<i>tomo-ni</i> ‘together with’	→	<i>ai-tomo-ni</i> (same) (B. 12)
<i>tui-de</i> ‘behind, after, following’	→	<i>ai-tui-de</i> ‘one after another’ (Ko1. 11).
<i>kawara-zu</i> ‘without changing’ (CONV of <i>kawar-u</i> ‘change’ vi)	→	<i>ai-kawarazu</i> ‘as before/as usual’.

10. The noun *otagai* ‘each other’

10.1 Introductory

The word *tagai* ‘each other’ (commonly used with the honorific prefix *o-* which has practically lost this sense; it is more common in colloquial speech, while in the written style, and in dictionary definitions, *tagai* is more common without *o-*) called “reciprocal anaphor” by Nishigauchi (1992:157) is a noun. According to Martin (1988:812), it cannot appear in subject position and thus cannot take the subject marker *ga*, but this definition does not cover embedded sentences. As Nishigauchi (1992:159) claims, “*otagai* is capable of appearing in the subject position of an embedded clause, while *each other* in English is generally excluded in the corresponding position”. In this connection, it may be expedient to quote an example from Jespersen (1924:224) taken from a latest English novel (he notes that such sentences are to be found in Danish, too):

(84) *Miss C. and I are going to find out what each other are like.*

‘Miss C. and I each are going to find out what the other is like’, i.e. ‘Miss C. is going to find out what I am like and I am going to find out what Miss C. is like.’

In this interpretation, *each other* is distributive in meaning (and it doubles the number of the participants of the base situation).

The noun *otagai* may appear with the marker *ga* in the distributive meaning in embedded clauses only. The other forms may render this meaning along with the reciprocal one (a similar situation is attested in Tuva with regard to the pronoun *bot-bot-tara* which may render the meaning ‘each other’ and also ‘each (separately)’, ‘respectively’; see Kuular, Ch. 27, §4.1.1). This word cannot precede the subject (Kholodovich 1978:11). It appears in the following main forms:

(a) *otagai o* ‘each other’ where *o* is a direct object marker – with transitive verbs including suffixed reciprocals from transitives (see 10.3.1.1);

(b) *otagai ni* where *ni* is an indirect object marker (with the meaning ‘to each other’ and the like’) – with intransitive and transitive verbs (in the examples, *ni* is spelt separately, like other case markers);

(c) *otagai-ni* – in this spelling the form functions as an adverbial with the meaning ‘mutually’, ‘reciprocally’; in contrast to *otagai ni* under b), the use of *ni* here is not dependent on the case frame of the predicate; therefore it is hyphenated; here the particle *ni* serves as an adverbializer (*otagai* may be used as a truncated form of *otagai-ni*);

(d) *otagai no* – as an attributive reciprocal-possessive form meaning ‘each other’s’;

(e) *otagai ga* – as subject of an embedded clause (cf. 10.2.6).

The noun *otagai* does not seem to occur with other case markers.

M. Shibatani (p.c.) has drawn our attention to the fact that native speakers are unlikely to understand *ni* as the dative marker and they see *otagai ni* as an adverbial in all its usages (note that *ni* serves both as a dative and an adverb marker). We agree with this, but for technical reasons we retain separate spelling, i.e. *otagai ni*, for the cases where it corresponds to the dative argument of the underlying construction (cf. 10.2.1.2 and 10.2.3.1), and we hyphenate it as *otagai-ni* when this condition is not observed.

10.2 The noun *otagai* with non-reciprocal verbs

In those functions in which the suffix *-aw* is used this noun occurs less commonly, but, as mentioned above, it has its own specific functions in which the two markers do not compete. The different forms of *otagai* are distributed among the diathesis types of reciprocal constructions as follows (*otagai* generally inherits the case form of the noun it replaces):

1. “Canonical” constructions: (a) with two-place transitives – *otagai o*;
(b) with two-place intransitives – *otagai ni*;
2. “Indirect” constructions: – *otagai ni*;
3. “Possessive” constructions: – *otagai no*.

Combinability of these forms with non-reciprocal verbs is restricted but the conditioning factors are not clear, and sometimes the informants reject some combinations. Sometimes this seems to be due to the existence or absence of a commonly used suffixed reciprocal counterpart. Thus combinability of *otagai* differs considerably from the English reciprocal pronoun *each*.

The three forms in question differ in the meanings they may express:

a. The form *otagai o* is always unambiguously reciprocal in meaning; this meaning is also expressed by *otagai ni* in combination with two-place intransitives (see 10.2.1.2).

b. The form *otagai ni* with three-place transitives may render the reciprocal meaning ‘to each other’ or the distributive meaning ‘each (of the subject referents) to someone else’ (see 10.2.3.1).

c. The form *otagai no* with two-place transitives may convey the reciprocal meaning ‘each other’s’ (hand, etc) and the distributive meanings ‘each ... his/her own’ (hand, etc.) and ‘each ... someone else’s’ (hand, etc.) (see 10.2.3.2).

10.2.1 “Canonical” constructions

Most of the examples at our disposal are of “canonical” reciprocal constructions.

10.2.1.1 *With two-place transitives.* The form *otagai o* (with the direct object marker) is used with these verbs (see also (1d)). Though constructions of this type are formed with greater ease than with *otagai ni*, not all the sentences are equally acceptable to the informants. The sentences in (85) are approved by the informants, (86) is marginally possible, and (87) is “not good”.

1. The collocations are “fine”; there is no corresponding *-aw* form (some forms in *-aw* registered in dictionaries are out of use, not common):

- (85) a. [*Karera wa*] *otagai o mi-te-i-nai desu kara ne.* (H. 263)
 they TOP each.other ACC look-CONT-be-NEG COP since EMPH
 ‘[They] are not looking at each other.’
 b. *Karera wa otagai o mat-u.*
 ‘They wait for each other.’
 c. *Karera wa otagai o aitedor-u.*
 ‘They treat each other as opponents.’

2. The collocation is “fine”; there is a parallel form in *-aw* (this group also includes combinations with the verbs *hakaru-u* ‘to weigh’, *tazuner-u* ‘to visit’, *syukusu-ru* ‘to congratulate’, *aisu-ru* ‘to love’, *kowagar-u* ‘to be afraid’, *sir-u* ‘to know’, etc.):

- d. *Taroo to Akiko wa otagai o rikaisu-ru.* (M. 719)
 ‘Taro and Akiko understand each other.’

3. The collocation is marginally possible, “not very good” (here also belong combinations with the verbs *ikikisu-ru* ‘to visit’, *okos-u* ‘to wake up’, *oikake-ru* ‘to chase’, *naguritaos-u* ‘to knock down’, *keriage-ru* ‘to kick up’, *dak-u* ‘to embrace’, *nagur-u* ‘to hit, beat’, etc.):

- (86) *Karera wa otagai o dak-u.* ‘They embrace each other.’

4. The collocation is “bad”:

- (87) *Karera wa otagai o ker-u.* ‘They kick each other.’

10.2.1.2 *With two-place intransitives.* The form *otagai ni* corresponding to the underlying dative object marker is used here. The following is an example with an underlying dative object. Like the previous case, this type cannot be formed from all the relevant verbs. The conditioning factors are not quite clear either: some collocations are “fine” (see (88)) or (marginally) acceptable and, as the informants say, not as good as with the reciprocal suffix (with or without *otagai ni*; see (89)); (90) is assessed as “not good” though intelligible.

1. “Fine” collocation:

- (88) *Karera wa otagai ni tikazui-ta.* ‘They approached each other.’

2. (Marginally) acceptable to one of our informants only (here also belong *tayor-u* ‘to depend’, *aisatusu-ru* ‘to greet’, *kansyasu-ru* ‘to thank’, *motare-ru* ‘to lean against’, *tobikakar-u* ‘to attack’ (*tobikakari-a-u* is “not good” either), *oituk-u* ‘to catch up with’, etc.):

- (89) *Tagai ni ozigisu-ru.* (M. 1699)
 each.other DAT bow-NPAST
 ‘[They] bow to each other.’

3. “Not good”:

- (90) [?]*Karera wa otagai ni muka-u.* ‘They are opposite (to) each other.’

10.2.2 Subject-oriented benefactive reciprocal constructions

They are derived from two-place transitives, i.e. from the same transitives “canonical” reciprocals derive from, and also from two-place transitives with inanimate object (cf. (91a)). Needless to say, benefactive constructions differ from “indirect” ones (see (10.2.3.1) in that the subject is cross-referenced with an optional beneficiary. The object-oriented benefactive construction contains an expression *tame ni* (*tame* ‘reason, sake’) preceded by the name of the beneficiary in the genitive case (see (91b); it is opposed to the subject-oriented benefactive construction with the meaning ‘Father built a house for himself’). In the reciprocal construction, *otagai* is an attribute (with the genitive marker) to a direct object (see (91c)); cf.:

- (91) a. *Titi to musuko wa ie o tate-ta.*
 father and son TOP house ACC build-PAST
 ‘Father and son built a house.’
- b. *Titi wa musuko no tame ni ie o tate-ta.*
 father TOP son GEN for DAT house ACC build-PAST
 ‘Father built a house for his son.’
- c. *Titi to musuko wa otagai no tame ni ie o tate-ta.*
 father and son TOP each.other GEN for DAT house ACC build-PAST
 ‘Father and son built houses for each other.’ (M. Shibatani, p.c.)

Constructions of type (91c) but with a suffixed reciprocal are not used or they are marginal at best (see (91d)). If we omit the bracketed words in (91d), the likeliest reading is sociative or competitive (thus, in contrast to some languages, e.g. Yakut (see Ch. 26, example (73) in 4.1.2), the reciprocal suffix cannot be used to express the reciprocal-benefactive meaning):

- d. *Titi to musuko wa [otagai no tame ni] ie o tate-at-ta.*
- i. with the bracketed words: same as (c); marginally; it is much worse than (91c).
 - ii. without the bracketed words: ‘Father and son built a house *together*.’
 - iii. ‘Father and son built houses *as if in a competition*.’ (T. Tsunoda, p.c.)
 - iv. ‘Father and son built *each other’s* houses’ (M. Shibatani, p.c.).

Apart from object-oriented benefactive constructions like (91b) and subject-oriented benefactive reciprocal constructions of type (91c), there are two more types of constructions which are semantically close to these two: see (91e) and (91f) respectively; the latter two constructions are peculiar in that (91e) cannot be transformed (mostly probably due to the deictic asymmetry of the auxiliary *ya-ru*) into a reciprocal one and (91f) has no underlying non-reciprocal construction. (91e) contains the object-oriented benefactive auxiliary *ya-ru* postposed to the notional verb and governing the dative case of beneficiary, and (91f) contains the noun *aite* ‘companion’ and optional *otagai-ni*:

- e. *Titi wa musuko ni ie o tate-te yat-ta.*
 father TOP son DAT house ACC build-CONV O.BEN-PAST
 ‘Father built his son a house.’
- f. *Titi to musuko wa [otagai-ni] aite no ie o tate-ta.*
 father and son TOP mutually companion GEN house ACC build-PAST
 (same translation as in (91c)).
 lit. ‘Father and son built [mutually] the companion’s house.’

10.2.3 *Reciprocal or distributive constructions?*

10.2.3.1 “Indirect” constructions. As in the type discussed in 10.2.1.2, the dative form *otagai ni* is used here. In the case of the reciprocal meaning each subject referent, being agent, acts upon another subject referent as patient, i.e. they are cross-referenced, while in the case of the distributive reading of the constructions under consideration each subject referent acts upon an anonymous participant. This type also seems to be unstable: unambiguous reciprocal interpretation seems to be rare. The distributive reading of *otagai ni* competes with the reciprocal; cf. (i) and (ii) in (93); this also applies to “possessive” constructions (see 10.2.3.2). *Otagai ni* with different verbs reveals different preferences for the reciprocal or distributive interpretation; thus, for instance, for (92b) the reciprocal interpretation is rejected by our informants; in most of the examples at our disposal, the distributive reading is less possible or marginal. In the reciprocal reading, the number of participants does not change but their semantic roles are doubled, whereas in the distributive reading the number of participants is doubled, i.e. there are two pairs of participants; cf. (93.ii) where Akiko and someone else and Taro and someone else are taking part in the situation.

- (92) a. *Taroo wa Akiko ni booru o nage-ru.*
 T. TOP A. DAT ball ACC throw-NPAST
 ‘Taro throws a ball to Akiko.’
- b. [*Taroo to Akiko wa*] *tagai ni booru o nage-ru.* (Kn. 1185)
 i. *[Taro and Akiko] throw a ball to each other.’ (M. Shibatani, p.c.)
 ii. ‘[Taro and Akiko] each throw a ball to someone else.’
- (93) *Taroo to Akiko ga otagai ni kai-ta mono o mise-ta.*
 T. and A. NOM each.other DAT write-PAST hing ACC show-PAST
 i. ‘Taro and Akiko showed *each other* what they had written.’ (two participants)
 ii. ‘Taro and Akiko *each* showed to *someone else* what *each* of them had written.’ (cf. (84))
 (two pairs of participants; M. Shibatani and T. Tsunoda, p.c.; our younger informants do not accept this reading.)

10.2.3.2 “Possessive” constructions. Unlike respective constructions with verbal reciprocals that lose the underlying possessive attribute (cf. (19a) and (19b)), these constructions retain the underlying structure entirely. The possessive form *otagai no* is not unambiguously reciprocal in meaning and the reciprocal reading is established by default, too. Thus in (94b) reading (i) is more likely than (ii), (iii) being excluded. In (95a), the reciprocal reading is also “stronger” pragmatically than the distributive, because normally no one sets his own house on fire (to make the reciprocal reading unambiguous, the reciprocal verb form *yaki-at-ta* should be used instead of *yai-ta*), while in (95b) the distributive reading (ii) is more likely pragmatically than the reciprocal. In contrast to the “indirect” type, the distributive reading of a “possessive” construction does not entail doubling of participants in comparison with the reciprocal reading. Instead, cross-referenced possession of the object (see (94b.i)) is replaced by reflexive possession (see (94b.ii)):

- (94) a. *Taroo wa Akiko no / zibun no te o tor-u.*
 T. TOP A. GEN self GEN hand ACC hold-NPAST
 ‘Taro holds Akiko’s/his own hand.’
 b. *Taroo to Akiko wa otagai no te o tor-u.*
 i. ‘Taro and Akiko hold each other’s hands.’
 ii. ^(?)‘Taro and Akiko each holds his/her own hand.’
 iii. *‘Taro and Akiko each hold someone else’s hand.’
- (95) a. *Taroo to Akiko wa otagai no ie o yai-ta.*
 T. and A. TOP each.other GEN house ACC burn-PAST
 i. ‘Taro and Akiko burned each other’s houses.’
 ii. ^(?)‘Taro and Akiko each burned his/her own house.’
 iii. *‘Taro and Akiko each burned someone else’s house.’
 b. *Taroo to Akiko wa otagai no kane o kakus-u.*
 i. [?]‘Taro and Akiko hide each other’s money.’
 ii. ‘Taro and Akiko each hide his/her own money.’
 iii. *‘Taro and Akiko each hide someone else’s money.’ (M. Shibatani, p.c.)
 c. *Taroo to Akiko wa otagai no senaka o massazisi-ta.*
 i. ‘Taro and Akiko massage each other’s back.’
 ii. [?]‘Taro and Akiko each massage his/her own back.’
 iii. ‘Taro and Akiko each massage someone else’s back.’
 d. *Taroo to Akiko wa otagai no kodomo o niran-da.*
 i. ‘Taro and Akiko glared at each other’s children.’ (T. Tsunoda, p.c.)
 ii. ‘Taro and Akiko each glared at his/her child.’ (M. Shibatani, p.c.)
 iii. [?]‘Taro and Akiko each glared at someone else’s child.’

10.2.4 The discontinuous construction

The discontinuous construction serves as a means of topicalization of the first reciprocal argument (see also 4.2). Such constructions are generally less acceptable (“not very good”) or unacceptable (“bad”) with *otagai*. In the discontinuous construction, the form in *-aw* should be used. The latter form alone allows to interpret the comitative group as part of the subject. Nevertheless, some of our informants regard this construction with *otagai* as acceptable. Here are examples of “canonical” and “possessive” constructions respectively:

- (96) a. *Taroo to Akiko wa otagai o aisite-ita.*
 b. **Taroo wa Akiko to otagai o aisite-ita.*
 c. [?]*Taroo wa Akiko to otagai o aisi-at-te-ita.*
 ‘Taro and Akiko love each other’ (for all the three sentences).

“Possessive” sentences with *otagai no* also have peculiarities of usage in the discontinuous construction: in this case a suffixed reciprocal is obligatory; cf. (97b) and (97c):

- (97) a. *Taroo to Ziroo wa otagai no ie o yai-ta.* (cf. (94b))
 b. **Taroo wa Ziroo to otagai no ie o yai-ta.*
 c. [?]*Taroo wa Ziroo to otagai no ie o yaki-at-ta.*
 ‘Taro and Jiro burnt each other’s houses.’ (for all the three sentences).

We owe this information to M. Shibatani.

10.2.5 *Object-oriented constructions*

Causative constructions derived from suffixed reciprocals were discussed in 3.6. Analogous derivations from *otagai* constructions are accepted by some informants more readily than the underlying constructions. As mentioned above (see (24d, e) and discussion), in such cases an object-oriented construction is formed according to the general rule of causative formation from transitives, the underlying subject taking the dative case marker (see (98e)). In addition to the data in (24d, e, f), the following may be cited:

- (98) a. *Taroo ga Akiko o dai-ta.* 'Taro embraced Akiko.'
 → b. *Taroo to Akiko ga daki-at-ta.* 'Taro and Akiko embraced each other.'
 → c. ²*Kare ga T. to A o daki-aw-ase-ta.* 'He made T. and A. embrace each other.'
 d. ²*Taroo to Akiko ga otagai o dai-ta.* 'Taro and Akiko embraced each other.'
 → e. *Kare ga T. to A. ni otagai o dak-ase-ta.* 'He let T. and A. embrace each other.'
 (T. Takiguchi and F. Endoo, p.c.)

(98f) is the only example at our disposal of an object-oriented reciprocal with *otagai o* derived from a "indirect" reciprocal (borrowed from specialist literature; but not all of our informants find it acceptable, and one of them interpreted it as non-reciprocal); cf. (25) and i) in (98f):

- f. *Taroo ga Ziroo to Akiko ni otagai o syookaisi-ta.*
 i. 'Taro introduced Jiro and Akiko to each other.' (Is. 159)
 ii. 'Taro introduced himself and someone else to Jiro and Akiko.' (Y. Takahashi, p.c.)

10.2.6 *Distributive otagai ga in embedded clauses. Reciprocals by default?*

This case is somewhat similar to the case considered in 3.4. The specific meaning of the sentences in both cases is determined by the presence of an embedded clause. They are similar in that the subject referents are agents of the matrix predicate. And the principal semantic difference between them is that in (21e) the subject referents of the matrix clause are at the same time the patients of the embedded clause, while in (99d) they are the agents of both the matrix and embedded clause (and they are in reciprocal relation within the matrix clause: by default, 'they thought about each other...'):

- (99) a. *Akiko ga Noriko no koto o omot-ta.*
 A. NOM N. GEN affair ACC think-PAST
 (intended meaning:) 'Akiko thought about Noriko.'
 b. *Akiko ga [Noriko ga Taroo o seme-ta to] omot-ta.*
 A. NOM N. NOM T. ACC accuse-PAST and think-PAST
 'Akiko thought that Noriko accused Taro.'
 c. *Noriko ga [Akiko ga Taroo o seme-ta to] omot-ta.*
 'Noriko thought that Akiko accused Taro.'
 d. *Akiko to Noriko ga [otagai ga Taroo o seme-ta to]*
 A. and N. NOM each.other NOM T. ACC accuse-PAST and
omot-ta.
 think-PAST
 'Akiko and Noriko thought each other accused Taro' (N. 159), i.e. *Akiko* thought that *Noriko* accused Taro and *Noriko* thought that *Akiko* accused Taro.'

In other words, *each* thought that *the other* accused Taro (cf. 3.4).

10.3 Pleonastic and distributive use of the noun *otagai*

As in many other languages, there is a tendency in Japanese to emphasize the reciprocal meaning of the reciprocal suffix by lexical means. Moreover, the noun *otagai* seems to be more common with morphological reciprocals than with non-reciprocal verbs. In this case we observe pleonastic use of *otagai* and the suffix *-aw*, because they are very close in meaning (see, however, Columns C and D in (119)). Co-occurrence of the reciprocal suffix and *otagai* may have a number of other functions as well. Needless to say, this does not concern the pleonastic use.

There are all the three main diathesis types of reciprocal constructions with pleonastic *otagai*. Reciprocal verbs and/or diathesis types of reciprocal constructions differ with respect to their combinability with different forms of *otagai*, or to its absence. The situation here is rather complicated. The main cases are as follows (cf. 10.2).

1. A combination of *otagai o* with a suffixed reciprocal (if it is possible) is always unambiguously reciprocal in meaning; this meaning is also coded by *otagai ni* in combination with suffixed reciprocals derived from two-place intransitives (see 10.3.1.2). Instead of *otagai o*, the adverb *otagai-ni* may be used, with subtle differences in meaning (see 10.3.1.1).

2. A combination of *otagai ni* with suffixed reciprocals (if it is possible) may render the reciprocal meaning ‘to each other’ or the distributive-reciprocal meaning ‘each (of the subject referents) and someone else (anonymous) to each other’ (double reciprocity). In certain cases, *otagai no* sounds better instead of *otagai ni* (see 10.3.2.1).

3. A combination of *otagai no* with suffixed reciprocals derived from two-place transitives may render either the possessive reciprocal meaning ‘each other’s (back, etc.)’ or the distributive reciprocal meaning ‘each (of the subject referents) and someone else (anonymous) ... each other’s (back, etc.)’. The adverb *otagai-ni* may sometimes be used instead of *otagai no*, with subtle differences in meaning.

10.3.1 “Canonical” constructions

10.3.1.1 *With two-place transitives.* In (100c) *otagai* has the direct object marker *o*, though the reciprocal verb is intransitive, because the underlying object is deleted: either the verb retains the valency of the base verb, or *otagai o* is not perceived as a full-fledged direct object, i.e. the accusative meaning is weakened. The reciprocal form in (100b) and (100c) is slightly lexicalized (some of our informants do not accept a human object with the base verb and prefer an inanimate object though all of them unanimously accept the derived reciprocal).

- (100) a. *Taroo wa Akiko o / Akiko no koto o rikaisu-ru.*
 ‘Taro understands Akiko / Akiko’s affairs.’
 b. *Taroo to Akiko wa rikaisi-a-u.*
 ‘Taroo and Akiko understand each other.’

- c. *Taroo to Akiko wa [otagai o] rikaisi-a-u.* (M. 719)
 ‘Taro and Akiko understand each other.’ (cf. also (85d))

Many of the transitives in 3.1.1 and 10.2.1.1 may be used here as well though the degree of their acceptability varies. Sometimes, the possibility or necessity of *otagai o* is determined by factors that are hard to pinpoint; cf. (101a) where *otagai o* is needed to make the sentence complete (it is redundant if there is indication of the cause of congratulation) and (101e, f, g) where it is rejected by the informants.

- (101) a. *Taroo to Akiko wa otagai o / seikoo o syukuhukusi-at-ta.*
 T. and A. TOP each.other ACC success ACC congratulate-REC-PAST
 ‘Taro and Akiko congratulated each other/on their success.’
 b. *Karera wa [otagai o/otagai-ni] hagemasi-at-ta.*
 ‘They encouraged each other.’
 c. *Taroo to Akiko wa [otagai o /*otagai-ni] warai-at-ta.*
 ‘Taro and Akiko laughed at each other.’
 d. *Karera wa [²otagai o/²otagai-ni] naguri-at-ta.*
 ‘They hit each other.’
 e. *Taroo to Akiko wa [*otagai o/²otagai-ni] korosi-at-ta.*
 ‘Taro and Akiko killed each other.’
 f. *Karera wa [*otagai o/²otagai-ni] siri-at-ta.*
 ‘They got acquainted [with each other].’
 g. *Karera wa [*otagai o/otagai-ni] daki-at-ta.*
 ‘They embraced [each other].’

The variant *otagai-ni* ‘mutually’ seems to be more common in “canonical” constructions than *otagai o*, but in this case the reciprocal suffix is obligatory on the verb (cf. Columns C and D in (119)); cf:

- (102) a. *Hitobito wa tagai-ni idaki-at-ta.* (Kh. 11)
 people TOP mutually embrace-REC-PAST
 ‘People embraced each other.’
 b. *Hutari wa otagai-ni nagusame-a-i, kobusi-at-ta.*
 both TOP mutually comfort-REC-CONV cheer.up-REC-PAST
 ‘The two cheered each other up, having comforted each other.’ (Kh. 11)
 c. *Maa, hanasi-tara, nanka otagai-ni siri-a-e-tara ...* (H. 263)
 well speak-if like mutually know-REC-can-if
 ‘Well, if [you] spoke, if [you] could know each other ...’

10.3.1.2 *With (two-place) intransitives.* All the verbs mentioned in 10.2.1.2 sound better with the reciprocal suffix and *otagai ni* rather than with *otagai o* only. In the opinion of some of our informants, some of these verbs, like *ozigisu-ru* ‘to make a bow’, are preferable with both markers rather than with the reciprocal suffix only, while other informants consider the use of *otagai ni* here as redundant. In (103d) either *otagai ni* or the reciprocal suffix can be omitted (M. Matsumoto, p.c.); cf.:

- (103) a. *Karera wa otagai ni aisatusi-a-u.* ‘They greet each other.’
 b. *Karera wa otagai ni ozigisi-at-ta.* ‘They made a bow to each other.’

- c. *Karera wa otagai ni sasayaki-at-ta.* (Kh. 11) ‘They whispered [sth] to each other.’
 d. *Karera wa otagai ni zikosyookaisi-at-ta.* ‘They introduced themselves to each other.’

10.3.2 Reciprocal or distributive-reciprocal constructions (double reciprocity)?

10.3.2.1 “Indirect” constructions. In the examples at my disposal, the noun *otagai* is commonly used with the dative marker *ni* of indirect object, the direct object of the underlying construction being retained. As often as not, *otagai* can be omitted without affecting the meaning (cf. 3.2 where there is no *otagai*), though sometimes its presence is preferable.

- (104) a. *Kare wa kanozyo ni tumi o abise-ta.*
 he TOP she DAT blame ACC lay-PAST
 ‘He laid the blame on her.’
 b. *Kare to kanozyo wa tagai ni tumi o abise-at-ta.* (Kh.12)
 he and she TOP each.other blame ACC lay-REC-PAST
 ‘He and she laid the blame on each other’; cf. also:
 (105) *Taroo to Akiko ga otagai ni kai-ta mono o mise-at-ta.*
 T. and A. NOM each.other DAT write-PAST thing ACC show-REC-PAST
 ‘Taro and Akiko showed each other what they had written.’

The form *otagai ni* is characteristic of constructions with three-place transitives, but there are cases when *otagai no* is preferable. We shall consider two such examples.

Some verbs governing a human dative object in the base form sound better with the genitive rather than the dative case of *otagai* in a reciprocal construction; i.e. in this case the “indirect” reciprocal construction undergoes mutation into “possessive”, due to the meaning of the reciprocal construction (see (106b)). This holds in those cases when the direct object of the underlying non-reciprocal construction has an obligatory reflexive-possessive attribute; the latter is usually retained in the reciprocal construction:

- (106) a. *Taroo wa Akiko ni zibun no kangae o osie-ta.*
 T. TOP A DAT self GEN idea ACC tell-PAST
 ‘Taro told about *his* idea to Akiko.’
 b. *Taroo to Akiko wa otagai ni zibun no* (much better *otagai no*) *kangae o osie-at-ta.*
 ‘Taro and Akiko told each other about their ideas.’ (M.Shibatani, T.Tsunoda, p.c.)

Another analogous case also concerns semantically three-place verbs which allow expression of a human argument by a complement or by an attribute, with a certain shift in meaning (these two means of expression, though different semantically (Mary’s money may be stolen from someone else), may describe the same denotational situation, i.e. the difference between them may be neutralized by the context); see (107a). Following is a series of examples with the informants’ evaluations, the most acceptable variant being the pleonastic “possessive” construction (typical of verbs denoting stealing, taking away, etc.):

- (107) a. *John wa Mary kara/ Mary no kane o nusum-u.*
 J. TOP M. from M. GEN money ACC steal-NPAST
 ‘John steals from Mary/Mary’s money.’
 b. *John to Mary wa kane o nusumi-a-u.* (“a bit strange”)
 ‘John and Mary steal money from each other.’

- c. *John to Mary wa otagai kara kane o nusum-u.* (“better, but still a bit strange”) (same translation).
- d. *John to Mary wa otagai kara kane o nusumi-a-u.* (“just as good as (c)”) (same translation).
- e. *John to Mary wa otagai-ni kane o nusumi-a-u.* (“slightly odd”) (same intended meaning).
- f. *John to Mary wa otagai no kane o nusumi-a-u.* (“the best expression”) lit. ‘John and Mary steal each other’s money from each other.’ (M. Shibatani, p.c.)

Co-occurrence of *otagai ni* in the distributive meaning with the predicate in the reciprocal meaning in the same sentence allows an interpretation which may be termed double reciprocity: alongside the standard reading (see (108.i)), another interpretation is possible with the subject referents as not the only participants of the same subevents but each interacting with “anonymous” participants, i.e. such sentences describe reciprocal situations with two pairs of subevents; but again not all informants allow interpretation (ii). Thus this also involves a doubling of the participants, as in the examples discussed in 10.2.3.1. Reading (108.ii) is not accepted by most of our informants.

(108) *Taroo to Akiko ga otagai ni kai-ta mono o mise-at-ta.*

- i. ‘Taro and Akiko showed *each other* what they had written.’ (M. Shibatani, p.c.)
- ii. ‘Taro *and someone else* showed *each other* what *each* had written and Akiko *and someone else* showed *each other* what *each* had written.’ (T. Tsunoda, p.c.)

It is worthwhile noting that interpretation (108.ii) is symmetrical to that of *zibun-tati* given by Nishigauchi (1992: 171). Thus, he considers the reciprocal reading (see (i)) of (109) to be pragmatically inappropriate (indeed, there is no sense in telling each other about general ideas), but he allows the second reading which entails a doubling of the participants and related to the distributive reading of the suffix *-aw*:

(109) ^{??}*John to Mary ga zibun-tati no kangae o osie-at-ta.*

J. and M. NOM self-PL GEN idea ACC tell-REC-PAST

- i. ‘John and Mary told about selves’ idea to each other.’
- ii. ‘John revealed to Mary the idea that he and somebody else had and Mary revealed to John the idea that she and somebody else had.’

10.3.2.2 “Possessive” constructions. As mentioned above (see 3.3), these constructions are formed from two-place transitives with a possessive attribute to the direct object. Here also belong reciprocals (from three-place transitives) taking *otagai no*. This concerns sentences like (106b) and (107f) above. In contrast to 10.2.3.2 where *otagai no* alone is used, both *otagai no* and *otagai ni* can be used here with a subtle difference in meaning. As often as not, either form can be omitted without noticeably affecting the meaning.

(110) a. *Taroo wa Akiko no kosei o mitome-ru.*

T. TOP A. GEN individuality ACC recognize-NPAST

‘Taro recognizes Akiko’s individuality.’

b. *Akiko wa Taroo no kosei o mitome-ru.*

‘Akiko recognizes Taro’s individuality.’

- c. *Hutari wa [otagai no / otagai-ni] kosei o mitome-a-u.* (Kh. 14)
 both TOP each.other GEN mutually individuality ACC recognize-REC-NPAST
 ‘Both persons recognize each other’s personality.’
- (111) a. *Karera wa [otagai no / otagai-ni] te o tori-at-ta.*
 ‘They held each other’s hands.’
- b. *T. to M. wa [otagai no / otagai-ni] senaka o massaazisi-at-ta.*
 i. ‘T. and M. massaged *each other’s* backs.’ (M. Shibatani, p.c.)
 ii. ‘T. and *someone else* massaged *each other’s* backs, and M. and *someone else* massaged *each other’s* backs.’ (T. Tsunoda, p.c.)
- c. *T. to M. wa [otagai no / otagai-ni] ie o tate-at-ta.*
 i. ‘T. and M. built *each other’s* houses.’ (cf. (91d))
 ii. ‘T. and M. *each* built *his/her* house.’

As (111b.ii) shows, in this diathesis type, what has been called above double reciprocity is also possible. As in the previous case (see (108)), actualization of this meaning is linked to the use of *otagai no* or *otagai-ni*. (True, in (111c) the second interpretation entails the interpretation of *otagai-ni* as ‘respectively’.) Again, not all of our informants accept this interpretation.

- (112) a. *Taroo wa Akiko no ude o ot-ta.*
 ‘Taro broke Akiko’s arm.’
- b. *Taroo to Akiko wa [otagai no] ude o ori-at-ta.*
 ‘Taro and Akiko broke *each other’s* arms.’
- c. *Taroo to Akiko wa otagai-ni ude o ori-at-ta.*
 ‘Taro and *someone else* broke *each other’s* arms, and Akiko and *someone else* broke *each other’s* arms.’ (T. Tsunoda, p.c.)

10.4 -aw reciprocals and *otagai* reciprocals: Examples of selectivity

As has been pointed out above, the meaning of *otagai* is close to that of *-aw* (this does not concern *otagai* in the distributive sense). Sometimes, however, they are semantically distinct (Nishigauchi 1992: 158). Compare the following two examples:

- (113) a. *Baa de otoko-tati ga naguri-at-te-iru.*
 bar LOC man-PL NOM hit-REC-CONT-NPAST
 ‘Men are hitting one another in the bar.’
- b. *Baa de otoko-tati ga otagai o nagut-te-iru.*
 bar LOC man-PL NOM each.other ACC hit-CONT-NPAST
 (same translation).

The translation of (113a) and (113b) is the same but they may differ in connotations: (113b) “depicts a rather bizarre situation in which the men, presumably drunken, are engaged in the activity of hitting everybody – man A hits man B, B hits C, C hits A, etc.,” while (113a) “may be true if the men can be subdivided into groups within which they are in the mutual hitting relation” (Nishigauchi 1992: 158–9). If we take into account the differences in the degree of acceptability of combinability of the base verbs with both re-

reciprocal markers this explanation, it seems, does not cover all or most of the analogous pairs of constructions.

The following statement contains an analogous interpretation characterizing the difference between (1b) and (1d) on the one hand and (1b) and (1e) on the other. In the first two (1b) reciprocity is taken holistically whereas in the latter case (1d, e) it is emphasized so that the actions of the participants are individuated (M. Shibatani, p.c.)

Some examples of selectivity are cited above. For the most common (namely “canonical”) type of reciprocal constructions, we shall give preliminary results of the native speakers’ reaction to the use of five verbs with the four types of marking reciprocity:

- (a) only or preferably with the suffix *-aw*;
- (b) only or preferably with *otagai o*;
- (c) with *-aw* and *otagai o* simultaneously;
- (d) with *-aw* and *otagai-ni* simultaneously.

Our informants do not consider the latter two cases as preferable with our five verbs (for an example of “possessive” reciprocal, see (107f)). This is shown in the table under (119) based on the data elicited from the informants (the symbol “+” means “OK”, “-” means “bad, strange”, parentheses denote hesitation or disagreement of the informants). The examples contain reciprocals based on five two-place transitives. It is not easy to point out the conditioning factors for this selectivity.

- (114) a. *Taroo to Mitiko wa mi-at-te-ita.*
 b. *Taroo to Mitiko wa otagai o mi-te-ita.*
 c. *Taroo to Mitiko wa otagai o mi-at-te-ita.*
 d. *Taroo to Mitiko wa otagai ni mi-at-te-ita.*
 ‘Taro and Mitiko were looking at each other.’
- (115) a. *Taroo to Mitiko wa aisi-at-te-ita.*
 b. *Taroo to Mitiko wa otagai o aisi-te-ita.*
 c. *Taroo to Mitiko wa otagai o aisi-at-te-ita.*
 d. *Taroo to Mitiko wa otagai-ni aisi-at-te-ita.*
 ‘Taro and Mitiko loved each other.’
- (116) a. *Taroo to Mitiko wa nikumi-at-te-ita.*
 b. *Taroo to Mitiko wa otagai o nikun-de-ita.*
 c. *Taroo to Mitiko wa otagai o nikumi-at-te-ita.*
 d. *Taroo to Mitiko wa otagai-ni nikumi-at-te-ita.*
 ‘Taro and Mitiko hated each other.’
- (117) a. *Taroo to Mitiko wa korosi-at-ta.*
 b. *Taroo to Mitiko wa otagai o korosi-ta.*
 c. *Taroo to Mitiko wa otagai o korosi-at-ta.*
 d. *Taroo to Mitiko wa otagai-ni korosi-at-ta.*
 ‘Taro and Mitiko killed each other.’
- (118) a. *Taroo to Mitiko wa hagemasi-at-te-ita.*
 b. *Taroo to Mitiko wa otagai o hagemasi-te-ita.*
 c. *Taroo to Mitiko wa otagai o hagemasi-at-te-ita.*
 d. *Taroo to Mitiko wa otagai-ni hagemasi-at-te-ita.*
 ‘Taro and Mitiko were encouraging each other.’

(119)	A	B	C	D
	<i>-aw</i>	<i>otagai o</i>	<i>otagai o</i>	<i>otagai-ni</i>
	only	only	and <i>-aw</i>	and <i>-aw</i>
1. <i>mi-ru</i> 'to look'	(-)*	+	-	-
2. <i>aisu-ru</i> 'to love'	+	+	(-)	+
3. <i>nikum-u</i> 'to hate'	+	+	(+)	+
4. <i>koros-u</i> 'to kill'	+	-**	-	(+)
5. <i>hagemas-u</i> 'to encourage'	+	+	(-)	+

* Absence of a reciprocal with *-aw* on the stem *mi-ru* is probably due to the existence of the reciprocal *mi-aw-as-u* 'to exchange glances' used with a direct object as a set phrase (see (65b); see, however, (30b)).

** The non-combinability of the verb *koros-u* 'to kill' with *otagai o* is a puzzle to us. It is interesting to note that some of our informants reject combinability of *otagai o* with the semantically contiguous verb *nagur-u* 'to hit' (T. Takiguchi, F. Endoo, p.c.). Cf. (113b) and its discussion.

10.5 The "inclusive" meaning of the adverb *otagai-ni* 'mutually'

This material is included here to complete the picture. This meaning of the adverb is closely related to the sociative and it most frequently occurs in hortative (i.e. forms inviting to perform a joint/sociative action) sentences which imply the 1st and 2nd persons (speaker and addressee) as the participants though they cannot be expressed overtly. The dictionary (Ko.2. 221) gives the following contexts (among others) for this word: i. 'and I too' (e.g. 'and I am not obliged to you either'), ii. 'and you too (e.g. 'and you too are not better than I'). Also, when complimented, for instance, on work well done, one often responds with *otagai-sama* which means something like 'You too' (Hinds 1986:263). In the examples below the speaker has in mind, it seems, the addressee rather than himself but includes himself out of politeness. The adverb *otagai-ni* cannot be used in this meaning in an affirmative sentence, or in a sentence with the participants named. In these cases it is replaced by the adverb *tomo-ni* (see (120b)). Examples ((120) and (121a, b), and the comments on them, have been suggested by M. Shibatani.

- (120) a. *Otagai-ni boke-te ki-ta ne?*
mutually/both grow.senile-CONV come-PAST FIN.Q
'[We, i.e. you and I] are both (lit. 'mutually/together') growing old, aren't we?'
- b. *Kimi to boku to tomo-ni [*otagai-ni] boke-te ki-ta ne?*
you and I and together mutually grow.old-CONV come-PAST FIN.Q
'You and I are growing old together, aren't we?'
- (121) a. *Otagai-ni ganbari-mas-yoo!*
mutually do.the.best-POL-HORT
'Let us do our best!'
- b. *Otagai-ni kirei-ni si-mas-yoo!*
mutually clean-ADVZ do-POL-HORT
'Let's keep it clean!' (notice in Japanese toilets).

- c. *Zya, otagai kenkoo de i-ru koto o negat-te kampai desu.*
 then mutually healthy COP be-NPAST that ACC wish-CONV drink.up COP
 ‘Let’s then drink up wishing for our (mutually) being healthy.’

Some of our young informants are more liberal in their opinion and consider *otagai-ni* in (120b) acceptable.

10.6 Reciprocal constructions with locative nouns

(The data for this section are A. Bugaeva’s contribution.) In Japanese, locative nouns may take the noun *otagai* with the genitive marker *no* (never the reciprocal suffix) to form reciprocal adverbial constructions, contrary to a number of other languages (more or less close areally) where locative nouns (and locative postpositions and adverbs) may combine with a reciprocal affix and thus form reciprocal adverbs, postpositions, etc. (cf. Ainu in Alpatov et al., Ch. 42, §12.1; Even in Malchukov, Ch. 39, §12; Evenki in Nedjalkov & Nedjalkov, Ch. 38, §12; Yukaghir in Maslova, Ch. 44, §4.1.4.2). The term “adverbial constructions” is used in a broad sense here:

(a) to refer to constructions, including spatial ones where the respective spatial meaning is part of the verb’s lexical meaning, which are not proper adverbial constructions; this is shown in the following example with a lexical reciprocal whose meaning contains the component of close spatial contact. In (122) the meaning ‘on top of sth’ is implied by the meaning of the verb *kasari-ar-u* ‘to be placed one upon another’ (cf. (129), (146)), i.e. it is a kind of argument.

- (122) *Hon ga otagai no ue ni kasanari-at-te-iru.*
 book NOM each.other GEN top DAT pile-REC-CONT-NPAST
 ‘The books are piled on top of one another.’

(b) It is also used to refer to proper adverbial constructions, viz. those where the meaning of an adverbial noun phrase is not implied by the verb’s lexical meaning, as is the case with the verb *asob-u* ‘to play’ in (124c).

In a reciprocal adverbial construction, the predicate may be used either with or without the reciprocal suffix. The first option seems to be preferable when the reciprocal referents are in close spatial contact. In (122) this is inherent in the verbal meaning. In (123a, b) close contact is expressed by a noun phrase: ‘on each other’s knees’, ‘on each other’s backs’. Note also that in all the examples of this section with reciprocals in *-aw* we find the locative noun *ue* ‘top’ which usually implies a close contact between objects (see (122) and (123)), and in the examples without a verbal reciprocal we find locative nouns that do not imply this kind of contact, cf. *soba* ‘close’, *mae* ‘front’ (see (124)).

- (123) a. *A to B ga otagai no hiza no ue ni suwari-a-u.*
 A and B NOM mutually GEN knee GEN top DAT sit-REC-NPAST
 ‘A and B are sitting by turns on each other’s knees.’
 b. *Kodomo ga otagai no senaka no ue ni nori-at-te-iru.*
 children NOM mutually GEN back GEN top DAT climb-REC-CONT
 ‘The children are climbing on top of each other’s backs.’

In the following examples there is no implication of close spatial contact (cf. ‘on each other’s knees’ and ‘next to each other’ with the same verb in (123a) and (124a)) and therefore the reciprocal suffix cannot be used in the sentences below.

- (124) a. *Karera wa otagai no soba ni suwaru* [**suwari-a-u*].
 they TOP mutually GEN close DAT sit sit-REC-NPAST
 ‘They sit next to each other.’ (cf. (123a))
- b. *Watasi-tati wa otagai no soba ni sun-de-iru* [**sumi-at-te-iru*].
 I-PL TOP mutually GEN close DAT live-CONT-NPAST
 ‘We live next to each other.’
- c. *Kono kodomo-tati wa itumo otagai no soba de ason-de-iru*.
 these children-PL TOP always mutually GEN close LOC play-CONT-NPAST
 ‘These children always play next to each other.’
- d. *Otagai no mae ni bakemono ga de-te ki-ta*.
 mutually GEN front DAT monster NOM appear-CONV come-PAST
 ‘A monster/Monsters appeared in front of us’, lit. ‘... in each other’s (our) front.’
 (a situation with two observers is described, with a monster appearing between them).

As we see, adverbial reciprocal constructions with *otagai no* and locative nouns can be formed from intransitive verbs as well, i.e. from verbs that do not take *-aw* at all (cf. *sum-u* ‘to live’ → **sumi-a-u*) or in constructions without locative nouns. Certain verbs that have a reciprocal form, e.g. *asob-u* ‘to play’ → *asobi-a-u* ‘to play with each other’, or *der-u* ‘to appear’ → *de-a-u* ‘to meet each other’ (lexicalized; cf. (68)), cannot be used in sentences like (124c) and (124d) respectively. The form *suwari-a-u* is accepted in the meanings ‘to sit by turns’ and ‘to sit facing each other’ by some of our informants (cf. *suwari-aw-ase-ru* ‘to happen to sit next to each other’ in (66b)). The verb *nor-u* from (123b) means ‘to climb’ in the sense of climbing on a dais, a chair, etc., never climbing a mountain (cf. the derivatives *nori-a-u* and *nori-aw-ase-ru* in (67a) and (66b) in the meaning ‘to happen to ride in the same train, car, etc.’ derived from *nor-u* in the meaning ‘to take a ride in a train, a car, etc.’).

11. Lexical reciprocals proper

11.1 Introductory

If we define lexical reciprocals as verbs with a reciprocal meaning which do not enter into a standard semantic opposition with a base verb (cf. (1a, b, c)), we obtain a class within which three main groups can be distinguished:

1. Lexicalized reciprocals with a reciprocal suffix and a non-standard semantic relation to the base verb (see Section 7).
2. *Reciproca tantum*, i.e. verbs with a presumably reciprocal suffix and no base verb (see Section 8).
3. Lexical reciprocals with no (obligatory) reciprocal marker.

The first two groups have been considered above, and further below we shall discuss the third group which may be termed lexical reciprocals proper. These are verbs with an inherent reciprocal meaning.

A distinctive feature of prototypical lexical reciprocals is semantic (but not pragmatic) equivalence of three constructions of which the first two ((125a) and (125a')) are discontinuous (with a reversed syntactic arrangement of the arguments) and (125b) is a simple construction with both participants named by the subject (cf. Section 4). The ambiguity of interpretation of the simple construction as elliptical with an implied second participant(s) is resolved by context. Thus, in contrast to (125a-a') with discontinuous constructions, the reciprocal interpretation of simple construction (125b) is foremost though not the only one possible (cf. Hinds 1986:97). It is potentially ambiguous as it may also signify that each of the agents got engaged to someone else. Following are illustrations of two main types of prototypical constructions (three constructions of the first type correspond to two of the second type; note that we have found only one two-place transitive lexical reciprocal, see 11.2.2; most likely, they are more numerous but the fact that we have found only one verb is indicative of their limited number).

1. Subject-oriented two-place intransitive construction (see 11.2.1.1):

- (125) a. *Taroo wa Akiko to kekkonsi-ta.* 'Taro married Akiko.'
 = a'. *Akiko wa Taroo to kekkonsi-ta.* 'Akiko married Taro.'
 = b. *Taroo to Akiko wa kekkonsi-ta.* i. 'Taro and Akiko got married [to each other].'
 ii. 'Taro and Akiko each got married to someone else.'
 c. **Taroo to Akiko wa kekkonsi-at-ta.* (same intended meanings as (b)).

2. Object-oriented three-place transitive construction (see 11.3):

- (126) a. *Karera wa Taroo to Akiko o kekkons-ase-ta.*
 lit. 'They married Taro and Akiko' ambiguous between:
 i. 'They married Taro to Akiko.'
 ii. 'They married Taro and Akiko each to someone else.'
 = b. *Karera wa Akiko to Taroo o kekkons-ase-ta.*
 i. 'They married Akiko to Taro.'
 ii. 'They married Akiko and Taro each to someone else.'
 (We owe (125) and (126) to M. Shibatani, p.c.)

To complete the picture, here is an example of a construction with the reciprocal form derived from the lexical reciprocal under (126a)–(126b), i.e. from a causative verb derived from a lexical reciprocal. The semantic difference is very slight.

- (127) *Mukasi kono mura de wa, A-ke to B-ke wa otagai ni*
 long.ago this village LOC TOP A.family and B.family TOP mutually
itizoku o kekkons-ase-at-te-ita.
 family.members ACC marry-CAUS-REC-CONT-PAST
 'Long ago in this village, the A family and the B family used to make their family members marry to (one of) each other's family members.' (T. Takiguchi, F. Endoo, p.c.)

Unlike some other languages which may employ a reciprocal marker on lexical reciprocals (generally or in the simple construction only), Japanese lexical reciprocals, with the ex-

ception of a small group (see (129), (134)–(136), (148)–(152)), are incompatible with the reciprocal suffix. In this respect they differ particularly from lexical reciprocals in Mongolic languages most of which may occur with the reciprocal marker used pleonastically, cf. Khalkha *tox'oo-/tox'oo-ldo-* 'to meet', 'to coincide'; *marga-/marga-lda-* 'to argue' (see Nedjalkov et al., Ch. 29, §10.1, where about 70 such pairs are listed). Thus in Japanese the reciprocal marker and two-place intransitive lexical reciprocals usually “repel” each other while in Buryat they are mutually attracted. It is different with three-place lexical reciprocals of joining (in the broad sense) in Japanese: there was a tendency to mark these verbs with the (now unproductive) compound reciprocal-causative suffix *-aw-ase* (see Section 6).

Japanese lexical reciprocals seem to run into several hundred items. As in some other languages, they display great semantic, syntactic and morphological diversity. Needless to say, we shall consider only some of them below.

11.2 Subject-oriented two-place reciprocals

11.2.1 *Two-place intransitives*

11.2.1.1 *Combinability with the reciprocal suffix -aw.* This feature distinguishes two groups, Group A and Group B. Two-place intransitive lexical reciprocals mostly denote fighting, getting engaged, joining together or parting, quarrelling or getting reconciled, being different or alike, etc. As pointed out in the heading, they are two-place intransitives; some lexicalized reciprocals (see (68)) and some *reciproca tantum* (cf. (75)) are also of this type.

Lists (128) and (129) have been compiled with the help of the informants who rejected reciprocal forms from the verbs in (128), but there is no strict borderline between these two lists, which is supported by the fact that two verbs from (128a) are registered in specialist literature with the suffix *-aw*: *araso-i-a-u* 'to argue with each other' and *hanare-a-u* 'to part from each other' (Ha. 37).

11.2.1.1.1 *Group A. Verbs which do not take -aw.* Here belong mostly dynamic verbs (see (128a)), a number of stative verbs (cf. (128b)) and qualitative verbs (predicative adjectives; cf. (128c); suffixed reciprocals are not formed from qualitative verbs at all), some of the latter with a unique paradigm (e.g. (128d)).

- | | | |
|----------|-----------------------|--|
| (128) a. | <i>araso-u</i> | i. 'to dispute, argue, quarrel', ii. 'to compete' (M. 36) |
| | <i>atumar-u</i> | 'to meet or come together' (B.50) |
| | <i>a-u</i> | i. 'to correspond to', 'agree, harmonize'; ii. 'fit/suit' (B.50) |
| | <i>a-u</i> | 'to meet with, encounter, face' (B. 50) |
| | <i>hanare-ru</i> | 'to separate from, part, become disjoined' (M. 390) |
| | <i>kaigoosu-ru</i> | 'to meet, get together' (M. 662) |
| | <i>kekonsu-ru</i> | 'to marry sb, be/get married to' (M. 787) |
| | <i>kenkasu-ru</i> | 'to quarrel' (M. 793) |
| | <i>konyakusu-ru</i> | 'to be engaged to sb' (M. 926) |
| | <i>nakanaorisu-ru</i> | 'to make peace' (B. 991) |

	<i>rikonsu-ru</i>	‘to get divorced’ (Hi. 39)
	<i>sakar-u</i>	‘to copulate (as animals)’ (B. 1064)
	<i>sensoosu-ru</i>	‘to fight, make war’ (B. 1231)
	<i>sessu-ru</i>	i. ‘to come in(to) contact with’, ii. ‘to be adjacent to’ (M. 1501)
	<i>soro-u</i>	i. ‘to make a pair/set’, ii. ‘to be equal/uniform’ (M. 1654)
	<i>yakusokusu-ru</i>	‘to come to an agreement, to promise’ (Ko.2. 584)
	<i>wakare-ru</i>	i. ‘to divorce’, ii. ‘to part/be divided from sb/sth’, etc. (M. 1940)
b.	<i>kotonar-u</i>	‘to differ’ (Hi. 39)
	<i>ni-ru</i>	‘to be alike or similar, resemble’ (B. 1032)
	<i>ruisu-ru</i>	‘to be similar, to be like, resemble’ (B. 1136)
	<i>sum-u</i>	‘to live somewhere/with sb’ (Hi. 39)
	<i>tonar-u</i>	‘to adjoin, to lie next to’ (B. 1493)
	<i>toto-no-u</i>	‘to be in harmony, to accord’ (B. 1509)
c.	<i>hitosi-i</i>	‘equal, similar to sb/sth’ (B. 362)
	<i>tika-i</i>	‘close to sb/sth’ (also with <i>kara</i> ‘from’)
	<i>too-i</i>	‘far from sb/sth’ (with <i>kara</i>)
d.	<i>onazi</i>	‘the same, like, similar to sb/sth’ (B. 1084).

Compare Himeno (1982:17–8).

11.2.1.1.2 *Group B. Verbs taking -aw optionally.* The dictionary translations are given for the unsuffixed forms; they are more or less valid for the suffixed forms as well. Himeno (1982:21) claims that *-aw* only highlights the reciprocal meaning on verbs that already have this meaning in their base form, i.e. it serves to emphasize it.

(129)	<i>buttukar-u / buttukari-a-u</i>	‘to collide with’ (B. 103)
	<i>karam-u / karami-a-u</i>	‘to coil, twine around’ (B. 587)
	<i>kasamar-u / kasanari-a-u</i>	‘to be placed one upon another’ (B. 595)
	<i>kooronsu-ru / kooronsi-a-u</i>	‘to argue’ (Hi. 21)
	<i>kuttuk-u / kuttuki-a-u</i>	‘to stick, adhere’ (B. 806)
	<i>kyoosoosu-ru / kyoosoosi-a-u</i>	‘to compete, rival’ (M. 1020; B. 849)
	<i>mazar-u / mazari-a-u</i>	‘to be mixed, blended, mingled’ (B. 897)
	<i>maziwar-u / maziwari-a-u</i>	‘to keep company’ (B. 871)
	<i>moture-ru / moture-a-u</i>	‘to get entangled (as threads)’ (B. 962).

11.2.1.2 *Two main types of discontinuous constructions: Dative and comitative.* To form a discontinuous construction, most lexical reciprocals take either a comitative object (marker *to*; see (125a, a’)), or a dative object (marker *ni*; see (132a)), though with a slight shift of meaning (other case markers of the object, e.g. *kara* ‘from’, are rare). When *to* is used both reciprocal argument (subject and object) referents are presented as more “equal” semantically and/or pragmatically (see (130), (131) and the discussion). Thus the generalized formula of the case frame is (a) *A ga B to* = (b) *B ga A to* (see (125a) = (125a’)). A small group of lexical reciprocals may take optionally the reciprocal marker. Below are the lists of these two groups.

In the discontinuous construction, some of the predicates can be entered in the lists under (128)–(129) if both arguments are homogeneous semantically and pragmatically

(as is known, if Taro resembles Jiro, Jiro resembles Taro as well but if Taro resembles a bull it does not follow that the bull resembles Taro). As mentioned, two constructions with the same lexical reciprocal and reversed comitative objects are mostly synonymous (cf. (125a) and (125a')). Analogous constructions with a dative object may be non-synonymous (only a few lexical reciprocals do not take a dative object, e.g. *kekonsu-ru* 'to marry sb', *kenkasu-ru* 'to quarrel', *tiga-u* 'to be different'). If they are not synonymous, their "sum" may be more or less synonymous to the simple construction, which is reflected in the simplified equation $A \text{ ga } B \text{ ni} + B \text{ ga } A \text{ ni} = A \text{ to } B \text{ ga}$; cf. (130a) + (130a') = (130b). The latter relationship is analogous to $(1a) + (1a') = (1b)$. The difference lies in the fact that the simple construction under (1b) contains a suffixed reciprocal and (130b) does not.

Generally, the object with *ni* denotes a less active referent than the object with *to*. Thus, (130a) and (130a') describe a situation when one participant meets the other (probably by chance) and (130c) describes a meeting by arrangement (as well as (130b)), therefore in (130a-a') the object may denote a referent of a different semantic class (e.g. non-human, e.g. a cat; e.g. 'when walking in the park I met a cat': F. Endoo, p.c.), but (130c) does not allow such usage.

- | | | | |
|-------|----|---------------------------------|---|
| (130) | a. | <i>Taroo wa Akiko ni at-ta.</i> | 'Taro went to meet Akiko.' |
| | a' | <i>Akiko wa Taroo ni at-ta.</i> | 'Akiko went to meet Taro.' |
| | b. | <i>Taroo to Akiko wa at-ta.</i> | 'Taro and Akiko went to meet each other.' |
| | c. | <i>Taroo wa Akiko to at-ta.</i> | 'Taro met with Akiko.' |

The *to* marking is more typical of active verbs (e.g. *kekonsu-ru* 'to marry sb'; see (125)), while *ni* marking is more typical of stative verbs (*ni-ru* 'to be alike', *hitosii* 'to be equal'), although many verbs (e.g. *a-u* 'to meet', etc.) allow both markers. In the latter case there is a semantic difference depending on the choice of the marker (Kuno 1970; Martin 1988: 203). In contrast to *ni*, the postposition *to* implies that the roles of the participants are entirely symmetrical. Therefore the form *buttukari-at-ta* is readily accepted in (131a') and (131e) but it sounds worse in (131b') and it is hardly acceptable in (131d) (Examples (131a-b-c) are borrowed from Martin (1988: 203) who quotes Kuno (1970)):

- | | | |
|-------|----|---|
| (131) | a. | <i>A no atama ga B no atama to buttukat-ta.</i>
A GEN head NOM B GEN head with strike-PAST
'A's head struck against B's head.' (both heads moved) |
| | a' | <i>A no atama ga B no atama to buttukari-at-ta.</i>
(same as (131a)). |
| | b. | <i>A no atama ga B no atama ni buttukat-ta.</i>
A GEN head NOM B GEN head DAT strike-PAST
(same as (131a)). (only A's head moved) |
| | b' | <i>?A no atama ga B no atama ni buttukari-at-ta.</i>
(same as (131a)). |
| cf. | c. | <i>A no atama ga kabe ni / *to buttukat-ta.</i>
A. GEN head NOM wall DAT / with strike-PAST
'A's head struck against the wall.' |
| | d. | <i>*A no atama ga kabe ni / to buttukari-at-ta.</i>
(intended meaning: same as (131c)). |

- e. *A no atama to B no atama ga buttukat-ta / buttukari-at-ta.*
 'A's head and B's head struck against each other.'

In (131e) the unsuffixed verb form denotes most likely accidental collision, while the suffixed form may imply a certain purpose (T. Takiguchi and F. Endoo, p.c.).

11.2.1.3 *The simple construction.* By way of partially repeating ourselves, we shall consider formation of the simple construction. In this construction, the subject must be semantically plural. The formation varies depending on the predicate. There are three main means.

1. Most of these predicates may form a simple construction without any additional means (see (125b); see the list under (128)); cf. also:

- (132) a. *Taroo no seikaku wa Akiko no seikaku ni ni-te-iru.*
 lit. 'Taro's character is like Akiko's character.'
 b. *Karera wa seikaku ga yoku ni-te-iru.* (M. 1236)
 they TOP character NOM much be.alike-CONT-NPAST
 lit. 'As for them, the characters are very much alike.'
 'They are very alike in character.'

2. A few verbs require the use of the adverb *otagai-ni* 'mutually'. If the latter adverb is omitted the sentence may be interpreted as a discontinuous construction in the sense that the streets named are close to a third street which is not named (this peculiarity of unmarked lexical reciprocals is pointed out above; see (125b) and the discussion). *Otagai ni* may also occur with suffixed reciprocals (see (147b)).

- (133) a. *A-doori wa B-doori ni / kara / to tika-i.*
 'Street A is close to Street B.'
 b. *A-doori to B-doori wa otagai-ni tika-i.*
 'Street A and Street B are close to each other.' (F. Endoo, p.c.)

3. A limited number of lexical reciprocals (listed under (129)) may be used in the simple (as well as in the discontinuous) construction both with and without the reciprocal suffix (cf. also (135)). As mentioned, if the object of a discontinuous construction is dative (see (134a)) its referent (in this case, Akiko's hand) is static and only Hanako's hand moves, and in a construction with the comitative object this is not specified. The latter is also true of the simple construction. The reciprocal suffix stresses that no other participants are involved besides those named in the sentence, and it also stresses mutual entangling. In (134a) the non-reciprocal form is preferable, and in (134b) both forms are equally acceptable; this also applies to (135) (H. Narrog, p.c.). Note that (134) contains six variants, four for (134a) and two for (134b).

- (134) a. *Hanako no yubi ga Akiko no yubi ni / to karan-da /*
 H. GEN finger NOM A. GEN finger DAT / COM entangle-PAST /
karami-at-ta.
 entangle-REC-PAST
 'Hanako's fingers and Akiko's fingers intertwined.'

- b. *Hanako no yubi to Akiko no yubi ga karan-da / karami-at-ta.*
 H. GEN finger and A. GEN finger NOM entangle-PAST
 ‘Hanako’s and Akiko’s fingers intertwined.’ (M. Shibatani, p.c.)
- (135) a. *Kona ga satoo to mazat-ta / mazari-at-ta.*
 flour NOM sugar COM mix-PAST / mix-REC-PAST
 ‘Flour got mixed with sugar.’
- b. *Kona to satoo ga mazat-ta / mazari-at-ta.*
 ‘Flour and sugar got mixed.’

11.2.2 Two-place transitives

So far, we have only one example of such lexical reciprocals, viz. *sir-u* ‘to be acquainted’. Our informants disagree with regard to the formation of both simple and discontinuous constructions: some allow both an accusative object and a comitative object, others regard a comitative object as “old-fashioned”, some consider a suffixed reciprocal obligatory in the simple construction and others allow both a suffixed and an unsuffixed verb in both constructions. In the discontinuous construction, some informants see a slight difference in meaning between the base and the suffixed forms; thus *sit-ta* in (136a, b) but not in (136c) may have sexual connotations which the form *siri-at-ta* lacks.

- (136) a. *Taroo wa Akiko o / to sit-ta / siri-at-ta.* ‘Taro got acquainted with Akiko.’
 = b. *Akiko wa Taroo o / to sit-ta / siri-at-ta.* ‘Akiko got acquainted with Taro.’
 = c. *Taroo to Akiko wa sit-ta / siri-at-ta.* ‘Taro and Akiko got acquainted with each other.’ (T. Takiguchi, F. Endoo, H. Narrog, p.c.; (136a-b) are “very bad” – M. Shibatani, p.c.)

11.3 Object-oriented three-place reciprocals. Verbs of joining two objects together

11.3.1 Introductory

This is a group of transitives denoting actions with two interacting (mostly inanimate) object referents or with one plural object (in this case the verbs are syntactically two-place, but for convenience they are included here; see *atume-ru* in (142b)). Most of them are lexical or morphological causatives. The typical meanings are those of joining and mixing, and less commonly separating and comparison. Here also belong many lexicalized verbs with the suffix *-aw-ase*, as well as their base verbs (see (57) and (58)). The latter base verbs are listed under (138) and (142). As mentioned above, there was a tendency in Japanese to mark three-place transitives of conjoining by means of the complex suffix *-aw-ase*. As the semantic relation between the base and the derivative in *-aw-ase* is not reciprocal standard they also belong to lexical reciprocals by definition.

Many of the verbs considered here have two-place non-causative intransitive counterparts, i.e. lexical reciprocals listed in 11.2.1.1 above. There seem to be no anti-causatives among the latter, i.e. derivatives formed by attaching an affix (an example of an anti-causative, though not from a reciprocal, is (5c)). The reciprocal suffix in Japanese, unlike reciprocal suffixes in some other Altaic languages (e.g. Turkic and Mongolic; cf. Buryat *hürme-* ‘to entwine sth’ → *hürme-lde-* ‘to get entwined’, *zalga-* ‘to join sth with sth’ → *zalga-lda-* ‘to become joined’; see Nedjalkov et al., Ch. 29, §12.2), is not used as an an-

ticausative marker on three-place transitives (it would be interesting to find out whether *-aw* had an anticausative function in the past, though it is rather unlikely in view of the relatively “young age” of the marker *-aw-* which is undergoing a change from an auxiliary verb into a suffix).

11.3.2 Two main types of discontinuous constructions: Dative and comitative

The non-direct object may be introduced either by *to* or by *ni*. The use of these case markers is analogous to their use with two-place intransitives discussed in 11.2.1.2. If the object is introduced by the comitative marker *to* both object referents are presented as pragmatically equal, without any implication of their size, volume or mobility (cf. (130), (131), (134) and discussion). Thus, (137a) and (137a') do not indicate whether the amount of flour is much larger than that of sugar, therefore the reversal of the objects does not violate the correctness of the sentence. (137b) implies that the object referent with *ni* (i.e. the flour) is stationary and larger in quantity, which is usually the case pragmatically, while (137b'), being grammatically correct, is unlikely “because of our pragmatic knowledge that we mix much more flour than sugar when baking a cake” (F. Endoo, p.c.). Most of the verbs listed below have the case frames:

- (a) *A ga B to/ni C o*
 = (a') *A ga C to/ni B o*
 = (b) *A ga [B + B ...] o.*

The discontinuous constructions (a) = (a') are illustrated by (137a, b) and (137a', b') respectively, and type (b) by (137c):

- | | | | | |
|-------|----|--|---|--|
| (137) | a. | <i>Taroo wa kona to satoo o maze-ta.</i> | ‘Taro mixed sugar with flour.’ | |
| | = | a'. | <i>Taroo wa satoo to kona o maze-ta.</i> | ‘Taro mixed flour with sugar.’ |
| | | b. | <i>Taroo wa kona ni satoo o maze-ta.</i> | ‘Taro added (lit. mixed) sugar to flour.’ |
| | # | b'. | <i>?Taroo wa satoo ni kona o maze-ta.</i> | ‘Taro added (lit. mixed) flour to sugar.’ |
| | | c. | <i>Taroo wa nisyu no kona o maze-ta.</i> | ‘Taro mixed two kinds of flour.’
(<i>nisyu</i> ‘two kinds’). |

11.3.3 Existence of a non-causative counterpart

With respect to the relatedness between the lexical reciprocals in question and (possible) same-root non-causatives, three groups of verbs can be distinguished (we have in mind morphological relatedness of the verbs in question to two-place intransitives from the lists under (128)–(129)). In the list of each group, verbs that may also take the suffix *-aw* are given under (a), and those that cannot under (b) (we owe this subclassification to T. Takiguchi, F. Endoo and H. Narrog).

11.3.3.1 Group A: Verbs without non-causative counterparts. However, the passive forms with the suffix *-rare/-are* (see 2.5.2) from some of these verbs are close in meaning to non-causatives. Groups A and C also include three-place transitives listed under (57) as base verbs for the *-aw-ase* verbs. Some of these base verbs are entered under (138) and

(142) in bold type (the compound verbs *kaki-maze-ru* and *musubi-tuke-ru* do not have forms in *-aw-ase* but their components do, therefore they are also in bold type).

- (138) a. *hikakusu-ru* 'to compare sth with sth' (B. 337)
kurabe-ru 'to compare sth with sth' (B. 791)
 b. *kagar-u* 'to lace sth together by sewing' (B. 525)
kakimaze-ru 'to stir and mix together' (B. 555)
kak-u 'to interlace, intertwine, braid' (B. 554)
kongoosu-ru 'to mix up, blend together' (B. 740)
kubetusu-ru 'to distinguish' (B. 772)
kuker-u 'to sew the edges of two pieces together' (B. 783)
musubituke-ru 'to tie, join sth with sth, fasten together' (B. 977)
musub-u 'to tie, knot' (B. 977)
renketusu-ru 'to combine, unite' (B. 1121)
teras-u 'to compare sth with sth' (B. 1469)
tunag-u 'to tie (as with a rope)' (B. 1534)
tuzur-u i. 'to sew sth and sth together', ii. 'to patch' (B. 1544)
war-u 'to divide sth into parts' (M. 1948).

11.3.3.2 *Group B: Derivatives from non-causative stems.* Their marker is the productive causative suffix *-sase/-ase* (see 2.5.1). Following is an example and a list of these verbs (the non-causative verbs, listed above under (128), are given in brackets without translation):

- (139) a. *Taroo ga Akiko to kekkonsi-ta.* 'Taro married Akiko.'
 → b. *Karera wa Taroo o Akiko to kekkons-ase-ta.* 'They married Taro to Akiko.'
- (140) a. *aw-ase-ru* 'to put sth together, sum up' (←*a-u*)
kekkons-ase-ru 'to marry sb to sb' (←*kekkonsu-ru*)
kenkas-ase-ru 'to make sb quarrel with sb' (←*kenkasu-ru*)
 b. *nakanaoris-ase-ru* 'to reconcile sb with sb' (←*nakanaorisu-ru*)
wakares-ase-ru 'to make part' (←*wakare-ru*).

11.3.3.3 *Group C: Verbs with non-causative counterparts with alternation of fossilized suffixes.* Some have lost a fossilized causative suffix. What follows is an example and a list of these verbs (the information on this group of verbs has been provided by M. Shibatani, F. Endoo, H. Narrog and T. Takiguchi):

- (141) a. *Taroo wa kona to satoo o maz-e-ta.* 'Taro mixed flour with sugar.'
 ↔ b. *Kona to satoo wa maz-at (<-ar)-ta.* 'Flour and sugar got mixed.'
- (142) a. *karam-e-ru* 'to entangle sth and/with sth' (←*karam-u*)
kasan-e-ru 'to put sth over sth' (↔*kasan-ar-u*)
kuttuk-e-ru 'to join/fasten together, glue sth to sth' (←*kuttuk-u*)
totono-e-ru i. 'to harmonize sth', ii. 'to adjust' (←*totono-u*)
wak-e-ru 'to part, divide, share' (↔*wak-are-ru*)
 b. *atum-e-ru* 'to assemble, to call together' (↔*atum-ar-u*)
han-as-u i. 'to divide sth from sth', ii. 'to distinguish' (↔*hana-rer-u*)
maz-e-ru 'to mix sth with sth' (↔*maz-ar-u*)
motur-as-u 'to entangle sth and/with sth' (↔*motur-er-u*).

11.3.4 Existence of a suffixed reciprocal

Some object-oriented lexical reciprocals can take the reciprocal suffix displaying selectivity in this respect. As mentioned above, the base verbs taking the suffix are given in (138a), (140a) and (142a). The derivatives may differ in meaning from the base verbs and from one another. We shall consider derivatives of Groups A, B and C consecutively.

11.3.4.1 Suffixed reciprocals of Group A. With the exception of two verbs, suffixed reciprocals are not formed from verbs of this group. However, many of them take the suffix *-aw-ase* (they are given in bold type in (138)). Both verbs that form suffixed reciprocals denote comparison. In the simple construction, unlike their base verbs and like these bases with *otagai no* (see (143b)), the suffixed derivatives denote actions in which the subject referents alone take part, while the base verbs allow two readings (see (143a)). The discontinuous construction (analogous to (125a–b)) does not imply any other participants except those named.

- (143) a. *Taroo to Ziroo wa sintyoo o kurabe-ta.* (*sintyoo* ‘height’)
 i. ‘Taro and Jiro compared *their (own)* heights with each other.’
 ii. ‘Taro and Jiro compared (*someone else’s*) heights.’
 b. *Taroo to Ziroo wa otagai no sintyoo o kurabe-ta.*
 (same as (i)).
 c. *Taroo to Ziroo wa sintyoo o kurabe-at-ta.*
 (same as (i)).
 d. *Taroo wa Ziroo to sintyoo o kurabe-ta.*
 (same as (i); T. Takiguchi, F. Endoo, p.c.)

11.3.4.2 Suffixed reciprocals of Group B. The nature of the changes in this group differs from that in Group A: the difference in meaning between the bases and respective derivatives is very subtle and hard to pinpoint, but there seems to be an implication of sociativity in the latter; cf.:

- (144) a. *Taroo to Ziroo wa otagai ni nittei o awase-ta.* (*nittei* ‘schedule’)
 ‘Taro and Jiro arrange their schedule (by talking with each other).’
 b. *Taroo to Ziroo wa otagai ni nittei o awase-at-ta.*
 (≈ same as (a); T. Takiguchi, F. Endoo, p.c.)

In the opinion of the native speakers named, (144b) implies that the subject referents are more deeply involved in the arranging of their schedule than in (144a): they must have discussed it in a detailed way suggesting several alternatives, but they say that some speakers may consider the reciprocal suffix redundant.

11.3.4.3 Suffixed reciprocals of Group C. Some of the lexical reciprocals of this group are of particular interest because they derive not only from three-place causative transitives (cf. *karam-e-ru*, *kasan-e-ru* and *kuttuk-e-ru* in (148)–(150)) but also from the two-place non-causative correlates (cf. *karam-u*, *kasan-ar-u* and *kuttuk-u* in (148)–(150); see also list (129)). The difference between the variants with *ni* and *to* is parallel to the difference between the variants of the corresponding non-causative verb (see (134) and the discus-

sion). The meaning of joining is contained in the lexical meaning of the verb and the reciprocal suffix highlights it. In the discontinuous construction, some informants prefer the unsuffixed form. The diathesis type of these reciprocals is not quite clear: they have features of both “indirect” (because they are derived from three-place transitives) and “possessive” (because of the possessive relationship between the subject and object referents) reciprocals.

To complete the picture, here are two derivatives in *-aw-ase-*: *karami-aw-ase-ru* ‘to coil, twine sth’ (see (57) and (145c)) for (148a) and *kasan-e-aw-ase-ru* ‘to lay one on top of another’ (see (57) and (146c)) for (149b). Compare:

- (145) a. *H. ga yubi o A. no yubi i / to karam-e-ta / karam-e-at-ta.*
 H. NOM finger ACC A. GEN finger DAT COM entangle-PAST (-at < -aw)
 ‘H. intertwined his fingers with Akiko’s fingers.’
- b. *Hanako to Akiko ga yubi o karam-e-ta / karam-e-at-ta.*
 H. and A. NOM finger ACC entangle-PAST (-at < -aw)
 ‘Hanako and Akiko intertwined their fingers.’ (cf. (135))
- c. *Hanako to Akiko ga [otagai no] yubi o karami-aw-ase-ta.*
 H. and A. NOM each.other GEN finger ACC entangle-REC-CAUS-PAST
 ‘Hanako and Akiko joined their fingers together.’
- (146) a. *H. ga zibun no te o T. no te ni kasan-e-ta / kasan-e-at-ta.*
 H. NOM self GEN hand ACC T. GEN hand DAT put.OVER-PAST/put.OVER-REC
 ‘Hanako put his own hand on Taro’s hand.’
- b. *Hanako to Taro ga te o kasan-e-ta / kasan-e-at-ta.*
 H. and T. NOM hand ACC put.OVER-PAST / put.OVER-REC-PAST
 ‘Hanako and Taro put their hands on top of one another.’
- c. *H. to T. ga [otagai no] te o kasane-aw-ase-ru.*
 H. and T. NOM each.other GEN hand ACC put.OVER-REC-CAUS-PAST
 ‘H. and T. put their hands one over another.’
- (147) a. *Taroo no mi ga Akiko no mi ni kuttui-ta.*
 T. GEN body NOM A. GEN body DAT huddle-PAST
 ‘Akiko’s body huddled to Taro’s body.’
- b. *Taroo to Akiko no mi ga kuttuki-at-ta.*
 T. and a. GEN body NOM huddle-REC-PAST
 ‘Taro’s and Akiko’s bodies huddled together/to each other.’
- c. *W. wa U. ni [zibun no] mi o kuttuk-e-ta.*
 W. TOP U. DAT self GEN body ACC huddle-PAST
 ‘W. huddled his body to U.’s body.’
- d. *W. to U. to wa... tagai ni mi o kuttuk-e-at-ta. (Kh. 12)*
 W. and U. and TOP each.other DAT body ACC huddle-REC-PAST
 ‘W. and U. were huddling (lit. ‘their bodies’) to each other.’

(148) shows four-member derivational chains with suffixed reciprocals derived from both the intransitive and the transitive lexical reciprocals. The numbers of the examples, including those where the translations of these verbs can be found, are given beneath the relevant forms.

(148)	a. (vi)	b. (vt)	(149)	a. (vi)	b. (vt)	(150)	a. (vi)	b. (vt)
	<i>karam-u</i> →	<i>karam-e-ru</i>		<i>kasan-ar-u</i> ↔	<i>kasan-e-ru</i>		<i>kuttuk-u</i> →	<i>kuttuk-e-ru</i>
	↓	↓		↓	↓		↓	↓
	<i>karami-a-u</i>	<i>karam-e-a-u</i>		<i>kasan-ari-a-u</i>	<i>kasan-e-a-u</i>		<i>kuttuki-a-u</i>	<i>kuttuk-e-a-u</i>
	(134)	(145)		(129), (122)	(146)		(129), (147)	(147)

Forms like *karam-e-a-u* which can be used in a transitive construction seem to be possible on verbs which may combine with objects in possessive relationship with the subject (in a broad sense), mostly of inalienable possession (see (145), (146), and (147); cf., however, (122)). An indication of this seems to be the fact that a suffixed reciprocal is unlikely to be formed from the three-place transitive *maze-ru* ‘to mix sth with sth’ of the same Group C listed under (142), though it also denotes joining, because this condition is not observed:

- (151) *Taroo to Akiko ga nisyu no kona o maze-ta / *maze-at-ta.*
 T. and A. NOM two.kinds GEN flour ACC mix-PAST / mix-REC-PAST
 ‘Taro and Akiko mixed two kinds of flour.’ cf (135).

The difference between *totonoe-a-u* and *totonoe-ru* seems to be parallel to that in (144). As to *wake-a-u*, its meaning can be regarded as predictable, because the meaning ‘with each other’ is acquired by verbs with the same lexical meaning in other languages as well; cf.:

- (152) a. *Taroo to Ziroo wa tabemono o wake-ta.*
 ‘Taro and Jiro divided the food.’ (between other persons or between themselves?)
 b. *Taroo to Ziroo wa otagai ni tabemono o wake-at-ta.*
 ‘Taro and Jiro shared the food with each other.’ (T. Takiguchi, F. Endoo, p.c.)

12. Reciprocals with the prefix *soo-*

This prefix borrowed from Chinese has the same meaning as the prefix *a-i-* (see Section 8). It occurs in Chinese loan-words. It derives reciprocal nouns from nouns and the former become verbs if combined with the verbalizer *su-ru*. This prefix is rather productive, many words with it being lexicalized. Derivational chains that belong here may be divided into the following three types:

1. Three-member derivational chains; in a number of cases, some derivatives were ousted by respective formations with the prefix *a-i-* (though they may be registered in dictionaries); cf. (153a) and (153b) respectively:

- (153) a. *zoku* ‘second series’
 → *soo-zoku* ‘succession, inheritance’
 → *soo-zoku-suru* ‘to inherit’
 b. *han* ‘antithesis’
 → [*soo-han*] *a-i-han* ‘reciprocal’ (in combinations)
 → [*soo-han-suru*] *a-i-han-suru* ‘to oppose.’

2. The derivational chains in which the final verbal derivative is not used though some of them may be registered in the dictionaries:

(154) *ai* 'love' → *soo-ai* 'mutual love' [→ *soo-ai-suru* 'to love mutually'].

3. Probably the most numerous group comprises two-member chains in which the base word is out of use. Many Chinese roots are not generally used as words, and composita of two roots are the standard. Therefore some roots with a reciprocal meaning become words in combination with *soo-*:

(155) [*i* 'difference' →] *soo-i* 'difference' → *soo-i-su-ru* 'to differ'
 [*kan* 'barrier' →] *soo-kan* 'conversation, mutual relation' → *soo-kan-su-ru* 'correlate'
 [*koku* 'predominance' →] *soo-koku* '(a) conflict' → *soo-koku-su-ru* 'to conflict'
 [*zi* 'resemblance' →] *soo-zi* 'similar figure, resemblance' → *soo-zi-su-ru* 'to resemble'
 [*dan* 'conversation' →] *soo-dan* 'consultation/conference' → *soo-dan-su-ru* 'to consult/discuss' (M. Shibatani, p.c.)

13. Etymology of the reciprocal markers

As discussed above (see 2.5.4), the reciprocal suffix *-aw/-at/-a* is related etymologically to the two-place intransitive verb *a-u* 'to meet', 'to fit' (their allomorphs are entirely identical). Some of the authors regard morphological reciprocals as compounds with the verb *a-u* (see, among others, Hinds (1986: 124) who ascribes the meaning 'to suit, fit' to this verb). As a matter of fact, the two meanings of this verb, 'to meet' and 'to fit' are denoted by different characters. Nishigauchi (1992: 157) calls *a-u* "a reciprocal verb" (though he hyphenates it on the root). The viewpoint that verbal forms with the component *-aw* are compounds is the most widely accepted and traditional.

The nearest parallel to this etymological relation is found in Chukchi where the reciprocal marker (suffix or second component of an incorporated verb) is descended from the two-place intransitive verb *wəly-* 'to collide, join, cross'; cf. *penrə-nen* '[he] attacked-him' → *penrə-wəly-əgʔet* '[they] attacked-each-other-they' (see Nedjalkov, Ch. 40, §8).

By origin, the noun *tagai* 'difference, variation' is a deverbal derivation with the suffix *-i* (cf. (74)) from the lexical reciprocal verb *taga-u* i. 'to differ, be varied', ii. 'to act contrary to'. The root-final *-a* is possibly related genetically to the reciprocal suffix *-aw*, in which case this latter verb could be segmented as *tag-a-u* and thus interpreted as reciprocal *tantum*.

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Reciprocals, sociatives, comitatives, and assistives in Yakut*

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1. Introduction

1.1 Yakut

Yakut (Sakha) belongs to the Siberian group of the Northern Turkic (Eastern Hunnic) languages. This group also includes Altai (Oïrot; 71,317 individuals, according to the 1989 Census), Khakas (Abakan Tatar; numbering 81,428), Shor (16,650), Tofa (Tofalar; 730), Tuvan (Uryankhai; 222,000 persons), and *Runic Turkic. Yakut is spoken natively by nearly all of the 440,000 Yakuts most of whom live in the Republic of Sakha-Yakutia (which covers about one fifth of the territory of Russia in Eastern Siberia) and in the adjacent territories. The neighbouring aboriginal languages are Evenki, Even, Yukaghir and Chukchi. The Yakuts have migrated to their present territory (previously occupied by Tungusic tribes) from the area around Lake Baikal (which was not their original territory either, according to some sources). The migration began approximately in the 13th century CE under the pressure of Mongolian tribes and reached the northern boundaries by the 17–18th centuries (Korkina 1992: 3–5; Voronkin 1984: 8–9). As a result of strong in-

fluence of Evenki, a specific dialect of Yakut, viz. Dolgan, was formed to the north-west of Yakutia (about 7,000 speakers; Dolgans, mostly descended from Evenkis, developed into a separate ethnic group at the beginning of the 20th century). Dolgan differs from Standard Yakut to a greater degree than other dialects.

Yakut has undergone a strong influence of Mongolic and Tungusic languages in phonetics, grammar and lexicon due to contacts over a long period of time.

In respect of its grammatical features, Yakut is closer to the ancient Turkic languages than to other modern Turkic languages.

The Turkic languages are in general very similar and form a continuum of mutually intelligible dialects, with the exception of two widely divergent languages, Yakut and especially Chuvash.

1.2 Overview

Reciprocity is marked by the suffix *-s* alternating with *-h* in intervocalic position. This same marker also expresses the other three meanings listed in the heading, all the four meanings being closely related semantically. The interpretation of the marker is determined by sentence structure and/or context. For instance, in (1b) the form *tiej-s-* of the verb *tiej-* 'to carry/cart' allows all the four readings but the reciprocal reading of this particular verb is only possible if we add the adverb *xardarəta* 'by turns', 'mutually':

- (1) a. *Kiniler xardarəta ot tiej-el-ler.*¹
 they.NOM by.turns hay.NOM cart-PRES-3PL
 'They cart hay by turns.'
- b. *Kiniler [xardarəta] ot tiej-s-el-ler.*
- i. 'They cart hay together.' (sociative)
 - ii. 'They cart hay [with somebody].' (comitative)
 - iii. 'They help [somebody] to cart hay.' (assistive)
 - iv. 'They cart hay to each other.' (reciprocal)

The readings of (1b) are arranged in the order of preference for this reciprocal form.

In the following two sentences with a singular subject the dative object allows the assistive reading only and the comitative phrase with the postposition *kəttə* 'with' allows two interpretations:

- c. *Kini aya-tə-yar ot tiej-s-er.*
 he.NOM father-his-DAT hay.NOM cart-REC-PRES.3SG
 'He helps his father to cart hay.' (assistive)
- d. *Kini aya-tə-n kəttə ot tiej-s-er.*
 he.NOM father-his-ACC with hay.NOM cart-REC-PRES.3SG
- i. 'He carts hay with his father.' (comitative)
 - ii. lit. 'He with his father helps [someone] to cart hay.' (assistive)

1. In the examples, double letters denote long vowels, as in Yakut orthography based on the cyrillic alphabet. The boundaries between morphemes in verbs are drawn in accordance with the specialist literature on Yakut. In some unclear cases the boundaries are arbitrary, which does not affect the issues under discussion.

Sentence (1e), in comparison with (1d), lacks a comitative phrase. The sentence remains ambiguous but it has the opposite order of preferable interpretations:

- e. *Kini ot tiej-s-er.*
 he hay cart-REC-PRES.3SG
 i. ‘He *helps* [somebody] to cart hay.’ (assistive)
 ii. ‘He carts hay *together* [with *someone*].’ (comitative)

To save space, NOM is not glossed henceforth; this also pertains to the unmarked ACC, as in (1e). As a rule, these cases are clear enough in sentences.

The reciprocal meaning can also be rendered by a reciprocal pronoun which is derived from the reflexive pronoun by root reduplication. It is inflected for person and case. This reciprocal pronoun is used with non-reciprocal verbs as the only marker of reciprocity, and it may also occur with reciprocal verbs, as in (2) where the reciprocal suffix can be omitted without affecting the meaning:

- (2) *Kiniler beje-beje-leri-n homuruj-s-al-lar.* (S. 496)
 they self-self-their-ACC reproach-REC-PRES-3PL
 ‘They reproach each other.’

To sum up, there are three ways of expressing reciprocity in Yakut: (1) by means of the reciprocal suffix, (2) by means of the reciprocal pronoun, and (3) by a combination of these two means.

Alongside the four meanings which are very close semantically, the reciprocal suffix may also render a number of other (unproductive) meanings (e.g. anticausative, intensive, etc.), and it also occurs as a lexicalized component in a great many verbs. Verbs with the reciprocal marker form all the three subject-oriented diathesis types: “canonical” (2), “indirect” (1b.iv) and “possessive” (3a). Subject-oriented constructions may be transformed into object-oriented by means of the causative suffix (3b):

- (3) a. *Kiniler oyo-loru-n bil-s-el-ler.*
 they child-their-ACC know-REC-PRES-3PL
 ‘They know each other’s children.’
 b. *Kini oyo-loru-n bil-ih-in-ner-d-e.*
 he child-their-ACC know-REC-REFL-CAUS-PAST-3SG
 ‘He introduced (lit. ‘made know each other’) their children to each other.’

There is a special suffix *-la-s-/la-h-* (containing the reciprocal suffix *-s-/h-*) which derives reciprocal verbs from nouns, e.g.: *tuspa* ‘difference’ → *tuspa-las-* ‘to differ from’.

1.3 Data sources

The material for this chapter has been elicited from informants and obtained from the following dictionaries and specialist literature: Afanasjev & Kharitonov (eds. 1968), Böhntlingk (1989), Pekarskij (1959), Slepcev (ed. 1972), Ubrjatova (ed. 1982), Kharitonov (1963, 1982), Cheremisina (ed. 1995). The informants Alexandr Petrov and Nikolaj Artemjev, and Nikolaj Efremov have provided important information. Their examples are

given without reference to the source. Some of the examples borrowed from dictionaries and specialist literature (written by Yakut authors) are not confirmed by our informants.

This chapter relies heavily on the insightful work of the outstanding Yakut linguist L. Kharitonov (1963).

2. Grammatical notes²

2.1 Morphology

Yakut suffixes may have as many as 16–20 variants due to vowel harmony and processes of assimilation and dissimilation of consonants at the morphemic boundaries. For instance, the dative case marker may have the following 20 allomorphs in the paradigm of simple (non-possessive) declension, viz. five consonant variants with four vowel alternations each: *-ya/-ye/-yo/-yö*, or *-ga/-ge/-go/-gö*, *-ka/-ke/-ko/-kö*, *-xa/-xe/-xo/-xö*, *-ŋa/-ŋe/-ŋo/-ŋö*, determined by the preceding root vowel(s). There are two sets of vowel alternations, of open vowels (viz. *-a/-e/-o/-ö*, as in the dative endings) and of narrow vowels (viz. *-ə/-i/-u/-ü*, as in the reciprocal suffix; see 2.5). Respective long vowels (signified in this paper by geminated letters) are subject to the same type of alternations. Possessive declension has its own morphonological series of endings (4). Needless to say, in most cases we will refer to one (or four) of the variants only instead of an entire series.

2.2 General characteristics. Sentence structure

Yakut is an agglutinating (suffixing) language. There are no prefixes in Yakut. It has numerous postpositions (cf. *katta* ‘with’ in (1d)) and no prepositions. The predicate usually takes the sentence final (rightmost) position. In sentence structure, an important role belongs to converbs: there may be as many as three or four converbs in a sentence preceding a final finite verb form (see (150)). Converbs may (a) be used adverbially and depend on lexical verbs (see (23)), or constitute (b) periphrastic aspectual forms (see (57), (63b), etc.) or (c) periphrastic tense forms.

Syntactic relations are expressed by case markers. The subject is expressed by the nominative case of a nominal (personal pronouns are usually omitted) in sentence initial position (in most sentential examples, the subject is not glossed for the nominative case which has zero marking). Objects are placed between subject and predicate. Thus Yakut is a SOV language. A direct object is mostly expressed by the accusative case if it is definite (see the ending *-n* in (3)) or by the nominative (cf. *ot* in (1)), or by the partitive (along with the cases named) in imperative clauses (cf. (31) below). In the case of a nominative direct object, it is generally not marked for number and possession and is positioned immediately before the verb. An attribute precedes its head noun.

2. For a more detailed survey of Yakut grammar written in English see Krueger (1962).

2.3 Case and number. Possessive relations

The Yakut noun has two declensions, simple and possessive. In the latter, the possessive marker immediately follows the nominal stem in the majority of forms. Case markers of the two declensions are mostly the same. Plural is marked by the suffix *-lar/-tar/-dar/-nar*, etc.; sometimes, the plural suffix is absent (if a noun in the singular is used in the generic or collective sense or if it is inanimate; cf. (70b), (124)). There are eight cases in Yakut. Here are the two paradigms (depending on the stem final, the endings may partly vary):

(4)	a. Simple declension (for SG)	b. Possessive declension (for 1.SG)
NOM	<i>at</i> 'horse'	<i>at-əm</i> 'my horse'
ACC	<i>at-ə</i>	<i>ap-pə-n</i> (<i>pə < mə</i>)
PRTV	<i>at-ta</i>	<i>ap-pə-na</i>
DAT	<i>ak-ka</i>	<i>ap-par</i>
ABL	<i>at-tan</i>	<i>ap-pə-ttan</i>
INST	<i>at-ənan</i>	<i>ap-pə-nan</i>
COM	<i>at-təən</i>	<i>ap-pə-nəən</i>
COMP	<i>at-taayar</i>	<i>ap-pə-naayar</i> .

The plural number of both declensions (*at-tar* 'horses' and *at-tar-a* 'his/their horses', etc.) and the 2nd (*at-əŋ* 'your horse', etc.) and 3rd person (*at-a* 'his/her horse', etc.) of the possessive declension have special sets of forms.

Nominative case forms are used in the initial position of *izafet* (possessive) constructions, i.e. in the function of an attribute to a head noun that takes the possessive marker; e.g.:

(4)	c.	<i>αγα-m</i>	<i>at-a</i>
		father-my.NOM	horse-his
		'my father's horse', lit. 'father-my horse-his.'	

2.4 Tense/aspect system

There are about ten simple and periphrastic tense-aspect forms: present, future, and eight past tenses. Each of the tenses has a negative form (see (c) under (5)). Agreement in person and number is expressed by means of two sets of endings, one of the sets coinciding entirely with the possessive markers (see (b), (c) and (d) under (5)) and the other only partially overlapping with them (see (a) and (e) under (5)). The present tense markers are *-a* (1 and 2 p. SG and PL), *-ar* (3SG) and *-al* (3PL). Recent past (abbreviated as PAST) is marked by the suffix *-t/-d/-n/-l*. (Here we gloss tense markers separately from agreement markers, as suggested by Korkina 1970:61–2.) Non-recent past (abbreviated as NR.PAST) and resultative perfect (abbreviated as PERF) are marked by the suffix *-bət/-pət/...* but they differ in their agreement endings (cf. (d) and (e) under (5)). Here are fragments of the paradigms of the verb *as-/ah-* 'to open' (in (5c) *-pa < -ma*; in (5d, e) *-pət < -bət*):

(5)	a.	PRES	b.	PAST (positive)	c.	PAST (negative)	d.	NR.PAST	e.	PERF
	1.SG	<i>ah-a-bən</i>	<i>as-t-əm</i>	<i>as-pa-t-əm</i>	<i>as-pət-əm</i>	<i>as-pəp-pən</i>				
	3.SG	<i>ah-ar</i>	<i>as-t-a</i>	<i>as-pa-t-a</i>	<i>as-pət-a</i>	<i>as-pət-Ø</i>				
	3.PL	<i>ah-al-lar</i>	<i>as-t-əlar</i>	<i>as-pa-t-əlar</i>	<i>as-pət-tara</i>	<i>as-pət-tar</i>				

There are at least a dozen auxiliary verbs used in periphrastic aspectual forms, the lexical verb assuming one of the converbal suffixes (*-an*, *-a*, *-aarə* and their allomorphs). For instance, the verb *is-* ‘to go’ when used as an auxiliary with a converb in *-an* expresses an imperfective meaning.

2.5 The reciprocal suffix

As was mentioned above (see 1.2), the reciprocal meaning is rendered by the suffix *-s* (voiceless dorsal fricative) which alternates with *-h* (voiced faringal fricative) in intervocalic position (as it happens, this alternation is especially frequent in this suffix; in other cases *-h* has become permanent). The latter phoneme is of recent origin and occurs almost exclusively in intervocalic position. In certain positions the consonant *-s-* takes a connective vowel determined by vowel harmony: *-əs/-is/-us/-üs*. Not infrequently, this suffix is reduplicated and assumes the allomorphs *-səs/-sis/-sus/-sius* (see (6a) and (6b)). Both simple and reduplicated variants are regarded as identical in meaning although sometimes the reduplicated form is “preferable for the expression of reciprocal action in contrast to the sociative meaning, and also for the expression of a special emotive colouring in the verbal meaning” (Kharitonov 1963:19). When followed by the reciprocal marker, stem-final long vowels and diphthongs become short (see (6c)); the final *-j* may be retained in a monosyllabic stem with a short vowel, while in other cases it is optional (see (6b)).

- (6) a. *bil-* ‘to know’ → *bil-is-/bil-sis-* ‘to get acquainted [with each other]’
 b. *suruj-* ‘to write’ → *suru-s-/suruj-us-/suruj-sus-* ‘to write [letters] to each other’
 c. *uuraa-* ‘to kiss’ → *uura-s-* ‘to kiss each other.’

In certain verb forms, the vowel and the reciprocal *-s* undergo metathesis, e.g. *bil-is-/bil-sis-/bil-si-* ‘to get acquainted’ (6a). In nouns derived from reciprocal verbs, the marker *-s*, when preceded by a vowel, always alternates with *-h*, due to intervocalic position:

- (7) a. *bil-si-* ‘to get acquainted’ → *bil-s-ii* ‘acquaintance’
 b. *suru-s-* ‘to write to each other’ → *suru-h-uu* ‘exchange of letters.’

2.6 Reflexive and reciprocal pronouns

The reflexive pronoun is descended from the noun *beje-* ‘self’ (an ancient borrowing from the Mongolian *bie* ‘body, person’). It is inflected for person, number and case (the *possesive* declension), which results in 42 forms all in all (in specialist literature, six case forms are usually given). The most frequently used case forms are accusative, dative, and ab-

lative. The reciprocal pronoun is formed from the reflexive by reduplication;³ it has 21 forms, as it naturally lacks forms in the singular. Under (8a) are the accusative case forms of the reflexive pronoun whose 1SG.NOM forms are [*min*] *beje-m* ‘[I] myself’, [*en*] *beje-η* ‘[you] yourself’, [*kini*] *beje-te* ‘[he/she] him/herself’, etc. The accusative case forms of the reciprocal pronoun are given under (8b).

(8)	a.	Reflexive pronoun	b.	Reciprocal pronoun
	1.SG	<i>beje-bi-n</i> ‘myself’	–	
	2.SG	<i>beje-yi-n</i> ‘yourself’	–	
	3.SG	<i>beje-ti-n</i> ‘him/herself’	–	
	1.PL	<i>beje-biti-n</i> ‘ourselves’	<i>beje-beje-biti-n</i> ‘each other’	
	2.PL	<i>beje-yiti-n</i> ‘yourselves’	<i>beje-beje-yiti-n</i> ‘each other’	
	3.PL	<i>beje-leri-n</i> ‘themselves’	<i>beje-beje-leri-n</i> ‘each other’.	

The reflexive pronoun can combine pleonastically with reflexive verbs (cf. the analogous use of the reciprocal pronoun in (2)):

- (9) *Kini beje-ti-n xajya-n-ar.*
 he self-his-ACC praise-REFL-PRES.3SG
 ‘He praises himself.’

2.7 Voices (means of changing valency)

In Yakut grammar, as well as in the grammars of other Turkic languages, the reciprocal is traditionally included in the voice system. Five voices are commonly distinguished: active, or basic (zero marking), reflexive (the marker *-n*; see (10b), (11b), (12b)), passive (the marker *-ələn* or *-n*; see (10c), (11b.iv), (11c), (12c)), causative (the markers *-t/-d*, *-tar/-dar/-lar/-nar*, and unproductive *-ar*, *-əar*; see (10d), (11d), (12d)), and reciprocal (the marker *-s/-h*; see (10e), (11e), (12e)). Verbal valency in Yakut may be changed only by means of these marked voices.

The names of the voices do not cover the semantic range of their usages. To illustrate the derivational properties of the voice markers, here are a few derivational clusters; as can be seen from the examples, derivatives may have meanings which are not “a sum” of the meanings of the components; cf.:

3. However, we have encountered single instances of the use of the reflexive pronoun instead of the reciprocal and also of a reciprocal expression formed after the common Turkic pattern, i.e. from the numeral ‘one’; cf.:

- (i) *ayas balas saŋa-larə-n ist-is-el-ler ühü beje-leri-n*
 elder.sister younger.sister voice-their-ACC listen-REC-PRES-3PL they.say self-their-ACC
kör-sü-mne-ʼre ühü. (P. 977)
 see-REC-NEG.CONV-3PL (-ʼre < -ler) they.say
 ‘They say two sisters hear each other’s voices without seeing each other.’ (ear-rings).
- (ii) ... *biir biir-giti-n tuluj-a sald’a-ηne-t* ... (P. 2803; translation of New Testament)
 one one-YOUR-ACC suffer-CONV AUX-ITER-CONV
 ‘... [you.PL] tolerating each other...’

- (10) a. *bis-* i. 'to smear/spread'
 ii. 'to soil'
 b. *bih-in-* 'to smear sth for oneself' (reflexive-possessive)
 c. *bih-ilin-* i. 'to smear/soil oneself' (reflexive proper)
 ii. 'to be smeared/soiled' (passive)
 iii. 'to get smeared/soiled' (anticausative)
 d. *bis-ter-* 'to cause/allow to smear/soil sth'
 e. *bih-is-* i. 'to smear/soil *each other*'
 ii. 'to smear/soil *together*'
 iii. 'to *help* to smear/soil', etc.
- (11) a. *sot-* 'to rub sth/sb'
 b. *sot-un-* i. 'to rub *oneself*' (e.g. with a towel) (reflexive proper)
 ii. 'to rub *one's body part*' (reflexive-possessive)
 iii. 'to *rub* against sth' (autocausative) (see S. 335)
 iv. 'to *be rubbed*' (passive)
 c. *sot-ulun-* 'to *be rubbed/towelled*, etc.' (passive) (S. 335)
 d. *sot-tor-* 'to *cause/allow* to rub sth/sb'
 e. *sot-us-* i. 'to rub *each other*'
 ii. 'to rub *together*'
 iii. 'to *help* to rub.'
- (12) a. *albən-naa-* 'to deceive' (← *albən* 'sly, a sly person' + denominal suffix *-naa*)
 b. *albən-na-n-* i. 'to deceive *oneself*'
 ii. 'to *pretend* (to be)'
 c. **albən-na-lən-* 'to be deceived' (the passive meaning is expressed by (12d); see (14))
 d. *albən-na-t-* i. **to cause/allow* to deceive sb'
 ii. 'to *be deceived* (through one's own fault)'
 e. *albən-na-s-* i. 'to *fawn* (on sb)'
 ii. 'to deceive *each other*'

3. Co-occurrence of voice markers

3.1 Introductory

The voice markers may co-occur in the same verbal form in various combinations. The order of voice markers reflects the sequence of derivational operations. Below is a simplified survey of the meanings and derivational relations between the four voices, of which one (causative; the most productive) increases valency and the other three decrease valency. The purpose is to show the place of the reciprocal suffix among the means of valency change. The passive and causative can be expressed by two markers each, in complementary distribution (which is not quite consistent but covers most of the cases). On verbs with a stem final consonant (a) the passive voice is expressed by the suffix *-ələn*, and (b) the causative by the suffix *-tar* (also used on all the derived verbs). On verbs with a final vowel (a) the passive is expressed by the reflexive polysemous suffix *-n*, and (b) the causative by the suffix *-t*.

3.2 Causative: Its meanings and co-occurrence with other voice markers

Apart from causativity (permissive and factitive; see (10d), (11d) and (15)), causative forms may also express a kind of passive (reflexive-permissive) meaning; in this case the number of valencies is retained, but agent valency becomes optional; cf.:

- (13) a. *aal kini-ni saaxamak-ka kəaj-d-a.*
 neighbour he-ACC chess-DAT defeat-PAST-3SG
 ‘The neighbour defeated him in chess.’
 b. *Kini saaxamak-ka kəaj-tar-d-a.* (S. 203)
 he chess-DAT defeat-CAUS-PAST-3SG
 ‘He lost (lit. ‘let-defeat’) a game of chess.’
- (14) *Kimie-xe albanna-t-t-əŋ?* (S. 37)
 who-DAT deceive-CAUS-PAST-2SG
 ‘Who has deceived you?, lit. “Whom did you allow to deceive yourself?” (cf. (12c))

1. *Causative derivation from causatives.* Basically, from any intransitive verb a causative verb can be derived which does not differ in any way from other transitives. Furthermore, from any two-place causative (and from any other transitive verb) a three-place causative can be formed; e.g.:

- (15) *öl-* ‘to die’ → *öl-ör-* ‘to kill sb’ → *öl-ör-tör-* ‘to cause/allow sb to kill sb.’

2. *Causatives derived from reciprocals.* In principle, a causative can be derived from any reciprocal (see 4.2); for unclear reasons, a reflexive marker is inserted between the reciprocal and the causative markers without affecting the meaning; in verbs with the final -s which is not (at least genetically) related to the reciprocal marker, insertion of the reflexive suffix is not possible; cf. (16) and (17) respectively:⁴

- (16) a. *ətə-s-* ‘to shoot at each other’ (← *ət-* ‘to shoot’) → **ətə-s-tər*
 b. *ətə-h-ən-nər-* ‘to cause/allow to shoot at each other.’
- (17) a. *tas-* ‘to carry’ → *tas-tar-* ‘to cause/allow to carry’
 b. **tah-un-nar-*.

3. *Causative derivation from reflexives.* A causative can be derived practically from any formal reflexive, whatever the meaning of the latter; cf.:

- (18) a. *öjöö-* ‘to support sb/sth’, ‘to prop sth up’
 b. *öjö-n-* ‘to lean/rest (up) on sth/sb’ (autocausative)
 c. *öjö-n-nör-* ‘to lean/prop sb/sth against sth’; cf.:

4. Böhtlingk (1959: 318–9) has noted instances of the reflexive marker included not only after the root-final -s- but also after other root-final consonants (mostly after -t-, it seems); e.g.: *əraat-* ‘to leave, go far away’ → *əraat-ən-nar-* i. ‘to let leave/go’, ii. ‘to send away’; *kətaat-* ‘to hearten up’ → *kətaat-ən-nar-* ‘to encourage’; *xorgut-* ‘to be upset’ → *xorgut-un-nar-* ‘to upset sb’; *kepset-* ‘to tell’ → *kepset-in-ner-* ‘to make/let tell’; *ihit-* ‘to listen’ → *ihit-in-ner-* ‘to announce’; *kəaj-* ‘to overcome’ → *kəaj-ən-nar-* ‘to make overcome’. All these causatives excepting the last one are registered in (S. 528, 213, 500, 220, 156).

- (19) *Kini saa-nə mas-ka öjö-n-nör-d-ö.* (S. 286)
 he rifle-ACC tree-DAT prop-REFL-CAUS-PAST-3SG
 ‘He propped a rifle against a tree.’

4. *Causative derivation from passives.* Causatives cannot be formed from passives proper.

3.3 Reciprocal: Its meanings and co-occurrence with other voice markers

Apart from the four meanings listed in 1.2, reciprocal forms may also render a number of other meanings, the most important of them being anticausative and converse (see 10.2). Moreover, many of the derivatives with a reciprocal marker are lexicalized and the reciprocal meaning may be absent (see 11.3).

1. *Reciprocal derivation from causatives.* Reciprocals are derived from two-place causatives without restrictions, like from any ordinary transitives (cf., for instance, (20a)). From three-place causatives reciprocals are not likely (at least they are not registered in dictionaries), with two or three exceptions (the only instances we have found are the verbs meaning ‘to show’ and ‘to let sb know’, ‘to inform’; see (21), (21’)); cf.:

- (20) a. *öl-ör-* ‘to kill’ → *öl-ör-üs-* ‘to kill each other’;
 b. *öl-ör-tör-* ‘to cause/allow to kill’ → *öl-ör-tör-üs-* (intended meaning:
 ‘to cause/allow each other to kill sb.’)
- (21) a. *kör-* ‘to see/look’
 b. *kör-dör-* ‘to show’
 c. *kör-dör-üs-* ‘to show sth to each other.’
- (21’) a. *bil-* ‘to know’
 b. *bil-ler-* ‘to let sb know sth/inform’
 c. *bil-ler-is-* ‘to inform each other about sth.’

2. *Reciprocal derivation from reciprocals.* This kind of derivation is impossible. There are irregular cases of reduplication of the reciprocal marker which can hardly be regarded as instances of reciprocal derivation from reciprocals (see 2.5), though Slepcev (1972) and Pekarskij (1959) do treat some instances as such: e.g. *kör-süs-* ‘to see/meet each other’ is interpreted as a reciprocal derivative from the reciprocal *kör-üs-* (same meaning) (← *kör-* ‘to see’) (S. 181; P. 1165).

3. *Reciprocal derivation from reflexives.* One-place reflexives, like one-place verbs in general, do not yield reciprocals, but the latter can be derived without special restrictions from two-place reflexives with an anticausative, anticausative and other meanings; cf.:

- (22) a. *öjöö-* ‘to support sb’, ‘to prop up’ (vt)
 b. *öjö-n-* ‘to lean/rest (up) on sth/sb’ (vi; autocausative)
 c. *öjö-n-üs-* ‘to lean (up) on/support each other’; e.g.:
- (23) *Kiniler beje-beje-leri-tten öjö-n-s-ön tur-al-lar.* (S. 286)
 they self-self-their-ABL support-REFL-REC-CONV stand-PRES-3PL
 ‘They stand supporting each other.’

As a curiosity, formation of a reciprocal from a one-place reflexive can be cited:

- (24) a. *kuus-* 'to hug/embrace sb'
 b. *kuuh-un-* 'to hug/embrace oneself/one's breast' (e.g. 'to stand facing one's superior with one's arms crossed on one's breast') (cf. *kuus-t-an* in (135))
 c. *kuus-t-us-* 'to hug/embrace each other' (-*t-* < -*un-*, by way of assimilation).

4. *Reciprocal derivation from passives.* Reciprocals from passives proper cannot be formed, not even reciprocal forms with a sociative meaning; e.g.:

- (25) *öl-ör-ülün-* 'to be killed' (S. 286)
 (26) **öl-ör-ülün-üs-* (intended meaning:) 'to be killed together.'

3.4 Reflexive: Its meanings and co-occurrence with other voice markers

As often as not, the suffix *-n* renders meanings characteristic of reflexive markers in a number of European languages, such as anticausative, autocausative, etc., and after some stem finals (usually after vowels) it may render the passive meaning (on stems with a final consonant its meaning is not passive). In derivatives from lexical reciprocals, the suffix *-n* sometimes competes with the reciprocal suffix *-s* (cf. (27b.iii) and (27c)):

- (27) a. *xolboo-* 'to join sth to sth'
 → b. *xolbo-n-* i. *'to join oneself' (reflexive proper is ungrammatical)
 ii. 'to join/add to oneself' (reflexive-benefactive)
 iii. 'to get joined to sth' (anticausative)
 iv. 'to be joined' (passive)
 c. *xolbo-s-* i. 'to get joined to sth' (anticausative)
 ii. 'to get joined together' (Kh.1. 44)

The reflexive marker expresses the reflexive meaning proper (like 'to wash oneself') less frequently than the more common reflexive-possessive meaning in transitive constructions denoting actions performed on one's body part or for one's own benefit (i.e. 'to wash one's hands' and the like; cf. the respective meaning of the Ancient Greek Middle). (Note that most of the Turkic languages have practically lost the reflexive-possessive meaning). This is due to the difference in the lexical range of base verbs that allow one or the other derivative meaning (cf. (i) and (ii) under (27b) and (28b)). If the meaning is reflexive-possessive, as in (28c) and (30), or reflexive-benefactive, as in (29b–c) and (31), a direct object is retained. In cases of the (28b) type, the reflexive suffix corresponds to the object argument (i.e. *sirej-in* in (28a)), while in (28c) the reflexive suffix corresponds to the possessive attribute of the underlying sentence (i.e. *oyo-m* in (28a)).

- (28) a. *Min oyo-m sirej-in suuj-uo-m.*
 I child-my face-ACC wash-FUT-1SG
 'I will wash my child's face.'
 b. *Min suu-n-uo-m.*
 I wash-REFL-FUT-1SG
 'I will wash myself.' (reflexive proper)

- c. *Min sirej-bi-n suu-n-uo-m.*
I face-my-ACC wash-REFL-FUT-1SG
'I will wash my face.' (reflexive-possessive)
- (29) a. *Ot tiej-e-bin.*
hay cart-PRES-1SG
'I cart hay.'
- b. *Ot tie-n-e-bin.*
hay cart-REFL-PRES-1SG
'I cart hay for myself.' (reflexive-benefactive)
- c. *O-pu-n beje-m tie-n-e-bin.* (Kh.1. 79)
hay-my-ACC self-my cart-REFL-PRES-1SG
lit. '[I] myself cart my hay for myself.' (reflexive-benefactive)
- (30) *Taŋas-kə-n kuur-d-un-Ø!*
clothes-your-ACC dry-CAUS-REFL-IMP.2SG
'Dry your clothes!' (S. 195) (reflexive-possessive)
- (31) *Mas-ta kerd-in-Ø!* (Kh.1. 79)
wood-PRTV chop-REFL-IMP.2SG
'Chop some fire-wood for yourself!' (reflexive-benefactive)

In the northern dialects of Yakut, an extremely characteristic feature of the reflexive marker *-n-* is its (mostly desemanticized) use in those cases where Standard Yakut does not resort to it (analogous extension of the use of the reflexive suffix in Turkic languages is attested only in the eastern dialects of Bashkir; cf.: *aša-n* (instead of *aša*) 'to eat' (Maksjutova 1976: 58, 142)). In a number of dialects, e.g. in the Kolyma dialect, nearly total extension of the reflexive suffix over the active voice without any perceptible semantic contribution is observed (Korkina 1992: 57, 190, 207, 256; Voronkin 1984: 189–90)). The following examples are from the north-eastern (see (32), (33)) and north-western (see (34)) dialects:

- (32) *Kinige aay-ən-ar* (instead of *aay-ar*) ' [He] is reading a book.'
- (33) *[Kini] min ih-in-er* (instead of *ih-er*) ' [He] is eating soup.'
- (34) *Min manna ülele-n-i-em* (instead of *ülel-i-em*) 'I will work here.'

1. *Reflexive derivation from causatives.* Reflexives are derived from two-place causatives in the same way as from any other two-place verbs, while from three-place causatives they are not formed (cf. (35c)), very much like reciprocals. Thus, in Kharitonov's (1963: 84) opinion, reflexive forms of three-place causative verbs that sometimes occur in texts look rather odd (cf. (36)).

- (35) a. *öl-ör-* 'to kill sb' → *öl-ör-ün-* 'to kill oneself'
b. *öl-öt-tör-* 'to cause/allow sb to kill some one'
→ c. **öl-öt-tör-ün-* (intended meaning) 'to cause/allow oneself to kill sb.'
- (36) *Doktor-ga kör-dör-ün!* 'See the doctor!'
(lit. 'Let the doctor see you'; Kh.1. 84; S. 180)

2. *Reflexive derivation from reciprocals.* Such cases are semantically ruled out. An exception are cases of causative derivation from reciprocals which involve automatic insertion of the reflexive marker (see case 2) in Section 3.2).

In a limited number of lexicalized verbs with a non-reciprocal meaning, the reflexive marker follows the reciprocal suffix (see 14.3):

- (37) a. *ək-* 'to press/squeeze' (vt)
 b. *əg-ən-* 'to press/squeeze for/on oneself' (vt) (reflexive-benefactive or possessive)
 c. *əg-əh-ən-* 'to exert oneself, distend' (vi) (autocausative) (Kh.1. 88).
- (38) a. *tart-* i. 'to pull'; ii. 'to restrain'
 b. *tard-ən-* i. 'to restrain oneself' (autocausative)
 ii. 'to pull [up] for/on oneself' (reflexive-benefactive)
 c. *tard-əh-ən-* 'to pull [oneself] up.' (autocausative)

3. *Reflexive derivation from passives.* This seems to be forbidden.

3.5 Passive markers: Their meanings and co-occurrence with other voice markers

Passives proper, especially with an agentive object, are rather rare in spoken Yakut (instead of agentive passive, the active is preferred (Kharitonov 1963: 104, 108)).

- (39) *Suruk suru-lun-n-a.* 'The letter is written.' (← *suruj-* 'to write')
 (40) *Ot oxsu-lun-n-a.* 'The grass is mown down.' (← *oxsu-* 'to mow')

Apart from the passive meaning proper which is its main meaning, the marker *-ələn/-lən* (in complementary distribution with *-n* depending on the stem final; see 3.1) is also used to render meanings characteristic of the reflexive-passive marker *-n*. Not infrequently, a derivative has two or more meanings, including lexicalized ones; cf:

- (41) a. *əal bəa-nə tüür-d-e.*
 neighbour rope-ACC coil-PAST-3SG
 'The neighbour coiled the rope.'
 b. *ət təmnə-ttan tüür-üllü-büt.* (S. 417) (autocausative)
 dog cold-ABL coil-PASS-PERF.3SG
 'The dog coiled from cold.'
 c. *Bəa tüür-üllü-büt.* (S. 417) (passive)
 rope coil-PASS-PERF.3SG
 'The rope is coiled.'

Sometimes it is difficult to draw a borderline between the passive and the anticausative meanings, the distinction between them being context-dependent.

- (42) a. *əal aan-ə xataa-t-a.*
 neighbour door-ACC open-PAST-3SG
 'The neighbour locked the door.'
 b. *Aan xata-n-n-a.*
 door open-REFL-PAST-3SG

- i. 'The door was locked [by sb].' (passive)
 ii. 'The door locked.' (anticausative)

1. *Passive derivation from causatives.* This is a common case: passives are derived from two-place causatives like from any other transitives; from three-place causatives their derivation is unlikely. As Kharitonov (1963: 107) points out, such forms are grammatically possible but they are avoided in speech; the following example illustrates this form:

- (43) *tiej-* 'to cart' → *tiej-ter-* 'to cause to cart' → *tiej-ter-ilin-* 'to be caused to cart sth'.

2. *Passive derivation from reflexives, reciprocals, and passives.* These types of derivation are not registered. Nevertheless, there is a tendency in Yakut to combine two passive markers. As it happens, in some other Turkic languages the suffix *-l* alone is used to mark the passive voice. In Yakut, it is supplemented by the reflexive-passive suffix *-n*, yielding the complex suffix *-əl-ən* (as has just been mentioned, it is used on stems with a final consonant). Since *-n* is more polysemous than *-ələn* this latter suffix is sometimes added to it when it has a passive meaning, thus yielding a three-component passive marker *-n-əl-ən* (Kharitonov 1963: 106). (This combination is facilitated by the final consonant on stems in *-n*.) Thus no component of meaning is added but the form becomes less ambiguous. Compare:

- (44) a. *battaa-* 'to press/squash'
 b. *batta-n-* 'to be pressed/squashed'
 c. *batta-n-ələn-* (same meaning) (Kh.1. 106).

In the following example, additional marking of the passive resolves ambiguity of the underlying form:

- (45) a. *erbee-* 'to saw'
 b. *erbe-n-* i. 'to saw for oneself' (reflexive-possessive)
 ii. 'to be sawn' (passive)
 c. *erbe-n-ilin-* 'to be sawn [by sb]' (passive) (S. 543; Kh.1. 106).

4. Diathesis types of reciprocals with the suffix *-s/-h* only

4.1 Subject-oriented reciprocal constructions

4.1.1 "Canonical" reciprocals

In this type, the reciprocal marker obligatorily deletes either the direct or the indirect object of the underlying non-reciprocal construction. This type also includes reciprocals derived from intransitives commonly used as one-place verbs (see 4.1.1.6). Thus "canonical" reciprocals are always intransitive, while the underlying verbs can be either transitive or intransitive.

4.1.1.1 *Derived from two-place transitives.* This is the main type of reciprocals. It is likely that all two-place transitives (with both human referents) may be used reciprocally, this process involving intransitivization.

- (46) a. *Min urukkuttan kini-ni bil-e-bin.*
 I for.a.long.time he-ACC KNOW-PRES-1SG
 ‘I have known him for a long time.’
 b. *Bihigi urukkuttan bil-s-e-bit.* (Kh.2. 271)
 we for.a.long.time KNOW-REC-PRES-1PL
 ‘We have known each other for a long time.’
- (47) a. *Kini kini-ni balaj-d-a.*
 he he-ACC slander-PAST-3SG
 ‘He slandered him.’
 b. *Kiniler balaj-sas-t-alar.* (P. 62)
 they slander-REC-PAST-3PL
 ‘They slandered each other.’

Below, representative lists of the most common lexical groups of “canonical” reciprocals are given. The underlying verbs are not quoted because their meaning is part of and therefore recoverable from that of the derived reciprocals.

A. The first group comprises verbs of physical action upon an object referent that may result in a change of state of the latter (it is noteworthy that among verbs of physical action, those of violent hostile actions are prevalent).

- (48) *ann’-as-* ‘to push each other’
battaxta-s- ‘to seize each other by the hair’
kəɖaj-as-, kəɖa-s- ‘to kill/exterminate each other’
kərba-s- ‘to beat/hit each other’
muomala-s- ‘to squeeze each other when fighting’
musku-s- ‘to wring/twist each other’s hands’
oxs-us- ‘to beat each other’, ‘to fight’
ölör-üs- ‘to kill each other’
öttükte-s- ‘to throw each other over the thigh’
sejmekte-s- ‘to tear each other to pieces’
suturukta-s- ‘to attack each other with fists’
sərbat-as- ‘to beat/hit each other’, ‘to fight’
tabaj-as- ‘to kick each other with front hooves’
tarba-s- ‘to scratch each other’
toyonoxto-s- ‘to push each other with elbows’
tuppaxta-s- ‘to pinch each other’
tut-us- ‘to seize/grasp each other’
təg-as- ‘to flick each other on the forehead’
uolukta-s- ‘to seize/grab each other by the clothes above the waist’
ütürü-s- ‘to push each other’
xaanna-s- ‘to beat each other till bleeding’
xabəala-s- ‘to bite each other (of dogs)’
xabərə-s- ‘to press/push each other’
xad’əkta-s- ‘to bite each other’

<i>xad'ərə-s-</i>	'to tear/torment each other'
<i>xap-səs-</i>	'to seize each other', etc.

B. Here belong verbs denoting all kinds of relations between people that do not necessarily imply physical action, and also verbs of speech:

(49) <i>aatta-s-</i>	'to name each other'
<i>burujda-s-</i>	'to condemn/accuse each other'
<i>bəðha-s-</i>	'to free/save/rescue each other'
<i>keteh-is-</i>	'to wait for each other'
<i>küüt-üs-</i>	'to wait for each other'
<i>kəra-s-</i>	'to curse/damn each other'
<i>sura-s-</i>	'to ask about each other'
<i>tuorajda-s-</i>	'to disturb/hinder each other'
<i>xomuruj-us-</i>	'to reproach each other'
<i>əjat-əs-</i>	'to ask each other'
<i>əsta-s-</i>	'to scold/curse each other', etc.

C. Verbs denoting feelings or their manifestation, approval or disapproval, mental activities, or sense perception form a distinct lexical group:

(50) <i>axt-əs-</i>	'to remember each other'
<i>albənna-s-</i>	'to deceive each other'
<i>atayasta-s-</i>	'to offend each other'
<i>bil-is-</i>	'to know each other', 'to get acquainted with each other'
<i>künüüle-s-</i>	'to be jealous of/envy each other'
<i>küöte-s-</i>	'to scare each other'
<i>kütüre-s-</i>	'to suspect each other'
<i>maanəla-s-</i>	'to respect each other'
<i>öjdö-s-</i>	'to understand each other'
<i>tapta-s-</i>	'to love each other'
<i>umm-us-</i>	'to forget of each each', etc.

Verbs of sense perception:

(51) <i>bul-us-</i>	'to find each other'
<i>ist-is-</i>	'to hear each other'
<i>kör-üs- / kör-süs-</i>	i. 'to see each other', ii. 'to meet each other'
<i>seŋeer-is-</i>	'to listen to each other attentively'.

D. Verbs of motion also form a distinct lexical group:

(52) <i>aah-əs-</i>	'to pass/go by each other'
<i>kötöy -üs-</i>	'to lift/raise each other'
<i>oro-s-</i>	'to take each other out'
<i>tohuj-us-</i>	'to go to meet each other', etc.

4.1.1.2 *Derived from two-place transitives with a split object valency.* Here belong the same verbs as in 4.1.1.1. The difference lies in the fact that in this case the underlying construc-

tion contains an optional ablative object (denoting a body part) which appears as a result of splitting the obligatory human object argument: thus the latter is expressed twice, as a whole by a direct object and as an immediately affected body part by an ablative object. This type is semantically close to “possessive” reciprocals due to the involvement of a body part (inalienable possession) (see 4.1.3): cf.:

- (53) a. *Ije-m kəh-ə-n [uoh-u-ttan] uuraa-t-a.*
 mother-my daughter-her-ACC lip-her-ABL kiss-PAST-3SG
 ‘My mother kissed her daughter [on the lips].’
 b. ... *uos-tarə-ttan uura-h-an* ... (P. 2974)
 lip-their-ABL kiss-REC-CONV
 ‘[they]... having kissed each other on the lips...’
- (54) a. *Tustaaččə ilii-bi-tten [miig-in] xab-an əl-l-a.*
 wrestler hand-my-ABL I-ACC grasp-CONV take-PAST-3SG
 lit. ‘The wrestler grasped [me] by my hand.’
 b. *Tustaaččə-lar ilii-ilii-leri-tten xap-səh-an əl-l-əlar* (S. 480)
 wrestler-PL hand-hand-their-ABL grasp-REC-CONV take-PAST-3PL
 ‘The wrestlers grasped each other’s hands.’
- (55) *Kiniler ili’i-ilii-leri-tten sietti-h-en ih-el-ler.*
 they hand-hand-their-ABL lead.by.hand-REC-CONV go-PRES-3PL
 ‘They lead each other holding each other’s hands.’
- (56) ... *Ilii ilii-leri-tten əl-səs-t-əlar.* (S. 525)
 hand hand-their-ABL grasp-REC-PAST-3PL
 ‘[They] grasped each other by the hands.’
- (57) *tüös tüös-teri-tten utarata kep-s-en kebih-en bar-an* (P. 1003)
 breast breast-their-ABL opposite push-REC-CONV AUX-CONV AUX-CONV
 ‘[they] ... having pushed each other on the breast.’

4.1.1.3 Derived from two-place intransitives. Most of these intransitives take an object with the postposition *kəttə* ‘with’ (see the list of verbs under A below). Some of the speech and motion verbs may require an object either in the dative (see lists A and C) or, much less commonly, in the ablative case (see list B). In the derived sentences, the nominal with *kəttə* is a part of the subject group.

Intransitives that can acquire the reciprocal form seem to be much more numerous in Yakut than in some other Turkic languages.

- (58) a. *əal kimie-xe kuruutun saan-ar.* (P. 305)
 neighbour he-DAT all.time threaten-PRES.3SG
 ‘The neighbour threatens him all the time.’
 b. *əal kini-ni kəttə kuruutun saan-s-al-lar.*
 neighbour he-ACC with all.time threaten-REC-PRES-3PL
 ‘The neighbour and he threaten each other all the time.’
- (59) a. *Min atas-par sərət-t-əm.*
 I friend-my.DAT come-PAST-1SG
 ‘I visited my friend.’

- b. *Bihigi atas-pə-n kəttə səld'-əs-t-əbət.*
 we friend-my-ACC with come-REC-PAST-1PL
 'I and my friend visited each other.'

Here belong verbs of the following lexical groups.

A. Verbs of speech and communication (most of the underlying verbs take a dative human object (see (60a)), and some an object with the postposition *kəttə* (see (60b)) or both (see (60c)); some of the verbs may take an optional object with the postposition *toyunan* 'about' denoting the content of speech):

- (60) a. *botugura-s-* 'to whisper with each other'
de-s- 'to talk with each other'
imnen-is- 'to make signs to/wink at each other'
muḡatə-s- 'to complain to each other'
n'əlaḡna-s- 'to flatter each other'
sibigine-s- 'to whisper with each other'
sipsi-s- 'to whisper with each other'
üögüle-s- 'to shout to each other'
əhəta-s- 'to shout to each other'
- b. *kepset-is-* 'to talk with each other'
labaxala-s- 'to chatter with each other'
xalaata-s- 'to talk loudly with each other'
xobd'oor-us- 'to talk loudly and quickly with each other'
- c. *sarḡar-əs-* 'to talk with each other.'

B. Verbs expressing mental states (the underlying verbs govern an ablative object):

- (61) *xomoj-us-* 'to be disappointed with each other'
xorgut-us- 'to become upset by each other('s behaviour).'

C. Verbs of various human activities and relations:

- (62) *bat-əs-* 'to live in harmony with each other'
mehejde-s- 'to hinder each other.'

4.1.1.4 *Derived from two-place intransitives with a split object valency.* This case is analogous to that under 4.1.1.2.; cf.:

- (63) a. *Kini östöö-gör [ilii-ti-ger] sillee-t-e.*
 he enemy-his.DAT hand-his-DAT spit-PAST-3SG
 lit. 'He spat his enemy into his hand.'
- b. ... *ilii ilii-leri-ger sillee-h-en bar-an-nar.* (P. 933)
 hand hand-their-DAT spit-REC-CONV AUX-PAST-3PL
 lit. '[They] spat each other into their hands.'

4.1.1.5 *Derived from three-place intransitives.* Unlike the verbs in 4.1.1.2, the base verbs of this type contain two non-direct objects of which one is retained in a reciprocal construction. Semantically, this type is adjacent to "indirect" reciprocals; cf.:

- (64) a. *aal kinie-xe ah-ənan-üöülü-nen xardala-ə.*
 neighbour he-DAT food-INST-food-INST give.in.exchange-PRES.3SG
 ‘The neighbour gives him food in exchange.’
 b. *Kiniler ah-ənan-üöülü-nen xardala-h-al-lar.* (S. 484)
 they food-INST-food-INST exchange-REC-PRES-3PL
 ‘They exchange their supplies of food with each other.’
- (65) a. *Oyo oyo-yo xaar-ənan bəray-ar.*
 child child-DAT snowball-INST throw-PRES.3SG
 ‘A child throws snowballs at another child.’
 b. *Oyo-lor xaar-ənan bərax-s-al-lar.* (Kh.2. 271)
 child-PL snowball-INST throw-REC-PRES-3PL
 ‘The children throw snowballs at each other.’

4.1.1.6 *Derived from one-place intransitives.* The latter commonly denote uttering sounds by animate beings or other signals; these actions usually imply an addressee which is practically never expressed. The derived reciprocals denote an exchange of signals provoked by the partner(s). This type is kind of intermediate between reciprocals and sociatives. The list of one-place intransitives used reciprocally is limited. Compare:

- (66) a. *Küöl-ge kus-tar maatəry-əl-lar.*
 lake-DAT duck-PL quack-PRES-3PL
 ‘The ducks are quacking in the lake.’
 b. *Kus-tar maatərya-h-al-lar.*
 duck-PL quack-REC-PRES-3PL
 ‘The ducks are quacking to each other.’
- (67) a. *Börö ərd’əgənaa-t-a.*
 wolf growl-PAST-3SG
 ‘The wolf began to growl.’
 b. *Börö-lör ərd’əgəna-h-al-lar.* (S. 529)
 wolf-PL growl-REC-PRES-3PL
 ‘The wolves growl at each other.’
- (68) a. *Otčut əhətaa-n bar-d-a.*
 mower shout-CONV AUX-PAST-3SG
 ‘The mower began to shout loudly.’
 b. *Otčut-tar əhəta-h-al-lar.* (S. 531)
 mower-PL shout-REC-PRES-3PL
 ‘The mowers are loudly shouting to each other.’
- (69) a. *Bu atəər d’oxsoottoo-n bar-d-a.*
 this stallion assume.threatening.posture-CONV AUX-PAST-3SG
 ‘This stallion assumed a threatening posture.’ (when he saw another stallion)
 b. *Atəər-dar d’oxsoottoo-h-on er-el-ler.*
 stallion-PL assume.threatening.posture-REC-CONV begin-PRES-3PL
 ‘The stallions begin to behave towards each other in a threatening way.’
- (70) a. *Bu ənax mayəraa-n bar-d-a.*
 this cow moo-CONV AUX-PAST-3SG
 ‘The cow began to moo.’

- b. *Bu ənax mayəra-h-an bil-s-er.* (Kh.1. 23)
 this cow moo-REC-CONV know-REC-PRES.3SG
 ‘The cows recognize each other by mooing to each other.’

The following reciprocals also belong in this group:

- (71) *ajaata-s-* ‘to roar/bellow at/to each other (of oxen)’
kiste-s- ‘to neigh to each other’
kürd’üütte-s- ‘to assume a threatening pose against each other (of oxen)’
xongkuna-s- ‘(of geese) to exchange cackles.’

4.1.2 “Indirect” and benefactive reciprocals

In reciprocal constructions of this type, a direct object is retained and an indirect dative or ablative object is deleted. Therefore the underlying transitive structure is retained. The number of reciprocals with the “indirect” diathesis derived from three-place verbs with an obligatory indirect object does not exceed ten or fifteen. If we count reciprocals with the benefactive meaning (derived from verbs with an optional indirect object; cf. (73)) their number will increase significantly. As is mentioned above (see 2.2) the retained object has the nominative case form or, if the object is definite, the accusative.

- (72) a. *Beje-η üle-γə-n mie-xe najəlaa-ma.*
 self-2SG.NOM work-thy-ACC I-DAT shift-NEG.IMP
 ‘Don’t shift your work on me.’
 b. *At-tar-ə manəł-larə-n najəla-h-an, mökküh-er*
 horse-PL-ACC guard-their-ACC shift-REC-CONV argue-PART
buol-al-alara. (Kh.1. 37)
 AUX-PAST-3.PL
 ‘It happened from time to time that they argued with each other trying to shift on each other the guarding of the horses.’
- (73) a. *Aya-m kinie-xe die-ni tut-t-a.*
 father-my he-DAT house-ACC build-PAST-3SG
 ‘My father built a house for him.’
 b. *Kiniler die-leri-n tut-us-t-ular.*
 they house-their-ACC build-REC-PAST-3PL
 ‘They built houses for each other.’
- (74) a. *Ini bii-tten kur-u bəld’a-t-a.*
 younger.brother elder.brother-ABL belt-ACC take.away-PAST-3SG
 ‘The younger brother took the belt from the elder brother.’
 b. *Ikki ini-bii kur-dar-ən bəld’a-s-pət-tar ühü.* (P. 616)
 two brothers belt-PL-ACC take.away-REC-PERF-3PL they.say
 ‘They say, the two brothers are taking belts from each other.’ (see also (1b))
- (75) *Barə xardarəta sonu-nu bil-ler-s-el-ler.* (Kh.1. 37)
 all mutually news-ACC know-CAUS-REC-PRES-3PL
 ‘All (people) tell each other the news.’

The following verbs meet this description:

- (76) *belexte-s-* ‘to exchange presents’
ber-is- i. ‘to give sth to each other’
 ii. ‘to share sth with each other’ (← *bier-* ‘to give’)
bəld’a-s- ‘to take sth away from each other’
kepset-is- ‘to tell sth to each other’
kör-dör-üs- ‘to show sth to each other’
najala-s- ‘to shift sth on(to) each other’
n’əmaatta-s- ‘to exchange presents’
suruj-us-/suru-s- ‘to write to each other’
tiej-s- ‘to carry sth to/for each other’
tut-us- ‘to build sth for each other’
ular-səs- ‘to give sth to each other for a time’
(ies) əl-səs- ‘to borrow sth from each other’
əət-əs- ‘to send sth to each other.’

4.1.3 “Possessive” reciprocals

In this type of reciprocals, the diathesis of the underlying transitive construction is retained, due to object retention as in “indirect” reciprocals. The reciprocal marker corresponds to the possessive suffix of the object of the base verb which usually denotes a body part (e.g., a hand, a face, lips, breast, often an injured body part, etc.) or, much more rarely, other inalienable or alienable possession (a house, weakness, etc.), or it corresponds to the possessive attribute of an *izafet* construction of the object (cf. *baləh-ə-n* in (77a)). In many of the examples the direct object is reduplicated (see (78)–(81)), thus iconically signalling two objects in the situation described (the structure of the direct object is thus similar to that of the reciprocal pronoun; cf. *beje-beje-leri-n* and *ilii-ilii-leri-tten*). Semantically adjacent to these reciprocals are some “canonical” reciprocals (see 4.1.1.2 and 4.1.1.4), which may find expression in object reduplication (cf. (54)–(57)).

- (77) a. *Ayas baləh-ə-n saŋa-tə-n ist-er.*
 elder.sister younger.sister-her-ACC voice-her-ACC hear-PRES.3SG
 ‘The elder sister hears her younger sister’s voice.’
 b. *Ayas-baləs saŋa-larə-n ist-ih-el-ler.* (P. 977)
 blood.sisters voice-their-ACC hear-REC-PRES-3PL
 ‘The sisters hear each other’s voices.’
- (78) ... *tüü tüü-leri-n, et et-teri-n, tirii tirii-leri-n*
 hair hair-their-ACC flesh flesh-their-ACC skin skin-their-ACC
bara-s-pət-tara. (P. 373)
 destroy-REC-NR.PAST-3PL
 ‘[The horses of the athletes] destroyed each other’s hair, flesh, and skin.’
- (79) ... *tüü tüü-leri-n, et et-teri-n barat-əs-t-əlar,*
 hair hair-their-ACC flesh flesh-their-ACC destroy-REC-PAST-3PL
senie-leri-n barat-əs-t-əlar. (P. 374)
 strength-their-ACC destroy-REC-PAST-3PL
 ‘[The lions] destroyed each other’s hair, flesh, destroyed each other’s strength.’

- (80) *Kuuhima uonna Suonnuja sirej-sirej-deri-n ere kör-s-ön*
 K. and S. face-face-their.ACC only see-REC-CONV
kebis-t-iler. (Kh.1. 36)
 AUX-PAST-3PL
 ‘Kuzma and Sonja only quickly looked at each other’s faces.’
- (81) *Ilüi ilüi-giti-n tut-uh-uñ!* (Kh.1. 35)
 hand hand-your-ACC hold-REC-IMP.2PL
 lit. ‘Shake each other’s hands!’
- (82) *Xara xaan-narə-n toh-su-butuman bar-d-əlar.* (P. 2702)
 black blood-their-ACC spill-REC-CONV AUX-PAST-3PL
 ‘They began to spill each other’s black blood.’
- (83) ... *imeri-s-en kebis-t-iler et-teri-n, tirii-leri-n*
 stroke-REC-CONV AUX-PAST-3PL flesh-their-ACC skin-their-ACC
ölör-üm-müt-teri-n. (P. 932–3)
 hurt-PASS-PAST.PART-their-ACC
 ‘[They] stroked each other’s bodies and skin where they were hurt.’
- (84) *Ikki xataannax kələ-larə-n berke kete-sih-el-ler.* (P. 1067)
 two rival fault-their-ACC carefully watch-REC-PRES-3PL
 ‘Two rivals are watching for each other’s faults.’
- (85) *Kiniler oyo-loru-n bil-s-el-ler.*
 they child-their-ACC know-REC-PRES-3PL
 ‘They know each other’s children.’
- (86) ... *xatan uñuox-tarə-n xardayasta-h-an is-t-iler.* (P. 3149)
 hard bone-their-ACC break-REC-CONV AUX-PAST-3PL
 ‘[They] began to break each other’s hard bones.’
- (87) ... *ürdük uñuox-tarə-n üöreyste-h-en is-t-iler.* (P. 3149)
 upper bone-their-ACC cut.into.parts-REC-CONV AUX-PAST-3PL
 ‘[They] began to slash [at] each other’s upper bones.’
- (88) ... *xaləñ tirii-leri-n xajət-əs-pət-tara.* (P. 3252)
 thick skin-their-ACC tear-REC-NR.PAST-3PL
 ‘[They] tore each other’s skin.’
- (89) ... *xohox xohox-toru-n xosto-s-put-tar.* (P. 3523)
 offence offence-their-ACC dig.out-REC-PERF-3PL
 ‘... [they] dug out each other’s offences.’
- (90) ... *kepset-er təl-larə-n öjdö-s-pöt gən-an*
 speak-PART speech-their-ACC understand-REC-NEG.PART AUX-CONV
kees-t-e. (P. 1917)
 AUX-PAST-3SG
 ‘... [he] did so that [they] did not understand each other’s speech.’
- (90’) *[Kiniler] əjə əja-s-pət-tar.* (P. 3766)
 they weight weigh-REC-PERF-3PL
 lit. ‘[They] weighed the weight of each other.’

The reciprocals that occur in this diathesis type can also be used in the “canonical” diathesis (see 4.1.1). Some of them can also occur in the “indirect” diathesis, with a slight shift of

meaning; e.g.: *ihit-* ‘to hear’ → *ist-is-* i. ‘to hear each other’ (“canonical”), ii. ‘to hear sth from each other’ (“indirect”), iii. ‘to hear each other’s voices, etc.’ (“possessive”; (77b)).

4.2 Causatives derived from reciprocals

Causatives from intransitive reciprocals are widely attested in Yakut texts and registered in dictionaries. As mentioned above, contrary to other Turkic languages with object-oriented reciprocals, the causative marker in respective Yakut forms can be added only after an additional reflexive suffix which does not affect the meaning (the cause of this phenomenon is not clear; see also (16) and (17 above)).

- (91) a. *bil-* ‘to know’
 → b. *bil-is-* ‘to become acquainted with each other’
 → c. *bil-ih-in-ner-* (REC-REFL-CAUS) ‘to acquaint sb with sb.’

Here are a few examples of object-oriented constructions with embedded “canonical” (92)–(93), “indirect” (94) and “possessive” (95) reciprocals respectively:

- (92) *Aya-m kiniler-i bil-ih-in-ner-d-e.*
 father-my they-ACC know-REC-REFL-CAUS-PAST-3SG
 ‘My father introduced them to each other.’
- (93) *Kiniler uol-larə-n kör-üh-ün-ner-d-iler.*
 they son-their-ACC see-REC-REFL-CAUS-PAST-3PL
 ‘They made (let) their sons meet each other.’
- (94) *Aya-m kiniler-i kinige-leri-n ber-ih-in-ner-d-e.*
 father-my they-ACC book-their-ACC give-REC-REFL-CAUS-PAST-3SG
 ‘My father made them give books to each other.’
- (95) *Aya-m kiniler-i sirej-sirej-deri-n kör-üh-ün-ner-d-e.*
 father-my they-ACC face-face-their-ACC see-REC-REFL-CAUS-PAST-3SG
 ‘My father made them look into each other’s face.’

4.3 Deverbal nouns

Deverbal nouns are formed from all the verb bases by means of the suffix *-əə* (or its synharmonic variants *-ii/-uu/-üü*). These deverbal nouns can contain any derivational affixes: either aspectual or voice markers. Reciprocal verb forms can also be nominalized by means of this suffix; e.g.:

- (96) a. *bəlxətə-s-* ‘to give presents to each other’ → *bəlxətə-h-ii* ‘exchange of presents’
 b. *tiej-s-* ‘to cart to each other’ → *tiej-s-ii* ‘carting to each other’
 c. *uura-s-* ‘to kiss each other’ → *uura-h-əə* ‘mutual kissing’
 d. *xorgut-us-* ‘be offended with each other’ → *xorgut-uh-uu* ‘mutual resentment’
 e. *əl-səš-* ‘to take from each other’ → *əl-səh-əə* ‘taking from each other’
 (see also (7)).

The following examples illustrate the use of (96d) and (96b):

- (97) a. *Bihigi əkkardə-bətə-gar xorgut-uh-uu taxs-a səs-t-a.*
 we among-our-DAT be.offended-REC-NR appear-CONV hardly-PAST-3SG
 ‘We almost got offended with each other.’ (S. 500)
 lit. ‘Mutual resentment almost developed between us.’
- b. *Bügün aya-laax uol ikki ardə-larə-gar ot tiej-s-ii buol-l-a.*
 today father-POSS son two between-their-DAT hay cart-REC-NR be-PAST-3SG
 lit. ‘Today mutual carting of hay between father and son took place.’

In (98) illustrating the use of (96c) the name of a reciprocal action occupies the position of a direct object (as a cognate object) with the underlying reciprocal verb as predicate:

- (98) *uonna kiniler aan bastaanəə uura-h-ə-larə-n uura-s-t-əlar.* (U. 22)
 and they very first kiss-REC-NR-their-ACC kiss-REC-PAST-3PL
 ‘... and they kissed for the first time.’
 lit. ‘... and they kissed-each-other their very first mutual-kiss.’

5. Diathesis types of reciprocals with the pronoun *beje-beje-leri-n* ‘each other’

5.1 Introductory

As was mentioned above (see 1.2), reciprocity can be expressed not only by the suffix *-s/-h* but also by a reciprocal pronoun. Sometimes, these two means co-occur in the same sentence (see 5.4). As was shown above, the reciprocal pronoun is marked for person (see the forms under (8b)), and inflected for case: it can assume five out of eight case forms marked on nouns (accusative, dative, ablative, instrumental and comitative). (99) shows these case forms for the 3.PL form of the reciprocal pronoun:

- (99) ACC *beje-beje-leri-n* ‘[they ...] each other’
 DAT *beje-beje-leri-ger* ‘[they ...] to each other’
 ABL *beje-beje-leri-tten* ‘[they ...] from/by each other’
 INST *beje-beje-leri-nen* ‘[they ...] of each other’
 COM *beje-beje-leri-niin* ‘[they ...] with each other.’

Needless to say, the valency properties of the underlying construction do not change in the reciprocal pronominal construction.

The instrumental case form of the reciprocal pronoun is quite rare, being required by verbs like *kien tut-* ‘to be proud of’ (lit. ‘to hold wide’; see (104)). The comitative case form is also rather rare as the accusative form with the postposition *kəttə* ‘with’ (*beje-beje-leri-n kəttə* ‘with each other’) is more commonly used instead.

5.2 Subject-oriented reciprocal constructions

5.2.1 “Canonical” reciprocals

5.2.1.1 *Derived from two-place transitives.* Most of the verbs listed in 4.1.1.1 may be used with the reciprocal pronoun instead of the reciprocal suffix, as in the following example:

- (100) a. *Kiniler üčügejdik ist-is-t-iler.* (*ist- < ihit-*)
 they good hear-REC-PAST-3PL
 ‘They heard each other well.’
 b. *Kiniler beje-beje-leri-n üčügejdik ihit-t-iler.*
 they each.other-their-ACC good hear-PAST-3PL
 (same translation).

The following are examples from the dictionary by Pekarskij (1959):

- (101) a. *Bihigi beje-beje-biti-n küüt-t-übüt.*
 we.NOM each.other-our-ACC wait-PAST-1PL
 ‘We waited for each other.’
 b. *Kiniler beje-beje-leri-n xarəstə-əl-lar.*
 they.NOM each.other-their-ACC take.care-PRES-3PL
 ‘They take care of/protect each other.’

In these two sentences, the suffixed reciprocal forms *küüt-üs-t-übüt* ‘we waited for each other’ and *xarəsta-h-al-lar* ‘they take care of/protect each other’ are also possible. Substitution of the reciprocal pronoun for the reciprocal suffix seems to be less acceptable in the case of the most frequent common suffixed reciprocals; cf. *bil-is-* ‘to get acquainted/ know each other’ and *beje-beje-leri-n bil-* (same meaning).

5.2.1.2 Derived from two-place intransitives. Most of the reciprocals listed in 4.1.1.3 may be used with the reciprocal pronoun instead of the suffix *-s/-h*, as in the following examples:

- (102) a. *Kini miig-in tus-p-unan ihit-t-e.*
 he I-ACC direction-1SG-INST hear-PAST-3SG
 ‘He heard about me.’
 b. *Kiniler beje-beje-leri-n tus-tar-ənan ihit-t-iler.*
 they each.other-their-ACC direction-3PL-INST hear-PAST-3PL
 ‘They heard about each other.’
 (103) a. *Aya-m kini-ni kəttə kepset-t-e.*
 father-my he-ACC with speak-PAST-3SG
 ‘My father spoke with him.’
 b. *Kiniler beje-beje-leri-n kəttə kepset-t-iler.*
 ‘They spoke with each other.’
 (104) a. *Kini miigi-nen kien tutt-ar.*
 he I-INST wide hold-PRES.3SG
 ‘He is proud of me.’
 b. *Kiniler beje-beje-leri-nen kien tutt-al-lar.*
 they.NOM each-other-their-INST wide hold-PRES-3PL
 ‘They are proud of each other.’

5.2.1.3 Derived from one-place intransitives. If we replace the reciprocal suffix with the reciprocal pronoun in the verbs listed in 4.1.1.6 it may involve a shift in meaning; thus, for instance, (105a) denotes acts of the subject referents directed at each other, while (105b) denotes a sociative action. The accusative form of the reciprocal pronoun with

the comitative postposition in (105b) can be replaced by the dative form *beje-beje-leri-ger* ‘to each other’, but the informants find it preferable with the reciprocal form of the verb (see (105c)), and the sentence becomes synonymous to (105a), though the informants consider (105c) less acceptable.

- (105) a. *Kus-tar maatərya-h-al-lar.* (see (66b))
 ‘The ducks are quacking at each other.’
 b. *Kus-tar beje-beje-leri-n kəttə maatəryə-əl-lar*
 duck-PL each.other-their-ACC with quack-PRES-3PL
 ‘The ducks are quacking together (lit. ‘with each other’)’
 c. *Kus-tar beje-beje-leri-ger maatərya-h-al-lar.*
 (same as (a)).

5.2.2 “Indirect” reciprocals

All “indirect” reciprocals listed in 4.1.2 may be used with the reciprocal pronoun instead of the reciprocal suffix; e.g.:

- (106) a. *Kini əalə-ttan kinige-ni əl-l-a.*
 he neighbour-ABL book-ACC take-PAST-3SG
 ‘He took a book from the neighbour.’
 b. *Kiniler kinige-leri-n beje-beje-leri-tten əl-l-əlar.*
 they book-their-ACC each.other-their-ABL take-PAST-3PL
 ‘They took books from each other.’
 (107) a. *Kini əalə-gar kinige-ni əl-l-a.*
 ‘He took a book for the neighbour.’
 b. *Kiniler kinige-leri-n beje-beje-leri-ger əl-lə-lar.*
 ‘They took books for/to each other.’
 (108) a. *Kini əalə-gar kinige-ni bier-d-e.*
 ‘He gave a book to the neighbour.’
 b. *Kiniler kinige-leri-n beje-beje-leri-ger ber-di-ler.*
 ‘They gave books to each other.’

5.2.3 “Possessive” reciprocals

The majority of “possessive” reciprocals listed in 4.1.3 allow, in the informants’ opinion, the reciprocal pronoun (without a case marker) as an attribute instead of the reciprocal suffix, but we have no textual examples.

- (109) a. *Kini aya-tə-n kuolah-ə-n ist-er.*
 he.NOM father-his-ACC voice-his-ACC hear-PRES.3SG
 ‘He hears his father’s voice.’
 b. *Kiniler beje-beje-leri kuolas-tarə-n ist-el-ler.*
 they.NOM each.other-their voice-their-ACC hear-PRES-3PL
 ‘They hear each other’s voices.’
 c. *Bihigi beje-beje-bit kuolas-pətə-n ist-e-bit.*
 we.NOM each.other-our voice-our-ACC hear-PRES-1PL
 ‘We hear each other’s voices.’

- d. *Ehigi beje-beje-yit kuolas-kətə-n ist-e-yit.*
 YOU.NOM each-other-your voice-your-ACC hear-PRES-2PL
 ‘You hear each other’s voices.’

5.3 Causatives from subject-oriented reciprocals

Reciprocal constructions of this syntactic type are rather rare. The antecedent of the reciprocal pronoun of (110) can be either a direct object (which makes the sentence object-oriented; see (i)) or the subject of the underlying sentence (in this case it is a subject-oriented constructions; see (ii)). In (111) the subject is singular, therefore it cannot be the antecedent of the reciprocal pronoun and the antecedent can be only the object referents, which makes the construction unambiguously object-oriented.

- (110) *Kiniler uol-lattar-ən beje-beje-leri-ger kör-dör-d-üler.*
 they son-their-ACC each.other-their-DAT see-CAUS-PAST-3PL
 ‘They made (let) their sons meet each other.’
 i. = ‘the sons met/saw each other’
 ii. = ‘Each of the subject referents showed his son to the other subject referent.’
- (111) *Aya-m kiniler-i kinige-leri-n beje-beje-leri-ger bier-der-d-e.*
 father-my they-ACC book-their-ACC each.other-their-DAT give-CAUS-PAST-1SG
 (intended meaning:) ‘My father made them give books to each other.’

5.4 Co-occurrence of the reciprocal suffix and reciprocal pronoun

Concomitant use of these markers is a very common phenomenon (cf. (2), (23), (112), (114)). As the suffix *-s/-h* intransitivizes a verb in “canonical” constructions, interpretation of the reciprocal pronoun as a direct object becomes problematic. Sometimes such a combination may sound unusual; thus, for instance, in (106b) the verbal form *əl-l-əlar* cannot be replaced by the reciprocal form *əl-əs-t-əlar* for unclear reasons, though most sentences with the reciprocal pronoun we find in dictionaries and specialist literature contain the reciprocal verb form (the following combinations can be cited in addition to the examples below: *beje-beje-leri-n maanəla-s-* ‘to respect each other’ (S. 232), *beje-beje-leri-n burujda-s-* ‘to accuse each other’ (S. 84), *beje-beje-leri-ger n’əlaŋna-s-* ‘to fawn upon each other’ (S. 263), etc.; see also 5.2.1.3). In sentences with both reciprocal markers one of them can be omitted in most cases, though, as we have just mentioned, there are certain preferences which require further study.

- (112) *Beje-beje-yiti-n atayasta-hə-ma-ŋ!* (S. 51)
 each.other-your-ACC hurt-REC-NEG-IMP.2PL
 ‘Do not hurt each other!’
- (113) *ət-tar oxs-uh-an beje-beje-leri-n muomaxta-s-t-əlar.* (S. 245)
 dog-PL hit-REC-CONV each.other-their-ACC throttle-REC-PAST-3PL
 ‘In the fight, the dogs throttled each other to death.’
- (114) *Bihigi duohuja seherge-s-t-ibit, beje-beje-bit-i-n öjdö-s-t-übüüt.* (Kh.1. 36)
 ‘We talked to our heart’s content, understood each other.’ (see also (2))

5.5 Deverbal nouns

Derivation of *nomina actionis* by means of the suffix *-æð/-ii/-üü/-uu* from verbs with *beje-beje-leri-n* instead of the reciprocal suffix is possible though restricted. The scope of these restrictions is unclear. For instance, in (115a) and (115b) the verbs allow *nomina actionis* with the reciprocal suffix only, while (115c) and (115d) allow *nomina actionis* both with and without the reciprocal suffix:

- (115) a. *beje-beje-leri-n belextee-* 'to give presents to each other'
 → *beje-beje-leri-n belexte-h-ii* 'giving presents to each other'
 b. *beje-beje-leri-n uuraa-* 'to kiss each other'
 → *beje-beje-leri-n uura-h-æð* 'kissing each other'
 c. *beje-beje-leri-n bier-* 'to give sth to each other'
 → *beje-beje-leri-n bier-ii/bier-s-ii* 'giving sth to each other'
 d. *beje-beje-leri-tten xorgut-* 'to be offended with each other'
 → *beje-beje-leri-tten xorgut-uu/xorgut-uh-uu* 'mutual offence.'

Sentential examples for (115d):

- (116) a. *Bihigi ækkardə-bətə-gar beje-beje-biti-tten xorgut-uu taxsəs-t-a.*
 we among-our-DAT each.other-our-ABL be.offended-NR AUX-PAST-3SG
 'We almost got offended with each other.' (cf. (97))
 b. *Kini aya-laax uol beje-beje-leri-n /beje-beje-leri-ger kinige*
 he father-POSS.PART son each.other-their-ACC each.other-their-DAT book
bier-ii-leri-n tuyunan kepsee-t-e.
 give-NR-their-ACC about tell-PAST-3SG
 lit. 'He told [sb] about father and son giving books to each other.'

6. Simultaneity and succession of reciprocal acts

The reciprocal verbal form itself is neutral with respect to the feature named, i.e. it cannot denote either succession or simultaneity of the acts within a reciprocal event by itself. One or the other interpretation is determined solely by the lexical meaning of the base verb. The situation 'X and Y kissed each other' obligatorily presupposes simultaneity of the acts within this reciprocal situation for pragmatic reasons, while the situation 'They visit each other' necessarily presupposes their succession. And there are a great many other situations which may be either simultaneous or successive, e.g. 'They fired at each other', 'They write letters to each other', etc.

Simultaneity may be explicated by the adverb *biir biriemeye* 'simultaneously, at the same time': its combinability with reciprocals has rather trivial restrictions; thus it does not collocate with the reciprocals *uura-s-* 'to kiss each other', *ber-is-* 'to give each other' and *təl bərag-əs-* lit. 'to fling words at each other', *kuot-us-* 'to outrun each other', etc. but it can collocate with the reciprocals *suruj-us-* 'to write to each other', *ann'-əs-* 'to push each other', *xad'ækta-s-* 'to bite each other', *küüt-üs-* 'to wait for each other', etc.

The adverb *biirge* 'together' is not used with reciprocals at all.

Succession of reciprocal acts can be expressed by the adverbs *utum-sitim* ‘one after another’ (which does not collocate with the reciprocal form *oxs-us-* ‘to beat each other’) and *xardarə-tarə* with the same meaning, *xardarəta/xardarə* ‘alternately’, ‘in turn’, ‘by turns’, and *utuu-subuu* ‘one after another’ (only with verbs of motion). The reciprocal acts of both agents are fused to a varying degree depending on the situation. For instance, the acts within such situations as ‘to embrace [each other]’, ‘to fight with each other’, can hardly be separated, while non-contact acts within a situation like ‘to try to surpass each other’, can be separated quite easily. Examples:

(117) *Xardarə-taarə təl bərax-s-al-lar.* (S. 484)
 by.turns word fling-REC-PRES-3PL
 lit. ‘By turns they are flinging words at each other.’

(118) *Xardarə-taarə səld’ə-h-al-lar.*
 by.turns visit-REC-PRES-3PL
 ‘They call on each other by turns.’

(119) *Bihigi ügüstük suru-h-a-bət.*
 we often write-REC-PRES-1PL
 ‘We often write [letters] to each other.’

(120) *Bihigi kini-liin solbuj-s-an ülelii-bit.*
 we he-COM replace-REC-CONV work-PRES.1PL
 lit. ‘We work replacing each other.’

Reciprocals like *kuot-us-/kuot-ala-s-* in the meaning ‘to try to catch/outrun each other’ (← *kuot-* ‘to outrun’; *-ala-* is an iterative suffix), *kepset-is-* ‘to tell each other [stories]’ (← *kepset-* ‘to (re)tell [stories]’), do not allow simultaneous interpretation pragmatically; cf.:

(121) a. *Die tahəgar xas künnete ünüges oyo-loro sər-s-al-lar, xaja-lara*
 home outside each day puppy child-PL run-REC-PRES-3PL which-PL
dayanə kuot-us-pat-tar. (answer: sledge runners; P. 1235)
 PRTL outrun-REC-NEG.PRES-3PL

‘Two puppies outside run together every day and cannot outrun each other.’
 b. *Ikki čolbot-tor miin-s-en-ner ölüü-nü oŋor-uox-tara.* (P.1571)
 two Venus-PL mount-REC-PRES-3PL misfortune-ACC do-FUT-3PL
 ‘Venus now appears now disappears (lit. ‘Two stars mount each other’) betokening misfortune.’

7. Productivity and restrictions on reciprocal formation

It has been claimed that reciprocal verbs are relatively few in number but they are very widely used in spoken language (Kharitonov 1963:31, 1982:271). The cited dictionaries (Pekarskij; Slepcev) register the forms in *-s/-h* as either reciprocal or sociative (in our terminology) or both. These forms may have either one of the two meanings or both. Judging by the dictionaries, there are no less than 300 verbs in which the reciprocal meaning can be expressed by the suffix *-s/-h*.

As for restrictions, they seem to be mostly trivial, being imposed by the inanimateness of the second argument in two-place verbs. Thus, Kharitonov (1963:31, 1982:271) lists *xoruj-* ‘to dig up’, *ör-* ‘to put on a fire’, *xataa-* ‘to close’, *orgut-* ‘to boil’, *buhar-* ‘to cook, brew’ and the like as examples of verbs that cannot be used in the reciprocal form. According to our informants, however, these verbs may take the reciprocal suffix but not in the reciprocal meaning. In fact, “canonical” reciprocals cannot be formed from these and similar verbs (see (122b.i)), unless for a description of a fantastic situation, but “indirect” and “possessive” reciprocals, at least from some of them, are quite possible, especially if the reciprocal pronoun is used; cf. (122c) and (122d):

- (122) a. *Kini as belemnee-bit-e.*
 he food cook-NR.PAST-3SG
 ‘He has cooked the food.’
- b. *Kiniler belemne-s-pit-tere.*
 they cook-REC-NR.PAST-3PL
 i. *‘They have cooked *each other*.’ (reciprocal)
 ii. ‘They have cooked *together*.’ (sociative)
 iii. ‘They *helped* [sb] to cook.’ (assistive)
- c. *Kini mie-xe as belemnee-bit-e*
 he I-DAT food cook-NR.PAST-3SG
 ‘He has cooked food for me.’
- d. *Kiniler səl-ə bəha beje-beje-leri-ger as belemne-s-pit-tere.*
 they year-ACC whole each.other-DAT food prepare-REC-NR.PAST-3PL
 ‘They have cooked food for each other for a whole year.’ (“indirect” reciprocal).

If the reciprocal pronoun is omitted in (122d), it results in the loss of the reciprocal meaning and acquisition of the assistive or the sociative meaning.

According to our informants, the reciprocal meaning is not rendered by the *-s/-h* forms of the following base verbs: *orulaa-* ‘to wheeze/shout in a hoarse voice’, *orunnaa-* ‘to provide with a sleeping place’, *öhöö-* ‘to feel hostile towards sb’, *ülelet-* ‘to make sb work’, but they can render the sociative meaning. Sometimes, the informants (one or both) do not accept reciprocals registered in the dictionaries or they recommend adding the reciprocal pronoun. An example can be the form *axt-əs-t-əlar* ‘[they] remember/miss each other’ where the reciprocal pronoun *beje-beje-leri-n* ‘each other’ should be added, in the opinion of an informant (see also 5.4). The form *saan-s-al-lar* ‘they threaten each other’ requires the dative form *beje-beje-leri-ger*, in the opinion of the same informant. Sometimes, the informants’ opinions do not coincide.

Due to their lexical meaning, some of the reciprocals can be used only in the negative form or with a specifier; thus (123b) sounds strange though acceptable if we add *xardarəta* ‘by turns’ (the sense is ‘They overcome one another by turns’); in the perfective aspect the sentence without negation is ungrammatical; e.g.:

- (123) a. *Kiniler beje-beje-leri-n kəaj-sə-bat-tar.* (S. 203)
 they each.other-their-ACC overcome-REC-NEG.PRES-3PL
 ‘They cannot overcome one another.’

- b. [?]*Kiniler beje-beje-leri-n kəaj-sə-lar.*
 ‘They are overcoming each other.’
- c. **Kiniler beje-beje-leri-n kəaj-s-əən kebis-t-iler*
 they each.other-their-ACC overcome-REC-CONV AUX-PAST-3PL
 ‘They overcame each other.’

Compare, however, paragraph 7) in 10.2.

8. Expression of reciprocal arguments

8.1 Simple reciprocal constructions

In this type of constructions, both reciprocal arguments are in subject position, which requires a predicate in the plural. Their expression is no different from that of plural subjects in non-reciprocal constructions. There are two subtypes of the syntactic subject: a) homogeneous subject, expressed either by a plural nominal (e.g. (122d)) or by a collective noun like *kergen* ‘family’, *d’on* ‘people’, etc. (124); b) heterogeneous subject, covering such means of expression as i) two nominals conjoined by the numeral *ikki* ‘two’ (for two participants only) which as a rule occurs twice, after each of the nominals (125a); ii) two nominals conjoined by the conjunction *uonna* ‘with’ (125b); iii) two nominals conjoined by the coordinative postposition *kətta* ‘with’ placed after the second nominal in the accusative form (125c); iv) two nominals conjoined by the comitative case marker on the second nominal or on both (125d); v) the first component containing a possessive suffix in attributive position (*oyonn’or-doox emeexsin* ‘an old man and woman’, lit. ‘an old woman possessing an old man’). In all these cases the verb agrees with the subject group in the plural number.

- (124) *D’on / d’on-nor beje-beje-leri-n ölör-üh-ül-ler.*
 people people-PL each.other-their-ACC kill-REC-PRES-PL
 ‘People kill each other.’
- (125) a. *Kini [ikki] aya-ta ikki sura-h-al-lar.* ‘He and his father ask each other.’
 b. *Kini uonna aya-ta sura-h-al-lar* (same)
 c. *Kini aya-tə-n kətta sura-h-al-lar* (same; lit. ‘He with his father ask each other.’)
 d. *Kini aya-tə-nəən sura-h-al-lar* (same; lit. ‘He father-his-with ask each other.’)

8.2 Discontinuous reciprocal constructions

It should be pointed out at once that verbs with *beje-beje-leri-n* cannot be used in the discontinuous construction, which is to say we shall discuss here only suffixed reciprocals, i.e. the possibility of their use with a singular subject. In discontinuous constructions, one of the arguments is the subject and the other is an object. This object may be marked either by the postposition *kətta* ‘with’ or by the comitative case form, i.e. it is homonymous with the second part of a heterogeneous subject in (125c–d). Schematically, this homonymy looks as follows: Sb₁ + Sb₂ and Sb₁ + Ob₂; cf.:

- (126) a. *Kini aya-tə-n kəttə kuust-uh-a tiis-t-üler.*
 he father-his-ACC with hug-REC-CONV AUX-PAST-3PL
 ‘He and his father hugged each other quickly.’
- b. *Kini aya-tə-n kəttə kuust-uh-a tiis-t-e.* (Kh.1. 36)
 he father-his-ACC with hug-REC-CONV AUX-PAST-3SG
 ‘He and his father hugged each other quickly.’
 lit. ‘He quickly hugged each other with his father.’

This homonymy is due to the sentence-final position of the verb: it prevents placing a comitative phrase after the predicate, which would unambiguously point to its object status. However, an object does occur in the final position, though rarely, for emphasis, etc.; thus in the following example the comitative object is in post-verbal position:

- (127) *Min bil-si-bit-im onnuk soru kəttə.* (B. 393)
 I know-REC-PERF-1SG misfortune with
 ‘I met (lit. ‘got acquainted’) with misfortune.’

If the first nominal preceding a comitative phrase is singular and the predicate agrees with it in number the construction is unambiguously discontinuous (because “the subject and predicate are always linked by agreement in Yakut” (Ubrjatova 1962: 103)). Constructions of this type have the function, among others, of topicalizing the first nominal (see (126b)).

It should be borne in mind that a transformation of the (126a) → (126b) type may be complicated by the fact that with a singular subject a verb with the suffix *-s/-h* may have a sociative or comitative or assistive meaning; in other words, this may result in the loss of the reciprocal meaning or at least the reciprocal reading may become a less preferable one.

Let us consider instances with the first nominal in the plural number. In this case the predicate is necessarily plural, too. If the first nominal is the 1.PL pronoun *bihigi* ‘we’ the second nominal can be only the 2nd or 3rd person. If the first nominal is the 2.PL pronoun *ihigi* ‘you’ the second may be either the 1st or the 3rd person. In these cases we obtain a discontinuous construction, because the verb agrees with the first nominal; cf.:

- (128) *Bihigi elbex saxa-nə gəttə kör-sü-büp-püt.* (B. 393)
 we many Yakut-ACC with see-REC-PERF-1PL
 ‘We met/collided with (lit. ‘saw each other’) many Yakuts.’

If the first nominal is the 3PL pronoun *kiniler* ‘they’ (or a plural noun) the second nominal can be any of the three persons. As a result, if the second nominal is a 3rd person pronoun or a noun it is practically impossible to distinguish between a simple and a discontinuous reciprocal construction as they are formally homonymous. The syntactic difference between (126a) and (126b) is neutralized if the subject is plural, because the predicate is also plural and therefore it is not clear whether it agrees with the first nominal alone (which would make it a discontinuous construction) or with both arguments (which would make it a simple construction):

- (129) *Kiniler aya-larə-n kəttə kuust-uh-a tiis-t-üler.*
 they father-their-ACC with hug-REC-CONV AUX-PAST-3PL

- i. ‘They and their father quickly hugged each other.’ (simple)
 ii. (same) lit. ‘They quickly hugged each other with their father.’ (discontinuous)

As a rule, such constructions are interpreted as simple.

And now, let us consider sentences with the first nominal in the singular number. There seem to be certain restrictions imposed by combinations of personal pronouns in both positions. Let us discuss combinations of the 1SG, 2SG and 3SG pronouns in the first position with the 3SG pronoun (or a noun) in the comitative phrase. The following regularity, which is not quite clear, can be observed: if the first nominal is the 1SG pronoun *min* ‘I’ or the 3SG pronoun *kini* ‘s/he’ the predicate may be either in the singular or in the plural, the constructions being discontinuous or simple respectively (see (130a, b)), but if the subject is the 2SG pronoun *en* ‘thou’ the predicate can assume the singular form only, which makes it a discontinuous construction (see (130c, d)).

- (130) a. *Min kini-ni katta ann'-əh-a-bən.*
 I he-ACC with push-REC-PRES-1SG
 ‘He and I push each other.’
 b. *Min kini-ni katta ann'-əh-a-bət.*
 I he-ACC with push-REC-PRES-1PL
 ‘He and I push each other.’
 c. *En kini-ni katta ann'-əh-a-γən.*
 you.SG he-ACC with push-REC-PRES-2SG
 ‘You and he push each other.’
 d. **En kini-ni katta ann'-əh-a-γət.*
 you.SG he-ACC with push-REC-PRES-2PL
 ‘You and he push each other.’
 e. *Kini aya-tən katta ann'-əh-ar.*
 he father-his with push-REC-PRES.3SG
 ‘He and his father push (lit. ‘pushes’) each other.’
 f. *Kini aya-tən katta ann'-əh-al-lar.*
 he father-his with push-REC-PRES-3PL
 ‘He and his father push each other.’

With regard to (130d), it should be noted that the predicate is plural if the subject is expressed by a form for two persons only, like *en bih-ikki* ‘you and I’ (lit. ‘thou we-two’) and *kini / aya-m bih-ikki* ‘s/he / my father and I’ (lit. ‘s/he/my father we-two’); cf.:

- g. *En bih-ikki ann'-əh-a-bət.*
 you I-two push-REC-PRES-1PL
 ‘You and I push each other.’

In most of the sentences of these types in the dictionaries and literature, agreement in the singular is observed, which makes them discontinuous constructions. Here are examples for “canonical”, “indirect” and “possessive” reciprocals respectively:

- (131) a. *Kini... ayabəət-ə katta tərət-a tət-s-pət-a.* (Kh.1. 36)
 he priest-ACC with tear-CONV tear-REC-NR.PAST-3SG
 lit. ‘He scratched each other with the priest.’ (see also (126b))

- b. *En on-u katta təl ber-si-bit-iŋ.* (P. 440)
 you.SG s/he-ACC with word give-REC-NR.PAST-2SG
 lit. 'You gave word (=made promise) to each other with him.'
- c. [*Kini*] *Edlin-i katta ilii tut-us-put-a.* (Kh.1. 36)
 he E.-ACC with hand hold-REC-NR.PAST-3SG
 'He exchanged handshakes with Edlin.'

In the examples of discontinuous constructions at our disposal, reciprocals with a greater or lesser degree lexicalization are prevalent. But this issue requires further study. Thus, it is not clear why the reciprocal *axt-əs-* 'to remember/miss each other' cannot be used (according to one of our informants) in a discontinuous construction, while *kütüre-s-* 'to suspect each other' allows such usage.

The tendencies in agreement in constructions with comitative phrases are not, it seems, a specific feature of reciprocal verbs. Analogous tendencies are also observed in constructions with non-reciprocals, i.e. in constructions of type (164c–d). But the following example from specialist literature, unlike (130d), is accepted by the informants without hesitation (if we substitute the phrase with *katta* 'with' for *Ivan-nəən* the sentence will retain the agreement scheme).

- (132) *En Ivan-nəən baləkt-əax-xət.* (Kh.3. 176)
 you.SG I.-COM fish-FUT-2PL
 'You and Ivan will go fishing.' (lit. 'You with Ivan will fish.')

8.2.1 *The second reciprocal argument in direct object position*

Two reciprocals of this type have been registered so far, both of them lexicalized. But their object can also be of the regular type (cf. (133c) and (133d)).

- (133) a. *Kini bu kihi-ni bil-bet [ete].*
 he this man-ACC know-NEG AUX.PAST
 'He did not know this man.'
- b. *Kiniler bil-si-bet eti-ler.*
 they know-REC-NEG AUX.PAST-3PL
 'They did not know each other.'
- c. *Kini bu kihi-ni bil-si-bet ete.*
 he this man-ACC know-REC-NEG AUX.PAST
 (same meaning); lit. 'He this man did not know each other.'
- d. *Saŋa ülehit-i katta bil-is-t-im.* (S. 70)
 new worker-ACC with know-REC-PAST-1SG
 'I got acquainted with the new colleague.'

Sentence (134) contains the reciprocal verb *kör-üs-* (← *kör-* 'to look, to see') registered in the Russian-Yakut dictionary as the only equivalent of the Russian verb *vstretit'* 'to meet':

- (134) *Min uulussa-ya biler kihi-bi-n kör-üs-t-üm.* (A. 85)
 I street-DAT familiar man-my-ACC know-REC-PAST-1SG
 'I met an acquaintance in the street.'

8.2.2 *Non-reversible discontinuous constructions*

These are constructions that cannot be transformed into simple reciprocal constructions. This may involve a shift in meaning or metaphoric use, which allows the speakers to use in comitative object position entities that differ from the subject referent semantically; cf. (127) and the following:

- (135) a. *Bəar kuus-t-an tur-an, ohoy-un katta xumuru-s-t-a.* (Kh.1. 40)
 breast hug-REFL-CONV AUX-CONV stove-ACC with scold-REC-PAST-3SG
 ‘Standing with her arms crossed on her breast (lit. ‘hugging her breast’), she was reproaching her stove.’ (on *kuus-t-an* see (24b) and (24c))
- b. **Kini ohoy-un katta xumuru-s-t-ular.*
 s/he stove-ACC with scold-REC-PAST-3PL
 ‘She and the stove reproached each other.’

9. Meanings immediately related to reciprocal: Sociative, comitative, assistive

9.1 Introductory

The four meanings listed in the heading are closely related semantically: *all of them presuppose at least two participants of the same situation acting together*. It is not accidental that they may be expressed by the same form (cf. (1)). It is tempting to regard them as realizations of one and the same meaning dependent on contextual factors in the broad sense, including the lexical meaning of the underlying verbs, the type of construction, pragmatic factors, etc. But it is necessary to distinguish between these meanings one way or another because they are attested to a different degree across the Turkic languages, including possible absence of some of them in a particular language: compare the weak development of the competitive meaning in Yakut (see 7) in 10.2) and its extreme productivity in Karachay, very high productivity of the sociative meaning in Yakut and its next to total absence in modern Kirghiz, extreme productivity of the assistive meaning in Yakut, Tatar and some other languages and its nearly absolute absence in Azerbaijani and Turkish, etc. (see, for instance, Sevortjan 1962:532, 539). Therefore it is reasonable and convenient to regard them as distinct meanings, whatever our attitude to the possibility of their interpretation as manifestations of one general meaning. It is noteworthy that the reciprocal meaning proper is attested in all of the Turkic languages, though with a varying degree of productivity.

The relationship between the four meanings can be shown in the following way:

- | | | |
|-------|---------------|------------|
| (136) | a. | b. |
| | 1. reciprocal | assistive |
| | 2. sociative | comitative |

1. In column (a), the meanings (reciprocal and sociative) obligatorily require a plural subject (discontinuous reciprocal constructions, which allow a singular subject, are derivative relative to simple reciprocal constructions).

2. In column (b), the two meanings (assistive and comitative), contrary to those in column (a), can be realized with a singular subject.

3. In column (b), realization of both meanings involves valency increase by one. The sociative meaning (2a) involves an increase of the number of participants by at least one.

4. In column (a), the reciprocal meaning, with the exception of ‘possessive’ reciprocals, involves valency decrease, and the sociative meaning retains the valency of the underlying form.

5. In line 1, the meanings (reciprocal and assistive) involve a more significant shift in the lexical meaning of a verb than those (i.e. sociative and comitative) in line 2.

6. In column (a), the subject referents perform identical actions, while in the case of the assistive meaning (1b) the dative object referent is the main “performer” (though it may be not mentioned or it may not take part in the action; cf. (171) and 9.2.4). In the case of the comitative meaning, on the contrary, the subject referent is the main “performer”.

9.2 Subject-oriented constructions

9.2.1 *The sociative meaning*

Judging by the data registered in Slepcev (1972) (and checked with the informants), the number of verb forms in *-s/-h* which may render the sociative meaning is at least twice as large as that of forms that can express the reciprocal meaning (approximately 600 sociatives vs. 300 reciprocals). Needless to say, this involves a significant overlapping of meanings in the same forms rather than in different sets of verbs. Most of the verb bases whose reciprocal form can acquire the sociative meaning (about 60 per cent of the relevant forms) denote everyday activities of humans, i.e. controlled actions (about 90 per cent of them are transitives).

The sociative meaning can be emphasized (or expressed only) by the adverb *biirge* ‘together’ or by the postpositional reciprocal pronoun *beje-beje-lerin katta* ‘with each other’.

9.2.1.1 *Sociatives derived from one-place intransitives.* These are verbs denoting motion of animate subjects, emotions, sounds, etc.; e.g.:

(137) <i>kel-is-</i>	‘to come together’ (= simultaneously)
<i>köt-üs-</i>	‘to fly together’
<i>sət-əs-</i>	‘to lie down together’
<i>taxs-əs-</i>	‘to go out together’
<i>xaal-əs-</i>	‘to stay/remain together’
<i>xon-us-</i>	‘to spend a night together’, etc.

The number of sociatives with inanimate subjects is very limited and includes, for instance, verbs denoting burning, flashing, glittering, sounding and the like: these processes involve at least a degree of activity on the part of the subject referents perceived visually; cf.:

(138) <i>d’irimne-s-</i>	‘to glitter/flash/blink together (of several objects)’
<i>kilengne-s-</i>	‘to glitter together (of several objects)’

- külimne-s-* 'to flash/flare up/sparkle together (of several objects)'
kalamna-s- 'to burn/twinkle together (of several objects)', etc.

In (138) and in the other lists of verbs, the sociative meaning is more or less adequately rendered by the translations, but in sentential examples selected from texts the translations do not always reflect this meaning, which may be due to subtle semantic deviations from the meaning roughly rendered by the adverb 'together'. The following examples illustrate this type of sociative forms:

- (139) *Uot-tar suburuŋna-s-t-alar.*
 fire-PL flash-REC-PAST-3PL
 'Sparks began to flash/glitter.'
- (140) *Təhənča-nan hojuu bugul-lar bačəgəra-h-al-lar.*
 thousand-INST thick haystack-PL stand-REC-PRES-3PL
 'Thousands of haystacks stand here and there.'
- (141) *Kölöhən-ner-e čallərya-ččə tammala-s-t-alar.*
 sweat-PL-his drop-CONV drop-REC-PAST-3PL
 'Drops of his sweat fell down.'
- (142) *Üöhe sulus-tar d'irimme-h-el-ler.*
 above star-PL glitter-REC-PRES-3PL
 'Stars are twinkling above.'
- (143) *Töbö-tü-ger bəstala suox čuraan-nar ləŋnkəna-h-al-lar.*
 head-his-DAT continuously little.bell-PL ring-REC-PRES-3PL
 'Little bells were continuously ringing in his ears.'
- (144) *D'on küil-en n'irg-is-t-iler.*
 people laugh-CONV ring,OUT-REC-PAST-3PL
 'The people burst into loud laughter.'
 (these six examples are borrowed from Kh.1. 270).

In most of the examples of our sample the sociative subject has a plural referent, but sociatives can also describe situations with two subject referents; e.g.:

- (144') *Čoxu ikki baya ikki sir-ten ikki-te-üs-te örüte*
 snail and frog and ground-ABL two-times-three-times upwards
tej-iekkele-h-e tüs-t-üler. (P. 2118)
 rise-ITER-REC-CONV AUX-PAST-3PL
 'The snail and the frog raised themselves together two or three times.'

Sociatives are especially frequent from onomatopoeic verbs (typically used in iterative contexts) and expressive verbs (often with an iterative suffix; cf. *-ŋŋö-*, *-əala-* and *-uoxxala-* below; see Kharitonov 1963:28). Sociatives are easily formed from verbs denoting multi-directional, disorderly actions. Compare:

- (145) *ajbarda-s-* 'to rush from side to side together, fuss together'
bəg-əala-s- 'to look out/show oneself out together repeatedly'
d'abd'alə-s- 'to do sth together in a rush, fussily, with energy'
oj-uoxxala-s- 'to jump up together repeatedly'
tohugura-s- 'to produce together frequent slight knocks'

<i>töñkö-ññö-s-</i>	‘to bend together repeatedly’
<i>xaaxəna-s-</i>	‘to creak together raucously and slowly.’

The sociative meaning differs from simple plurality in that the subject referents are presented as participants of the same situation connected in one way or another and acting at the same time and place or iteratively within the same situation. The sociative form of some verbs implies a kind of coordinated action. Sometimes, a common cause of several actions is implied. A sociative meaning may also acquire additional emotive or intensive overtones (see Kharitonov 1963: 22–5).⁵ Compare:

- (146) a. *Turaax-tar daayənə-l-lar* ‘Crows are crowing.’
 b. *Turaax-tar daayəna-h-al-lar* ‘Crows are crowing (all of them together, simultaneously).’
- (147) a. *Oyo-lor ətə-l-lar* ‘The children are crying.’
 b. *Oyo-lor əta-h-al-lar* ‘The children are crying (all of them together, as if vying with each other, etc.).’

Compare also:

- (148) *Ojuur-ga čəčəax-tar čəbəgəra-h-al-lar.*
 ‘In the woods, birds are chirping (all of them together, at high tempo, etc.).’
- (149) *Suol-ga d’on-nor eleñne-h-el-ler.*
 ‘On the road, people are rushing back and forth (rapidly, one after another).’
- (150) *Talax-tar bəs-tarə-ttan ənax-tar mülüküččü-h-en taxs-an*
 willow-PL border-their-ABL cow-PL dash-REC-CONV go.out-CONV
kel-l-iler. (Kh.1. 29)
 come-PAST-3PL
 ‘Suddenly cows came out rushing from the willow-wood.’

In constructions with verbs of uttering sounds, a kind of semantic neutralization between reciprocal and sociative interpretation can be perceived if a situation can be interpreted as a kind of exchange; cf. 4.1.1.6.

Sociative forms in *-s/-h* are not derived from verbs denoting “passive” properties, interior processes or states (see Kharitonov 1963: 21), such as the following:

- (151) a. *sələj-* ‘to grow tired’ c. *üün-* ‘to grow’
 b. *toŋ-* ‘to be cold’ d. *uoj-* ‘to grow fat’, etc.

5. The following description of the Turkish sociatives seems to be applicable to the Yakut sociatives of this type: “A second readily definable use of the reciprocal is to form verbs in which the (plural) subjects act separately but with a common goal or purpose – that is, in which a number of separate actions are in some way related. If the subjects act jointly or together, the action is not reciprocal. For example, *Kuşlar uçtular* means ‘The birds flew’ and implies that they all flew together in a flock; thus there was, so to speak, only a single action of flying. But *Kuşlar uçuştular* implies that although each bird flew in a different direction, the actions were related: either they flew toward or away from a common point, or flew for a common reason, or simply flew simultaneously” (Underhill 1979: 368).

9.2.1.2 Sociatives derived from two-place transitives and intransitives. Unlike the sociatives from one-place intransitives which do not as a rule allow parallel reciprocal interpretation, those derived from two-place verbs may in principle, though not always, allow dual interpretation. They can be divided into three main groups with respect to their relatedness to the reciprocal meaning: (a) derivatives that can assume the reciprocal as well as the sociative meaning; (b) verbs that can assume the sociative meaning only; (c) verbs that assume the reciprocal meaning only. Let us consider these three groups.

A. Verbs assuming both the reciprocal and the sociative meaning; cf.:

- (152) a. *Kiniler is taŋah-ə məɬala-s-t-əlar.*
 they interior clothes-ACC soap-REC-PAST-3PL
 ‘They soaped the underwear together.’
 b. *Kiniler məɬala-s-t-əlar.*
 ‘They soaped each other.’

The following verbs with the reciprocal suffix derived from transitives belong here:

- (153) *ann’-əs-* i. ‘to push sb/sth together’ ii. ‘to push each other’
ist-is- i. ‘to listen to sb together’ ii. ‘to listen to each other’
kör-süs- i. ‘to look at sb together’ ii. ‘to look at each other’
kərba-s- i. ‘to beat sb together’ ii. ‘to beat each other’, etc.

The following derivatives are based on two-place intransitives:

- (154) *ihür-is-* i. ‘to whistle to sb together’ ii. ‘to whistle to each other’
səld’-əs- i. ‘to call on sb together’ ii. ‘to call on each other’
tüh-üs- i. ‘to rush at/attack sb together’ ii. ‘to rush at/attack each other’, etc.

The meaning, sociative or reciprocal, is determined by the construction: in the case of the sociative meaning the structure of the underlying construction remains unchanged, the object being retained, while in the case of reciprocal meaning the object is omitted as it is co-referent with the subject (though in the case of ellipsis the interpretation may present difficulties).

B. Verbs that can assume the sociative meaning only: they cannot assume the reciprocal meaning because of the inanimate object, which is retained in sociatives (a special problem is the possibility of a benefactive dative and its reciprocalization; cf. (122)):

- (155) a. *Kiniler uulussa-nə muosta-s-t-əlar.*
 they street-ACC pave-REC-PAST-3PL
 ‘They paved the street together.’
 b. *Kiniler muosta-s-t-əlar*
 i. *‘They paved each other’, but: ii. ‘They did the paving together.’

Verbs of this type:

- (156) a. *d’üülle-s-* ‘to discuss (a project, etc.) together’
 b. *mehij-is-* ‘to knead (dough) together’
 c. *naarda-s-* ‘to stack (in a certain order, books, etc.) together’
 d. *naborda-s-* ‘to set up/compose (a book, etc.) together’
 e. *narəla-s-* ‘to trim up (sth) together’

- f. *nastaabəla-s-* 'to brew (tea, etc.) together'
 g. *nuormala-s-* 'to normalize, standardize together', etc.

This derivational pattern is highly productive, as is testified by the sociative use of many latest borrowings from Russian (see (156b, c, e, g)).

C. *Verbs that can assume the reciprocal meaning only.* Here belong relatively few verbs which take an animate object whose form in *-s/-h* does not assume the sociative meaning due to their lexical meaning or for some pragmatic reasons. According to Kharitonov (1963: 33), the following verb forms in *-s/-h* are of this type:

- (157) *axt-əs-* 'to miss each other'
bil-is- 'to get acquainted with/know each other'
kig-is- 'to instigate each other'
küniüle-s- 'to be jealous of each other'
kəaj-əs- 'to win a victory over/overcome each other'
süij-üs- 'to win from each other'
tapta-s- 'to love each other'
ubura-s- 'to kiss each other'
umn-us- 'to forget each other'
üöx-süs- 'to curse each other, to quarrel.'

9.2.1.3 *Sociatives derived from three-place transitives.* There are probably no derivatives from this class of transitives that are used as sociatives only. In other words, two subtypes can be expected here: (a) verbs in *-s/-h* with two meanings, both sociative and reciprocal (cf. (1)), and (b) verbs acquiring the reciprocal meaning only. This issue requires further study.

9.2.2 *The comitative meaning*

Unlike verbs with the sociative meaning, those with the comitative meaning can be used with a singular subject. The co-participant can be expressed in two ways: either by a noun phrase with the postposition *kətta* 'with' or by a nominal in the comitative case; or it may be omitted though implied by the verb form. The possibility of transformation of sociative sentences into comitative divides the verbs considered in 9.2.1 into two groups: verbs that allow it without restrictions and verbs that do not allow it or produce unnatural sentences.

A kind of parallelism can be observed in the relations between sociative and comitative, on the one hand, and between simple and discontinuous reciprocal constructions, on the other. It is possible that the existence of comitative constructions furthered the development of discontinuous constructions. In sociative and simple reciprocal constructions both participants are presented as pragmatically equal while in comitative and discontinuous reciprocal constructions the subject referent (to be more precise, the first reciprocal argument) is foregrounded. The difference lies in the fact that the object referent of a discontinuous reciprocal construction cannot as a rule be omitted as it is implied by the lexical meaning of the verb, while the object referent of a comitative construction is not infrequently absent and the reciprocal suffix indicates only that the subject referent does not act alone and there is a co-participant in the situation named.

9.2.2.1 Comitatives derived from one-place intransitives. Sociatives from certain groups of intransitives, especially those implying a non-human agent, are never found in comitative constructions. We have in mind intransitives in (139)–(144) and (146), (148), (150). Other sociative constructions are easily transformable into comitative ones.

This transformation triggers predicate agreement with the first nominal only, therefore (158a) where the first nominal is singular and the predicate plural, is ungrammatical. Note that formally analogous constructions with a reciprocal verb allow plural agreement with the subject containing a comitative noun group (see (126a)).

There are a few intransitives that are used in comitative but not in sociative constructions (see (158a)). If the predicate agrees with the plural subject (see (158b)), the expected sociative meaning is ungrammatical (cf. (ii) in (158b)) and the sentence retains its comitative interpretation with an implied participant of the situation (see (i) in (158b)).

- (158) a. **Kini aya-tə-n kəttə bar-s-al-lar*
 he father-his-ACC with go-REC-PRES-3PL
 ‘He goes away with his father.’
 b. *Kini ikki aya-ta bar-s-al-lar.*
 he and father-his go-REC-PRES-3PL
 i. ‘He and his father go away together with someone.’
 ii. *‘He and his father go away together.’

Comitative verbs can express actions that are not simultaneous with but follow another action (in the following sentence comitativity is emphasized by the adverb *biirge* ‘together’):

- (159) *Kennitten aya-m biirge taxs-əs-t-a.* (Kh.1. 25)
 behind[him] father-my together go.OUT-REC-PAST-3SG
 ‘Immediately after him my father went out.’

In the following examples the second co-participant is not named (as a translation equivalent, the adverb ‘too’ can be used here in certain contexts; see also (165b)):

- (160) a. *Bar-s-aarə gən-a-bən.*
 go-REC-CONV AUX-PRES-1SG
 ‘I want to go together/too’, ‘I want to join/accompany.’
 b. *Biirge ülele-h-er.*
 together work-REC-PRES.3SG
 ‘He works together/too.’

Comitativity can also be expressed by lexical means alone, viz. by the adverb *biirge* ‘together’, or by a noun phrase with the same postposition *kəttə* ‘with’. The difference between this and a construction with a comitative verb is very subtle. In the case of a comitative verb form the co-participants are more closely related within the situation described, though the first participant remains pragmatically more prominent than the second:

- (161) a. [*Min*] *ehigi-ni kəttə üör-e-bin.*
 I you.PL-ACC with rejoice-PRES-1SG
 ‘I rejoice together with you’, ‘I share your joy.’

- b. [Min] ehigi-ni *kætta* üör-s-e-bin.
(same translation).
- (162) a. Min ehigi-ni *kætta* bar-a-bən.
I you.PL-ACC with go-PRES-1SG
'I am going away with you.'
- b. Min ehigi-ni *kætta* bar-s-a-bən.
(same translation).

9.2.2.2 *Comitatives derived from two-place transitives and intransitives.* Comitatives can be derived from two-place transitives, and not from two-place intransitives (see the lists under (60), (61), (62)): as a rule, a comitative object with the postposition *kætta* 'with' cannot be added in a sentence which already contains an oblique object with the same postposition, viz. in sentences with meanings like 'He is whispering with her', 'He is talking with her', etc. Its addition would yield an unnatural sentence (see also 9.2.3.2).

- (163) a. En bihigi-ni *kætta* mas-ta *kerd-is-Ø!*
you.SG we-ACC with fire.WOOD-PRTV cut-REC-IMP.2SG.
'Cut firewood together with us!'
- b. Kini ije-tin *kætta* ənax əa-s-t-a.
s/he mother-her.ACC with cow milk-REC-PAST-3SG
lit. 'She with her mother milked cows.'

The following examples illustrate the four main ways of expressing comitativity: two of the examples, viz. (164a) and (164b), contain the reciprocal suffix and the other two contain only the lexical means which may co-occur with the grammatical expression; all of the sentences are roughly synonymous:

- (164) a. Kini miig-in *kætta* [biirge] ot tiej-is-t-e.
he I-ACC with together hay cart-REC-PAST-3SG
'He and I (lit. 'He with me') carted hay [together].'
- b. Kini miigin-niin [biirge] ot tiej-is-t-e.
he I-COM together hay cart-REC-PAST-3SG
(same translation)
- c. Kini miig-in *kætta* [biirge] ot tiej-d-e.
he I-ACC with together hay cart-PAST-3SG
(same translation)
- d. Kini miigin-niin [biirge] ot tiej-d-e.
(same translation).

If the first nominal is plural, which involves plural marking on the predicate, the comitative phrase allows two interpretations, as part of the subject and as a comitative object:

- e. Kiniler miig-in *kætta* ot tiej-d-iler.
they I-ACC with hay cart-PAST-3PL
i. 'They and I carted hay.'
ii. 'They carted hay with me.'

In the following example the second co-participant is not named, the implication being that the subject referent was one of a group of hunters:

- (165) a. [Min] *tajay-ə bulta-s-t-əm.*
 I elk-ACC hunt-REC-PAST-1SG
 ‘I took part in hunting down elk.’
 b. *Et-te kərba-s-Ø!*
 meat-PRTV chop-REC-IMP.2SG
 ‘Chop some meat, too!’ (in a situation when someone is already chopping the meat).

9.2.3 The assistive meaning

As mentioned above, a comitative or assistive interpretation of a reciprocal form is determined by the way the second co-participant is expressed: in the case of its comitative marking (the postposition *katta* ‘with’ or the comitative case ending *-læn*, etc.) the reading is as a rule comitative, and if the marking is dative it is usually assistive. If the expression of this co-participant is omitted the interpretation is determined pragmatically and by context. Thus in the case of motion verbs the reading is likely to be comitative; e.g.:

- (166) a. *Kini bar-s-ar* i. ‘He is going with somebody.’
 ii. *‘He is helping somebody to go.’
 b. *Kini aha-s-ta* i. ‘He has eaten with somebody.’ (= in company)
 ii. *‘He has helped somebody to eat.’
 c. *Min üör-s-e-bin* i. ‘I rejoice [together] with sb’; ‘I also rejoice.’
 ii. *‘I help sb to rejoice.’

It has been pointed out above that the lexical range of comitatives is somewhat narrower than that of sociatives, partly due to the fact that sociatives from certain intransitives do not have corresponding comitatives. If we take into account (166) and similar data we can assume that the lexical range of assistives is somewhat narrower than that of comitatives.

The lexical range of sociatives and reciprocals most likely overlaps. The following acceptability hierarchy in the lexical range of reciprocals, sociatives, comitatives and assistives can be tentatively proposed:

reciprocal \cap sociative \supset comitative \supset assistive.

9.2.3.1 Assistives derived from one-place intransitives. The number of assistives of this type seems to be rather limited and covers mainly verbs denoting various everyday activities; cf.:

- (167) *Aya-m miexe üleli-h-ir.*
 father-my I.DAT work-REC-PRES.3SG
 ‘Father helps me to work.’

9.2.3.2 Assistives derived from two-place transitives and intransitives. Assistives derived from two-place transitives comprise the main group. There are no assistives from two-place intransitives, which is accounted for by the lexical meaning of the verbs: assisting in such actions and states as whispering, flattering, being disappointed, etc. (see (60), (61), etc.) is pragmatically unlikely (cf. 9.2.2.2).

- (168) *bəh-əs-* ‘to help to cut’
kötöy-üs- ‘to help to lift/raise’

- | | | |
|----------|---------------------------------------|---|
| | <i>kərg-əs-</i> | ‘to help to chop/hack’ |
| | <i>suuj-us-</i> | ‘to help to wash’ |
| | <i>tut-us-</i> | ‘to help to catch’, ‘to help to build’; e.g.: |
| (169) a. | <i>At tut-us-t-a.</i> | ‘[He] helped to catch the horse.’ |
| b. | <i>Aya-m miexe otuu tut-us-t-a.</i> | ‘Father helped me to build a hut.’ |
| c. | <i>Bihiexe mas-ta kerd-is!</i> | ‘Help us to chop the firewood.’ |
| d. | <i>Iti d’oh-ŋo ot munn’-uh-a-bən.</i> | ‘[I] help these people to rake hay.’ |
| e. | <i>Ije-tiger ənax əa-s-t-a.</i> | ‘[She] helped her mother to milk cows.’ |

The following sentence contains no expression of the second co-participant.

- (170) *Min d’ie-ber uu bas-əh-a-bən.*
 I home-DAT.POSS water bring-REC-PRES-1SG
 ‘At home, I help to bring water.’

The reciprocal form is used to encode the assistive meaning even when the subject referent performs the action alone (171). If the reciprocal form of a given verb customarily has a comitative meaning the lexical verb meaning ‘to help’ is used instead of the reciprocal suffix (172):

- (171) *Min kəaj-an xaam-bap-pən ol ihin da əal-əm mie-xe*
 I overcome-CONV walk-NEG.PRES-1SG that because.of neighbour-my.NOM I-DAT
mas kerd-is-t-e.
 firewood chop-REC-PAST-3SG
 ‘I could not walk, therefore my neighbour helped me to chop the firewood.’
- (172) a. *Kini bar-əs-t-a.*
 he walk-REC-PAST-3SG
 ‘He walked *with* somebody.’
- b. **Kini miexe bar-əs-t-a.*
 (intended meaning:) ‘He helped me to walk.’
- c. *Kini miexe bar-ar-əgar kömölös-t-ö.*
 he I.DAT walk-PART-DAT help-PAST-3SG
 ‘He helped me to walk.’

9.2.4 The use with negation

When used with negation, verbs with a comitative meaning show that the subject referent either does not perform the action at all or performs it alone. The action of the co-agent is not negated. Verbs with a negated assistive meaning denote that the co-agent performs the action alone:

- (173) a. *Kini biirge ülele-s-pet.*
 he together work-REC-NEG.PRES.3SG
 ‘He does not work together [with anybody].’
- b. *Kini miexe ülele-s-pet.*
 he I.DAT work-REC-NEG.PRES.3SG
 ‘He does not help me to work.’

9.3 Causatives from sociatives, comitatives and assistives

As well as in the other cases, causative constructions can be easily formed from all the semantic types of derivatives with the reciprocal suffix (see (16) and the relevant text, and also 4.2); cf.:

- (174) a. *baləktaa-* 'to fish'
 b. *baləkta-s-* 'to fish together'
 c. *baləkta-h-ən-nar-* 'to make/allow to fish together'.

A causative based on an assistive (cf. (169e)):

- (175) *Aya-m kini-ni ije-ti-ger ənax əa-h-ən-nar-d-a.*
 father-my she-ACC mother-her-DAT COW milk-REC-REFL-CAUS-PAST-3SG
 'My father made her help her mother to milk the cow.'

A causative based on a comitative:

- (176) *Aya-m kini-ni müig-in kəttə bar-əh-ən-nar-d-a.*
 father-my he-ACC I-ACC with go-REC-REFL-CAUS-PAST-3SG
 'My father made him go with me.'

9.4 Deverbal nouns

Nouns are easily formed from all the semantic types of derivative verbs with the reciprocal suffix. (177) contains a deverbal noun with a sociative meaning, and (178) with an assistive meaning (it contains a substantivized participle with the suffix *-er/-ar*, etc.):

- (177) *Kini ənax mayəra-h-əə-tə-n ist-er.*
 he.NOM COW.NOM moo-REC-NR-its-ACC hear-PRES.3SG
 'He hears the mooing of many cows.' (SG of both nouns has collective meaning).
- (178) *Emtieke ot-un tiej-s-er-e, mah-ən erbe-h-er-e muuh-un*
 drugstore hay-ACC cart-REC-PART-his firewood-ACC saw-REC-PART-his ice-ACC
əl-s-ar-a barammat buol-l-a. (Kh.1. 27)
 take-REC-PART-his endless be-PAST-3SG
 'His help in carting hay to the hospital, his help in sawing firewood and his help in bringing ice became endless.'

10. Non-productive meanings of the reciprocal suffix

10.1 Introductory

In the literature on the Turkic languages, it has been noted that the reciprocal markers in these languages are the most polysemous among the voice markers (the other three being passive, reflexive and causative). There is an opinion that this is particularly true of the Yakut language (Kharitonov 1982:268). The four productive meanings covering

hundreds of verbs considered above are supplemented by a number of other meanings less productive but interesting typologically.

It should also be pointed out here that in many verbs the meaning of the reciprocal marker undergoes lexicalization and it cannot be assigned a distinct meaning in some of the derivatives. The meanings listed below are characteristic of small groups of reciprocal forms, sometimes of two or three only (according to our probably incomplete data). Nevertheless, they deserve mention, in particular those cases where a semantic shift is parallel to that in the reciprocal (or reflexive) marker in other Turkic and non-Turkic languages.

Some reciprocal forms may have several meanings; for instance, alongside unproductive meanings they may have the reciprocal proper, or sociative, or comitative meaning. Thus the reciprocal form *ələ-s-* (← *əl-* ‘to take’) acquires at least three meanings: the regular meanings ‘to take/grasp each other’ and ‘to grasp sth together’ and also the two-place intransitive meaning ‘to grasp at/take hold of sth’ which may be tentatively called “contact-locative”.

- (179) *Kini aan tutaayə-ttan əl-əs-t-a.* (Kh.2. 272)
 he door handle-ABL take-REC-PAST-3SG
 ‘He took hold of the door handle.’

10.2 The list of non-productive meanings

Derivation of these meanings involves valency reduction, including object demotion, or valency retention. Here belong the following meanings.

10.2.1 *The anticausative meaning (i.e. the meaning which is a result of the elimination of the causative meaning)*

This group of forms is derived from three-place transitive lexical reciprocals (see 13.3). The derivatives are two-place intransitives.

- (180) *xolboo-* ‘sb joins (sth to/with sth)’ → *xolbo-s-* ‘sth joins to sth.’

The anticausative meaning seems to be more commonly marked by the reflexive suffix which also derives anticausatives from lexical reciprocals, thus competing in this function with the reciprocal marker. The reciprocal suffix may have acquired this function due to a kind of “mutual attraction” of the lexical reciprocal meaning of the underlying verbs and the grammatical reciprocal meaning of the suffix which most commonly appears on “canonical” reciprocals which are intransitive.

10.2.2 *The converse meaning*

Here belong verbs derived from base verbs meaning ‘to sell’, ‘to rent out’, etc. The derivatives denote the actions of the counter-agent implied by the meaning of the base verb, i.e. they have meanings like ‘to buy’, ‘to rent/hire’. The actions they describe seem to be more “active” than those described by the base verbs.

- (181) a. *ajaxtaa-* ‘to give sb to sb who should provide for him/her’
 → *ajaxta-s-* ‘to take sb in order to provide for him/her’ (S. 34)
 b. *atəlaa-* ‘to sell sth to sb’
 → *atəla-s-* ‘to buy sth from sb’
 c. *ettee-* ‘to hire out (a horse, a scythe ...)’
 → *ette-s-* ‘to hire (a horse, etc.)’
 d. *kuortamnaa-* ‘to lease (e.g. lodgings)’
 → *kuortamna-s-* ‘to rent (lodgings, etc.)’
 e. *tüülee-* ‘to lease (meadow-land)’
 → *tüüle-s-* ‘to take (meadow-land) on lease’ (arch.; S. 417).

10.2.3 *The meaning of response action*

These are derivations of the following type:

- (182) a. *ajaataa-* ‘to produce a long drawn-out bellow before a fight’
 → *ajaata-s-* ‘to produce a drawn-out bellow in response to the same kind of bellow’
 (Kh.1. 32)
 b. *maḡəraa-* ‘to moo’ → *maḡəra-s-* ‘to moo in response’ (Kh.1. 32).

10.2.4 *The contact-locative meaning*

This meaning is attested in the derivatives of several verbs of manual physical actions involving a relatively long physical contact in order to keep balance, a posture, or contact between agent and a (fixed) object, etc.:

- (183) a. *əl-* ‘to take’ → *əl-əs-* ‘to take hold of/to grasp’ (see (179))
 b. *tart-* ‘to pull’ → *tard-əs-* ‘to pull oneself up to sth’
 c. *tut-* ‘to hold/grasp’ → *tut-us-* ‘to hold on to sth.’
 (184) a. *Bəa-ttan tut-us-Ø!* (Kh.1. 39)
 rope-ABL hold-REC-IMP.2SG
 ‘Get hold of the rope!’
 b. *Mas-tan tard-əs-Ø!* (Kh.2. 279)
 tree-ABL pull-REC-IMP.2SG
 ‘Pull yourself up to the tree!’

10.2.5 *The absolutive meaning*

In this case the surface object is deleted:

- (185) a. *Miigin meneek üögü-me-Ø!*
 I.ACC for.nothing scold-NEG-IMP-2SG
 ‘Don’t scold me for nothing!’
 b. *Meneek üöx-sü-me-Ø!* (S. 454)
 for.nothing scold-REC-NEG-IMP.2SG
 ‘Don’t swear without reason!’

10.2.6 *The intensive meaning*

This meaning is present in (186b) (see Kharitonov 1963:40). It can also be discerned in the lexicalized form *teb-is-* ‘to trample down/on’ (vt) derived from *tep-* ‘to kick’ (vt) (S. 424; P. 2613), and also in a number of verbs listed in (193).

Most of lexicalized reciprocals are two-place intransitives governing an object with the postposition *katta* ‘with’ or in the comitative case (these verbs are not marked as (vi) in the lists below). A few verbs govern a dative object and some of them are transitive (they are marked as (vt)). Alongside a lexicalized meaning some of the verbs have a standard reciprocal, sociative or assistive meaning (see the meanings ii and iii in (190) for the verb *xap-səs-*).

11.2 *Reciproca tantum*

(189) is a list of verbs whose underlying bases are lost or almost extinct, or semantically not associated with the formally reciprocal counterparts. We list not only verbs whose reciprocal meaning is more or less clear but also verbs which are in a way peripheral to the reciprocal meaning. This list and those in the subsequent subsections have been compiled on the basis of the data from Slepcev (1972) and Pekarskij (1959). It covers half the verbs with (fossilized) *-s/-h* registered in Kharitonov (1963: 120–1).

(189) <i>batəs-</i>	‘to follow’ (vt)
<i>böülüös-</i>	‘to form into a clot, to condense’
<i>iris-/kiris-</i>	‘to couple (of animals); ‘to gather for coupling’
<i>kečes-</i>	‘to persist’ (vt)
<i>killeekele-s-</i>	‘to contradict (about an obstinate person)’ (P. 1088)
<i>meld’es-</i>	‘to deny’ (vt)
<i>sajəs-</i>	‘to want to go together’, ‘to not let go (of children)’ (vt)
<i>seles-</i>	‘to converse with sb (for a long time)’
<i>sərəs-</i>	‘to race with one another’
<i>tigis-</i>	‘to gather (from different directions)’ (coll.)
<i>tubus-</i>	i. ‘to make peace with each other’, ii. ‘to improve’
<i>üles-</i>	‘to settle with sb’, ‘to come to an agreement’
<i>üilles-</i>	‘to share with sb’
<i>xarəs-</i>	‘to butt’, ‘to compete’, ‘to collide’
<i>əbəs-</i>	‘to close up’, ‘to adhere closely to sth.’

11.3 Some types of lexicalization

The groups of verbs are listed below with the aim of giving an idea of the semantic range of lexicalization. Verbs that do not lend themselves to any classification are quoted as a separate group: the function of the suffix *-s/-h* in these verbs is not clear. In the case of polysemous verbs, sometimes only some of the meanings are quoted. Needless to say, the lists of lexicalized reciprocals are not exhaustive.

1. The first group comprises intransitive verbs in *-s/-h* which denote various hostile actions; the underlying verbs denote actions that may be a part (not necessarily hostile) of the latter; the typical lexical meaning of the derivatives is ‘to quarrel’, ‘to fight’:

(190) <i>et-</i> ‘to say, speak’	→	<i>et-is-</i> i. ‘to quarrel’, ii. ‘to speak with each other’
<i>oyus-</i> ‘to beat/hit’	→	<i>oxs-us-</i> i. ‘to fight’, ii. ‘to struggle against sth’

- xap-* i. 'to catch/seize' → *xap-səs-* i. 'to enter into a fight'
 ii. coll. 'to scold/abuse' ii. 'to enter into an argument'
 iii. 'to seize each other'
- kumalaa-* 'to break, rumple' → *kumala-s-* 'to fight' (cf. P. 1212)
kiir- 'to enter' → *kiir-is-* 'to enter into a fight' (Kh.1. 32); etc.

2. The derivatives denote resistance, objecting, defence of someone. The base verbs may render these meanings as well; cf.:

- (191) *bečigennee-* 'to be stubborn, to resist' → *bečigenne-s-* 'to persist (in one's own opinion)'
 (vt) (P. 451)
- d'oryoj-* 'to show courage' → *d'oryo-s-* 'to vie (with)/rival' (P. 835)
- kirietee-* i. 'to cut with a blunt knife' → *kiriete-s-* 'to contradict' (P. 1105)
 ii. 'to reproach'
- kömüskee-* 'to intercede (for)/defend' → *kömüske-s-* 'to intercede (for)/defend.'

3. The derivatives (all of them intransitive) denote coming to an agreement and the like, or they denote actions that lead to coming to an agreement; the underlying verbs are roughly synonymous to the derivatives, or they denote actions that may be a part of the meaning of the derivative:

- (192) *aax-* i. 'to read', ii. 'to count' → *aax-səs-* i. 'to settle accounts with each other'
 iii. 'to regard as' ii. 'to take sb into account'
- ana-* i. 'to appoint', ii. 'to bequeath' → *ana-s-* 'to come to an agreement'
- kepset-* 'to talk/converse' → *kepset-is-* i. 'to enter into a conversation'
 ii. 'to agree (with sb) to do sth'
- kik-* 'to incite, provoke' → *kik-sis-* 'to agree to do sth'
- söbulee-* i. 'to give consent/approve' → *söbule-s-* 'to agree (with sb/sth)'
 ii. 'to agree with sb/sth'
- sübelee-* 'to advise' → *sübele-s-* 'to ask advice of/consult together.'

4. The meaning of this group of derivatives can be roughly defined as an intention to obtain or achieve, to follow or pursue something; the underlying verbs may be synonymous to their derivatives at least in one of the meanings, or the difference in meaning may be so great that the dictionaries register them as unrelated items. Most of the derivatives retain transitivity; two verbs take a dative object. The actions denoted by the derivatives often imply a response action of the object (e.g., imploring presupposes compliance with the wish expressed, etc.).

- (193) *aartaa-* 'to implore, to beg' → *aarta-s-* i. 'to implore', ii. 'apologize' (vt)
- bat-* 'to follow/pursue' (out of use) → *bat-əs-* 'to follow/pursue' (vt)
- d'anəj-* i. 'to pursue (a goal), to strive' → *d'anə-s-* 'to pursue a goal/strive' (vt)
 ii. 'to revenge'
- d'uluj-* i. 'to do sth persistently'
 ii. 'to wish/strive for sth' → *d'ulu-s-* 'to wish/strive for sth' (vi+DAT)
- ekkiret-* 'to follow/pursue' → *ekkiret-is-* 'to follow/pursue' (vt)
- ellee-* 'to pound, to knead', 'to forge' → *elle-s-* i. 'to try to achieve (with difficulty)'
 ii. 'to endure/hold out against' (vt)

<i>iettee-</i>	i. 'to pluck/pick out'		
	ii. 'to force, to implore persistently'	→	<i>iette-s-</i> 'to implore persistently' (vt)
<i>irdee-</i>	i. 'to track/trace (an animal)'	→	<i>irde-s-</i> i. 'to find out (by inquiring)'
	ii. 'to demand (a debt)'		ii. 'to demand (a debt)' (vt)
<i>kete-</i>	i. 'to await/wait for'	→	<i>kete-s-</i> i. 'to await/wait for, lie in wait'
	ii. 'to guard/watch over'		ii. 'to be on the look out for' (vt)
	iii. 'to watch/spy on'		
<i>kördöö-</i>	i. 'to look for', ii. 'to beg, to demand'	→	<i>kördö-s-</i> 'to beg/demand' (vt)
<i>sit-</i>	i. 'to catch up with sb'	→	<i>sit-is-</i> i. 'to achieve (a goal, etc.)'
	ii. 'to achieve (a goal, etc.)'		ii. 'to revenge' (vt)
<i>sojuolaa-</i>	i. 'to look for'; ii. 'to track hunting'	→	<i>sojuola-s-</i> 'to persecute (like a hunted elk)' (P. 2264) (vt)
<i>suraa-</i>	'to inquire'	→	<i>sura-s</i> 'to inquire' (vt)
<i>tiij-</i>	'to reach'	→	<i>tii-s-</i> (disapproval) 'try to achieve/secure' (vi+DAT)
<i>tuluj-</i>	'to endure/suffer'	→	<i>tulu-s-</i> 'to endure/suffer' (vt).

5. The intransitive derivatives denote entering into or having a love affair, etc.:

- (194) *bul-* 'to find' → *bul-us-* i. 'to find each other', 'find sth together'
 ii. 'to enter into a love affair' (P. 546)
- kulaa-* 'to hit/strike violently' → *kula-s-* 'to begin/have a love affair' (P. 1203)
- kuud'uj-* i. 'to lure', ii. 'fall in love' → *kuud'uj-us-* i. 'to lure', ii. 'to have a love affair'
 iii. 'to long (for)' (with)' (P. 1195).

6. Residual verbs with various meanings:

- (195) *bier-* 'to give sth to sb' → *ber-is-* i. 'to share sth with sb'
 ii. 'to give sth to each other' (vt)
- bil-* 'to know, recognize' → *bil-sis-* i. 'to be/get acquainted', 'to know each other'
 ii. 'to call on each other regularly'
 iii. 'to consort with' (P. 471)
- kör-* i. 'to look/see'; ii. 'to look after' → *kör-üs- /kör-süs-* i. 'to see each other'
 iii. 'to suffer (sth)/experience' ii. 'to meet/gather (from different directions)'
 iii. 'to look after (sb) together' (sociative)
 iv. 'to help to look after' (assistive)
 v. 'to suffer/experience together' (sociative)
- oinoo-* 'to play' → *oino-s-* 'to flirt (with a woman)' (P. 1801)
- äl-* 'to take/seize' → *äl-säs-* i. 'to seize each other'
 ii. 'to start (doing sth).'

12. Lexical reciprocals with the suffix *-la-s/-la-h* derived from non-verbal bases

12.1 Introductory

The principal means of denominal verb derivation is the suffix *-laa/-taa/-daa/-naa...* which has 16 synharmonic variants. This suffix can derive verbs from any part of speech. Among 16 meanings of denominal derivatives with this suffix cited in the grammar of cur-

rent Yakut (Korkina 1982: 215–6; see also (12)), only one has parallels among verbs in *-la-s*, viz. verbs derived from names of games; cf. *xaartə* ‘cards’ → *xaartə-laa-* ‘to play cards’ vs. *temteti* ‘a card game’ → *temteti-le-s-* ‘to play temteti’ (P. 2634). The suffix *-la-s* derives a considerable number of reciprocal verbs from nominal stems (Kharitonov 1963: 34). Characteristically, these base nouns are in fact lexical reciprocals. It is easy to see that *-la-s* is composed of the suffix *-laa* and the reciprocal suffix *-s* (*-laa* > *-la* before *-s* according to the general rule of final vowel shortening before a derivational suffix). It should be noted, however, that verbs with the suffix *-las* do not have non-reciprocal counterparts without *-s*, i.e. with the suffix *-laa* alone. This fact makes it possible to qualify them as lexical reciprocals according to our definition. They can be divided into two groups: (1) those with non-spatial meanings and (2) those with spatial meanings. Needless to say, the lists below are not exhaustive.

12.2 Non-spatial reciprocals

They fall into three subgroups.

12.2.1 Verbs derived from nouns denoting reciprocal relations

The base nouns of these derivatives have such lexical meanings as ‘peace’, ‘agreement’, ‘game’, ‘quarrel’, ‘exchange’, ‘struggle’, etc. With the exception of *atas*, all the verbs below are two-place intransitives.

(196) <i>atas</i> ‘exchange’	→ <i>atas-tas-</i> ‘to exchange sth’ (vt)
<i>baarəs</i> ‘a card game’	→ <i>baarəs-tas-</i> ‘to play baarys’ (P. 387)
<i>besiede</i> ‘conversation, a talk’	→ <i>besiede-les-</i> ‘to converse/talk with’
<i>d’üül</i> ‘trial’	→ <i>d’üül-les-</i> ‘to be at law with, to argue with’
<i>eje</i> ‘peace’	→ <i>eje-les-</i> ‘to get reconciled/make peace with’
<i>il</i> ‘peace, concord’	→ <i>il-les-</i> ‘to make peace with’
<i>iirseen</i> ‘quarrel’	→ <i>iirseen-nes-</i> ‘to quarrel’ (P. 958)
<i>kör-s-üü</i> i. ‘meeting’, ii. ‘lover’, ii. ‘love affair’	→ <i>kör-s-üü-les-</i> ‘to have a love affair’, etc.
<i>kuomun</i> ‘complicity’	→ <i>kuomun-nas-</i> ‘to be accomplices’
<i>küres</i> ‘competition’	→ <i>küres-tes-</i> ‘to compete’
<i>tuspa</i> ‘difference, distinction’	→ <i>tuspa-las-</i> ‘to differ, to be distinct from’
<i>xoxučuol</i> ‘quarrel, squabble’	→ <i>xoxučuol-las-</i> ‘to quarrel/squabble’, etc.

The base noun (*nomen actionis* with the suffix *-üü*; see *kör-s-üü* under (196)) is in its turn a derivative from the reciprocal verb *kör-üs-* ‘to see/meet each other’ derived from the transitive *kör-* ‘to see/look’.

12.2.2 Verbs derived from nouns denoting participants of a reciprocal situation

The base nouns have such lexical meanings as ‘fellow-traveller’, ‘friend’, ‘neighbour’, ‘family’, ‘relatives’, ‘collaborator’, ‘people’, etc. (it is probably not accidental that the final consonant in three nouns (*argəs*, *atas*, *böyös* in (197)) is materially identical with the reciprocal suffix). This pattern of derivation is rather productive, as we find such derivatives from

fairly recent Russian borrowings: cf. *tabaarəs* ‘comrade’ (< Russian *tovarišč*) → *tabaarəs-tas*- ‘to establish friendly relations with’. All the derivatives are two-place intransitives:

- | | | | |
|-------|---------------------------------------|---|--|
| (197) | <i>ajmax</i> ‘relatives, kinsfolk’ | → | <i>ajmax-tas</i> ‘to become relatives’ |
| | <i>argəs</i> ‘fellow-traveller’ | → | <i>argəs-tas</i> - ‘to travel together’ |
| | <i>atas</i> ‘friend’ | → | <i>atas-tas</i> ‘to become/make friends’ (P. 190) |
| | <i>böyös</i> ‘fighter, wrestler’ | → | <i>böyös-tös</i> - ‘to fight/wrestle’ |
| | <i>doyor</i> ‘friend’ | → | <i>doyor-dos</i> - ‘to become/make friends’ |
| | <i>d’on</i> ‘a people, relatives’ | → | <i>d’on-nos</i> - ‘to become friends’ |
| | <i>d’ukaax</i> ‘neighbour’ | → | <i>d’ukaax-tas</i> - ‘to share a room/house’ |
| | <i>kergen</i> ‘family, family member’ | → | <i>kergen-nes</i> - ‘to get on with/get used to each other.’ |

12.2.3 Verbs denoting resistance or assistance, derived from nouns, adjectives and adverbs

Verbs of this group do not express reciprocity but they denote an action performed in response to another implied action, which sense may be termed semi-reciprocal. It should be noted that in this case situations that are not reciprocal proper are treated by the languages in the same way as reciprocal proper. All the verbs, excepting *tur-uu* in (198), are two-place intransitives.

- | | | | |
|-------|--|---|--|
| (198) | <i>böppörök</i> ‘across’, ‘rude’,
‘the one who contradicts’ | → | <i>böppörök-tös</i> - ‘to contradict [each other]’
(P. 523) |
| | <i>breeki</i> ‘stubborn, stubbornness’ | → | <i>breeki-les</i> - ‘to contradict/object’ (P. 532) |
| | <i>kirdiex</i> ‘obstinate, unyielding’ | → | <i>kirdiex-tes</i> - ‘to be obstinate’ (P. 1102) |
| | <i>örö</i> ‘upstream’ | → | <i>örö-lös</i> - ‘to contradict/oppose/counteract’ |
| | <i>tur-uu</i> ‘standing’ (<i>nomen actionis</i>) | → | <i>tur-uu-las</i> - ‘to struggle persistently against’ |
| | <i>utarə</i> ‘opposite, against’ | → | <i>utarə-las</i> - ‘to contradict/counteract’ |
| | <i>xarsaax</i> fig. ‘stubborn’ | → | <i>xarsaax-tas</i> - ‘to be stubborn, to disobey’ (vt) |
| | <i>xataj</i> ‘opposite, stubborn’ | → | <i>xataj-das</i> - ‘to contradict each other’ |
| | <i>alax</i> ‘cross-clamp (in a sled)’ | → | <i>alax-tas</i> - ‘to do sth stubbornly, overcoming
difficulties’ (S. 525). |

There are a number of verbs with the suffix in question that are unrelated to any attested bases; e.g.:

- (199) a. *kičenke-les*- ‘to be obstinate, to disobey’ (P. 1116; S. 169) (vt).

Curiously enough, there are a few verbs which are to a certain degree antonymous to the verbs under (198); the verbs under (200) are two-place intransitives with a dative object:

- | | | | |
|-------|--|---|---|
| (200) | <i>köd’üüs</i> ‘usefulness/benefit/profit’ | → | <i>köd’üüs-tös</i> - ‘to help’ (P. 1127) |
| | <i>kömö</i> ‘help, assistance’ | → | <i>kömö-lös</i> - ‘to help/assist’ |
| | <i>önö</i> ‘service, good turn’ | → | <i>önö-lös</i> - ‘do service [to each other]’ (P. 1950) |
| | <i>tuha</i> ‘use(fulness)’ | → | <i>tuha-las</i> - ‘to help’ (P. 1127). |

12.3 Spatial (locative) reciprocals

Here belong verbs derived from various parts of speech and denoting all kinds of motion or position relative to each other, or changing position of parts of a whole, including chaotic movements. These verbs are either two-place or one-place intransitives with a plural subject:

(201) <i>aal</i> 'raft, any floating means'	→	<i>aal-las-</i> 'to crowd/move (about a crowd)'
<i>atax</i> 'leg/foot'	→	<i>atax-tas-</i> 'to lie together with heels touching'
<i>eŋer</i> 'side, edge'	→	<i>eŋer-des-</i> 'to live next to [each other]'
<i>kiliiep</i> 'bread'	→	<i>kiliiep-tes-</i> 'glue/stick together into a mass' (P.1088)
<i>n'uur</i> 'face'	→	<i>n'uur-das-</i> 'to stand face to face' (P. 1738)
<i>ojoyos</i> 'side, rib'	→	<i>ojoyos-tos-</i> 'to be side by side with sb' (S. 268)
<i>serge</i> 'next to, near' (PPS)	→	<i>serges-tes-</i> 'to line up, walk next to [each other]'
<i>üömex</i> 'disorderly crowd/flock'	→	<i>üömex-tes-</i> 'to flock/crowd/mill together'
<i>üörüik</i> 'matted hair'	→	<i>üörüik-tes-</i> 'to become matted/entangled'
<i>ürüö-taraa</i> 'to and fro/in all directions'	→	<i>ürüö-tes-</i> 'to gather/crowd together'
<i>xar-əə</i> 'ice-blocking'	→	<i>xar-ta-las-</i> 'pile up (of ice blocks) one upon another'
<i>əam</i> 'spawning'	→	<i>əam-naa-/əam-nas-</i> 'gather for spawning' (S. 520)
<i>əama</i> 'young fish'	→	<i>əama-las-</i> 'to swarm/teem with'
<i>əksa</i> 'nearby, close (to)'	→	<i>əksa-las-</i> 'to be next to each other.'

13. Lexical reciprocals and their derivatives

13.1 Introductory

The verbs to be discussed in this section are heterogeneous both morphologically and lexically. Most of them denote connecting (in the broad sense, i.e. combining or fixing things together literally or figuratively), gathering or collecting things in one place, or changing the position of an object or one part of an object relative to another part. Less commonly, they denote disconnecting. We shall confine ourselves to this major group of lexical reciprocals with the meanings of connecting and disconnecting.

Reciprocal arguments may be separate entities or substances (cf. (210) and (205)) as well as parts of a whole which move to one point from different directions (or perform chaotic movements) or, if they compose one whole entity, contract thus growing smaller. All these different actions and processes are similar in the sense that the space taken up by the argument referents is reduced.

According to valency and derivational properties, three main types of verbs can be distinguished:

1. *Group A* is the main group of verbs under consideration which comprises three-place lexical reciprocals (= lexical causatives), cf. *xolboo-* 'to join sth to sth'.

2. *Group B1*: from some of Group A verbs, the reciprocal (or reflexive) morpheme can derive two-place intransitive anticausatives, cf. *xolbo-s-* 'to become/get joined';

3. Group B2 is comprised of underived (though they may contain the root-final *-s/-h-*) two-place intransitives which are also lexical reciprocals, cf. *eps-* ‘to get clenched’;

4. Group C are morphological causatives – three-place lexical reciprocals derived from the latter verbs, cf. *eps-er-* ‘to clench (two entities)’.

13.2 Group A: Underived three-place transitives

This group comprises at least 15 lexical reciprocals with the typical meanings ‘to join’, ‘to combine’, ‘to tie’, ‘to mix’, ‘to glue together’, etc.:

(202)	a.	<i>baaj-</i>	‘to tie together’
	b.	<i>bölötöö-</i>	‘to gather (cattle, etc.)’
	c.	<i>bulkuj-</i>	‘to mix, to join’
	d.	<i>d’üörelee-</i>	‘to couple/mate’
	e.	<i>ilbee-</i>	‘to join/gather’
	f.	<i>kelgij-</i>	‘to tie together’
	g.	<i>kətar-/kətəar-</i>	‘to mix/join’
	h.	<i>mus-/munn’-</i>	‘to gather/pile’
	i.	<i>silimnee-</i>	‘to glue up/glue together’
	j.	<i>tüüm-</i>	‘to tie/gather together’
	k.	<i>xanəlaa-</i>	‘to put/join in pairs’
	l.	<i>xatəj-</i>	‘to put crosswise’
	m.	<i>xolboo-</i>	‘to join/mix/tie together’, etc.

13.3 Group B1: Two-place anticausative intransitives

These are derivatives from Group A verbs mostly by means of the reciprocal marker *-s/-h-*. Other anticausative markers are also used. In a number of cases both co-participants are expressed by a semantically plural subject. In some of their usages these verbs may have non-reciprocal meanings (cf. English: *The stamp got glued to the wall* # **The stamp and the wall got glued together* vs. *The old stamp got glued to the new one* = *The old stamp and the new stamp got glued together*). These derivatives enter into the following three formal types of oppositions with Group A verbs.

1. The base verb has no related anticausative, though it may have a derived form with the suffix *-s/-h-*. Anticausative derivation is blocked by the (“ever-present”) agent-oriented component in the meaning of the base verb (see Haspelmath 1993:93). The derivative may be sociative, comitative or assistive, as in (203a), or it may be lexicalized, as in (203b).

(203)	a.	<i>kelgij-</i> ‘to bind/tie together’	→	<i>kelgi-s-</i>	i. ‘to do the tying together’
					ii. ‘to help to tie’
	b.	<i>baaj-</i> ‘to tie a knot’	→	<i>baaj-əs-/baaj-səs-</i>	i. ‘to do the tying together’
					ii. ‘to help to tie’
					iii. ‘to nag/find fault with.’

2. Most base verbs have respective anticausatives derived by means of the suffix *-s/-h-*:

- (204) a. *bulku-s-* 'to get mixed' (P. 545)
 b. *d'üörole-s-* 'to couple/mate'
 c. *ilbe-s-* 'to join/unite/gather'
 d. *silimne-s-* 'to get glued together'
 e. *tüm-üs-* 'to gather'
 f. *xanəla-s-* 'to be/move in groups'
 g. *xatə-s-* 'to get intertwined'
 h. *xolbo-s-* 'to join/mix', 'to marry'; cf.:
- (205) a. *Kini kumax-ə burduk-ka xolboo-t-a.*
 he sand-ACC grain-DAT mix-PAST-3SG
 'He added sand to grain.'
 b. *Kini burdug-u kumax-ə kəttə xolboo-t-a* (three-place reciprocal)
 he grain-ACC sand-ACC with mix-PAST-3SG
 'He mixed grain with sand.'
 c. *Burduk kumax-ə kəttə xolbo-s-t-ular* (anticausative)
 grain sand-ACC with mix-REC-PAST-3PL
 'The grain and sand mixed together.'

3. A few base verbs also have respective intransitive anticausatives marked by the reflexive (-*n-*, etc.) or passive (-*ulun-*, etc.) suffix, sometimes in combination with the reciprocal suffix (-*uh-un-*); these anticausatives may have parallel anticausatives in -*s-/-h-*. In one instance three anticausatives with a different marking are derived from the same base verb (206d, e, f).

- (206) a. *silimne-n-* 'to get stuck/glued together' (S. 323) (cf. (204d))
 b. *bulku-lun-* 'to get mixed' (cf. (204a)) (S. 81)
 c. *tüm-ülün-* 'to assemble/gather' (S. 412) (cf. (204e))
 d. *muh-un-* 'to gather' (S. 246) (cf. (202h))
 e. *munñ'-ulun-* 'to gather' (S. 244)
 f. *munñ'-uh-un-* 'to gather' (S. 244).

It is interesting to note that (206f) contains the reflexive suffix *-un* added to the reciprocal marker *-us/-uh*. It is most likely that the form *munñ'-us* had an anticausative meaning, which made it possible to add the pleonastic reflexive suffix. In present-day Yakut this form does not have this meaning; cf. *munñ'-us-* 'to help sb to gather sth'.

4. To complete our account of Group B1 verbs, we shall mention two equipollent oppositions in which the causative verb and its non-causative counterpart contain an unproductive causative suffix *-əar* and the reflexive suffix *-ən* respectively (the root verb is not used without suffixes any longer, therefore the non-causative verb may be regarded as anticausative only from the diachronical point of view); moreover, the non-causatives also occur with the reciprocal marker added to the reflexive suffix (in the examples, the reflexive marker is assimilated as *-t-*):

- (207) a. **kət-*
 b. *kət-əar-* 'to join sth to sth' (vt)
 ↔ c. *kət-ən-* 'to join sth' (vi)
 → d. *kət-t-əs-* 'to join sth, to copulate' (vi).

- (208) a. **səh-*
 b. *səh-əar-* ‘to stick/glue/press sth to sth’ (vt)
 ↔ c. *səh-ən-* i. ‘to get stuck/glued to sth’
 ii. ‘to press oneself to sth/sb’ (vi)
 → d. *səs-t-əs-* i. ‘to get stuck/glued *together*’
 ii. ‘press oneself to *each other*’ (vi).

13.4 Group B2: *Reciproca tantum*

Group B2 comprises intransitive lexical reciprocals which have either no underlying verbs at all or no verbs with a semantically related meaning in current Yakut. Nearly all the verbs of this group contain, however, the final *-s/-h*, which is hardly accidental. This may be accounted for by two reasons:

(1) the underlying verb has gone out of use after a reciprocal form was derived from it; (2) there has never been an underlying verb, i.e. a lexical reciprocal may have acquired the reciprocal suffix by analogy due to its meaning (lexical reciprocal meaning may have attracted the reciprocal marker because there were numerous verbs that became reciprocal due to this suffix; this is supported by the pleonastic use of the reciprocal suffix in (209e, g, n, q)).

With respect to the range of lexical meanings Group B2 verbs are similar to Group B1 verbs. The typical meanings are: ‘to join together’, ‘to get clenched’, ‘to mate/couple’, ‘to adjoin’, ‘to border on’, ‘to make peace/reconcile’, ‘to argue’, ‘to fight/butt (about bulls, etc.)’, ‘to disperse’, ‘to divorce’, ‘to miss (not to meet) each other’, etc. All the following verbs with the exception of (209i) and (209r) are intransitive:

- (209) a. *arayəs-* ‘to branch/fork’, ‘to part’
 b. *batəs-* ‘to get along together’
 c. *böliös-* ‘to clot’
 d. *əbis-/əbəs-/əps-əs-* ‘to get clenched’
 e. *illes-* ‘to get reconciled’
 f. *iris-/irs-is-* ‘to mate/couple’
 g. *könüs-* ‘to get reconciled’
 h. *kuodarəs-* ‘to court each other’ (P.1223)
 i. *meld’es-* ‘to deny’ (vt)
 j. *mökküs-* ‘to argue/altercate’
 k. *seles-* ‘to converse for a long time’
 l. *silbes-* ‘to join’
 m. *sərəs-/sərs-əs-* ‘to compete in running’
 n. *taryas-* ‘to disperse’
 o. *tigis-* coll. ‘to gather’ (S.382)
 p. *tubus-/tups-us-* ‘to get reconciled’
 q. *üömextes-* ‘to crowd’
 r. *xarəs-* ‘to fight/butt’ (of bulls, etc.)
 s. *xardarəs-* ‘to disperse, miss each other’ (vt).

In the following two instances, there are two parallel roughly synonymous forms, one underived and the other derived (the forms in *-s* probably have a sociative meaning).

- kekkelee-/kekkele-s-* 'to stand up/sit down in a row/next to each other' (S. 217)
kečigiree-/kečigire-s- 'to stand in/form an even row' (S. 224).

13.5 Group C: Causatives derived from verbs of Group B2

All of them are regular derivatives, with the exception of two verbs which take an unproductive causative suffix: *ebis-* 'to get clenched' → *eps-er-* 'to clench (jaws, etc.)' and *tubus-* 'to get reconciled' → *tups-ar-* 'to reconcile sb with sb'; see (209d) and (209p); in (P. 2791) the latter verb is registered with the productive causative suffix as well: *tubus-un-nar-* 'to reconcile sb with sb'); cf.:

- (210) a. *Səŋaay-a eps-en xaal-bət.*
 jaw-his get.clenched-CONV AUX-PERF.3SG
 'His jaws have clenched.'
 b. *Kini səŋaay-ən eps-er-en kees-pit.*
 he jaw-his.ACC get.clenched-CAUS-CONV AUX-PERF.3SG
 'He clenched his jaws.'

In all the other instances the productive suffix *-tar* is preceded by the reflexive suffix (inserted, as is common, after the base-final *-s/-h*; see case 2) in 3.2); cf.:

- (211) *aray[əh]-ən-nar-* 'to make sb part' (cf. (209a))
irs-ih-in-ner- 'to couple/mate (of animals)' (cf. (209f))
silbeh-in-ner- 'to connect/join sth' (cf. (209.l)), etc.

Finally, here is an interesting example in which a verb of Group B1, like Group B2 verbs, assumes a form characteristic of Group C verbs, i.e. the underlying and the final forms of the derivational chain are roughly synonymous:

- (212) a. *ilbe-* 'to connect/gather sth' (vt) Group A
 → b. *ilbe-s-* 'to be connected, to gather'(vi) Group B1
 → c. *ilbe-h-in-ner-* 'to join/connect sth between them' (P. 914) Group C

14. Notes on diachrony

14.1 Introductory

Reciprocity was marked by the suffix *-š* as early as in Common Turkic (approximately in the last centuries BCE). This suffix is retained in most of the present-day Turkic languages. In Kazakh, Nogai and Kara-Kalpak it has changed into *-s* in intervocalic position. In the Turkic languages of Siberia, the intervocalic variant is *-ž* (in Tuvan, Altai, and Shor), *-z* (in Khakas) and voiced *-h* (probably via *-z*) in Yakut. In a non-intervocalic position it has changed into *-s* in Yakut.

There is no generally accepted etymology of the reciprocal suffix *-š*. Of the various hypotheses concerning its origin, we shall cite one which sounds plausible enough and finds support in the typological data at our disposal. This hypothesis relates the reciprocal suffix to markers of plurality. We shall also consider the problem of the connection of the reciprocal meaning in this marker with the reflexive meaning.

Prior to the discussion, we wish to stress that in the Turkic languages the most frequently combined affixes are similar in meaning. Thus, the widely used Turkic plural suffix *-lar/-ler* is a result of contamination of the two ancient markers of collective plurality *-l* and *-r* (Serebrennikov & Gadzhieva 1979:210, 93).

14.2 Markers of plurality as possible sources of the reciprocal suffix

There are two main possible sources of the reciprocal suffix. One of them is an expression of nominal plurality, and the other of verbal plurality, or iterativity. Both these sources may be materially identical and genetically related. Below, we cite cases of material similarity of the reciprocal suffix and other suffixes which are discussed in specialist literature as instances of genetic relatedness (for a detailed survey see Serebrennikov 1974:9–12; Juldashv 1988:269–324). A number of opponents point out that material similarity may be accidental (cf. Shcherbak 1981:13), which cannot be rejected out of hand. The suffix *-š* also occurs in combination with suffixes semantically more or less similar to it.

14.2.1 Nominal plurality

According to this hypothesis, the reciprocal marker is descended from the Common Turkic suffix of (collective) plurality **-š* (cf. Sevortjan 1962:138; Serebrennikov 1974:10–1). This hypothesis is supported by the existence of various traces of the meaning of plurality in this suffix across the Turkic languages. In the following three cases, the words containing the component *-š* denote groups of referents mostly in reciprocal or converse relations.

(a) In Ancient Turkic, there were collective nouns with the final component *-š*:

(213) Ancient Turkic

- | | | | |
|----|------------------------|----|---|
| a. | <i>arquš</i> ‘caravan’ | c. | <i>toquš</i> ‘cattle for slaughter’ |
| b. | <i>jarmaš</i> ‘cereal’ | d. | <i>uhuš</i> ‘tribe, kin’ (see Juldashv 1988:310). |

Compare the polysemy of reciprocal markers in Tagalog and Mundari (see Shkarban & Rachkov, Ch. 22, example (92); Osada, Ch. 37, §§9.2.2 and 11).

(b) Traces of this meaning are preserved in Tuvan. In this language the suffix in question also serves to express the meaning ‘a group of people (members of a family) related by a (given) degree of kinship’. In the examples below the suffix *-kə* may function as a marker of relative adjectives (cf. Altai *kəš* ‘winter’ → *kəš-kə* ‘winter (adj.)’) and the suffix *-lar* is a plural marker:

(214) a. *ana* ‘mother’ → b. *ana-š-kə-lar* ‘mother and her children.’

(215) a. *ugba* ‘elder sister’ → b. *ugba-š-kə-lar* ‘sisters’ (‘both the elder and other sisters’) (Isxakov & Pal’mbax 1961:171).

This hypothesis seems to be supported by more or less similar meanings of reciprocal markers in such diverse unrelated languages as Yukaghir, Mundari, Tagalog, Kabardian, To'aba'ita, Piro, etc. (see Maslova, Ch. 44, §6.2; Osada, Ch. 37, §§11, 5.2.3.3; Shkarban & Rachkov, Ch. 22, §3.2.2; Kazenin, Ch. 17, §3.3; Lichtenberk, Ch. 36, §8.1.5; Matteson 1965:38, 78–9, 82, 108).

(c) Another trace of the suffix in question can be discerned in the marker of distributive numerals *-ar/-er* (after a final consonant) and *-šar/-šer* (after a final vowel) in most of the current Turkic languages (see Tenishev 1988:193–5); the component *-ar/-er* is traced back to the ancient marker of collective plurality. It is worth noting that reciprocal pronouns and distributive numerals may display similarity in iconical reflection of the respective meanings, which is manifested in their reduplicated forms (cf. (218) and (219)).

- | | | | | |
|-------|---------|------------------------|---|-----------------------------|
| (216) | Turkish | <i>iki</i> 'two' | → | <i>iki-šer</i> 'in twos.' |
| (217) | Tatar | a. <i>žide</i> 'seven' | → | <i>žide-šar</i> 'in sevens' |
| | | b. <i>dürt</i> 'four' | → | <i>dürt-är</i> 'in fours.' |

Azerbaijani

- | | | | |
|-------|------------------|---|--|
| (218) | <i>bir</i> 'one' | → | <i>bir-är bir-är</i> 'one by one, singly.' |
| (219) | <i>bir</i> 'one' | → | <i>bir bir-ini</i> 'each other' (ACC). |

Reciprocal markers are used in a similar way in a number of other languages (see Osada, Ch. 37, §9.2.2).

(d) It is likely that the material coincidence of the suffix of nominal plurality and that of deverbal *nomina actionis* is not accidental. Note that these nouns of action, like collective nouns, do not as a rule occur in the plural number. The genetic proximity between the reciprocal suffix and that of *nomina actionis* was pointed out by Radloff (1897: 57–8) and a number of other researchers (Clauson 1967:6–7). The following tentative explanation of the reciprocal use of the marker of *nomina actionis* is proposed: in nouns of action the object valency is weakened, and as a result the agent expression connected semantically with an actional noun can be interpreted as both agent and patient (as an approximate illustration, cf. *I love her* → *I am in love with her* → *We are in love* 'We love each other'; cf. also **We mutually love* but *Our mutual love*. Compare in this connection the possible reciprocal interpretation of the phrases *The shooting of the soldiers* and *The touching of the knees*; see Uhlenbeck 1967:271). It should also be taken into consideration that in the Turkic languages deverbal nouns can in their turn be verbalized (see (196) and the commentary). The following examples are not from Yakut, as it has lost the Common Turkic suffix of deverbal nouns *-š*:

- | | | | | |
|-------|---------|-----------------------------|---|---|
| (220) | Uzbek | <i>kir-</i> 'to enter' | → | <i>kir-iš</i> 'entering.' |
| (221) | Kirghiz | a. <i>körsöt-</i> 'to show' | → | <i>körsöt-üş</i> 'showing, a show' |
| | | b. <i>körsöt-</i> 'to show' | → | <i>körsöt-üş-</i> 'to show each other.' |

This connection between the reciprocal suffix and that of deverbal *nomina actionis* is probably somewhat analogous to the means of expressing the reciprocal meaning in some of the Kiranti languages (Tibeto-Burman family). Thus in Bantawa a verb takes the active

participle suffix *-pa* and is followed by the inflected verb *mi-* ‘to do’. The suffix *-pa* functions as a nominalizer in Limbu which genetically and areally is closely related to Bantawa (see van Driem 1987: 193–9); therefore we may assume with a high degree of certainty that this suffix had this function in Bantawa as well.

Bantawa (Ebert 1994: 54)

- (222) *dhat-pa mi-c-a.*
 beat-ACT.PART do-DU-EXC
 ‘we two (DU) beat each other (NON-PAST)’; lit. ‘we do fighter.’

Reciprocal suffixes are also materially identical with the suffix of *nomina actionis* in Indonesian and Tagalog (see Ogloblin & Nedjalkov, Ch. 33, §2.3; Shkarban & Rachkov, Ch. 22, §4.2.2).

With regard to the data presented in (c) and (d) of this section, it should be noted that material identity may hold not only between the markers of reciprocity and distributive numerals (as is shown under (c)) and those of reciprocity and *nomina actionis* (as is shown under d)), on the one hand, but also between the markers of distributive numerals and *nomina actionis*, on the other hand. Thus in Yakut ‘... distributive, collective and ordinal numerals are names of action genetically’ (Shcherbak 1981: 13); cf. *könüs-* ‘to make peace with sb’ → *könüs-üü* ‘reconciliation’ and *tüört* ‘four’ → *tüört-üü* as in the sentence *Tüört-üü kuh-u* (ACC) *ölor-d-übüt* ‘[We] killed four ducks each’.

14.2.2 Verbal plurality

Above, we have discussed plurality in nominals. Semantically, this notion is closely related to the meaning of verbal plurality, i.e. iterativity: when an action is performed by a number of agents it is naturally performed several times, viz. at least as many times as there are agents. It is not by accident that nominal and verbal plurality sometimes have the same marking in different languages (the most common instance is reduplication in nouns and verbs). Verbal “plurality” manifests itself either in iteration of an action or in the plurality of subject referents. Most likely, the meaning of verbal plurality in the suffix *-š-* is historically a later phenomenon than nominal plurality in the same suffix. It should be noted that the plural suffix *-lar* appeared on verbs later than on nouns.

(a) Plurality or iterativity enters as a natural component into the reciprocal meaning in which an action must necessarily be repeated at least two times. Traces of the iterative meaning of the marker *-š-* can be observed in some of the Turkic languages, though in very few cases; cf. Uzbek:

- (223) Uzbek *mal-* ‘to dip/plunge’ (vt) → *mal-əš-* ‘to dip/plunge several times.’

This suffix also occurs (together with the causative suffix) within the complex suffix of iterativity *-š-tər-*; cf.:

- (224) Tatar *ukə-* ‘to read’ → *ukə-štər-* ‘to read for a while from time to time.’
 (225) Uighur *tiq-* ‘to hide’ → *tiqi-štur-* ‘to hide (sth) several times’ (Kibirov 1989: 296).

There is an opinion that the second component is a non-causative suffix and it is a contamination of two suffixes of iterativity, *-t* and *-r* (Serebrennikov 1975: 17–22; Serebrennikov & Gadžieva 1979: 210).

(b) The meaning of the plural number in the 3rd person form of verbs is quite often rendered by the suffix *-š* in ancient Turkic languages and this is particularly common in current Kirghiz, Kazakh and Uzbek. Thus in current Kirghiz, in verbal forms like

- (226) *jaz[-iš]-a-t*.
 write-PL-PRES-3SG/PL
 ‘they write’

the optional suffix *-iš* marks the plural number in the 3rd person only. In the 1st and 2nd persons it cannot be used as a plural marker. It is not used as a sociative marker in current Kirghiz. This is one more reason why this suffix cannot be used in forms meaning ‘we write’ and ‘you write’ in Kirghiz (cf. (226)). But it is unclear whether this is a new development of the reciprocal suffix or a relic inherited from Common Turkic.

The use of a polysemous marker with the reciprocal meaning to form verbal nouns is attested in a number of Oceanic languages; cf.: Bauan *wali* ‘to joke’ → *vei-wali* ‘jest, joke’, *loma-ni* ‘to feel compassion for sb’ → *vei-loma-ni* ‘love, compassion’; Motu *nanadai* ‘to ask sth’ → *he-nanadai* ‘question’ (Pawley 1973: 152). This marker is also used to indicate ‘collective plural, a group of something’: Fijian *vei-kau* ‘forest, a group of trees’, *vei-vale* ‘group of houses’ (ibid.). Thus this latter fact supports the hypothesis proposed in 14.2.1.

14.3 Relations between the reciprocal and the reflexive markers

Above, we have discussed the possible sources of the reciprocal marker. In this section, we will discuss its semantic proximity to the reflexive meaning in the subsequent period. This proximity manifests itself in the similarity of the secondary meanings of the markers of reciprocity and reflexivity and their contamination during this period. As Kharitonov (1963: 50) suggests, the modern principal reciprocal-sociative meaning was not the only primary meaning of *-s* and unproductive fossilized formations with this suffix show that in the earlier period it expressed meanings close to those of reflexive verbs. Later, Kharitonov (1982: 274) suggests that before the suffix *-n* came to be used as the principal reflexive marker, the suffix *-s* had been used in this function (including other functions that involved intransitivization) for a long time and for a while later the two markers functioned as alternative means. The order of these suffixes in the fossilized compound suffix also indicates that *-s* had preceded *-n* historically.

The following should be pointed out here. There exist very ancient pairs of verbs in which the reciprocal marker (usually the variant *-h*) alternates with the unproductive causative marker *-r/-ar/-əar*. Respective verbs without these suffixes are not registered. In these instances the reciprocal marker is usually followed by the reflexive marker, i.e. they appear as *-hən/-hin*, etc., and function as a morphological and semantic unity (it should be remembered in this connection that this combination also occurs in causative forms derived from reciprocals (see (16)–(17))). The meaning of this compound suffix is usually

non-reflexive and non-reciprocal and it coincides with one of the secondary meanings of the reflexive suffix. Verbs with this compound suffix fall into two groups.

Group A comprises verbs which have no unmarked underlying form. The reflexive forms derived from causative forms retain their reflexive proper or reflexive-possessive meaning (see (227c)–(229c)), whereas the derivatives with the compound suffix (reciprocal + reflexive; see (227d)–(229d)) are either anticausative or autocausative in meaning:

- (227) a. *oŋo-
 b. oŋo-r- 'to make sth' (vt)
 c. oŋo-r-un- 'to make sth for oneself' (vt)
 d. oŋo-h-un- i. 'to make sth for oneself' (vt)
 ii. 'to put oneself (or sth upon oneself) in order' (vi, vt)
 iii. 'to get ready, prepare oneself for sth' (vi).
- (228) a. *ətə-
 b. ətə-r- 'to bite, snap' (vt)
 c. ətə-r-ən- 'to bite oneself' (vi)
 d. ətə-h-ən- 'to clench (of jaws)' (vi).
- (229) a. *tүүŋe-
 b. tүүŋe-r- 'to overturn' (vt)
 c. tүүŋe-r-in- 'to overturn sth upon oneself' (vt)
 d. tүүŋe-h-in- 'to overturn/capsize' (vi).

There is an analogous alternation between the reflexive and the causative suffixes, as in (207c) and (207b), (208c) and (208b). It is interesting to note that in these cases the reciprocal marker added to to the reflexive suffix (see (207d) and (208d)), unlike in cases (227d)–(229d) with the opposite order of the suffixes, retains its own reciprocal proper or reflexive-possessive meaning.

Group B comprises verbs differing from the above in that they have underlying forms which are lexical reciprocals. The behaviour of forms with the compound suffix (-uh-un- in (230c)) and of those with the reflexive suffix alone is analogous to that of similar forms in the previous subgroups; cf.:

- (230) a. mus-/munn'- 'to gather' (vt)
 b. munn'-un- 'to gather for oneself' (vt) (see also (37)–(38))
 c. munn'-uh-un- 'to gather/assemble' (vi).

One may assume on the basis of the data cited that at an ancient stage of development the Yakut reciprocal marker also had a tendency to develop the reflexive meaning which disappeared at a later stage. This tendency to unite in a contamination the reciprocal and the reflexive markers ((231c); see (16) above) which were probably closer in meaning to each other than at present can be compared with 1) the contamination of two causative suffixes (231a); 2) contamination of the passive and the reflexive-passive suffixes in passive forms (see (231b) and 3.5); 3) reduplication of the reciprocal suffix ((231d); cf. 2.5). We shall risk drawing a parallel between the following four symmetrical (in the sense of two identical or semantically close affixes being combined into a compound) sets of suffixes:

(231)	a.	CAUS + CAUS	b.	PASS + REFL	c.	REC + REFL	d.	REC + REC
		-t-		-il-		-is-		-is-
		-ar-		-in-		-in-		-is-
		-t-ar-		-il-in-		-is-in- (> -ih-in)		-is-is-

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CHAPTER 27

Reciprocals, sociatives, comitatives, and assistives in Tuvan

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1. Introduction

1.1 The Tuvan language

Tuvan (Uryankhai; this was the ancient self-name of Yakuts; see Poppe 1959:671) belongs to the Siberian group of the Northern Turkic (Eastern Hunnic) languages (for details see Nedjalkov & Nedjalkov, Ch. 26 on Yakut, Section 1.1). It is spoken by approximately 222,000 speakers (in 1992), mostly in the Republic of Tyva (Southern Siberia) and also in Mongolia (25,000 people) and in China (3,000) (see Tishkov (ed.) 1994:337–8). Tuvan is a written language used in publications and schooling. The grammatical structure and particularly the lexicon are strongly influenced by the Mongolian language which for a period served as a written language in Tuva. The Tuvan people are the oldest aborigines of Central Asia. Tuva borders on Mongolia in the south and on Buryat-Mongolia in the east. Its neighbours in the west are the Altai people, and the Altai and Khakass in the north-west. (See also Menges 1959:640–2.)

The closest to Tuvan are the Altai, Tofa and Shor languages, mutual intelligibility being very high.

1.2 Overview

Tuvan marks reciprocity in two main ways, by means of the suffix *-š* alternating with *-ž* and *-č* (variant *-š* is used as a generalized allomorph) and by means of the reciprocal pronoun *bot-bod-u/bot-bot-tar-ə* ‘(they) each other’ which mostly co-occurs with suffixed reciprocals (see (2d)). This pronoun sometimes allows reflexive-distributive reading (see (2e)). The following illustrates a standard semantic reciprocal opposition: the action described in (1c) is, roughly speaking, the “sum” of the actions described by (1a) and (1b); in this example a converb in *-p* and an auxiliary, e.g. *tur* in the present tense, comprise the present progressive tense/aspect form (see 2.3):

- (1) a. *Ava-m ača-zə-n kuspakta-p tur.*
 mother-my father-her-ACC embrace-CONV AUX.3.PRES (= PRES.PROGR)
 ‘My mother is embracing her father.’

- b. *Ača-zə ava-m-nə kuspakta-p tur.*
 father-her mother-my-ACC embrace-CONV AUX.3.PRES (= PRES.PROGR)
 ‘(Her = ‘my mother’s’) father is embracing my mother.’
- c. *Ava-m bile ača-zə kuspakta-ž-əp tur-lar.*
 mother-my and father-her embrace-REC-CONV PRES-3PL (=PRES.PROGR)
 ‘My mother and her father are embracing each other.’
- d. *Ava-m ača-zə-bile kuspakta-ž-əp tur*
 mother-my father-her-with embrace-REC-CONV 3.PRES (=PRES.PROGR)
 (same translation), lit. ‘My mother is embracing each other with her father.’

Verbs in *-š* may also have an assistive, sociative or comitative reading, depending on the lexical meaning of the base verb, sentence structure and broad context. Thus *ber-* used as an auxiliary in (2c) denotes an action performed for sb’s benefit and unambiguously indicates the assistive reading:

- (2) a. *Bis sigen kez-ip tur bis.*
 we hay mow-CONV AUX.PRES 1PL (= PRES.PROGR)
 ‘We are making hay.’
- b. *Bis sigen kes-č-ip tur bis.*
 we hay mow-REC-CONV AUX.PRES 1PL
- i. ‘We are making hay *together*.’ (sociative)
 ii. ‘We are making hay *with somebody else*.’ (comitative)
 iii. ‘We *help somebody* to make hay.’ (assistive)
 iv. ‘We are making hay *together helping each other*.’ (assistive-reciprocal)
- c. *Bis sigen kes-č-ip ber-ip tur bis.*
 we hay mow-REC-CONV O.BEN-CONV AUX.PRES 1PL
 ‘We *help* [someone] to make hay.’ (assistive)

Besides the meanings listed above, the reciprocal suffix may render at least six other unproductive meanings: imitative, competitive, anticausative, reflexive, autocausative and converse (see 5.5).

Example (3b), as well as (2d) and (2e), illustrates the use of the reciprocal pronoun in the dative case; it may be glossed as ‘body-body-PL-our-DAT’ in (2d-e) and ‘body-body-PL-their-DAT’ in (3b). If we take into account the fact that it is a reduplicated reflexive pronoun, ‘body-body’ is equivalent to ‘self-self’. For simplicity, it is glossed as ‘each other’.

- (2) d. *Bis bot-bot-tar-əvəs-ka sigen kes-č-ip tur bis.*
 we each-other-PL-our-DAT hay mow-REC-CONV AUX.PRES 1PL
 ‘We make hay *for each other*.’
- e. *Bis bot-bot-tar-əvəs-ka sigen kez-ip tur bis.*
 we each-other-PL-our-DAT hay mow-CONV AUX.PRES 1PL
- i. (same as (2d)).
 ii. ‘We make hay *each for himself*.’
- (3) a. *Öörenikči-ler nom-nar-nə eš-ter-i-n-ge damčə-t-kan-nar.*
 pupil-PL book-PL-ACC friend-PL-their-*n*-DAT pass(VI)-CAUS-PERF-3PL
 ‘The pupils passed books to their friends.’

- b. *Öörenikçi-ler nom-nar-nə bot-bot-tar-ə-n-ga damčə-t[-əš]-kan-nar.*
 pupil-PL book-PL-ACC each-other-PL-their-*n*-DAT pass-CAUS-REC-PERF-3PL
 ‘The pupils passed the books to each other.’

Tuvan reciprocals are very similar to Yakut reciprocals in respect of both the polysemy of the reciprocal suffix and diathesis types. In comparison with Yakut and Kirghiz, denominal derivation of reciprocals by means of the suffix *-laš* is unproductive in Tuvan.

Reciprocals are quite frequent in texts: they seem to be more frequent than in other Turkic languages. Sometimes several reciprocals occur in the same sentence (analogous repetition of the reciprocal pronoun sounds “heavy” and is very rare; see, however, (4c)); here are examples (a converb in *-p* and the auxiliary *tur* with the perfect suffix *-gan* form past progressive):

- (4) a. *Iji möge bot-bot-tar-ə-n-dan sezin-č-ip, deskin-č-ip, birde*
 two wrestler each-other-*n*-ABL fear-REC-CONV walk.round-REC-CONV either
xol-dar-ə-n-dan segir-ž-ip, birde but-tar-ə-n sun-č-up
 hand-PL-their-*n*-ABL clasp-REC-CONV or foot-PL-their-ACC thrust-REC-CONV
ka-ap čoru-p-la tur-gan. (ST.)
 AUX-CONV AUX-CONV-INTS AUX-3.PAST
 ‘Two wrestlers feared each other, [they] only walked round each other, either clasping
 each other’s hands or thrusting their feet at each other.’
- b. *Urug-lar ooŋ soonda sajzanak ee-ler-i-niŋ xaralzaa-zə-n*
 child-PL then play.house head.of.family-PL-GEN relation-their-ACC
čoru-d-ar: aalda-ž-ər, kudala-ž-ər, kel di-ž-ip
 go-CAUS-3.NPAST visit-REC-3.NPAST propose-REC-3.NPAST come say-REC-CONV
čala-ž-ər. (SA.)
 invite-REC-3.NPAST
 ‘Then the children play family: (they) visit each other, propose to each other, call and
 invite each other.’

Besides the reciprocal pronoun named above, there are other similar means of expressing reciprocity. Here is one containing the word *biree* ‘one’:

- c. *Kiži-ler bot-bot-tar-ə-n detki-ž-ip, bot-bot-tar-ə-n-ga*
 man-PL each-other-PL-their-ACC support-REC-CONV each-other-PL-their-*n*-DAT
duzala-ž-əp, biree-zi-n-ge biree-zi eki čüve-ni kəl-əp azə
 help-REC-CONV one-his-*n*-DAT one-his good thing-ACC do-CONV or
kəl-ər-ə-n oraldaz-əp čoru-ur. (SS.)
 do-PART-his-ACC try-CONV AUX-3.NPAST
 ‘People support each other, help each other, do or try to do something good for one
 another.’

1.3 Database

The language data are drawn from original written Tuvan texts and folklore (see Sources). In the examples from modern fiction the author’s initials are indicated. Examples without attribution are mine, Tuvan being my native language. Dictionary data have also been

used (Tenishev (ed.) 1968; Mongush (ed.) 1980). In the lists, verbs are cited in the stem form which in Turkic languages coincides, as is known, with the 2SG of the imperative (for convenience, it is translated by means of the infinitive). The explanations reflect my intuitions.

1.4 Note on glossing

To save space in the sentential examples below (and in some examples above), the glosses of the morphemes *-tar* (3PL), and *-ə* ('their') in the reciprocal pronoun *bot-bot-tar-ə-n-ga* and its other forms (see (74)) are as a rule omitted; the epenthetic *-n* is glossed as *-n-*. Sometimes, the glosses of certain morphemes are omitted if analogous glosses are to be found in the preceding or following examples.

2. Grammatical notes

These notes are based mostly on Isxakov & Pal'mbax (1961).

2.1 General remarks. Sentence structure

The grammar of Tuvan is very similar to that of Yakut. As in Yakut, the Tuvan sentence is mainly verb-final (see, however, (21)).

The predicate may be preceded by one or more converbs (cf. (4a) containing six converbs); the most common are conjoining converbs (in a sentence, they function as verbal adverbials or conjoined predicates) of prior action with the suffix *-p* (after vowels)/*-əp/-ip/-up/-üp* (after consonants) which marks homogeneous predicates, the lexical part of complex verbs, and also periphrastic tense/aspect verb forms (cf. present progressive in (1) and (2)), and converbs of so-called simultaneous action with the suffix *-j* (after vowels) */-ə/-i/-a/-e/-u/-ü* (after consonants).

At morpheme boundaries assimilation of consonants (mostly progressive) is observed. Note that certain consonants in inter-vocalic position at morpheme boundaries often drop out; as a result short vowels of two morphemes are fused into a long one (*ee* and *aa*) and the boundary between the morphemes disappears (in these cases morphemic division is made provisionally between two letters signifying one long vowel, for the sake of glossing: cf. perfect forms *nomča-an men* 'I have read' < **nomča-gan*; *ka-an* < **kag-gan* or converbal forms *ka-ap* < **kag-əp*; cf. (4a), (35a), (36e), (54b)). As the examples above show, Tuvan also displays vowel harmony. Another example may be the accusative case marker which has three series of allomorphs: *-nə/-ni/-nu/-nü*, *-də/-di/-du/-dü* and *-tə/-ti/-tu/-tü*. Root vowels do not alternate.

A specific feature of Tuvan is that in addition to oppositions of long and short vowels (8 pairs) it has 8 pharyngalized vowels (which occur in the first syllable only), as in *e"t*

‘meat’ vs. *et* ‘property’, *a”t* ‘horse’ vs. *at* ‘name’. In this paper, long vowels are signified by jeminated letters, as in the Tuvan cyrillic writing.

The principal conjunction is *bile* ‘and’; the materially identical postposition *bile* ‘with’ is hyphenated on a noun (cf. (1b) and (1c)).

Nouns can function as adjectives without changing their form, as in English, cf. *mege* ‘a lie’ and ‘false’, *usun* ‘length’ and ‘long’. Adjectives and adverbs have distinctive suffixes but they often coincide in form; cf. *dürgen* ‘quick’ and ‘quickly’.

2.2 Case and number. Possessivity

The Tuvan noun has seven cases and two declensions, simple (see (5a)) and possessive (see (5b), (5c), (7)). The nominative, which is zero marked, has two functions, namely those of marking the subject and non-referential (usually) direct object (it is not glossed in the examples). Such an unmarked direct object is always in contact pre-position to the predicate (cf. *sigen* ‘hay’ in (2)). In specialist literature this object marking is sometimes regarded as non-marked accusative (see Isxakov & Pal’mbax 1961:131–2). Here is a case paradigm of the noun *tal* ‘willow’, *tal-əm* ‘my willow’ and *tal-ə* ‘his/her willow’ in the singular:

(5) a.	NOM	<i>tal</i>	b.	NOM	<i>tal-əm</i>	c.	NOM	<i>tal-ə</i>
	GEN	<i>tal-dəŋ</i>		GEN	<i>tal-əm-nəŋ</i>		GEN	<i>tal-ə-nəŋ</i>
	ACC	<i>tal-də</i>		ACC	<i>tal-əm-nə</i>		ACC	<i>tal-ə-n</i>
	DAT	<i>tal-ga</i>		DAT	<i>tal-əm-ga</i>		DAT	<i>tal-ə-n-ga</i>
	LOC	<i>tal-da</i>		LOC	<i>tal-əm-da</i>		LOC	<i>tal-ə-n-da</i>
	ABL	<i>tal-dan</i>		ABL	<i>tal-əm-dan</i>		ABL	<i>tal-ə-n-dan</i>
	ALL	<i>tal-če</i>		ALL	<i>tal-əm-če</i>		ALL	<i>tal-ə-n-če</i>

When preceded by a possessive 3rd person suffix, the accusative ending is *-n* (cf. *ada-zə-n* in (1a)); when preceded by the 3rd p. possessive suffix *-ə/i* a semantically empty *-n* (glossed as *-n-*) is inserted before the DAT, LOC, ABL and ALL case marker (5c); cf. also *eš-teri-n-ge* and *bot-bot-tar-ə-n-ga* in (3a) and (3b) respectively. The plural number on nouns (and also 3PL on verbs) is marked by the suffix *-lar/-ler*, *-nar/-ner*, *-tar/-ter*, *-dar/-der* (3).

A peculiarity of Tuvan in comparison with other Turkic languages (with the exception of geographically adjacent Tofa; see Rassadin 1978:63) is the suffix *-škə/-lə-škə* (glossed as COLL; it is usually combined with the plural suffix *-lar*). It derives collective nouns from terms of kinship, with the meaning ‘a group of people or members of a family linked by a given degree of kinship or friendship’ (Isxakov & Pal’mbax 1961:171–2):

(6) a.	<i>ača</i> ‘father’	→	<i>ača-škə[-lar]</i> ‘father and his child(ren)’
	→	<i>ača-lə-škə</i>	(same) (T. 77)
	b.	<i>čaava</i>	‘eldest brother’s wife’
	→	<i>čaava-škə[-lar]</i>	‘sisters and brothers with the eldest brother’s wife’ (T. 528); (176)
	c.	<i>eš</i>	‘friend/comrade’
	→	<i>eži-ški[-ler]</i>	‘friends/comrades’ (T. 607).

Possessivity is marked by the following suffixes (for the 1st and 2nd persons plural and singular, the allomorphs used after vowels are given; in allomorphs after consonants these markers are preceded by one of the same four vowels as is shown for the 3rd person):

(7) a.	SG	PL
1st p.	<i>-m</i>	<i>-vəs/-vis/-vus/-vüs</i>
2nd p.	<i>-ŋ</i>	<i>-ŋar/-ŋer</i>
3rd p.	<i>-ə/-i/-u/-ü</i> (after consonants)	<i>-ə/-i/-u/-ü</i> (after consonants)
	<i>-zə/-zi/-zu/-zü</i> (after vowels)	<i>-zə/-zi/-zu/-zü</i> (after vowels)

Possessive relation between two nouns is expressed by an *izafet* construction: the attributive noun is genitive and the head noun carries the possessive suffix which agrees in person and number with the attribute.

b.	<i>Ata-nəŋ</i>	<i>aʹd-ə</i>	c.	<i>stol-duŋ</i>	<i>usun-u</i>
	father-GEN	horse-his		table-GEN	length-its
	‘father’s horse’			‘the length of the table’ (cf. also (177b)).	

2.3 Tense/aspect system. Agreement

The Tuvan verb has eleven simple and periphrastic tense/aspect forms, five for the past tense, three for the present and three for the future. Most of the examples in this paper have the following tense/aspect forms (below, these forms are given tentative labels which most closely reflect their meaning):

1. Recent past tense (suffix *-də/-di/...* and other variants; glossed as PAST) which also denotes actions the speaker has observed (cf. (13)–(16), (19), etc.);

2. Perfect (suffix *-gan/-kan/...* which also marks past tense participles; cf. *čit-ken* in (10)); it does not have the features of the recent past (cf. (3), (11), (12), (18), (21), etc.);

3. Present progressive comprised of a converb in *-əp* and auxiliary *tur* ‘to stand, be’, or *čor(u)* ‘to go, be’, or *čət* ‘to stand, be’, or *olur* ‘to sit, be’ (cf. (1), (2), (17), (33a, b), etc.; only these four when used as notional verbs (with the same lexical meanings) form the present progressive tense synthetically, i.e. without an auxiliary; see (43), (44)). Past progressive is formed in the same way, the auxiliary taking the perfect suffix *-gan/-kan/...*; cf. (32);

4. Non-past otherwise termed present-future denoting future or generic actions (suffix *-ar/-er/-ər/-ir/-ur/-ür* for non-negated actions (cf. (28a, b)) which also marks future tense participles, and *-mas/-bas/-pas/-vas/...* for negated actions; cf. (20), (33c, d).

The so-called future participle in *-ar* (forming present-future tense forms) functions as the English gerund (masdar in some non-European languages), i.e. it may appear in subject, object and attribute positions, it is inflected for case and may be governed by postpositions, and it also retains its objects (28a). This participle, as well as the past participle in *-gan/-kan*, is the principal means of nominalization (see 3.5.1.1).

There are two agreement systems: (a) synthetic markers which are used in only one indicative form out of eleven, namely, on recent past forms; in the 1st and 2nd person SG and PL they coincide with possessive markers on nouns (cf. (7a) and (8a)); (b) analytical markers found in the remaining ten tense/aspect forms of the indicative mood; in

this case agreement is marked by bound pronouns which always follow the predicate (unlike suffixes, they are not subject to vowel harmony; thus phonetically they behave as free morphemes; cf. (2)); they coincide with respective 1st and 2nd person pronouns of both numbers and are spelt separately (see (8b); cf. (1), (2)); the 3SG marker is zero and 3PL optional marker is the same as in the first system of agreement.

(8) a.	Recent past		b.	Present progressive (<i>ap</i> < <i>al-əp</i>)		
	[<i>men</i>]	<i>al-də-m</i>	'I took'	[<i>men</i>]	<i>a-p tur men</i>	'I am taking'
	[<i>sen</i>]	<i>al-də-ŋ</i>	'you took'	[<i>sen</i>]	<i>a-p tur sen</i>	'you are taking'
	[<i>ol</i>]	<i>al-də-Ø</i>	'he took'	[<i>ol</i>]	<i>a-p tur-Ø</i>	'he is taking'
	[<i>bis</i>]	<i>al-də-vəs</i>	'we took'	[<i>bis</i>]	<i>a-p tur bis</i>	'we are taking'
	[<i>siler</i>]	<i>al-də-ŋar</i>	'you took'	[<i>siler</i>]	<i>a-p tur siler</i>	'you are taking'
	[<i>olar</i>]	<i>al-də(-lar)</i>	'they took'	[<i>olar</i>]	<i>a-p tur(-lar)</i>	'they are taking.'

There are also aspectual forms with semi-auxiliary verbs *kel-*, *kal-*, *ber-*, *bol-*, *kag-*, *al-*, etc. which in combination with conjoining converbs denote the beginning, continuation, completion of an action; cf. (2c), (4a), (10), (35a, b), (30), (36e), (37), etc. Thus the verb *ber-* (lexical meaning 'to give') with a pre-posed converb in *-j/-ə/...* denotes the beginning of an action, and with a converb in *-p/-əp/...* it renders the meaning of object-oriented benefactive (glossed as O.BEN), and the verb *al-* (lexical meaning 'to take') with a converb in *-p/-əp/...* renders the meaning of subject-oriented benefactive (glossed as S.BEN).

The marker of the perfective aspect (glossed as ASP) is the suffix *-əvət/-əpt/...*; in the examples below, it usually appears in its contracted form *-əp* materially identical with the converbal suffix *-əp* (Isxakov & Pal'mbax 1961:410).

As in other Turkic languages, a vast number of verbs are derived from non-verbal stems (and from some verbal stems) by means of the suffix *-la/-na/-da/-ta/...*, these derivations being mostly transitive (cf. *kuspak-ta-* 'to embrace' derived from *kuspak* 'armful'; see (1)). This suffix in combination with the reciprocal *-š* has given rise to the suffix *-la-š* which derives reciprocal verbs immediately from nominals (see Section 7). Another complex suffix is *-la-n* – a combination of *-la/...* and the reflexive suffix *-n* (see case 2 in 2.5; see (72)).

2.4 Reflexive and reciprocal pronouns

As mentioned above, the reciprocal pronoun is formed from the reflexive by means of reduplication. The reflexive pronoun in its turn is descended from a noun meaning 'body' (which is preserved, for instance, in this meaning in the compound *e''t-bot* '(human) body', with the first component meaning 'meat/flesh'; see M1. 578). Both pronouns are obligatorily used with possessive suffixes (without the latter, the root has a different meaning, e.g. *bot čurttalga* 'lonely life', *bot kiži* 'single man/woman'); cf. the nominative case of the reflexive pronoun: *bod-um* 'I myself', *bod-uŋ* 'you yourself', *bod-u* 'he himself', *bod-uvus* 'we ourselves', *bod-uŋar* 'you yourselves', *bot-tar-ə* 'they themselves'. Both pronouns are inflected for case. The forms of both pronouns with the plural marker *-tar* in the right-hand column below are synonymous with those without *-tar*. The forms with *-tar*

are more frequent in colloquial speech. Here are the accusative forms of the reflexive and reciprocal pronouns:

- (9)
- | | SG | | PL |
|----|------------------------------|--------------------|---------------------------------------|
| 1. | <i>bod-um-nu</i> ‘myself’ | <i>bod-uvus-tu</i> | = <i>bot-tar-əvəs-tə</i> ‘ourselves’ |
| 2. | <i>bod-uŋ-nu</i> ‘yourself’ | <i>bod-uŋar-nə</i> | = <i>bot-tar-əŋar-nə</i> ‘yourselves’ |
| 3. | <i>bod-u-n</i> ‘him/herself’ | | = <i>bot-tar-ə-n</i> ‘themselves’ |
- b. Reciprocal pronoun
- | | | | | |
|------|------------------------|---|----------------------------|--------------------|
| 1. – | <i>bot-bod-uvus-tu</i> | = | <i>bot-bot-tar-əvəs-tə</i> | ‘we each other’ |
| 2. – | <i>bot-bod-uŋar-nə</i> | = | <i>bot-bot-tar-əŋar-nə</i> | ‘you each other’ |
| 3. – | <i>bot-bod-u-n</i> | = | <i>bot-bot-tar-ə-n</i> | ‘they each other.’ |

The reciprocal pronoun also appears with postpositions: *bot-bot-tar-ə-n-ga udur* ‘one against the other’ (-*ga* = DAT), *bot-bot-tar-ə-nəŋ dugajənda* ‘about each other’ (-*nəŋ* = GEN), *bot-bot-tar-ə-bile* ‘with each other’, etc.

In the sentential examples, the reciprocal pronoun is glossed as ‘each-other+case’, with the glosses of the possessive suffixes (and the plural suffix *-tar* in the 3rd person) being omitted.

2.5 Voices (means of valency change)

Let us consider the system of suffixes into which the reciprocal suffix enters. Like other Turkic languages, Tuvan has three valency decreasing voices, namely *reflexive*, *reciprocal*, and *passive*, and one valency increasing, namely *causative* voice. These are the main valency characteristics of the voice markers. The former two voices may also retain (cf. (14), and (i) and (iv) in (2b)) and even increase valency (cf. (ii) and (iii) in (2b)) and the latter voice may decrease valency (cf. (21)). All the voice markers are polysemous (moreover, one form of the same verb may have more than one meanings), and the derivatives may undergo lexicalization. Therefore the names of the voices are often used as labels. The list of the most common functions of the voice markers below is to show the place of reciprocals among other voices (see also Isxakov & Pal’mbox 1961:272–94).

2.5.1 *Passive*

The passive suffix is *-I* (after vowels)/*-əl/-il/-ul/-ül* (after consonants). As often as not, this suffix marks other than passive meanings.

(a) Passive

- (10) *Čit-ken* *nom* *təp-t-əp* *kel-gen.* (*təp-t- < təv-əl-*)
 get.lost-PART book find-PASS-CONV AUX-3.PAST
 ‘The lost book has been found.’

(b) Autocausative

- (11) *Ogl-u* *düün* *dag-nə* *örü ködür-ül-gen.*
 son-his yesterday mountain-ACC up lift(vt)-PASS-3.PERF
 ‘Yesterday his son climbed up the mountain.’

(c) Anticausative

- (12) *Soŋga ŧil-i xat-tan buz-ul-gan.*
 window glass-its wind-ABL break(vt)-PASS-3.PERF
 ‘The window glass broke in the wind.’

2.5.2 Reflexive

The reflexive suffix has seventeen allomorphs: *-n* (after vowels), *-ən/-in/-un/-ün* (after consonants); *-tən/-tin/-tun/-tün* (after voiceless consonants); *-dən/-din/-dun/-dün* (after sonorants); and *-ttən/-ttin/-ttun/-ttün* (after vowels). The latter variants are not positional because they occur in the same positions as *-n*, with a semantic difference (for details see Kuular 1986b:33–52). There is an opinion that the last suffix is descended from a combination of the causative-passive *-t* (see (21)) and reflexive *-tən* (see Isxakov & Pal'mbax 1961:286). Here are examples of various meanings (the first four are subject-oriented and the last two are object-oriented):

(a) Reflexive proper

- (13) *Ol savaŋna-n-də.*
 he soap-REFL-3.PAST
 ‘He soaped himself.’

(b) Reflexive-possessive

- (14) *Ol arn-ə-n savaŋna-n-də.*
 he face-his-ACC soap-REFL-3.PAST
 ‘He soaped his face.’

(c) Reflexive-benefactive

- (15) *Ol aⁿt-tə tergele-n-di.*
 he horse-ACC harness-REFL-3.PAST
 ‘He harnessed the horse for himself.’

(d) Autocausative

- (16) *Ol iji xol-u-bile it-tin-di.*
 he two hand-his-with push-REFL-3.PAST
 ‘He pushed himself off with both hands.’

(e) Absolutive

- (17) *Ava-m am daara-n-əp tur.*
 mother-my now sew-REFL-CONV AUX.3
 ‘My mother is sewing now.’

(f) Passive

- (18) *Soŋga ŧalde-n-gen.*
 window glaze-REFL-3.PERF
 ‘The window is glazed.’

(g) Anticausative

- (19) a. *Ogl-u dūūn ögle-n-di.*
 son-his yesterday marry(sb.to.sb)-REFL-3.PAST
 ‘His son got married yesterday.’

Sometimes, the suffix *-n* appears together with the reciprocal marker as a single complex suffix *-n-əš* (in such cases there are no parallel derivatives with *-n* alone). The latter suffix may compete with the suffix *-š* (in (19b)), the form in *-n-əš* is even more widely used than the form in *-š*; cf.:

- (19) b. *badāla-* i. ‘to vote’, ii. ‘to register’
 → *badāla-š/-badāla-n-əš-/*badāla-n* i. ‘to vote/register together’ (sociative)
 ii. ‘to get married at the registrar’s’ (anticausative) (T. 83).

2.5.3 *Reciprocal*

The reciprocal suffix has allomorphs *-š/-əš/-iš/-uš/-üš* before consonants (33c–d); in intervocalic position *-š* changes into *-ž* (1c, d) and after voiceless consonants and before vowels into *-č* (2b, c). Apart from the meanings which the reciprocal suffix can express alongside the reciprocal, viz. the sociative, comitative and assistive (2b), it also has a number of less productive and non-productive meanings: imitative, competitive, etc. This suffix may decrease, or retain, or increase the valency of the base verb (see Section 5). (See Kuular 1986a:73–82.)

2.5.4 *Causative*

The causative suffixes are *-t* (after vowels)/*-ət/-it/-ut/-üt* (after consonants and after *-r* in polysyllabic stems), *-dər/-dir/-dur/-dür*, *-tər/-tir/-tur/-tür*. There is also a number of unproductive suffixes, e.g. *-ər*, *-gəz*, etc. Causative derivatives from intransitives always express the causative meaning (cf. *öl-* ‘to die’ → *öl-ür-* ‘to kill’; cf. (20)), while derivatives from transitives may have a causative or passive meaning depending on context (see also Letjagina & Nasilov 1974:13–24; Kulikov 1987:73–5); cf.:

(a) Causative

- (20) *Xoj-lar-ə-n bōrū-ge öl-ür-t-pes.* (I.P. 236)
 sheep-PL-their-ACC wolf-DAT die-CAUS-CAUS-NEG.3.NPAST
 ‘Not to let wolves kill the sheep.’

(b) Passive

- (21) *Bōrū-ge öl-ür-t-ken xoj-uvus iji.* (I.P. 236)
 wolf-DAT die-CAUS-CAUS-PERF sheep-our two
 ‘Two of our sheep have been killed by a wolf.’

2.6 Combinability of voice markers

Different voice markers may combine within a verbal form. Combinations of two suffixes are common enough, and derivatives with three and even four different suffixes

can be found as well (Isxakov & Pal'mbax 1961:293–4). Among three-member chains of derivatives, there occur two principal types.

1. The first and the last members are not synonymous, cf. (22) and (23); at each step of derivation the meaning of the preceding suffix is retained, the meanings being added consecutively:

- (22) a. *čöle-* 'to lean sth to sth'
 b. *čöle-n-* 'to lean on sth' (autocausative)
 c. *čöle-n-iš-* 'to lean on each other' (T. 542–3) (reciprocal of autocausative)
- (23) a. *ke^os-* 'to cut/mow'
 b. *ke^oz-iš-* 'to help to mow' (assistive)
 c. *ke^oz-iš-tir-* 'to ask/cause sb to help sb mow' (causative of assistive)
- (24) a. *tur-* 'to stand'
 b. *tur-gus-* 'to put up/stand, build' (causative of intransitive)
 c. *tur-guz-uš-* 'to build together' (sociative of causative)
 d. *tur-guz-uš-tur-* 'to let sb build sth together' (I.P. 294) (causative of sociative)

2. The first and the third members are roughly synonymous, as is observed in chains with the second anticausative derivative, cf. (25) and (26). Here, in the first stage of derivation instead of addition a component of meaning is subtracted, and the next step restores this meaning:

- (25) a. *ögle-* 'to marry sb to sb'
 b. *ögle-n-* 'to get married' (anticausative)
 c. *ögle-n-dir-* (same translation as (a); rare) (T. 331) (causative of anticausative)
- (26) a. *buda-* 'to confuse sb'
 b. *buda-l-* 'to become confused (when reading, etc.)' (anticausative)
 c. *buda-l-dər-* (same translation as (a); rare) (T. 119–20) (causative of anticausative)

3. Reciprocals with the suffix *-š* only

3.1 Subject-oriented reciprocal constructions

3.1.1 “Canonical” reciprocals

3.1.1.1 *Derived from two-place transitives.* In this diathesis type, the direct object of the underlying construction is deleted and the reciprocal construction is intransitivized; cf. (1a) and (1c), (27a) and (27b).

- (27) a. *Men onu tanə-ər men. + a. Ol meni tanə-ər.*
 I he.ACC know-NPAST 1SG he I.ACC know-3.NPAST
 'I know him.' 'He knows me.'
- b. *Bis tanə-ž-ar bis.*
 we know-REC-NPAST 1PL
 'We know each other.'

A few more examples:

- (28) a. *Ulgad-ə ber-gen ool-dar eʹt bəžək-tər-ar deeš,*
 become.adult-CONV AUX-PART youth-PL body become.strong-CAUS-NR for
čirim-bile šaagajta-ž-əp, kəmčə-bile kak-č-əp tur-ar. (SA.)
 saddle.strap-with beat.torture-REC-CONV whip-with hit-REC-CONV AUX-3.NPAST
 ‘The youths who have grown up, in order to make their bodies stronger, torture each other with saddle straps and beat each other with whips.’
- b. *Ekide eder-ž-ir – bakta kag-ž-ir.* (T. 606)
 well follow-REC-NPAST bad leave-REC-3.NPAST
 ‘When all is well he is a friend – when things are bad he deserts.’ (*eder-ž-ir* is a lexicalization; see 6.2).
- c. *Olar čügle aas-tar-ə-bile duza-ž-əp čoru-p-kan-nar.* (KK.)
 they only mouth-PL-their-with abuse-REC-CONV go-ASP-PERF-3PL
 ‘They left only abusing each other.’ (lit. ‘... with their mouths’).

Reciprocals of this type:

- (29) *aalda-š-* ‘to pay visits to each other’ (T. 28)
aspakta-š- ‘to clutch at each other (with nails, etc.)’ (T. 73)
atkəla-š- ‘to exchange fire’ (T. 75)
baraanna-š- ‘to see each other from afar’ (T. 91)
bekte-n-iš- ‘to hold on to each other’ (T. 97)
čaŋča-š- ‘to scold each other’ (T. 517)
čokta-š- ‘to miss each other’ (T. 538)
čalga-š- ‘to lick each other’ (T. 555)
čətta-š- ‘to sniff at (= kiss) each other’ (T. 560)
dəile-š- ‘to look for each other’ (T. 163)
duza-š- ‘to call each other names’ (T. 182)
dükpür-üš- ‘to spit at each other’ (T. 187)
ekile-š- ‘to greet each other’ (T. 609)
imne-š- ‘to wink to each other’ (T. 207)
itkile-š- ‘to push each other’ (T. 211)
ka-aš- (< *kag-aš-*) ‘to leave/desert each other’ (T. 214)
kag-aš- ‘to hit each other’
kajga-š- ‘to stare at each other’ (T. 219)
karga-š- ‘to curse each other’ (T. 229)
kuspakta-š- ‘to embrace each other’ (T. 267)
kəjgər-aš- ‘to call to each other’ (T. 275)
kəmčəla-š- ‘to whip each other’
kər-aš- ‘to exterminate one another’ (T. 279)
makta-š- ‘to praise each other’
medegle-š- ‘to inform each other’ (T. 292)
megele-š- ‘to deceive each other’
mendile-š- ‘to greet each other’ (T. 293)
mogad-aš- ‘to resent each other’ (T. 297)
ökpele-š- ‘to be displeased with each other’ (T. 334)
öored-iš- ‘to teach each other’ (T. 338)
öskele-š- ‘to shun each other’ (T. 341)
segir-iš- ‘to clasp each other in a fight’ (T. 371)

<i>sögle-š-</i>	‘to offend each other’ (T. 385)
<i>suragla-š-</i>	‘to question each other’ (T. 391)
<i>šaagajta-š-</i>	‘to torture each other’
<i>šamna-š-</i>	‘to accuse each other of theft’ (T. 566)
<i>šüg-diün-üš-</i>	‘to test each other’
<i>tana-š-</i>	‘to know each other’ (T. 406)
<i>tepkile-š-</i>	‘to kick each other (repeatedly)’ (T. 411)
<i>üsküle-š-</i>	i. ‘to butt each other’, ii. ‘to collide’ (T. 452)
<i>xəjərta-š-</i>	‘to look askance at each other’ (T. 699)
<i>xərbekte-š-</i>	‘to scratch each other, to fight’ (T. 474)
<i>xerberle-š-</i>	‘to fight/tear each other to pieces’ (T. 475)
<i>əzər-əš-</i>	‘to bite each other (of dogs, etc.)’ (T. 593).

3.1.1.2 *Derived from two-place intransitives.* In this type of derivatives, the indirect object (usually dative, less commonly ablative, etc.) is deleted in the reciprocal construction and the latter is formally identical with constructions derived from two-place transitives.

- (30) a. *Ol eš-ter-i-n-ge el-xol bol-u ber-gen.*
 he friend-PL-his-n-DAT help become-CONV O.BEN-3.PERF
 ‘He helped his friends.’
- b. *Šaandan tura eder-ž-ip kel-gen ež-iški-ler el-xol*
 since.long.ago since accompany-REC-CONV AUX-PART comrade-COLL-PL help
bol-č-up, ulam čook čurtta-j ber-gen-ner. (ED.)
 become-REC-CONV even.more close live-CONV O.BEN-PERF-3PL
 lit. ‘Friends being friends since long ago began to live even closer to each other, becoming a support to each other.’

The following reciprocals are based on two-place intransitives governing (a) dative, (b) ablative and (c) allative object respectively; the base verbs typically denote emotional attitudes, help, meeting, contact, etc.

- (31) a. *adaarga-š-* ‘to envy each other’ (T. 36)
ažən-əš- ‘to be angry with each other’ (T. 43)
bajərga-š- ‘to boast of one’s wealth to each other’ (T. 87)
büzüre-š- ‘to believe each other’
čookšula-š- ‘to come together/approach each other’ (T. 540)
čöpšeere-š- ‘to agree with/allow each other’ (T. 543)
daŋəragla-š- ‘to give an oath to each other’ (T. 147)
de-eš- (← *deg-iš-*) ‘to touch each other, come into contact’ (T. 151)
duzala-š- ‘to help each other’ (T. 182)
el-xol bol-uš- ‘to support each other’
idege-š- ‘to rely on each other’ (T. 200)
kör-üš- ‘to see each other (= meet)’ (T. 229)
ögen-eš- ‘to rub against each other’
səməran-əš- ‘to whisper to each other’ (T. 397)
xomuda-š- ‘to complain of each other’ (T. 481)
ənan-əš- ‘to rely on/be sure of each other’ (T. 596)

- b. *biziirge-š-əjad-əš-* ‘to be shy of each other’ (T. 102)
 ‘to be ashamed of each other’ (T. 603)
- c. *kuskunna-š-xülümziir-üš-alčəŋna-š-* ‘to call to each other’ (T. 267)
 ‘to smile at each other’
 i. ‘to tease each other’, ii. ‘to flirt with each other’ (T. 595).

3.1.2 “Indirect” and benefactive reciprocals

These reciprocals are derived from three-place transitives. As in the previous case, an indirect object is deleted in the reciprocal construction; the direct object is retained; e.g.:

- (32) a. *Olar ol kino-nu eš-ter-i-n-ge čugaala-p tur-gan-nar.*
 they this film-ACC friend-PL-their-*n*-DAT tell-CONV AUX-PERF-3PL
 ‘They told their friends about this film.’
- b. *Olar ol kino-nu čugaala-ž-əp tur-gan-nar.*
 they this film-ACC tell-REC-CONV AUX-PERF-3PL
 ‘They were telling each other about this film.’

Here are a few more examples:

- (33) a. *Ol-la “Kaŋgəvaj-Mergen-ni” am-daa toolda-ž-əp tur-lar.*
 same K.-M.-ACC still tell.tale-REC-CONV AUX-3PL
 ‘(They) are still telling each other the same tale “Kangyvaj-Mergen”’
- b. *Kara-ool bile duŋma-sə nom bəlaa-ž-əp tur-lar.*
 K. and younger.brother-his book take.away-REC-CONV AUX-3PL
 ‘Kara-ool and his younger brother try to take a book away from each other.’
- c. *Kəžən, čajən-daa inek bile xoj o”t xunaa-š-pas.* (KK.)
 winter summer-even cow and sheep grass take.away-REC-NEG.3.NPAST
 ‘Either in winter or even in summer, the cow and the sheep do not take grass from each other (in the pasture).’
- d. *Bot-tar-ə-nəŋ kajgal-erez-i-n čüge makta-n-əš-pas*
 self-PL-their-GEN daring-their-ACC why boast-REFL-REC-NEG.3.NPAST
er-ler-il? (KK.)
 lad-PL-Q
 ‘Why don’t they boast of their daring to each other?’
- e. *Ol nom-nu sonuurga-an ulus oorla-ž-əp tur-gan.* (KK.)
 this book-ACC be.interested-CONV people steal-REC-CONV AUX-3.PAST
 ‘Those who wanted to read this book stole it from each other.’
- f. *Čaa koža-m-bile at-tar-əvəs ada-ž-əp, tanə-ž-əp*
 new neighbour-my-with name-PL-our name-REC-CONV know-REC-CONV
al-də-vəs. (SA.)
 AUX-PAST-1PL
 ‘We got acquainted with my new neighbour and gave our names to each other.’
- g. *Ojtulaaštaa-n ool-dar, kəs-tar sagəš-setkil-i-n ərla-p*
 have.night.fete-PART boy-PL girl-PL feeling-their-ACC sing-CONV
ilere-t-č-ip čora-an. (K-L.)
 appear-CAUS-REC-CONV AUX-3.PERF
 ‘During the night fete, the young people expressed to each other their feelings by singing.’

Note the fixed combination of two hyphenated reciprocals from three-place transitives used as a rule without a direct object, usually in the figurative sense ‘to help each other’, ‘to mutually exchange sth’ (cf. (68)).

- h. *Ugba-škə-lar ürgülčü al-čəp-ber-ž-ip čoru-ur.*
 sister-COLL-PL always take-REC-CONV-give-REC-CONV AUX-3.NPAST
 ‘Sisters always help each other’, lit. ‘... take from each other and give each other.’

Two-place transitives can be used with the reciprocal suffix in the benefactive meaning, though in sentences like (33i) *bot-bot-tar-ə-n-ga* is more common; cf.:

- i. *Olar [bot-bot-tar-ə-n-ga] bažəŋ-nar tut-č-up al-gan-nar.*
 they each-other-n-DAT house-PL build-REC-CONV AUX-PERF-3PL
 ‘They have built houses for each other’ (with the bracketed word omitted, it may be interpreted as ‘They helped someone to build a house’).

Reciprocals of this type are derived from main two subtypes of three-place transitives: a) those with the underlying verb taking an indirect object in the dative or in the allative case; b) those with the underlying verb taking an indirect object in the ablative case (sometimes interchangeable with a genitive attribute; cf. *I took a book from him – I took his book*). Besides, one or two verbs are in fact used as two-place, but they imply an addressee, and their reciprocal derivatives do not differ from reciprocal of the two groups named, as they retain the direct object (see *ada-š-* in (33f)).

- (34) a. *aaza-š-* ‘to promise sth to each other’
biži-š- ‘to write to each other’
čorud-uš- ‘to send sth to each other’
čugaala-š- ‘to tell sth to each other’ (T. 545)
dagdən-əš- ‘to promise sth to each other’
damčət-əš- ‘to pass sth to each other’
ileret-iš- ‘to express sth to each other’
makta-n-əš- ‘to boast of sth to each other’
okta-š- ‘to throw sth at each other’
sun-uš- ‘to hold out/offer sth to each other’
toolda-š- ‘to tell tales to each other’
 b. *ajtər-əš-* ‘to ask each other about sth’ (T. 48)
al-əš- i. ‘to take from each other’, ii. ‘to exchange sth’ (T. 56)
bəlaa-š- ‘to take sth away from each other’ (T. 130)
čəžər-əš- ‘to hide sth from each other’ (T. 509)
če-eš- (< *čeg-iš-*) ‘to borrow (money) from each other’ (T. 525)
nege-š- ‘to demand sth from each other’ (T. 308)
oorla-š- ‘to steal sth from each other’ (T. 323)
xunaa-š- ‘to take sth away from each other’ (T. 494).

3.1.3 “Possessive” reciprocals

3.1.3.1 *Derived from two-place transitives.* Base constructions of this type of reciprocals contain a two-place transitive (cf. (35) and (36c–h)) or intransitive (cf. (36a–b)) and an object with a possessive attribute (cf. *Maša-nəŋ* in (35a)). As in “indirect” constructions,

the object is retained and the possessive attribute is deleted. In the derived construction the object is usually plural and contains a possessive marker which agrees in person and number with the subject; it usually denotes inalienable (seldom alienable) possession.

- (35) a. *Galja Maša-nəŋ xol-u-n tud-up, baž-ə-n sujba-p ka-an.*
 G. M.-GEN hand-her-ACC press-CONV head-her-ACC stroke-CONV AUX.3
 ‘Galja shook Masha’s hand and stroked her head.’
- b. *Galja bile Maša xol-dar-ə-n tut-č-up, baš-tar-ə-n*
 G. and M. hand-PL-their-ACC press-REC-CONV head-PL-their-ACC
sujba-š-kan
 stroke-REC-3.PERF
 ‘Galja and Masha shook (each other’s) hands and stroked each other’s head.’

A few more examples:

- (36) a. *Xöj kiži at-kəla-š-kaš, a”t-tar-ə-n öl-ür-üš-ken.* (KK.)
 many man shoot-ITER-REC-CONV horse-PL-their-ACC die-CAUS-REC-PERF
 ‘Many people, shooting at each other, killed each other’s horses.’
- b. *Sara bile Šolban-ool xol-dar-ə-n tut-č-up, sujba-ž-əp*
 S. and Sh. hand-PL-their-ACC hold-REC-CONV stroke-REC-CONV
ka-ap or-gan-nar. (NO.)
 AUX-CONV AUX-PAST-3PL
 ‘Sara and Sholban pressed each other’s hands and stroked them from time to time.’
- c. *Olar baš-tar-ə-n čətta-ž-əp ka-an-nar.*
 they head-PL-their-ACC kiss-REC-CONV AUX-PAST-3PL
 lit. ‘They kissed (lit. ‘sniffed’) each other’s heads.’
- d. *Bis čunar-bažəŋ-ga oorga-lar-əvəs dərbü-ž-er bis.* (KK.)
 we wash-house-DAT back-PL-our rub-REC-NPAST 1PL
 ‘In the bath-house, we shall rub each other’s backs.’
- e. *Iji ava-škə baš-tar-ə-n kərgə-š-kan*
 two mother-COLL head-PL-their-ACC cut-REC-3.PERF
 ‘Mother and daughter (or son) have cut each other’s hair.’
- f. *Olar baš-tar-ə-n dərə-š-kan.*
 they head-PL-their-ACC comb-REC-3.PERF
 ‘They have combed each other’s hair.’

A specific instance with a possibly “possessive” reciprocal interpretation: omission of the reciprocal suffix changes the meaning considerably:

- (37) a. *Bis ənakšəl-əvəs-tə bil-č-ip al-də-vəs.* (DB.)
 we love-our-ACC understand-REC-CONV AUX-PAST-1PL
 ‘We realized we loved each other’ (= lit. ‘I understood her love for me’ + ‘She understood my love for her’).
- b. *Bis ənakšəl-əvəs-tə (baskə-lar-ga) bil-ip al-də-vəs*
 we love-our-ACC teacher-PL-DAT understand-CONV AUX-PAST-1PL
 ‘We realized we loved (our teachers); lit. ‘We understood our love (for teachers).’

3.1.3.2 *Derived from two-place intransitives.* In this case an oblique object referent of the underlying verb denotes an inalienable part of the attribute referent (cf. *oŋ* in (38a)).

Semantically, this type is close to the reciprocals considered above in 3.1.3.1, but it differs from the latter by the absence of a direct object (in colloquial speech, instead of the genitive attribute, sometimes a direct object occurs); e.g.:

- (38) a. *Ojna-an ool ooŋ arnə-baz-ə-n-če xa-pt-ar.*
 play-PART child he.GEN face-head-his-*n*-ALL hit-ASP-3.NPAST
 ‘The playing boy may hit him on the head.’
- b. *Ojna-an ool-dar bil-bein arnə-baz-ə-n-če kak-č-əpt-ar.*
 play-PART child-PL notice-NEG.CONV face-head-their-*n*-ALL hit-REC-ASP-3.NPAST
 ‘The playing children may hit each other on the head without noticing it.’
- (39) a. *Olar baš-tar-ə-n-dan sirbekte-š-ken.*
 they head-PL-their-*n*-ABL pull-REC-3.PERF
 ‘They pulled each other by the hair.’
- b. [*Olar*] *xol-dar-ə-n-dan čet-tin-č-ip-keš baz-əp-kan-nar.* (AD)
 they hand-PL-their-*n*-ABL lead-REFL-REC-ASP-CONV go-ASP-PERF-3PL
 ‘They went leading each other by the hand.’
- c. *Majgak-təŋ ool-dar-ə mojun-nar-ə-n-ga öge-n-iš-ken*
 she.maral-GEN baby-PL-their neck-PL-their-*n*-DAT rub-REFL-REC-PART
tur-lar. (DB.)
 stand.PRES.PROGR-3PL
 ‘The young of the maral are standing rubbing their necks against each other.’
- d. *Bis ijilee arən-nar-əvəs-če kör-ž-üp-ken tur bis.*
 we both face-PL-our-ALL look-REC-ASP-PART PRES.PROGR 1PL
 ‘We two are standing looking into each other’s faces.’
- e. *Olar xol-dar-ə-n-dan tut-un-č-up-kan-nar.*
 they hand-PL-their-*n*-ABL take-REFL-REC-ASP-PERF-3PL
 lit. ‘They took each other’s hands (in order to keep balance).’

3.1.4 Discontinuous constructions

Subject expression in reciprocal constructions does not differ from that in non-reciprocal constructions: it may be a plural noun, a collective noun in the singular, or it may be a singular noun if it is preceded by an expression of number, or a conjoined subject. The predicate always agrees with the subject in person, and in the 1st and 2nd persons in number, while in the 3rd person, as is mentioned above, the ending is \emptyset in the singular, while in the plural it may be optionally marked; e.g.:

- (40) a. *Bis xündüle-ž-ip čor bis.*
 we respect-REC-CONV AUX.PRES 1PL
 ‘We respect each other.’

The conjoined subject nouns are most commonly connected by the conjunction *bile* ‘and’; e.g.:

- b. *Men bile kadaj-əm xündüle-ž-ip čor bis.*
 I and wife-my respect-REC-CONV AUX.PRES 1PL
 ‘My wife and I respect each other.’

If the subject is singular and the co-participant is encoded by a noun phrase with the post-position *bile* ‘with’ (it should not be confused with the materially identical and genetically related conjunction *bile*, as in (40b)), the predicate may agree either with the singular subject or with the subject and expression of co-participant though the latter is most likely an object, i.e. in this case we are faced with a discontinuous construction; cf. respectively:

- c. *Men kadaj-əm-bile xündüle-ž-ip čor men.*
 I wife-my-with respect-REC-CONV AUX PRES.1SG
 (same translation as in (b)) lit. ‘I wife-my-with respect each other.’
- d. *Men kadaj-əm-bile xündüle-ž-ip čor bis.*
 I wife-my-with respect-REC-CONV AUX PRES.1PL
 (same as (c)).

Note that the difference between (40c) and (40d) can be neutralized in the case of a 3rd person subject and absence of the 3PL marker on the verb; thus (40e) may correspond both to (40c) and (40d), while (40f) corresponds to (40d) only:

- e. *Ol kadaj-ə-bile xündüle-ž-ip čor.*
 he wife-his-with respect-REC-CONV AUX.3.PRES
 ‘He and his wife respect each other.’
- f. *Ol kadaj-ə-bile xündüle-ž-ip čor-lar.*
 he wife-his-with respect-REC-CONV AUX-PRES.3PL
 (same translation).

It is problematic whether the postpositional noun-phrase in type (40d) and (40f) cases should be regarded as part of the subject group.

In a number of cases, as in the following example (see also (1d)), the comitative object with *bile* is possible if only the predicate contains the reciprocal suffix.

- (41) *Činčizik öreel-če kir-e ber-geš, uruu-bile čugaala-ž-ə*
 Ch. room-ALL enter-CONV AUX-CONV daughter-with talk-REC-CONV
ber-gen. (K-L.)
 AUX-3.PERF
 ‘Chinchizhik entered the room and began talking to her daughter.’

At the same time the discontinuous construction in (42) cannot be converted into a simple one, because the comitative group contains a reflexive pronoun.

- (42) *Bod-u-bile bod-u čugaala-ž-əp or-ar kiži boor be?* (K-L.)
 himself-with himself speak-REC-CONV AUX-3.NPAST man possibly really
 ‘Does the man really talk with himself?’

Practically all subject-oriented reciprocals can be used in discontinuous constructions.

3.1.5 Lexical specifiers *udur-dedir* ‘mutually’, ‘face to face’, ‘to meet’ and *arazənda* ‘among/between themselves’

When used separately, *udur* means i. ‘against sth’, ii. ‘to meet’ (cf. German *entgegen, gegenüber*), iii. ‘immediately’, iv. ‘simultaneously’, and *dedir* i. ‘in the opposite direction’, ii. ‘obstinate’, *ara* means i. ‘among/between’ and ii. ‘space (between two objects)’. In *ara-zə-*

n-da ‘among/between themselves’ the middle component *-zə-* is a 3SG and 3PL possessive suffix (cf. the table in (7a)), which means that the subject must be either a noun or a 3rd p. pronoun; *-n-* in this form is a semantically empty infix and *-da* is DAT. The other two forms are *ara-vəs-ta* ‘between/among ourselves’ and *ara-ŋar-da* ‘between/among yourselves’.

When used without a suffixed reciprocal, these two words are usually spatial in meaning, like lexical reciprocals, denoting either position between two or more entities (in this case *arazənda* functions as a postposition) or position or motion of two objects opposite each other respectively:

- (43) *Olar tal-dar arazənda tur.*
 they willow-PL among stand.3.PRES.PROGR
 ‘They are standing among willows.’
- (44) *Olar udur-dedir olur.*
 they opposite sit.3.PRES.PROGR
 ‘They are sitting opposite each other.’

These specifiers occur with reciprocals, both morphological and lexical. They emphasize that the action is taking place between the subject referents. Unlike the reciprocal pronouns, these adverbs cannot substitute for the reciprocal suffix nor, as a rule, for each other. The specifier *udur-dedir* is characteristic of sentences describing situations with participants opposite each other. In rare cases, as in (45), the reciprocal suffix may be omitted.

- (45) *Bujan bile Artaakə udur-dedir [→*arazənda] xülümzür-ž-üp-ken.* (KK.)
 B. and A. mutually between.them smile-REC-ASP-PERF
 ‘Bujan and Artaky smiled at each other.’
- (46) *Daartazənda udur-dedir [→?arazənda] mendile-ž-ir kiži čok bol-gan.* (VM.)
 next.day mutually between.them greet-REC-PART man NEG COP-3.PERF
 ‘On the next day the people did not greet each other.’
- (47) *Iji urug arazənda [→*udur-dedir] bir-le čüve dees margə-š-kan xevirliġ.*
 two girl between.them mutually something because.of argue-REC-3.PERF likely
 ‘It looked as if the two girls argued between themselves about something.’
- (48) *Iji ež-iški arazənda [→*udur-dedir] sümele-š-ken.*
 two friend-COLL between.them mutually advise-REC-3.PERF
 ‘The two friends talked things over between themselves.’

3.2 Object-oriented reciprocals in *-š-tər*

3.2.1 Causatives from subject-oriented reciprocals

This is a trivial case: in principle, any subject-oriented reciprocal (those that have been considered above) can be converted into object-oriented by means of the causative suffix *-tər* on condition that the situation described is natural (cf. (23) and the following).

- (49) a. = (27a, b)
 b. *Baškə olur-ž-up tur-gan ada-bile o-nu tanə-š-tər-də.*
 teacher sit-REC-CONV AUX-PART father-with he.ACC know-REC-CAUS-3.PAST
 ‘The teacher introduced (lit. ‘acquainted’) him to the father (who was present).’

3.2.2 Causatives from two-place anticausatives

By way of forestalling things, I wish to point out transformations which at first glance look like the one in (49), but in fact they differ sharply from it, though the derivational components and their mechanism are the same. The difference lies in the fact that in the relationship (27a) → (27b) both the subject and object of the former turn up as subject of the latter, while in (50a) → (50b) the object of the underlying sentence alone turns up as subject of the derived construction, while the original subject is dropped. This type of transformation is termed anticausative. If this transformation is semantically unburdened by any additional semantic changes, at the second stage, namely causativization, a return to the initial meaning or a meaning more or less similar to it is alone possible, though their interchangeability is very often impossible. For this reason Russian three-place lexical reciprocals in the *Russian-Tuvan Dictionary* (Mongush (ed.) 1980) are sometimes translated by means of the first and the third verbs of a chain of this kind.; e.g.: ‘to mix sth with sth’ = *holu-* and *holu-š-tur-* (M1. 542), ‘to join sth with sth’ = *ula-* and *ula-š-tər-* (M1. 549), ‘to liken sth to sth’ = *dömejle-* and *dömejle-š-tir-* (M1. 609), ‘to confuse sth/sb with sth/sb’ = *salča-* and *salča-š-tər-* (M1. 542), ‘to compare sth with sth’ = *deñne-* and *deñne-š-tir-* (M1. 552), ‘to collate sth with sth’ = *šüg-* and *šü-ü-š-tür-* (M1. 520) (< *šüg-üš-tür*). Not infrequently, three-place lexical reciprocals are translated by two, three and even four verbs in *-š-tər*, as the verb meaning ‘to combine/bring into concord’ is translated as *kattəštər-*, *düüštür-*, *taarəštər-*, and *xolbaštər-* (M1. 555).

- (50) a. *Ol meni ooñ-bile deñne-p tur.*
 he I.ACC he.GEN-with compare-CONV AUX.3.PRES
 ‘He compares me with him.’
 b. *Ooñ-bile deñne-š-ip šəda-vas men.* (T. 157)
 he.GEN-with compare-REC-CONV be.able-NEG.NPAST 1SG
 ‘I cannot be compared with him.’
 c. *Ol meni ooñ-bile deñne-š-tir-ip tur.*
 he I.ACC he.GEN-with compare-REC-CAUS-CONV AUX.3.PRES
 (same translation as (a)).

For more details see Section 8 below.

3.3 Restrictions on reciprocals with the suffix *-š*

There do not seem to be any significant non-trivial restrictions on the derivation of “canonical” and “indirect” reciprocals. As examples of rare restrictions, the following verbs (which sound strange to native speakers) can be quoted: *sagə-n-dər-* ‘to remind sb (ACC) of sth’, *des-* ‘to run away from/avoid sth (ABL)’ (and its synonyms *ojla-* and *durgunna-*), *čalən-* ‘to implore sb (DAT)’, *eereš-* ‘to implore sb (ACC)’, *idege-* ‘to rely on/trust

sb (ABL), *ijle-* ‘to miss sb very much’. Semantically, these verbs allow reciprocal use (which is shown by the fact that the synonyms of the latter verbs *çokta-* ‘to miss’ and *büzüre-* ‘to trust’ do have a reciprocal form (see T. 538 and (86b)). In these cases the reciprocal pronoun alone or in combination with a suffixed reciprocal is used, e.g.:

- (51) a. *Olar ürgülçü akə-m-dan dez-er tur-gan.*
 they always elder.brother-my-ABL avoid-PART AUX-3.PAST
 ‘They always avoided my elder brother.’
 b. *Olar ürgülçü bot-bot-tar-ə-n-dan dez-er tur-gan*
 they always each-other-n-ABL avoid-PART AUX-3.PAST
 ‘They always avoided each other.’
- (52) a. *Olar bot-bot-tar-ə-n-ga idege-p tur-gan-nar.*
 they each-other-n-DAT rely-CONV AUX-PAST-3PL
 ‘They relied on each other.’
 b. *Olar bot-bot-tar-ə-n-ga onu sagən-dər-əp tur-gan-nar.*
 ‘they each-other-n-DAT this.ACC remember-CAUS-CONV AUX-PAST-3PL
 ‘They reminded each other of this.’
 c. *Olar bot-bot-tar-ə-n eerež-ip tur-gan-nar.*
 they each-other-ACC implore-CONV AUX-PAST-3PL
 ‘They implored each other.’
 d. *Olar bot-bot-tar-ə-n-ga čann-əp tur-gan-nar.*
 they each-other-n-DAT implore-CONV AUX-PAST-3PL
 ‘They implored each other.’

As for “possessive” reciprocals, there are none to translate sentences with the following meanings: ‘A and B saddled each other’s horses’, ‘A and B broke each other’s arms’.

There are more complicated cases of reciprocals connected with certain lexical meanings. Thus, for instance, the reciprocal form of the verb *ənakšə-* ‘to love/fall in love’ (from the adjective *ənak* ‘beloved’), namely *ənakšə-š-*, whose meaning is defined as ‘to fall in love with each other’ (T. 596) is most commonly used in the participial form *ənakšə-š-kan* ‘(having fallen) in love with each other’, while the meaning ‘to love each other’ is rendered by the adjective *ənak* ‘beloved’ with the dative case of the reciprocal pronoun:

- (53) *Olar bot-bot-tar-ə-n-ga ənak.* ‘They love each other.’

Though most of the reciprocals raise no doubts, the informants are sometimes in doubt whether the reciprocal form of a given verb is possible (this may be due to the frequency of the relevant situations in life); sometimes they disagree with each other and even with the dictionary. Thus, for instance, some of the native speakers reject reciprocals registered in the dictionary (see (54)); this rejection may be accounted for by the fact that a form in *-š* has a lexicalized meaning rather than a standard reciprocal meaning, like *či-š-* lit. ‘to eat each other’ more often used in the meaning ‘to compete’; in these cases the reciprocal reading requires support of the reciprocal pronoun (see (54b)):

- (54) a. *aaza-š-* ‘to promise each other’ (T. 26)
ažaa-š- ‘to take care of/feed each other’ (T. 39)
xöŋnü kal-əš- ‘to be disappointed with each other’
məžəra-š- ‘to whisper together with each other’ (T. 305).

- b. *Ol ajmak-tar bot-bot-tar-a-n čičip ka-ap-kan.*
 this tribe-PL each-other-ACC eat-REC-CONV AUX-ASP-3.PERF
 ‘These tribes ate one another.’

Some of the verbs may acquire the reciprocal suffix when used with negation only, due to their lexical meaning; e.g.: *tiile-/šüg-/aš-* ‘to win, overcome sb’ (see (55a)); though other verbs with a similar meaning are used reciprocally (see (55b)). But the causative from (55b) does not yield a reciprocal (cf. (55c, d)).

- (55) a. *Alaškalar kažan-daa tiile-š-pes (= šü-üş-pes = aš-aš-pas).*
 brothers never-EMPH overcome-REC-NEG.3.NPAST
 ‘The brothers never overcome one another.’
 b. *Alaškalar šadāraa-ga ut-č-up kaap-kan-nar.*
 brothers chess-DAT defeat-REC-CONV AUX-PAST-3PL
 ‘The brothers finished the chess game’, lit. ‘... defeated each other.’
 c. *Ol akā-m-ga šadāraa-ga ut-tur-up al-gan.*
 he elder.brother-my-DAT chess-DAT defeat-CAUS-CONV AUX-3.PERF
 ‘He lost a game of chess to my elder brother’, lit. ‘... let ... defeat himself.’
 d. **Alaškalar šadāraa-ga ut-tur-uš-up kaap-kan-dār.*
 brothers chess-DAT defeat-CAUS-REC-CONV AUX-3.PAST-PRTL
 (intended meaning:) ‘The brothers lost chess games to each other [by turns].’

3.4 Simultaneity and succession

As well as in other languages, reciprocals can denote both simultaneous and successive sub-actions of the participants; cf. (1c) and (56) respectively:

- (56) a. *Duruja-lar murnuu čük-če šuuž-up-kaš soñnug-murnug*
 crane-PL southern side-ALL move.in.a.line-ASP-CONV by.turns
kājgər-aš-kan-nar. (ED.)
 call-REC-PERF-3PL
 ‘The cranes flew south in a line, [they] called to each other by turns.’
 b. *Iji xovagan-nar ... səvər-ž-əp ...* (AD.)
 two butterfly-PL chase-REC-CONV
 ‘Two butterflies chased each other ...’
 c. *Student čora-aš, xöjleñ-ner-ivis ačāla-ž-əp, ket-č-ip čora-an*
 student be-CONV shirt-PL-our borrow-REC-CONV put.ON-REC-CONV be-PERF
bis. (BM.)
 1PL
 ‘When we were students we borrowed shirts from each other and wore them by turns.’

This is true of both suffixed and pronominal reciprocals; cf.:

- (57) a. *Doržu onu telefon-bile ottur-up tur-gan.*
 D. him telephone-with waken-CONV AUX-3.PAST
 ‘Dorju wakened him by telephone.’

- b. *Olar telefon-bile ottur-ž-up tur-gan-nar.*
 they telephone-with waken-REC-CONV AUX-PAST-3PL
 ‘They wakened each other by telephone.’
- c. *Olar bot-bot-tar-a-n ottur-ž-up tur-gan-nar.*
 they each-other-ACC waken-REC-CONV AUX-PAST-3PL
 ‘They wakened each other (by turns).’
- d. *Olar bot-bot-tar-a-n oočurlap üde-ž-ip tur-gan-nar.*
 they each-otherACC by.turns see-REC-CONV AUX-PAST-3PL
 ‘They saw each other off by turns.’
- e. *Tarbagan-nar örü-kudu mañna-ž-əp, səvarta-ž-əp, bot-bot-tar-a-n*
 marmot-PL up.down run-REC-CONV chase-REC-CONV each-other-ACC
aža hal-č-əp-la tur-lar. (KK.)
 jump.over-REC-CONV-INTS AUX-3PL
 ‘Marmots ran back and forth, chased each other, jumped over each other.’

It is but natural that reciprocals with a successive reading are derived from verbs whose lexical meaning excludes simultaneous action of co-participants (e.g., ‘to defeat’, ‘to pay a visit’, ‘to shave’, ‘to chase’, ‘to inform’, etc.).

- (58) a. *okta-* ‘to overcome/defeat sb in wrestling’
 → *okta-š-* i. ‘to overcome/defeat each other by turns in wrestling’
 ii. ‘to throw each other somewhere’ (in wrestling) (T. 317)
- b. *kag-* ‘to win in wrestling’
 → *ka-aš-* ‘to win over each other by turns in wrestling’ (T. 214)
- c. *šala-* ‘to check (in chess)’
 → *šala-š-* ‘to check each other’s king by turns’ (T. 566)
- d. *aalda-* ‘to pay visits to sb’
 → *aalda-š-* ‘to pay visits to each other’ (T. 228)
- e. *čülü-* ‘to shave sb’
 → *čülü-š-* ‘to shave each other’ (T. 551)
- f. *medegle-* ‘to inform sb’
 → *medegle-š-* ‘to inform each other’ (T. 292)
- g. *a”sta-n-* ‘to tidy up (one’s place)’ (← *a”sta-* ‘to tidy up (a flat, etc.)’)
 → *a”sta-n-aš-* ‘to tidy up each other’s place by turns.’

A peculiar feature of reciprocals with meanings like ‘to overcome each other’ (cf. (59b, c)) is a slight shift of meaning in perfective past forms: these forms express completion of the action with an unclear outcome: it remains unclear if one of the co-participants has won, or if it has been a draw, the main point being that the competition, wrestling, etc. is over. The singular number of the subject is not correct. These reciprocals do not combine with the reciprocal pronoun (59e), in contrast to standard “canonical” reciprocals (cf. (85)).

- (59) a. *Möge onu okta-p-kan.*
 wrestler he.ACC defeat-ASP-3.PERF
 ‘The wrestler has defeated him’, lit. ‘... threw him (to the ground).’
- b. *Möge-ler okta-ž-əp tur.*
 wrestler-PL defeat-REC-CONV AUX.3.PRES
 ‘The wrestlers are wrestling defeating each other by turns.’

- c. *Möge-ler okta-ž-əp-kan.*
wrestler-PL defeat-REC-ASP-3.PERF
'The wrestlers have had a fight/finished a fight.'
- d. **Möge okta-ž-əp-kan.*
wrestler defeat-REC-ASP-3.PERF
(intended meaning:) 'The wrestler has finished a fight'; cf. also:
- e. **Möge-ler bot-bot-tar-ə-n okta-ž-əp tur.*
wrestler-PL each-other-ACC defeat-REC-CONV AUX.3.PRES
'The wrestlers are wrestling defeating each other by turns.'
- (60) a. *Šomaadər Daržaa-nə šədəraa-ga ut-kan.*
Š. D.-ACC chess-DAT defeat-3.PERF
'Shomadyr won a game of chess from Darzha' (lit. '... defeated D. in chess').
- b. *Š. bile D. šədəraa-ga ut-č-up-kan.*
Š. and D. chess-DAT defeat-REC-ASP-3.PERF
'Sh. and D. have finished a game of chess.'

It is typologically interesting that in Bulgarian reciprocals of competition derived from verbs of overcoming and the like may sound somewhat unnatural in aorist of the perfective aspect, as both contestants cannot win in the same event (see Penchev, Ch. 13, §10), while respective Tuvan reciprocals are used in analogous tense/aspect forms, but with a slight shift in meaning.

3.5 Derivatives from reciprocals

3.5.1 *Nomina actionis*

In Tuvan, like in other Turkic languages, there is a considerable number of suffixes used to derive nouns from verbs. I shall briefly survey the forms in *-ar* and *-kan* which are in fact verbal forms, and also a number of other suffixes which derive nouns proper.

3.5.1.1 *With the suffixes -ar and -kan.* These suffixes seem to have no restrictions on their combinability with verbal stems. The form in *-ar* (see case 4 in 2.3) is the one in which verbs are usually entered in the dictionaries (like infinitives in some European languages), but it differs from infinitives in that it is inflected for cases though it retains a direct object like infinitives; its agent is expressed by the genitive case. Its nearest analogue in some languages seems to be the English gerund. These forms are used with possessive suffixes (cf. *olur-ar-ə* in (61b) and *sümele-š-ken-i-n* in (62b)).

- (61) a. *Iji ež-iški mogat-tən-č-əp, xəjərta-ž-əp olur-lar.*
two friend-COLL resent-REFL-REC-CONV look.askance-REC-CONV AUX-3PL
'Both friends resent each other and look askance at each other.'
- b. *Iji ež-iški-niñ mogat-tən-č-əp xəjərta-ž-əp*
two friend-COLL-GEN resent-REFL-REC-CONV look.askance-REC-CONV
olur-ar-ə kədə-ə-n-dan köskü bol-gan.
AUX-PART-their side-their-n-ABL seen COP-3.PERF
lit. 'The two friends' resenting each other and looking askance at each other was obvious.'

- (62) a. *Ava-m bile ača-m sümele-š-ken-ner.*
 mother-my and father-my advise-REC-PERF-3PL
 ‘My mother and father talked things over with each other.’
- b. *Ava-m bile ača-m-nəŋ sümele-š-ken-i-n bil-ip*
 mother-my and father-my-GEN advise-REC-PART-their-ACC understand-CONV
kag-də-m.
 AUX-PAST-1SG
 lit. ‘I understood mother and father’s talking things over with each other.’

3.5.1.2 *With the suffixes -əškan and -lga.* Besides these two, the suffixes *-əl*, *-əlda*, *-əm*, *-əg*, etc., are also used, but practically only they can derive *nomina actionis* from a limited number of suffixed reciprocals. They are probably the most frequent noun-forming suffixes, and nouns with these suffixes are quite numerous in the dictionaries; there are also some derivatives from reciprocal verbs. The latter manifest a kind of selectivity of these suffixes; as it happens, the derivatives from reciprocals (including those entered in the dictionaries) are rarely used or out of use (here belong (63.b.1–2); (64.b.1–2–3); (65.b.1)). The following examples registered in the dictionaries give an idea of these derivatives, though some informants reject them or consider them outdated (e.g. (63b.1, 2), (64b.1, 2, 3)).

- (63) a. *oška-* ‘to kiss’ → *oška-aškən* ‘a kiss’ (M1. 432)
- b. *oška-š-* ‘to kiss each other’ → 1. *oška-ž-əškan* ‘mutual kiss’ (T. 329)
 2. *oška-ž-əlga* (same) (T. 329)
 3. *oška-ž-ər-ə* lit. ‘kissing-their’ (M1. 432).
- (64) a. *at-kəla-* ‘to fire repeatedly’ → *at-kəla-aškən* ‘repeated fire’
- b. *at-kəla-š-* ‘to exchange fire’ → 1. *at-kəla-ž-əškan* ‘exchange of fire’ (T. 75; M1.383)
 2. *at-kəla-ž-əlga* (same)
 3. *at-kəla-ž-əg* (same).
- (65) a. *bil-* ‘to understand’ → 1. *bil-iškin* ‘concept’
 2. *bil-ig* i. ‘concept’, ii. ‘knowledge’ (M1. 420; T. 103)
 3. *bil-ir-i* ‘understanding’ (M1. 420)
- b. *bil-iš-* ‘to understand each other’ → 1. *bil-č-ilge* ‘mutual understanding’
 2. *bil-č-iškin* (same)
 3. *bot-bottaran bil-č-ir-i* (same) (M1. 67).

3.5.1.3 *With the suffix -š.* These are nouns ending in *-š* which are formally identical with semantically related reciprocals. In contrast to some other Turkic languages (e.g. Kirghiz), this suffix is unproductive in Tuvan (Isxakov & Pal’mbox 1961:157, 161). Nevertheless, it may be useful to briefly consider derivations with it, especially because there is an opinion that it is genetically related to the reciprocal suffix *-š* (Radloff 1897:57–8; for an overview of the opinions see Ch. 26 on Yakut). Most of the semantically reciprocal nouns of this type denote aggressive or competitive actions. This unproductive nominal suffix (its allomorphs coincide with those of the reciprocal suffix; see case 3 in 2.4) is used in two types of derivational chains. In both types the derivational direction between the forms in *-š* is not self-evident.

(a) The verb and the noun coincide entirely and are equally related to the same underlying non-reciprocal verb:

- (66) a. *sok-* ‘to beat’ → *sog-uš-* ‘to fight’, *sog-uš* ‘a fight’ (T. 379)
 b. *margə-* ‘to argue’, ‘to compete’ → *margə-š-* ‘to argue’, *margə-š* ‘argument’ (T. 287)
 c. *üle-* ‘to divide’ → *üle-š-* ‘divide among each other’, *üle-š* ‘dividing/division’ (T. 447).

(b) The base verb is non-existent, and the marked verb and the noun are materially identical; all of them are *reciproca tantum* (see 8.1):

- (67) a. *xüreš-* ‘to wrestle’ – *xüreš* ‘wrestling’ (T. 498)
 b. *kəṛəš-* ‘to quarrel’ – *kəṛəš* ‘quarrel’ (T. 279-80)
 c. *algəš-* ‘to quarrel’ – *algəš* ‘quarrel’ (T. 53)
 d. *čarəš-* ‘to compete’ – *čarəš* ‘competition/contest’ (T. 280)
 e. *čoguš-* ‘to fight’ – *čoguš* ‘a fight’ (T. 538); *čo(gu)š* → *čoš* ‘a fight’ (T. 579).

There exist paired formations of this kind of reciprocal nouns; e.g.:

- (68) *adaš-čarəš* flk. ‘competition (e.g. in shooting, running)’ (T. 39) (cf. *at-* ‘to shoot’)
aləš-beriš ‘mutual exchange’ (T. 56) (cf. *al-* ‘to take’, *ber-* ‘to give’; cf. (33h))
čoguš-kəṛəš ‘quarrel/fight’ (T. 538).

This same suffix is also encountered on non-reciprocal nouns; as a rule, though not always (cf. (69a) and (69b)), their derivational status is obvious. Paired nouns may be formed from non-reciprocals as well (60c):

- (69) a. *kör-* ‘to see’ → *kör-üš* ‘sight’
tən- ‘to breathe’ → *tən-əš* ‘breath’
təp- ‘to find’ → *təp-əš* ‘(a) find’
či- ‘to eat’ → *či-š* ‘food’ (I.P. 158)
 b. *dalaš-* ‘to be in a hurry’ – *dalaš* ‘hurry’ (T. 145)
 c. *eegiš-tənəš* ‘short breath/wind’ (T. 605).

3.5.2 Adjectives in *-š* and adverbs in *-š-təṛ*

To complete the picture, we shall consider these derivatives.

There is a small group of adjectives with final *-š* which are derived by means of grammatical conversion from lexical or suffixed reciprocals. In (70a, b, c), the types symmetrical to (66) are illustrated. Very seldom, an adjective with a reciprocal meaning is formed from a non-reciprocal verbs, cf. (70d) and (70e):

- (70) a. *tut-* ‘to squeeze/hold’ b. *xevirle-* ‘to give form/shape’
tud-uš- ‘to join/merge/flow together’ *xevirle-š-* ‘to be alike/like’
tuduš ‘solid/dense/continuous’ (T. 428) *xevirle-š* ‘alike’ (T. 472).
 c. *öže-* ‘to do sth to spite sb’ d. *dužaa-* ‘to be/come alongside of sth’
öže-š- i. (same), ii. ‘to be obstinate’ *dužaaš* i. ‘situated opposite sth’
öže-š ‘obstinate’ (T. 332, 333) ii. ‘situated opposite each other’ (T. 181).
 e. *okta-* ‘to load/charge’ (a gun, etc.)
okta-š ‘of the same calibre’ (of weapons)
 (cf. *okta-š-* ‘to load/charge sth together’) (T. 317).

Adverbs, mostly of *manner*, can be derived from a limited number of reciprocals by means of the causative suffix *-tur/-tər/-tür/-tir/...* (see 4 in Section 2.5). These adverbs can be derived from qualitative adjectives, and from root and derived verbs, including, as mentioned, reciprocal verbs (see Isxakov & Pal'mbax 1961:426–7). Adverbs from reciprocals are as a rule homonymous to causatives with the same root (see (71d)) and (72)); an exception is (71c) in which there is no verb *utku-š-tur-*.

- (71) a. *čaraš* i. 'beautiful', ii. 'beautifully' → *čaraš-dər* 'beautifully' (T. 518);
 b. *dəŋna-* 'to hear' → *dəŋna-l-* 'to be heard' (pass.) → *dəŋna-l-dər-* 'aloud' (T. 193–4)
 c. *utku-* 'to go to meet sb' → *utku-š-* 'to meet (each other)'
 → **utku-š-tur-* (intended meaning:) 'to bring together'
utku-š-tur (T. 441) = German *entgegen*
 d. *tut-* 'to squeeze/hold' → *tud-uš-* 'to join/merge'
 → *tud-uš-tur-* 'join/merge sth together', *tud-uš-tur* 'in one, inseparably' (T. 422–3).
- (72) *udur* i. 'against (sth)', ii. 'to meet'
 → *udur-lan-* i. 'to go against sth/resist' ii. 'to be against, object, protest'
 → *udur-lan-əš-* 'to oppose each other'
 → *udur-lan-əš-tər-* 'to oppose sth to sth'
udur-lan-əš-tər i. 'in opposition to sb/sth', ii. 'opposite each other' (T. 434).

An expansion of the suffix *-tur* is *-kula-š-tər/-kəla-š-tər/...* which differs from it in that it derives a limited number of adverbs from nouns, not verbs (Isxakov & Pal'mbax 1961:428), with the meaning of *comparison* (as is known, comparison is a reciprocal concept). This suffix includes the two-component combination *-š-tər* as a semantically fused whole, even within the structure of the adverbs cited above. The genetic relations of *-kula-/kəla/...* are unclear (it is unlikely to be related to the materially identical suffix *-kula /-kəla/...* 'repeatedly and in many places'; this is supported by the fact that in the Todža dialect this suffix has the form *-šəla-š-tər*; cf. *balək-šəla-š-tər* 'like a fish, in a fishlike manner'; cf. *balək šəlaŋ* with the same meaning (Čadamba 1974:95)).

- (73) *kuš* 'bird' → *kuš-kula-š-tər* 'like a bird', 'in a birdlike manner' (T. 267)
oor 'thief' → *oor-gula-š-tər* 'like a thief', 'in a stealthy manner' (T. 323)
ot 'fire' → *ot-kula-š-tər* 'like fire' (T. 326)
sogun 'arrow' → *sogun-gula-š-tər* 'like an arrow' (T. 379)
xat 'wind' → *xat-kəla-š-tər* 'like wind' (T. 471).

4. Diathesis types of constructions with the reciprocal pronoun *bot-bot-tar-ə* 'each other'

4.1 Introductory

The following table contains all the case forms of the reciprocal pronoun for all the three persons (see also (9)). Note that the case endings are preceded by a possessive suffix: *-əvəs* 'our', *-əŋar* 'your' and *-ə* 'their'. As mentioned above, in the 3PL forms the component *-n*

which has no meaning is inserted between the possessive suffix *-ə* and a case suffix unless the latter contains *-n*.

(74)	1PL	2PL	3PL
NOM	<i>bot-bot-tar-əvəs</i>	<i>bot-bot-tar-əŋar</i>	<i>bot-bot-tar-ə</i>
GEN	<i>bot-bot-tar-əvəs-təŋ</i>	<i>bot-bot-tar-əŋar-nəŋ</i>	<i>bot-bot-tar-ə-nəŋ</i>
DAT	<i>bot-bot-tar-əvəs-ka</i>	<i>bot-bot-tar-əŋar-ga</i>	<i>bot-bot-tar-ə-n-ga</i>
ACC	<i>bot-bot-tar-əvəs-tə</i>	<i>bot-bot-tar-əŋar-nə</i>	<i>bot-bot-tar-ə-n</i>
LOC	<i>bot-bot-tar-əvəs-ta</i>	<i>bot-bot-tar-əŋar-da</i>	<i>bot-bot-tar-ə-n-da</i>
ABL	<i>bot-bot-tar-əvəs-tan</i>	<i>bot-bot-tar-əŋar-dan</i>	<i>bot-bot-tar-ə-n-dan</i>
ALL	<i>bot-bot-tar-əvəs-če</i>	<i>bot-bot-tar-əŋar-že</i>	<i>bot-bot-tar-ə-n-če</i>

This section concerns both constructions with this pronoun and a non-reciprocal verb and those in which it appears with suffixed reciprocal verbs.

4.1.1 *The reflexive-distributive meaning of the reciprocal pronoun*

Before we consider constructions with the reciprocal meaning, we shall discuss briefly the distributive meaning i.e. the meaning ‘each (separately)’. It is less common than the reciprocal meaning proper. With regard to this meaning, Tuvan seems to differ from Yakut, Kirghiz, and Karachay-Balkar. A kind of analogy is observed in Japanese where the counterpart reciprocal noun occurs in the same syntactic positions as the Tuvan reciprocal pronoun, namely it appears in any syntactic position excepting, it seems, that of direct object – in this position the proper reciprocal meaning alone is realized (see Alpatov et al., Ch. 42, §2.9.3).

The different case forms of the reciprocal pronoun are distributed between the two meanings as follows: (1) nominative – reflexive-distributive meaning only; (2) accusative – reciprocal meaning only; (3) dative (and possibly other oblique cases) and genitive – reciprocal when used with a reciprocal verb and reflexive-distributive or reciprocal when used with a non-reciprocal verb. In the latter instance the interpretation is not obvious and native speakers hesitate and sometimes contradict each other and even themselves if asked at intervals.

4.1.1.1 *In subject position.* In this function, the reciprocal pronoun appears in the *nominative case* as part of the subject group (75). It is used with the subject proper like an identifying pronoun, compare the English reflexive pronoun in the sentence *Father himself said so*. To be precise, the counterpart of the English *himself* is the nominative case of the reflexive pronoun *bod-u* and *bot-tar-ə* is a counterpart of *themselves* (with a plural subject):

- (75) a. *Ol bod-u onu kamgala-ar.*
 he self-his he.ACC defend-3.NPAST
 ‘He himself defends him.’
- b. *Olar bot-tar-ə onu kamgala-ar.*
 they self-PL-their he.ACC defend-3.NPAST
 ‘They themselves defend him.’

In (75c) the reciprocal pronoun (glossed here as ‘self-self-...’ in agreement with the glossing of the reflexive pronoun) takes the direct object position and has accusative marking. In (75d) *bot-bot-tarə* does not occupy an object position, which is shown by the ungrammaticality of (75f) because the object position is unoccupied and by the artificial, though grammatical, character of (75g) in which the direct object position is taken by the reciprocal pronoun. The meaning of *bot-bot-tar-ə* in (75d, e) differs from that of *bot-tar-ə* in (75b) by the component of distributivity, i.e. ‘each (of the subject referents) separately’.

- c. *Olar bot-bot-tar-ə-n kamgala-ar.*
 they self-self-PL-their-ACC defend-3.NPAST
 ‘They defend each other.’
- d. *Olar bot-bot-tar-ə onu kamgala-ar.*
 they self-self-PL-their he.ACC defend-3.NPAST
 ‘They themselves (each separately) defend him.’
- e. *Olar bot-bot-tar-ə kamgala-ž-ər.*
 they self-self-PL-their defend-REC-3.NPAST
 ‘They themselves (each separately) defend each other.’
- a. **Olar bot-bot-tar-ə kamgala-ar.*
 they self-self-PL-their defend-3.NPAST
 ‘They themselves defend’ (whom?)
- g. *Olar bot-bot-tar-ə bot-bot-tar-ə-n kamgala-ar*
 they self-self-PL-their each.other-PL-their-ACC defend-3.NPAST
 ‘They themselves defend each other.’

Usages of the (75e) type are also possible for the 1PL and 2PL persons:

- h. *Bis bot-bot-tar-əvəs kamgala-ž-ər bis.*
 we self-self-PL-our defend-REC-NPAST 1PL
 ‘We ourselves defend each other.’
- i. *Siler bot-bot-tar-əŋar kamgala-ž-ər siler.*
 you.PL self-self-PL-your defend-REC-NPAST 2PL
 ‘You yourselves defend each other.’

4.1.1.2 *In non-subject positions.* In these cases the reciprocal pronoun occurs most commonly in the dative object and attributive position in which it may have both reciprocal and reflexive-distributive reading; cf. respectively (for comparison, parallel constructions with the reflexive pronoun are given):

- (76) a. *Olar bot-bot-tar-ə-n-ga büzüre-er.*
 they each-other-n-DAT believe-3.PRES
 i. ‘They believe *each himself / themselves*.’
 ii. ‘They believe *each other*.’
- b. *Olar bot-tar-ə-n-ga büzüre-er.*
 they self-PL-their-n-DAT believe-3.PRES
 ‘They believe themselves’ (see also (2e)).

- (77) a. *A bile B bot-bot-tar-ə-nəŋ a”d-ə-n suggar-gan.*
 A and B each-other-GEN horse-their-ACC water-3.PERF
 i. ‘A and B have watered *each his own* horse.’
 ii. ‘A and B have watered *each other’s* horses.’
 b. *A bile B bot-tar-ə-nəŋ a”d-ə-n suggar-gan.*
 A and B self-PL-their-GEN horse-their-ACC water-3.PERF
 ‘A and B have watered their horses.’

(76a) is a “canonical” construction derived from a two-place intransitive and (77a) is a “possessive” construction.

4.1.2 *Relations between suffixed and pronominal reciprocals*

As has been mentioned above, *the reciprocal pronoun most frequently occurs with suffixed reciprocals in texts*, but suffixed reciprocals mostly occur without a reciprocal pronoun. If a suffixed reciprocal is very frequent in speech or it is lexicalized to a greater or lesser degree its pronominal counterpart is not used, as a rule (cf. (78b) which is grammatical and clear but not natural), or it requires special context justifying its use; sometimes they may differ in meaning, as in (79). Generally, pronominal reciprocals seem to be more frequent in everyday speech, but in the case of some verbs naming the most common activities the suffixed form is preferable; thus (78a) is preferable to (78b).

- (78) a. *Olar kuspakta-ž-əp tur-lar.*
 they embrace-REC-CONV AUX-PRES.3PL
 ‘They are embracing’ (cf. (1c)).
 b. *Olar bot-bot-tar-ən kuspakta-p tur-lar.*
 they each-other-ACC embrace-CONV AUX-PRES.3PL
 (same translation).
 (79) a. *Olar bil-č-ir.*
 they understand-REC-3.NPAST
 ‘They understand each other’ (= ‘They are like-minded’, etc.).
 b. *Olar bot-bot-tar-ən bil-ir.*
 they each-other-ACC know-3.NPAST
 ‘They know each other’ (i.e. ‘sth/all about each other’).

The reciprocal pronoun can be related to several coordinated predicates without -š; cf.:

- (80) *Urug-lar bot-bot-tar-ə-n kajga-p, magada-p tur-gan-nar.*
 girl-PL each-other-ACC stare-CONV admire-CONV AUX-PAST-3PL
 ‘The girls stared at and admired each other.’

In some cases, the reciprocal pronoun is used with suffixed reciprocals to avoid ambiguity of the latter; cf. (54b) and the text above. Thus in the following example the reciprocal pronoun serves to exclude the sociative reading ‘to smile together’ (see also (45)):

- (81) *A bile B bot-bot-tar-ə-n-če xülümzür-ž-üp-ken.*
 A and B each-other-n-ALL smile-REC-ASP-3.PERF
 ‘A and B smiled at each other.’

For obscure reasons, certain suffixed reciprocals are preferably used with the reciprocal pronoun. Sometimes, such simultaneous use makes an utterance “milder”; cf. respectively:

- (82) a. *Daržaa bile Arakčaa bot-bot-tar-ə-n makta-ž-əp tur-gan-nar.*
 D. and A. each-other-ACC praise-REC-CONV AUX-PAST-3PL
 ‘Darzha and Arakcha praised each other.’
 b. *Sajana bile Saglaj ol ažal-ga bot-bot-tar-ə-n ažagla-ž-əp tur-gan.*
 S. and S. that work-DAT each-other-ACC use-REC-CONV AUX.3.PERF
 ‘Sajana and Saglaj helped (lit. ‘used’) each other in that work.’

4.2 Subject-oriented constructions

4.2.1 “Canonical” reciprocals

A characteristic feature of these reciprocals is that in the direct object position, i.e. with two-place transitives, the reciprocal pronoun *bot-bodu/bot-bottarə* is relatively rare, while in a non-direct object position, i.e. with two-place intransitives and three-place transitives, it is much more common. As mentioned, *the reciprocal pronoun most commonly occurs with suffixed reciprocals*. In this case it may be omitted, as a rule. Its function is limited to emphasizing the reciprocal meaning (and/or two participants) by explicitly distinguishing it from other possible interpretations (see Section 5).

4.2.1.1 *With two-place transitives.* In reciprocal constructions the pronoun occupies the direct object slot and acquires the accusative marker. The following examples illustrate co-occurrence of the reciprocal suffix and the reciprocal pronoun. So far, we have only three textual examples with the reciprocal pronoun without a suffixed reciprocal (see (84)). Constructions can be formed by the same verbs as in 3.1.1.1.

- (83) a. *Olar bis-ti detki-zin-ner!*
 they we-ACC support-IMP.3-3PL
 ‘Let them help us!’
 b. *Bot-bod-uvus-tu detki-ž-eeli!*
 each-other-our-ACC support-REC-IMP.1DU
 ‘We shall help each other!’
- (84) a. *Ava-zə bile uruu bot-bot-tar-ə-n čokta-j be-er*
 mother-her and daughter each-other-ACC miss-CONV BEN-PART
apar-gan-nar. (SS.)
 begin-PAST-3PL
 ‘Mother and daughter began to miss each other.’
 b. *Az-aš-kan iji kiži bot-bot-tar-ə-n araj dep tə-p al-gan-nar.* (ED.)
 lose-REC-PART two man each-other-ACC hardly find-CONV AUX-PAST-3PL
 ‘The two men who had lost each other found each other with difficulty.’
 c. *Bot-bod-uvus-tu šagga kiir kajga-p al-də-vəs.*
 each-other-our-ACC long.time look-CONV AUX-PAST-1PL
 ‘We looked at each other for a long time.’

- (85) a. *Bot-bod-uŋar-nə kamgala-ž-əp čoru-ŋar!*
 each-other-your-ACC take.care-REC-CONV AUX-IMP.2PL
 ‘Take care of each other!’
- b. *Kiži-ler ənčaar bot-bot-tar-ə-n megele-ž-ip, ojna-p-baštaktan-č-ər*
 man-PL thus/so each-other-ACC deceive-REC-CONV play-CONV-joke-REC-PART
apar-gan. (K-L.)
 become-3.PERF
 ‘Thus people began joking between themselves, deceiving each other.’
- c. *Az-a ber-gen kiži-ler bot-bot-tar-ə-n kajgər-ž-ip,*
 get.lost-CONV AUX-PART man-PL each-other-ACC call-REC-CONV
medeele-ž-ip tur-gan. (AD.)
 inform-REC-CONV AUX-3.PERF
 ‘Having lost their way, the people called to each other letting each other know (about themselves).’
- d. *Xej čuve dijin, kiži-ler bot-bot-tar-ə-n öl-ür-ž-ur.* (KK.)
 man-PL each-other-ACC die-CAUS-REC-3.NPAST
 ‘This is all in vain, only people are killing each other.’
- e. *Iji bod-u kaŋ-kadək, bot-bot-tar-ə-n əlap bil-č-ir.* (K-L.)
 two self-their quite-well each-other-ACC good know-REC-3.NPAST
 ‘Both of them are quite well, (they) know each other well.’
- f. ... *bot-bot-tar-ə-n bil-iš-pes ög-ler tur-ar ...* (K-L.)
 each other-ACC know-REC-NEG.PART family-PL AUX-3.NPAST
 ‘... there are families who don’t know each other.’
- g. *Kiži-ler čüge bot-bot-tar-ə-n öl-ür-ž-ür čüvel?* (AD.)
 man-PL why each-other-ACC die-CAUS-REC-3.NPAST Q
 ‘Why do people kill each other?’
- h. *Demir bile Bajərmaa bot-bot-tar-ə-n ol deš čemele-š-pe-en.* (AD.)
 D. and B. each-other-ACC this because.of reproach-REC-NEG-3.PERF
 ‘Demir and Bajirmaa did not reproach each other because of this.’
- i. ... *bot-bot-tar-ə-n čemger-ž-ip olur-ar kögebuga-lar ...* (AD.)
 each-other-ACC feed-REC-CONV AUX-PART pidgeon-PL
 ‘... pidgeons feeding each other ...’
- j. [*Bis*] *bot-bod-uvus-tu ajtər-ž-əp ...* (AD.)
 we each-other-our-ACC ask-REC-CONV
 ‘[We]... asking each other ...’
- k. *Bot-bod-uvus-tu šagga kiir kajga-ž-əp al-də-vəs.* (AD.)
 each-other-our-ACC long.time look-REC-CONV AUX-PAST.1PL
 ‘We looked at each other for a long time.’
- l. *Iji ool... bot-bot-tar-ə-n čug-dun-č-u ber-gen-ner.*
 two boy each-other-ACC wash-REFL-REC-CONV AUX-PERF-3PL
 ‘Two boys began washing each other.’

4.2.1.2 *With two-place intransitives.* The reciprocal pronoun takes the place of an oblique object and acquires the same case marking:

- (86) a. *Olar ada-sə-n-ga büzüre-er.*
 they father-their-n-DAT believe-3.NPAST
 ‘They believe their father.’

- b. *Olar bot-bot-tar-ə-n-ga büzüre-ž-ir.*
 they each-other-*n*-DAT believe-REC-3.PRES
 ‘They believe each other.’

As in the previous case, the reciprocal pronoun occurs most commonly with suffixed reciprocals. Needless to say, the same verbs are used here as in 3.1.1.2, and those which cannot take the reciprocal suffix (see 3.3).

- (87) a. *Olar bot-bot-tar-ə-n-dan bižiirge-ž-ip tur-lar.*
 they each-other-*n*-ABL feel.shy-REC-CONV AUX-PRES.3PL
 ‘They feel shy before each other.’
- b. *Amədəral bot-bot-tar-ə-n-ga büzüre-š-pes kəldər öödred-ip*
 life each-other-*n*-DAT believe-REC-NEG.NR for teach-CONV
ka-an. (KK.) (*ka-an* < **kag-gan*; see 2.1)
 AUX-PERF
 ‘Life ... has taught [people] not to believe each other.’
- c. “... *Bot-bot-tar-ənar-že kör-ž-üp, oška-ž-əp kör-üner.*” (DB.)
 each-other-ALL look-REC-CONV kiss-REC-CONV look-IMP.2PL
 ‘Look at each other, kiss each other.’ (*kör-üner* expresses polite request).

4.2.2 “Indirect” reciprocals

The reciprocal pronoun occupies the indirect object position and takes the suffix of the relevant case (see (3)). As with other suffixed reciprocals, the reciprocal pronoun can be omitted. In this type of constructions the same verbs can be used as in 3.1.1.3.

In the following examples the reciprocal pronoun is the only marker of reciprocity:

- (88) a. *Aalčə-lar bot-bot-tar-ə-n-če baš-tar-ə-n soqaŋna-t-kəla-an.* (ED.)
 guest-PL each-other-*n*-ALL head-PL-their-ACC nod-CAUS-ITER-3.PERF
 lit. ‘The guests nodded their heads to each other.’
- b. *Iji anəjak kiži čərlə-p tur-a, bot-bot-tar-ə-n-ga čügə eki-ni*
 two young man part-CONV AUX-CONV each-other-*n*-DAT only good-ACC
kü ‘ze-er di-š-ken-ner. (SS.)
 wish-PART say-REC-PERF-3PL
 ‘The young men promised on parting that they would wish each other only luck.’
- c. *əndəg xarə-nə olar bot-bot-tar-ə-n-dan nege-er-daa użurlug.* (KK.)
 such reply-ACC they each-other-*n*-ABL demand-PART-INTS must
 ‘They must demand such a reply from each other.’
- d. ... *magadaan-ə-n bot-bot-tar-ə-n-ga ilered-ip tur-gan-nar.* (ET.)
 admiration-their-ACC each-other-*n*-DAT show-CONV AUX-PAST-3PL
 ‘[They] showed their admiration to each other.’
- e. *Oruk-ka eki čoru-ur-u-n olar bot-bot-tar-ə-n-ga kü* ‘ze-p
 road-DAT well go-PART-ACC they each-other-*n*-DAT wish-CONV
ka-an-nar. (cf. *ka-an* in (87b))
 AUX-PERF-3PL
 ‘They wished each other godspeed.’
- f. *Edik bile Sara bot-bod-u-n-dan ol töögü-nü čəžər-əp-kan-nar.*
 E. and S. each-other-*n*-ABL this event-ACC conceal-ASP-PERF-3PL
 ‘Edik and Sara concealed this story from each other.’

In (89) the reciprocal pronoun co-occurs with suffixed reciprocals (see also (4c)):

- (89) a. *Ava-škə-lar bot-bod-u-n-dan čünü-daa čazər-əš-pa-s.*
 mother-COLL-PL each-other-*n*-ABL anything conceal-REC-NEG-3.NPAST
 ‘Mother and her children do not conceal anything from each other.’
- b. *Koza-lar bot-bot-tar-ə-n-ga sigen kezi-š-ken-ner.*
 neighbour-PL each-other-*n*-DAT hay mow-REC-PERF-3PL
 ‘The neighbours mowed hay for each other.’
- c. *Sveta bile Olja telefon-ga bot-bot-tar-ə-n-ga bajər čedir-ž-ip,*
 S. and O. telephone-DAT each-other-*n*-DAT greetings send-REC-CONV
kadə-ə-n ajtər-əš-kan-nar.
 health-their-ACC ask-REC-PERF-3PL
 ‘Sveta and Olja sent each other greetings on the telephone and asked each other about their health.’
- d. *Kuda-škə-lar bot-bot-tar-ə-n-ga aas-kežik-ti kü”ze-ž-ken-ner.*
 in.law-COLL-PL each-other-*n*-DAT happiness-ACC wish-REC-PERF-3PL
 ‘The in-laws wished each other happiness.’
- e. *Ool-dar bot-tar-ə-n-če čoçakta-an xar-lar okta-ž-əp tur-gan.* (K-L.)
 child-PL self-*n*-ALL crumple-PART snow-PL throw-REC AUX-3.PERF
 ‘Children threw snow-balls at each other.’
- f. *Bajərlal xün-ner-i-n-de ög-büle-niñ kežigün-ner-i bot-bot-tar-ə-n-ga*
 holiday day-PL-its-*n*-LOC family-GEN member-PL-its each.other-*n*-DAT
bajər čedir-ž-ip, belek-selek sun-č-ur-u čaagaj čančal. (ET.)
 greetings deliver-REC-CONV present hand-REC-PART-their good tradition
 ‘[There is] a nice tradition [according to which] on holidays members of a family send each other greetings and give each other presents.’

Sentence (89h) is a special case which is not quite clear: the transitive reflexive verb *čaš-tən-* ‘to splash sth over oneself’ differs from the base *čaš-* ‘to splash sth (over sb/sth)’ in that it cannot take an object in the allative case but despite this it is used reciprocally with both the reciprocal suffix and reciprocal pronoun; cf.:

- g. *[Olar] ... bot-bot-tar-ə-n-če sug čaš-č-əp ...* (ET.)
 they each-other-*n*-ALL water splash-REC-CONV
 ‘[They] ... splashing water over each other ...’
- h. *[Olar] ... bot-bot-tar-ə-n-če sook sug čaš-tən-č-əp ...* (K-L.)
 they each-other-*n*-ALL cold water splash-REFL-REC-CONV
 ‘[They] ... splashing water over each other’; cf. the underlying structures:
- g’. *Ol olar-že sook sug čaž-əp tur-gan.*
 he they-ALL cold water splash-CONV AUX-3.PERF
 ‘He splashed cold water over them.’
- h’. *Ol [*olar-že] sook sug čaš-tən-əp tur-gan.*
 he they-ALL cold water splash-REFL-CONV AUX-3.PERF
 ‘He (*over them) splashed cold water over himself.’

4.2.3 Benefactive reciprocals

The following examples illustrating this type also contain the reciprocal pronoun in the dative case:

- (90) a. *Olar bot-bot-tar-ə-n-ga bažəŋ-nar tud-up al-gan-nar.*
 they each-other-*n*-DAT house-PL build-CONV S.BEN-PERF-3PL
 ‘They have built houses for each other.’
- b. *Olar bot-bot-tar-ə-n-ga nom-nar sad-əp a-p tur-ar.*
 they each-other-*n*-DAT book-PL buy-CONV S.BEN-CONV AUX-3.NPAST
 ‘They buy books for each other.’

4.2.4 “Possessive” reciprocals

In this diathesis type the possessive attribute of the underlying construction is replaced by the genitive case of the reciprocal pronoun. In most cases, the latter can be omitted if it is dependent on a suffixed reciprocal. “Possessive” reciprocals seem to be less common in Tuvan than in Yakut and Kirghiz. The same verbs may be used in this way as the verbs in 3.1.3. (91b) is an example with the reciprocal pronoun only and (92b) and (93) are examples with both a suffixed reciprocal and a reciprocal pronoun:

- (91) a. *Ol ooŋ xan-ə-n tök-ken.*
 he his blood-his-ACC shed-3.PERF
 ‘He has shed his blood.’
- b. *Olar bot-bot-tar-ə-nəŋ xan-ə-n tök-ken-ner.*
 they each-other-GEN blood-their-ACC shed-PERF-3PL
 ‘They have shed each other’s blood.’
- (92) a. *Dima Saša-nəŋ a”d-ə-n suggar-gan.*
 D. s.-GEN horse-his-ACC water-PERF.3
 ‘Dima has watered Sasha’s horse.’
- b. *Dima bile Saša bot-bot-tar-ə-nəŋ a”t-tar-ə-n suggar-əš-kan.*
 D. and S. each-other-GEN horse-PL-their-ACC water-REC-3.PERF
 ‘Dima and Sasha have watered each other’s horses.’
- (93) a. *Iji kiži bot-bot-tar-ə-nəŋ bodal-dar-ə-n sös-domak čokka*
 two man each-other-GEN thought-PL-their-ACC word-speech without
öttür bil-č-ip tur-gan. (KL.)
 through understand-REC-CONV AUX-3.PERF
 ‘The two men understood each other (lit. ‘each other’s thoughts’) without words.’
- b. *Ež-iški-ler čar-l-əp čoru-ur-da bot-bot-tar-ə-nəŋ*
 friend-COLL-PL part-PASS-CONV go-FUT.LOC each-other-GEN
adres-ter-i-n solu-š-kan-nar. (SS.)
 address-PL-their-ACC exchange-REC-PERF-3PL
 ‘On parting the friends exchanged their addresses.’
- c. *Tolja bile Ivan bot-bot-tar-ə-nəŋ xol-dar-ə-n bas-č-əp ojna-p*
 T. and I. each-other-GEN hand-PL-their-ACC press-REC-CONV play-CONV
tur-gan-nar.
 AUX-PERF-3PL
 ‘Tolja and Ivan pressed each other’s hands playing (played armwrestling).’
- d. *Olar bot-bot-tar-ə-nəŋ dəl-ə-n bil-iš-pes.*
 they each-other-GEN language-their-ACC understand-REC-NEG.3.NPAST
 ‘They do not understand each other’s language.’

4.3 *Nomina actionis*

Nominalization does not involve any changes in the case form of the reciprocal pronoun, and a noun of action acquires a possessive marker which agrees in person with the reciprocal pronoun. The base verb and its nominalization occur both with and without the reciprocal suffix (cf. *bil[-č]-ir* and *bil[-č]-ir-i-n*).

- (94) a. *Olar bot-bot-tar-ə-n bil[-č]-ir.*
 they each-other-ACC know-REC-3.NPAST
 ‘They know/understand each other.’ (cf. also (46e)).
- b. *Olar bot-bot-tar-ə-n doluzu-bile bil[-č]-ir-i-n če”d-ip*
 they each-other-ACC completely know-REC-PART-their-ACC achieve-CONV
al-da. (M1. 67)
 AUX-3.PAST
 ‘They achieved complete mutual understanding.’

By way of referring to 3.5.1.2, I wish to point out that in (94b) instead of the collocation *bot-bot-tar-ə-n bil[-č]-ir-i-n* the single word *bil-č-iiškin-i-n* with the same meaning can be used; moreover, the informants claim it is much more preferable than the collocation. In (95b) the verbal form in *-ar* can be replaced by the noun *büzüre-ž-ilge*:

- (95) a. *Olar bot-bot-tar-ə-n-ga büzüre-ž-ir.*
 they each-other-n-DAT trust-REC-3.NPAST
 ‘They trust each other.’
- b. *Olar bot-bot-tar-ə-n-ga büzüre-ž-ir-i-n če”d-ip al-da.* (M1. 67).
 they each-other-n-DAT trust-REC-PART-their-ACC achieve-CONV AUX-3.PAST
 ‘They achieved mutual trust.’

The reciprocal pronoun is also used with deverbal nouns which cannot be descended from suffixed reciprocals (cf. (53) and the preceding text); e.g.:

- (96) a. *ənak* ‘beloved’ → *ənak-šə-* ‘to love/fall in love’ → *ənak-šə-l* ‘love’
 → b. *bot-bot-tar-ə-n-ga ənak-šə-l* ‘mutual love’ (M2. 30).

4.4 Object-oriented constructions

These constructions are formed in a standard way by means of causativization; cf. (3b) and (97):

- (97) *Baškə-lar öörenikçi-ler-ge nom-nar-nə bot-bot-tar-ə-n-če damičət-tər-kan-nar.*
 teacher-PL pupil-PL-DAT book-PL-ACC each-other-n-DAT pass-CAUS-PERF-3PL
 ‘Teachers told the pupils to pass the books to each other.’

5. Polysemy of the suffix -š

5.1 Introductory

In this section I will consider meanings both closely related to the reciprocal and often accompanying it in various languages, and less closely related or distant meanings. Realization of one or another of these meanings may be dependent on the semantic and syntactic properties of the base verb and also on context.

In certain cases a sociative or assistive meaning is not possible probably due to the unusual character of the intended situation (cf. *deg-* ‘to touch’ → *de-eš-* (intended meanings:) *‘to help to touch’, *‘to touch sth together’) and/or to the frequent use of the same form in the reciprocal meaning (*de-eš-* ‘to touch each other’ (T. 151); cf. *Olar-nəŋ xol-dar-a deg-ž-i ber-gen*. ‘Their hands touched’). In other words, the given form is used in the reciprocal sense only. On the other hand, it is not uncommon for a derivative in -š to have all the four principal meanings (cf. (2b)). Here are a few common types of polysemy:

1. If the subject alone is human (and the object, which is retained in the derived construction, is not human and therefore cannot be co-referential with the subject) the reciprocal meaning in the derivative is not possible (this is a common trivial restriction):

- (98) a. *aajla-* ‘to tidy up (a room)’
 → b. *aajla-š-* i. ‘to tidy up (a room) together’ (sociative)
 ii. ‘to tidy up (a room) with sb’ (comitative)
 iii. ‘to help sb tidy up (a room)’ (T. 26) (assistive)

2. If both subject and object of the underlying construction are human, the reciprocal meaning is also possible alongside the above set of meanings:

- (99) a. *üpte-* ‘to rob sb’
 → b. *üpte-š-* i. ‘to rob *each other*’ (“canonical” reciprocal)
 ii. ‘to rob sb *together*’ (sociative)
 iii. ‘to rob sb *with sb*’ (comitative)
 iv. ‘to *help* sb rob sb’ (T. 450) (assistive)
- (100) a. *čazər-* ‘to conceal sth (from sb)’ (also ‘to cover’)
 → b. *čazər-əš-* i. ‘to conceal sth from *each other*’ (“indirect” reciprocal)
 ii. ‘to conceal sth *together*’ (sociative)
 iii. ‘to conceal sth *with sb else*’ (comitative)
 iv. ‘to *help* sb conceal sth’ (assistive)
 v. ‘to help *each other* to conceal sth’ (T. 85) (reciprocal of assistive)

3. Some actions rule out the assistive meaning; e.g.:

- (101) a. *boda-* ‘to think over/ponder sth’
 → b. *boda-š-* i. ‘to think over/ponder sth *together*’ (sociative)
 ii. ‘to think over/ponder sth *with sb*’ (T. 107) (comitative)

4. The reciprocal form of certain one-place and potentially two-place intransitives (usually verbs of speech (indicating manner) or sound emission) may render the sociative and reciprocal meaning which are sometimes difficult to distinguish from one another,

because sound emission by humans and animals presupposes the presence of someone who perceives them; e.g.:

- (102) a. *ximiren-* 'to grumble/mumble'
 → b. *ximiren-iš-* i. 'to grumble/mumble (*of many*)' (sociative)
 ii. 'to grumble at *each other*' (T. 477) (reciprocal)

Alongside these regular cases of polysemy, derivatives in *-š* may have lexicalized meanings which may retain the reciprocal component or be non-reciprocal. Thus, for instance, *sana-š-* (← *sana-* 'to count sth') has the standard reciprocal and non-reciprocal meanings i. 'to count each other (by turns)', ii. 'to count sth together', iii. 'to count sth with sb else', iv. 'to help sb count sth' and also the lexicalized meaning 'to settle accounts with sb' (T. 367).

5.2 The sociative meaning

The sociative sense, when all the participants are named by the subject, is usually defined in the dictionaries as follows:

1. 'together', 'all together', 'jointly';
2. 'of many (at least several);
3. 'simultaneously' (about the actions of the subject referents).

As in other Turkic languages these are highly approximate characteristics, especially with regard to sociatives derived from intransitives. In transitive sociatives, the sociative meaning is more clear-cut. By definition, in sociatives both or more participants are encoded by the subject (needless to say, the number of participants also increases in the comitative and assistive usages). Sociative derivation does not involve any valency change, though it implies a multiple subject referent, in contrast to comitatives and assistives which increase valency. As often as not (probably in most cases) the sociative meaning is not rendered in the English translations (cf. (106)), to avoid unnatural emphasis on it (cf. analogous cases of translating the Slavic aspects into English). In a number of cases, sociative forms are used to render specific situations; thus, for instance, (*xon-* 'to spend a night' →) *xon-uš-* is not used in the sense 'to spend a night together', but it implies that one participant is afraid of spending a night alone and the other participant helps him by staying with him for the night.

In Tuvan, the meaning 'simultaneously', contrary to sociatives of some other languages, can refer to a series of successive actions within one situation, e.g.:

- (103) *A bile B oočurlap arla-ž-əp tur-lar.*
 A and B by.turns sing-REC-CONV AUX-3PL
 'A and B are singing by turns.'

5.2.1 Sociatives derived from intransitives

Below are given lists of the sociative form of verbs, (most of those registered in T.) and the translations given in this dictionary, in those cases when the dictionary does not supply an explanation, the meaning of the underlying verb alone is given: the reader may add the meaning in question (any of those listed in the above paragraph) himself; the expla-

nations in brackets that follow reference to the dictionary or the translation are added by the author.

- (104) a. *Səldəs-tar čiveŋejn-ip tur-lar.*
 star-PL twinkle-CONV AUX-PRES.3PL
 ‘The stars are twinkling’ (stating a plain fact).
 b. *Səldəs-tar čiveŋejn-č-ip tur-lar.*
 star-PL twinkle-REC-CONV AUX-PRES-3PL
 ‘The stars are twinkling’ (‘together’, ‘to each other’, ‘as if they were alive’).

As often as not, sociatives are derived from verbs of motion, sound and light emission, etc.

- (105) *algər-əš-* ‘to shout (simultaneously, together, of many)’ (T. 53)
čirile-š- ‘to cry/squeak ...’ (T. 535) (of many)
čiveŋne-š- ‘to twinkle (of stars, in different places)’ (T. 531)
deškile-š- ‘to romp/frisk ...’ (of animals)
karaŋna-š- ‘to gleam/appear briefly (of sth black) ...’
kattər-əš- ‘to laugh together with sb’ (T. 232) (of many together)
kujtula-š- ‘to cackle (of several hens)’ (T. 263)
kəlaŋna-š- ‘to sparkle/glisten ...’ (of many together)
kəlašta-š- ‘to go/walk together’ (T. 271)
mižire-š- ‘to chirp ...’ (T. 295)
mööle-š- ‘to moo (of many cows simultaneously)’ (T. 301)
məžərə-š- ‘to twitter ...’ (T. 305)
səgər-əš- ‘to whistle ...’ (of many)
səldərə-š- ‘to rustle ...’ (simultaneously)
səŋ-əš- ‘to go in (some space, of many)’ (T. 397)
šimeerge-š- ‘to make noise together (of many)’
tura xalə-š- ‘to stand up together simultaneously’
ulu-š- ‘to howl ...’ (of many)
xalə-š- ‘to run (simultaneously, of many)’ (T. 465)
ximiren-iš- i. ‘to mutter/mumble (of many)’
 ii. ‘to grumble at each other’ (T. 477)
xögle-š- arch. ‘to make merry together’ (T. 487)
xolže-š- arch. ‘to fuss (of many)’ (T. 489)
əgla-š- arch. ‘to cry/weep (of several persons)’ (T. 591)
ərļa-š- ‘to sing together/in chorus’ (T. 600)
əəla-š- ‘to whimper/moan ...’ (T. 602)
əətta-š- ‘to make noise/shout (of many)’ (T. 602) (of many together).
- (106) a. *ənaar xem kežildir börü-ler ulu-š-kan.* (AD.)
 there river across wolf-PL howl-REC-3.PERF
 ‘There, across the river, wolves howled.’
 b. *Bis oŋ soondan kəlasta-ž-əp olur bis.* (AD.)
 we he.ABL behind walk-REC-CONV AUX.PRES 1PL
 ‘We are walking behind him.’
 c. *Čük-čük-ten tabagan-nar čiriŋejn-č-ip-le egele-en.* (KK.)
 side-side-ABL marmot-PL cry-REC-CONV-INTS begin-3.PERF
 ‘The marmots began to whistle on all sides.’

- d. *Kuš-tar čagə baž-ə-n-da məžərtkaj-n-č-əp or-gan-nar.*
bird-PL pole top-his-n-LOC chirp-REC-CONV AUX-PAST-3PL
'Birds perched on the pole chirping' (as if conversing).
- e. *Sug kədə-ə-n-ga maŋna-ž-əp kel-geš, ənda balək-tar*
river bank-his-n-DAT run-REC-CONV come-CONV there fish-PL
karaŋna-š-kan-ə-n ürgülčü kö-ör bis. (KK.)
flash-REC-PART-their-ACC constantly look-NPAST 1PL
'We used to run to the river bank and look at the fish flashing [in the water].'
- f. *Anaj, xuragan aal dolgandər deškile-ž-ip tur-gan.*
kid lamb house around frisk-REC-CONV AUX-3.PAST
'Kids and lambs were frisking around the house.'
- g. *Urug-lar xenerten algər-ž-əp, əgla-ž-əp egele-en.*
child-PL suddenly shout-REC-CONV cry-REC-CONV begin-3.PERF
'Suddenly the children began to shout and cry.'
- h. *Šuptu tura xalə-š-kan-nar.*
all rise jump-REC-PERF-3PL
'All of them jumped up together.'

The dictionary definition of the form *səŋ-əš-* as 'to go in (some space, of many)' (T. 397) does not reflect the automatic use of this form if many participants are involved. On the same page, the following example is cited:

- i. *Bo zal-ga bir muŋ kiži səŋ-a be-er.*
this hall-DAT one thousand man go.in-CONV AUX-3.NPAST
'This hall seats a thousand people.'

The use of the sociative form here may be motivated by a desire to stress the multitude of participants in this situation instead of neutrally stating the fact by means of the base form. Thus, in the following instance there are only four participants, and the *-š-* form may imply, among other things, that the car is very small for this number.

- j. *Bo mašina-ga dört kiži səŋ-č-ər.*
this car-DAT four man go.in-REC-3.NPAST
'This car seats four persons.'

5.2.2 Sociatives derived from transitives

Unlike most of intransitive sociatives, transitive ones may often be interpreted as assistives and comitatives, and some even as reciprocals. Here is a list of sociatives with definitions from the *Tuvan-Russian Dictionary* (T), with the meanings added by the author of this paper.

- (107) *agla-š-* 'to bring (prey) to bay together' (T. 35); also 'to help...'
al-əš- i. 'to take sth together', ii. 'to take sth from each other' (T. 56)
analizte-š- 'to analyze together' (T. 60)
a"sta-š- 'to clean/tidy sth up together' (T. 78)
ažəgla-š- 'to use sth together' (T. 41)
biži-š- 'to write sth together' (T. 101); i. 'to help ...', ii. 'to write to each other'
boda-š- 'to think over sth together' (T. 107); also 'to think of each other'
bəžər-əš- 'to bake sth together', also 'to help sb bake sth' (T. 129)

<i>da-aš-</i>	‘to make a raft together’, also ‘to help sb make a raft’ (T. 141)
<i>kamgala-š-</i>	‘to defend sth together’, also ‘to defend each other’ (T. 223); ‘to help ...’
<i>kərgə-š-</i>	‘to shear sheep together’, also ‘to help sb shear sheep’ (T. 279)
<i>megele-š-</i>	‘to deceive sb together’, also ‘to deceive each other’
<i>oorla-š-</i>	‘to steal sth together’, ‘to steal sth from each other’ (T. 323); ‘to help...’
<i>sal-aš-</i>	‘to put down/place (together) sth’, also ‘to help sb put sth down’ (T. 365)
<i>sana-š-</i>	‘to count together’, also ‘to help count’ (T. 367)
<i>septe-š-</i>	‘to mend/fix sth together’, also ‘to help sb mend/fix sth’ (T. 373)
<i>silgi-š-</i>	‘to shake sth [out] together’, ‘to shake each other (in wrestling)’ (T. 376); also ‘to help to shake sth’
<i>šü-üš-</i>	‘to collate sth together’ (T. 583)
<i>tarə-š-</i>	‘to plough soil together’, also ‘to help sb plough’ (T. 408)
<i>uzutka-š-</i>	‘to exterminate sb together’, also ‘to exterminate each other’ (T. 437); also ‘to help exterminate’
<i>üde-š-</i>	‘to see sb off together’ (T. 443); ‘to help see sb off’, ‘see each other off’.

- (108) Olar *sal dag-ž-əp tur-lar.* (T. 141)
 they raft make.raft-REC-CONV AUX-3PL
 ‘They are making a raft together.’

There is a lexical sociative (this seems to be an extremely rare phenomenon cross-linguistically) whose *-š* form has the same meaning as the base verb: *emigle-* ‘to attack sb jointly’ – *emigle-š-* i. (same), ii. ‘to help sb’ (sic! – K.K.) (T. 613); another lexical sociative is *xojgaš-* ‘to sleep together’ (T. 479): it contains the reciprocal suffix on a bound stem (there is a form *xojgar-* ‘to let/take sb into one’s bed’ (T. 479) with an unproductive causative suffix; note that *udu-* ‘to sleep’ (T. 438) does not have a suffixed sociative form).

- (109) a. *Bičii uru-u-n ava-zə xojgar-əp al-də.*
 little child-her-ACC mother-her let.sleep-CONV AUX-PAST.3
 ‘Mother slept together with her little daughter’, ‘... let her daughter into her bed.’
 b. *Bičii urug-bile ava-zə xojgaž-əp al-də.*
 little child-with mother-her sleep.together AUX-PAST.3
 ‘Mother slept together with her daughter.’

5.2.3 Restrictions on derivation of sociatives in *-š*

There seem to be more restrictions on sociative formation in Tuvan than in Yakut. There are restrictions on verbs which pragmatically seem to allow it, e.g. verbs meaning ‘to hunt’, ‘to fish’, etc.

The most numerous group comprises intransitives denoting uncontrolled actions, e.g. the following lexical-semantic groups:

(a) verbs denoting natural phenomena, e.g. *nogaarar-* ‘to be/look green’, *bulutta-* ‘to be clouded over’, etc.;

(b) verbs denoting acquisition of a quality or feature, e.g. *iri-* ‘to go sour’, *dadar-* ‘to rust’, etc.;

(c) verbs denoting changes of psychological or physical state that do not depend on human will, e.g. *ar-* ‘to grow thin’, *semiri-* ‘to grow fat’, *aarə-* ‘to be ill’, *ottu-* ‘to awaken’, *buuk-* ‘to languish’, *albəsta-* ‘to go mad’, *eziri-* ‘to become drunk’, etc.;

(d) verbs expressing actions which cannot as a rule be performed collectively, in a group (but this does not mean they cannot be used with a plural subject), e.g. *božu-* ‘to give birth’ (of a woman), *törü-* ‘to give birth’ (of animals), *bəzaala-* ‘to calf’; *mög-* ‘to throw off (a rider)’, *kudurukta-* ‘to grasp by the tail’, *dargala-* ‘to be a boss’, *baškəla-* ‘to teach’, *bədaala-* ‘to eat soup’, *bəštakta-* ‘to make/eat cheese’, *aragala-* ‘to drink wine’, *amza-* ‘to taste sth’, *duza-* ‘to salt’, *durgunna-* ‘to run away/hide/desert’, *kulažəla-* ‘to measure in sagènes’, *kilde-* ‘to weigh’, *örümne-* ‘to drill’, *kada-* ‘to nail’, *čətkile-* ‘to fish with a net’, *dagala-* ‘to shoe (a horse)’, *šoočala-* ‘to padlock’, *xomusta-* ‘to play the homus’, *čadaganna-* ‘to play the chadagan’, *sagə-* ‘to observe (order, etc.)’, etc.

Some changes may be noted in the formation of sociatives; thus Katanov (1903:533) mentions the sociative verbs *či-š-* ‘to eat together’ and *iš-iš-* ‘to drink together’ which have gone out of use in modern Tuvan. Some of the listed verbs do have a form in *-š* but it has an assistive meaning instead of the sociative: *kilde-* ‘to weigh’, *örümne-* ‘to drill’, *kada-* ‘to nail’.

There is also a group of verbs whose meaning allows or even implies a collective action but they do not form sociatives: *aŋna-* ‘to hunt’, *baləkta-* ‘to fish’, *diiŋne-* ‘to hunt squirrels’, *möögüle-* ‘to gather mushrooms’, etc. Here also belong verbs denoting playing games: *saizanakta-* ‘to play mother-daughter’, *oĵtulaašta-* ‘to participate in public merrymaking (in traditional Tuva)’, *közerle-* ‘to play cards’, *šədəraala-* ‘to play chess’, *futbolda-* ‘to play football’, *xaakta-* ‘to ski’, *tenniste-* ‘to play tennis’, and also verbs like *orukta-* ‘to go/ride along a road’, *tajgala-* ‘to go to the taiga’, *xoorajla-* ‘to go to town’, *avtobusta-* ‘to go by bus’, *okta-* ‘to throw’ (in the figurative sense ‘to drop (e.g. studies)’), etc.

The sociative sense can be expressed on these verbs lexically, by means of the adverb *kadə* ‘together’, ‘next to’ (but in most cases it cannot replace the suffix *-š* in the sociative sense, for instance in the intransitive sociatives listed in (105)). Compare:

- (110) a. *Olar kadə adəg-nə aŋna-ar.*
 they together bear-ACC hunt-3.NPAST
 ‘They hunt bears together.’
 b. *Maadər bile Sarəg-ool ööredilge-zi-n kadə okta-p-kan.*
 M. and S. studies-their-ACC together drop-ASP-3.PERF
 ‘Madyr and Saryg-ol dropped their studies together.’

Note that this adverb can combine with assistives; e.g.:

- c. *Bis akə-m-ga kadə sigen kes-č-ip ber-ip tur bis.*
 we elder.brother-my-DAT together hay mow-REC-CONV O.BEN-CONV AUX 1PL
 ‘We help my elder brother together to make hay.’

5.3 The comitative meaning

Unlike the sociative meaning, in which all the participants are equally involved in an action, the comitative meaning implies that the subject referent takes part in an action initiated by another party which may be named by a non-subject or remain unnamed though always implied. Thus, unlike in the sociative, the subject may be singular. The presence of

the comitative sense is shown by the fact that comitatives do not combine with the adverb *čaaskan* ‘singly, alone’. Sentence (111d) is wrong because it is contradictory. Compare:

- (111) a. *Ol čaaskaan ərla-p tur.*
 he alone sing-CONV AUX.3.PRES
 ‘He is singing alone.’
- b. *Olar ərla-ž-əp tur-lar.*
 they sing-REC-CONV AUX.PRES-3PL
 ‘They are singing together.’ (sociative)
- c. *Ol ərla-ž-əp tur.*
 he sing-REC-CONV AUX.3.PRES
 ‘He is singing with someone else.’ (comitative)
- d. **Ol čaaskaan ərla-ž-əp tur.*
 he alone sing-REC-CONV AUX.3.PRES
 lit. ‘He is singing alone with someone else.’

It may be noted in passing that in contrast to comitative constructions, reciprocal constructions with the subject in the singular, like (111c), sound incomplete, as a rule, cf.:

- (112) **Ava-m kuspakta-ž-əp tur.*
 mother-my embrace-REC-CONV AUX.3
 ‘My mother is embracing (with whom?).’

If there is no indication of a co-participant, or if it is named by a postpositional phrase with *-bile*, a construction with a verb in *-š* is usually interpreted as comitative, i.e. that the subject referent does not act alone but with a second party. In these cases the assistive reading is also possible (see (2)). If the co-participant is not mentioned, a plural subject referent is commonly implied, whose naming is irrelevant for the utterance. Overt expression of the comitative meaning in English translations usually sounds too heavily stressed as something very important, because it has to be explicated by a phrase, while in the original it is not stressed due to its expression by means of the suffix.

The co-participant of a comitative action is usually denoted (if at all) by a noun with the postposition *-bile* ‘with’. This construction is synonymous to that with a suffixed comitative. The adverb *kada* ‘together’ (also ‘neighbour’) is usually used in these cases.

- (113) *Doržu-bile kada kel-di-m.* (T. 103)
 D.-with together come-PAST-1SG
 ‘I came together with Dorju.’

The following examples illustrate the use of comitative constructions. The sentences with a plural subject may also be interpreted as sociative, and those with a singular subject as assistive. The assistive interpretation can be excluded by the use of the auxiliary *al-* with the subject-oriented benefactive meaning (its lexical meaning is ‘to take’) in the form of a final verb or converb *ap* (< *al-əp*), as in (114f).

- (114) a. *Bujan bile Anaj-Kara čügle daš ašta-š-kan-nar.* (KK.)
 B. and A.K. only stone remove-REC-PERF-3PL
 ‘Bujan and Anaj-Kara (together with sb else) were only removing the stones.’

- b. *Xurbe arək kas-č-əp, čer suggar-ž-əp tur-gan.* (KK.)
 X. canal dig-REC-CONV soil water-REC-CONV AUX-3.PAST
 ‘Xurbe (together with sb else) dug a canal, watered the soil.’
- c. *Xöj öreeldig bažəŋ tut-č-up tur-du-m.* (ED.)
 I flat house make-REC-CONV AUX-PAST-1SG
 ‘I built (together with other people) apartment houses.’
- d. *Ertine Šagaan-Arəg xooraj-nə tut-č-up tur-ar.*
 E. Sh. town-ACC make-REC-CONV AUX-3.NPAST
 ‘Ertine builds (with all the people) the town of Shaganar.’
- e. *Töreen čurt-um-nu kamgala-ž-ər men.* (DB.)
 native country-my-ACC defend-REC-NPAST 1SG
 ‘I will defend my motherland (together with other people).’
- f. *Men čer aŋdar-ž-əp al-də-m.*
 I soil plough-REC-CONV S.BEN-PAST-1SG
 lit. ‘I ploughed the soil (with someone) for myself.’

There is also a lexical comitative *kir-iš-* ‘to participate in sth’ (a lexicalized form of *kir-* ‘to come’).

5.4 The assistive meaning

This meaning, which is contiguous to comitative (joint action often pragmatically involves assistance), occurs mainly in derivatives from transitives mostly denoting concrete physical actions. As mentioned above, assistive derivation involves valency increase: a dative object is added and a two-place verb becomes three-place. When a verb is used without a dative object referring to the second participant, the meaning of assistance can be replaced by that of co-participation, depending on the context (i.e. the assistive meaning is replaced by the comitative). In this case, if the second participant is unnamed, its presence is unambiguously indicated by the verb form. The meaning of acting for sb’s benefit can be emphasized by the verb *ber-* ‘to give’ with a converb in *-p* (see (117) and (119)). If we omit *ber-ip* in (117a) the meaning of the action performed for the brother is weakened.

The co-occurrence of the auxiliary verb *ber-* ‘to give’ with the *-ip* form of a suffixed reciprocal unambiguously points to the assistive rather than the comitative meaning.

As well as in the case of comitatives, the assistive implies participation in the action of another party, therefore the subject may be not only plural but also singular: in the latter case the sociative interpretation is ruled out by definition but the comitative meaning is mostly possible. Nearly all the verbs with the assistive meaning may be interpreted as comitative or sociative in certain contexts, it seems. In examples like (115), the first reading that comes to mind to some informants is assistive, and to others comitative. As in (111d), we cannot add *čaaskan* ‘alone’ in (115).

- (115) *Men čer aŋdar-ž-əp tur-du-m.* (T. 62)
 I soil plough-REC-CONV AUX-PAST-1SG
 i. ‘I helped to plough the soil.’
 ii. ‘I ploughed the soil together with others.’

In the *Tuvan-Russian dictionary* (T) forms in *-š* which may be interpreted as assistive are often supplied with a sociative and/or comitative reading, or with the latter two only (see (107)). Combinations of these readings offered in the dictionary sometimes seem arbitrary. But some of the verbs are defined as assistive only (which does not mean they cannot have the other readings). Here is a list of these verbs, in addition to the list in (107):

- (116) *adakta-š-* 'to assist sb in helping sb to mount a horse.' (T. 37)
čemger-iš- 'to help sb feed sb' (T. 524)
čugajla-š- 'to help sb to whitewash sth'
dažəgla-š- 'to help sb carry sth' (T. 143)
duza-š- 'to help sb salt/pickle sth' (T. 182)
düpte-š- 'to help sb make the bottom of a barrel' (T. 189)
kadar-əš- 'to help sb tend (sheep)'
keđir-iš- 'to help sb put sth on' (T. 235)
ölür-üš- 'to help sb kill sb', also 'to kill each other' (T. 335)
tud-uš- 'to help sb build sth' (T. 427).

Sentence (117a) cannot be preceded by a statement like 'My brother is in bed', because the reciprocal form implies obligatory participation of a co-participant in the action (in these cases the lexical assistive *duzala-* 'to help sb do sth', though not in the reciprocal form, can be used). The sentence in question can be followed by a verb without the suffix *-š*, as is the case in (117b) where the verb *ber-* indicates that the action is performed for the brother. Omission of *ber-* in (117a) makes the sentence slightly less natural if the dative object is preserved.

- (117) a. *Bis akə-m-ga* *sižen kes-č-ip* *ber-ip* *tur* *bis*.
 we elder.brother-my-DAT hay mow-REC-CONV O.BEN-CONV AUX.PRES 1PL
 'We help my elder brother to make hay for him.'
- b. *Akə-m* *aarəg čəd-ar,* *ənčangaš bis aŋaa* *sižen kez-ip*
 elder.brother-my sick lie-PRES.PROGR therefore we he.DAT hay mow-CONV
ber-ip *tur-du-vus*.
 give-CONV AUX-PAST-1PL
 'My brother is ill in bed, therefore we made hay for him.'

Note that verbs with the meaning 'to help' may appear in two forms (with and without *-š*) which are sometimes interchangeable without affecting the meaning: *duzala-* 'to help sb do sth' and *duzala-š-* i. 'to help sb do sth', ii. 'to help each other do sth' (T. 182), *karakta-* i. 'to help sb', ii. 'to help each other' and *karakta-š-* 'to help each other' (T. 228).

5.4.1 Expression of the co-participant. Object-oriented benefactive auxiliary

At least six cases can be distinguished, some of them indicating unambiguously the assistive meaning only and thus outruling the comitative interpretation.

1. The co-participant is not expressed.

1.1. It may be anonymous (see (115)) or it may be recoverable from the context, including a situation of dialogue as well; cf.:

- (118) *“Adar, men taraa-m sokta-p ka-apt-ajn.”* – *“Men sokta-ž-əpt-ajn.”* (AD.)
 wait I corn-my grind-CONV AUX-ASP-1SG.IMP I grind-REC-ASP-1.SG.IMP
 ‘Wait, I’ll finish grinding the corn.’ – ‘I’ll help [you] to grind it’

1.2. Though it is not expressed the benefactive auxiliary *ber-* ‘to give’ (as a final predicate, e.g. in the NPAST form *be-er*, or as converb *ber-ip*) preceded by converb in *-p* of the main notional verb points to it unambiguously and makes the assistive reading the only one possible.

- (119) *Ol bažəŋ išt-i-n aažla-ž-əp be-er.* (< **ber-er*)
 he house interior-its-ACC tidy-REC-CONV O.BEN-3.NPAST
 ‘He helps [sb] tidy up the house (flat)’ (see also (93b)).

2. The co-participant is named; at least four ways of its expression can be distinguished.

2.1. The co-participant is denoted by an attribute in the genitive case; as a rule, pragmatically, the referent of the genitive case *is* a co-participant, though grammatically a genitive attribute denotes a possessor; cf.:

- (120) a. *Dolgar-ool duŋma-m-nəŋ xoj-u-n katar-ž-ər men.* (AD.)
 D. younger.brother-my-GEN sheep-his-ACC tend-REC-NPAST 1SG
 ‘I’ll help my younger brother Dolgar-ool to tend the sheep.’

2.2. The co-participant is expressed by the dative case:

- b. *Anaj-Kara kunču-u-n-ga duzala-ž-əp, inek sag-ž-əp*
 A. mother.in.law-his-DAT help-REC-CONV cow milk-REC-CONV
tur-gan. (KK.)
 AUX-3.PAST
 ‘Anaj-Kara helped his mother-in-law, helped to milk the cow.’

2.3. The co-participant is expressed by the genitive supported by the benefactive auxiliary:

- (121) *Eki aŋčə ež-i-niŋ baləgla-p ka-an aŋ-ə-n čügə*
 good hunter friend-his-GEN wound-CONV AUX-PART beast-his-ACC only
əl-ür-ž-üp be-er. (KK.)
 die-CAUS-REC-CONV O.BEN-3.NPAST
 ‘A good hunter will help his friend to kill his quarry which he has only wounded.’

2.4. The co-participant is expressed by the dative supported by the benefactive auxiliary:

- (122) *Bujan Aŋgər-ool-g bažəŋ tut-č-up ber-ip tur.*
 B. A.-DAT house build-REC-CONV O.BEN-CONV AUX.3.PRES
 ‘Bujan helps Angyr-ool to build his house.’

5.4.2 *Reciprocal assistives. Subject-oriented benefactive auxiliary. Reciprocal pronoun.* In this case the subject can be plural only, of course. This meaning presupposes two or more subject referents that help each other. At least three ways of expressing the reciprocal assistive meaning can be distinguished:

1. The reciprocal assistive meaning is one of the possible readings of a form in *-š*:

- (123) *Bis sigen kes-č-ip tur bis.*
 we hay mow-REC-CONV AUX.PRES 1PL
 i. ‘We help *sb* to make hay.’
 ii. ‘We are making hay *helping each other*.’
 iii. ‘We are making hay *together*.’
 iv. ‘We are making hay *with sb else*’ (cf. (2c)).

2. This meaning is indicated by the subject-oriented benefactive auxiliary *al-* ‘to take’. Needless to say, this marker does not combine with a dative object (cf. *akə-m-ga* ‘for my brother’ in (124b)):

- (124) a. *Bis sigen kes-č-ip a-p (<al-əp) tur bis.*
 we hay mow-REC-CONV S.BEN-CONV AUX.PRES 1PL
 ‘We are making hay *helping each other*.’
 b. **Bis akə-m-ga sigen kes-č-ip a-p tur bis.*
 we brother-my-DAT hay mow-REC-CONV S.BEN-CONV AUX 1PL
 lit. ‘We are making hay for my brother for ourselves.’

3. The meaning in question is indicated by the reciprocal pronoun:

- (125) *Oruk-ka čolaačə-lar bot-bod-u-n-ga duzala-ž-ər, mašina-lar-ə-n*
 road-DAT driver-PL each-other-*n*-DAT help-REC-3.NPAST car-PL-their-ACC
septe-ž-ir. (AD.)
 fix-REC-3.NPAST
 ‘On the road, drivers help each other to fix each other’s cars.’

4. A combination of the reciprocal pronoun with the subject-oriented benefactive auxiliary serves to emphasize the reciprocal assistive meaning:

- (126) *Bis bot-bod-uvus-ka sigen kes-č-ip a-p tur bis.*
 we each-other-our-DAT hay make-REC-CONV S.BEN-CONV AUX.PRES 1PL
 lit. ‘We are making hay for each other *helping each other* for ourselves.’

5.5 Other meanings

In this section, the meanings are listed which are much less productive in the reciprocal suffix than the those considered above: they may number from a few verbs to as many as 15–20, but they are of typological interest because they may also occur in the reciprocal markers of other languages.

5.5.1 *Imitative*

There is a group of verbs with the suffix *-š* derived from denominal verbs whose meaning is defined as ‘to play what is named by the root’:

- (127) *baškəla*- ‘to be a teacher/teach’ → *baškəla-š-* ‘to play teachers’ (cf. *baškə* ‘teacher’)
bokserla- ‘to be a boxer’ → *bokserla-š-* ‘to play boxers’ (cf. *bokser* ‘boxer’)
emčile- ‘to work as a doctor’ → *emčile-š-* ‘to play doctors’ (cf. *emči* ‘doctor’)
kassirle- ‘to work as a cashier’ → *kassirle-š-* ‘to play cashiers’ (cf. *kassir* ‘cashier’)
sadəgla- ‘to work as a salesperson’ → *sadəgla-š-* ‘to play shopping’ (cf. *sadəg* ‘trade’).

5.5.2 *Competitive*

All the registered verbs with this meaning can also have a reciprocal or some other reading.

- (128) a. *kožaməktə*- ‘to sing comic songs’ → *kožaməktə-š-* i. ‘to sing comic songs with sb’
 ii. ‘to compete in singing comic songs’
selemele- ‘to hit with a sword’ → *selemele-š-* i. ‘to play with swords with sb’
 ii. ‘to compete in sword fighting’
təvəzəktə- ‘to ask riddles’ → *təvəzəktə-š-* i. ‘to ask each other riddles’
 ii. ‘to compete in asking riddles’
xaakta- ‘to ski’ → *xaakta-š-* ‘to take part in a skiing competition.’

The following verb may also be included under this heading, though it undergoes a degree of lexicalization:

- b. *kag*- ‘to overcome sb in wrestling’ → *ka-aš-* i. ‘to overcome each other by turns in wrestling’, ii. ‘to compete (e.g. in eloquence)’, iii. ‘to argue’ (T. 214).

I might as well mention here the lexicalized verb *či-š-* ‘to compete’ derived from the transitive *či-* i. ‘to eat sth’, ii. fig. ‘to take (a chess figure)/cover (a card)’: the object is either clear from the context or named by the dative case; thus, instead of *təvəzəktə-š-* in (128) we can use *təvəzək-ka či-š-* ‘to compete in asking riddles’.

It may also be relevant to mention the verb *kör-üş-* i. ‘to see *each other*’, ii. ‘to look *together*’, iii. ‘to *help* sb look through sth’, iv. fig. ‘to measure swords with *each other*, compete’. The latter competitive meaning is a lexicalization which may be a result of the usage: like (129a) where the lexicalized meaning is revealed due to the direct object. But this verb can also be used intransitively, as in (129b):

- (129) a. *Olar küž-ü-n kör-üş-tü.*
 they strength-their-ACC see-REC-3.PAST
 ‘They measured strength with each other’, lit. ‘...looked at each other’s strength.’
 b. *Iji kəzəl čuduruk-tar-ə-bile kör-ž-üpt-er bolgai.* (ST)
 two red fist-PL-their-with see-REC-ASP-3.NPAST you.know
 ‘One must fight with fists only’, lit. ‘...test each other with two red fists.’
 (130) a. *šene-* ‘to try sb/sth’
 b. *šene-š-* ‘to check, try each other’
 c. *küž-ü-n šene-š-* ‘to try each other’s strength’ (T. 570).

5.5.3 *Anticausative*

This is probably the most productive meaning among those considered in this section. Anticausative derivatives are usually formed from lexical reciprocals. The causative suffix may bring back the meaning of the base form (cf. (131a) and (131c)). This type is considered in more detail in 3.2.2 and 8.2.

- (131) a. *Ol spirt-ti sug-bile xolu-p tur.* (T. 481)
 he alcohol-ACC water-with mix-CONV AUX.3.PRES
 ‘He is mixing alcohol with water.’
- b. *Spirt sug-bile xolu-ž-a ber-gen.*
 alcohol water-with mix-REC-CONV AUX-3.PERF
 ‘Alcohol has mixed with water.’
- c. *Ol spirt-ti sug-bile xolu-š-tur-up tur.* (T. 481)
 he alcohol-ACC water-with mix-REC-CAUS-CONV AUX.3.PRES
 (same translation as in (a)).

5.5.4 Reflexive

All the registered derivatives with this meaning are formed from verbs with the same meaning ‘to make dirty/smear’. The origin of the reflexive meaning in formal reciprocals is not clear, as there is a specialized and highly productive marker of reflexivity in Tuvan (see 2) in §2.5), and also a reflexive pronoun (see (9a)).

- (132) *bälča-* ‘to dirty/smear sb/sth’ → *bälča-š-* ‘to smear/dirty oneself’ (T. 131)
bälčakta- ‘to dirty/smear sb/sth’ → *bälčakta-š-* ‘to smear/dirty oneself’ (T. 131)
bälga- i. ‘to dirty/smear’, ii. ‘to stir/rinse sth’ → *bälga-š-* ‘to dirty oneself’ (T. 130)
bora- ‘to make sb/sth dirty’ → *bora-š-* ‘to make oneself dirty’ (T. 113)
öge- ‘to smear/dirty sb/sth’ → *öge-š-* ‘to make oneself dirty’ (T. 331)
 (cf. *buduk-ka öge-š-* ‘smear oneself with paint’); cf.:
- (133) a. *Bora-xirilee-ler dovurak-ka bora-ž-ər, a köge-buga-lar xöölbek-ke*
 sparrow-PL dust-DAT dirty(vt)-REC-NPAST and pidgeon-PL puddle-DAT
bälga-ž-ər. (SS.)
 swill(vt)-REC-3.NPAST
 ‘The sparrows usually dirty themselves in dust, and pigeons dirty themselves in puddles.’
- b. *Siler xünnüñ-ne xavan-nar əškaš malgaš-ka bora-ž-ər ulus-tur*
 you every.day-INTS pig-PL like dirt-DAT smear-REC-PART people-be
siler. (SS.)
 2PL
 ‘You, like pigs, smear yourselves with dirt (from the lake).’

5.5.5 Autocausative

These verbs are derived from transitive verbs of moving objects and denote bodily moves.

- (134) *Čalan terek-ke oraa-ž-ə ber-gen.*
 snake tree-DAT coil(vt)-REC-CONV AUX-3.PERF
 ‘The snake has coiled round a tree.’

5.5.6 Converse

In this case both the base and the derived sentences have the same denotational meaning but subject and object referents exchange syntactic status:

- (135) a. *Izig-ni seriin solu-p-kan.* (M1. 542)
 heat-ACC cool.air change-ASP-3.PERF
 ‘Coolness gave way to heat.’

- b. *Končug izig seriin-bile solu-š-kan.* (M1. 542)
 strong heat cool.air-with change-REC-3.PERF
 ‘Strong heat gave way to coolness.’

5.5.7 Detransitive

A direct object is transformed into a non-direct object:

- (136) a. *Saaja seni öže-en-i ol be?*
 S. YOU.ACC spite-PERF-3SG really Q
 ‘Did Sajaa really do it to spite you?’
 b. *Saaja seŋee öže-š-ken-i ol be?*
 S. YOU.DAT spite-REC-PERF-3SG really Q
 ‘Did Sajaa really do it to spite you?’

5.5.8 Detopicalization

There are a few examples that stand apart from the above listed meanings: the derivative is used in the simple construction and involves two or more participants named by the subject, usually two relatives of different status (e.g. age), and only one of them performs the action named. In other cases, with equally active participants, the very same derivatives may describe “canonical” situations (e.g., ‘to swing each other’). A somewhat similar case is registered in Vietnamese (Bystrov & Stankevich, Ch. 47, §5.2) and Ancient Chinese (Yakhontov, Ch. 48, ex. (52)), when also relatives of different ages take part.

- (137) a. *Bičii urug [emi-in] daka ür em-gen.*
 little child breast-ACC very long.time suck-3.PERF
 ‘The baby has been sucking [the breast] for a long time.’
 b. *Ava-zə uru-u-n daka ür em-zir-gen.*
 mother-her child-her-ACC very long.time suck-CAUS-3.PERF
 ‘Mother has suckled the baby for a long time.’
 c. *Ava-škə-lar em-zir-ž-ip olur-gan-nar.*
 mother-COLL-PL suck-CAUS-REC-CONV AUX-PERF-3PL
 ‘Mother suckled the baby’, lit. ‘Mother and baby suckled each other.’
- (138) a. *Ava-zə uru-u-n adakta-p olur-gan.*
 mother-her child-her-ACC help.mount-CONV AUX-3.PERF
 ‘Mother helped the child (holding it by the legs) to relieve itself.’
 b. *Ava-škə-lar adakta-ž-əp olur-gan-nar.*
 mother-COLL-PL help.mount-REC-CONV AUX-PERF-3PL
 ‘Mother helped (e.g. by holding) the child to relieve itself’,
 lit. ‘Mother and child helped each other to relieve themselves.’
- (139) *Ügba-zə duŋma-zə-bile čajgan-č-əp olur-gan-nar.*
 elder.sister-her younger.sister-her-with swing-REC-CONV AUX-PERF-3PL
 ‘The elder sister was swinging her younger sister on a swing’,
 lit. ‘The elder and younger sisters were swinging each other on a swing.’
- (140) *Ava-zə ke-er-ge, ugba-škə-lar əgla-š-kan olur-gan-nar.*
 mother-her come-PART-DAT elder.sister-COLL-PL cry-REC-PAST.PART AUX-PERF-3PL
 ‘When mother came, the younger (sic!) sister was crying’,
 lit. ‘... the elder and younger sisters were crying together.’

5.6 Object-oriented constructions

Sociatives, comitatives and assistives can take on a causative suffix, e.g.:

- (141) a. *Ulus dile-p al-gaš, bažəŋ-əm kur-u-n sal-əš-tər-əp*
 people ask-CONV S.BEN-CONV house-my wall-its-ACC put.up-REC-CAUS-CONV
al-ər men. (ED)
 S.BEN-NPAST 1SG
 ‘I will invite people and ask them to help me put up the walls of the house for me.’
- b. *Ol onu ərla-š-tər-əp tur.*
 he he.ACC sing-REC-CAUS-CONV AUX.3.PRES
 ‘He makes him sing with someone else.’
- c. *Ol olar-nu ərla-š-tər-əp tur.*
 he they-ACC sing-REC-CAUS-CONV AUX.3.PRES
 ‘He makes them sing together.’

As for the other meanings listed in 5.5, there are some restrictions on causative derivation; thus, for instance, causatives are not formed from derivatives with the imitative meaning (see 5.5.1), nor from the verb *kaa-š-* ‘under’ (128b). However, here is an example of causative derivation from a derivative considered in 5.5 (derivatives from anticausatives are specially discussed in 8.4):

- d. *Ol onu dovurak-ka bora-š-tər-bajn tur.*
 he he.ACC dirt-DAT smear-REC-CAUS-NEG.CONV AUX.3
 ‘He does not let him smear himself with dirt’ (cf. (133)).

6. Lexicalization of verbs in -š

6.1 Introductory

Lexicalized reciprocals are those which are not related to the base verbs in a standard semantic way illustrated by (1). A distinctive feature of a lexicalized meaning is the impossibility of replacing the reciprocal suffix by the reciprocal pronoun, on condition of retaining the meaning. We do not have in mind a stylistic equivalent but a substitute with the same definition, like *oška-š-* ‘to kiss’(vi) = *bot-bot-tar-ə-n oška-* ‘to kiss each other’. Verbs on which the suffix -š does not form a standard semantic reciprocal opposition can be divided into two groups: those with a marked change of meaning and those with no perceptible change or with a very slight change of meaning. Nearly all of these verbs are intransitive. Here is an example with the lexicalized reciprocal *dü-üş-* (*düg-ž-ür*) formed from *düj-* ‘to tie in a knot/wrinkle’:

- (142) a. *Siler-niŋ bodal-ə-ŋar meeŋii-bile düg-ž-üp tur.* (T. 185)
 you-GEN opinion-your mine-with tie-REC-CONV AUX.3.PRES
 ‘Your opinion coincides with mine.’
- b. *Bis-tiŋ bodal-əvəs düg-ž-üp tur.*
 we-GEN opinion-our tie-REC-CONV AUX.3.PRES
 ‘Our opinions coincide.’

In this section, and elsewhere, the dictionary definitions are supplemented by the author's explanations.

6.2 A derivative in -š differs from the base in meaning

The lexicalized meaning is mostly reciprocal, but we also include here derivatives with the sociative, comitative and assistive meanings. A lexicalized meaning may be the only meaning of a derivative, or one of two or more. A derivative may have both a standard reciprocal (or sociative, etc.) and a lexicalized meaning, or a lexicalized meaning only; e.g.:

- (143) *aajla*- 'to tidy sth up/put sth in order' → *aajla-š*- i. 'to tidy sth up *together*',
 ii. 'to *help* tidy sth up', iii. 'to have luck in sth' (T. 27)
as- 'to lose one's way (get lost)' → *az-əš*- i. 'to lose each other somewhere',
 ii. 'to miss (not to meet) each other' (T. 45, 74)
ber- 'to give' → *beriš*- i. 'to touch sth. (-*bile*)', ii. 'to tease sb (-*bile*)',
 iii. 'to quarrel/squabble' (T. 100)
bol- 'to be/become...' → *bol-uš*- 'to defend/intercede for sb (DAT)' (T. 111)
doṇna- 'to tie with a strong knot' → *doṇna-š*- i. 'to be tied tightly' (anticausative),
 ii. fig. 'to fall in love with each other' (T. 172)
dugur- 'to rivet sth' → *dugur-uš*- i. 'to help sb rivet sth',
 ii. 'to come to an agreement' (T. 181)
düj- i. 'to tie sth in a knot' → *dü-üş*- i. 'to become tied in a knot',
 ii. 'correspond/coincide' (T. 185, 186; see (136))
eder- 'to accompany/follow sb/sth' → *eder-iš*- i. 'to become relatives/friends with sb
 (-*bile*)', ii. 'to mate (of animals)', iii. 'to live together' (T. 606)
emegle- i. 'to attack sb together', ii. 'to shout at sb together', iii. 'do sth together'
 → *emegle-š*- i. (same as i. and ii. of the base, but more common),
 ii. 'to help sb do sth' (T. 613)
ešte- 'make sth paired' → *ešte-š*- i. 'be one of a pair', ii. coll. 'to be friends' (T.621)
ište- 'to fill (a vessel)' → *ište-š*- i. 'to be equal in cubic content (of vessels)',
 ii. 'to help to fill sth' (T. 211)
kir- 'to enter' → *kir-iš*- i. 'to participate', ii. 'interfere' (T. 242)
kör- i. 'to look at sb/sth (ALL)', ii. 'to look after sb/sth (ACC)', iii. 'to see sb/sth' iv. 'to try'
 (+ converb), v. 'to look through sth' → *kör-üş*- i. 'to see each other',
 ii. 'to look at each other', iii. 'to meet (each other)',
 iv. fig. 'to compete in sth (DAT)',
 v. 'to help look through sth' (T. 259)
okta- i. 'to defeat in wrestling', ii. 'to throw sb/sth on sth' → *okta-š*- i. 'to be equal in
 strength', ii. 'to defeat each other by turns' (T. 317)
olur- 'to sit/sit down' → *olur-uš*- i. 'to be present at (e.g. a meeting)', ii. 'to live
 together/as a family', iii. arch. 'to enter into matrimony' (T. 319)
ölür- 'to kill sb' → *ölür-üş*- i. 'to kill each other', ii. 'to tease/mock at (-*bile*)',
 iii. 'to take sth into hands/touch sth (-*bile*)' (T. 335)
taakpala- i. 'to smoke', ii. arch. 'to offer tobacco' → *taakpala-š*- i. arch. 'to offer
 tobacco to each other', ii. 'to share sb's grief by
 visiting (-*bile*) and offering tobacco' (T. 318)
tavar- 'to drop in/visit sb (ACC)' → *tavar-əš*- i. 'to meet (by accident)',

- ii. 'to coincide, fit', iii. 'to be' (e.g. 'In some places there are wild goats'), iv. 'to undergo sth (DAT)' (T. 402)
- törelde*- i. 'to stay with relatives' → *törelde-š-* i. arch. 'to stay with each other',
ii. 'to become relatives' (T. 420)
- tur*- 'to stand/stand up' → *tur-uš-* 'to stand/fight for sth' (T. 425)
- xevirle*- 'give form/shape to sth (ACC)' → *xevirle-š-* 'be like sb/sth (DAT)' (T. 472).

6.3 A derivative in *-š* does not practically differ from the base in meaning

Two groups can be distinguished here: (1) the base verb is a lexical reciprocal, and (2) the base verb is not a lexical reciprocal.

1. In the first case the reciprocal suffix is likely to be acquired by these verbs by way of mutual attraction of lexical and grammatical reciprocity, the base verb often being archaic. The derivatives are roughly synonymous to their base verbs; cf.:

- (144) a. *čaala-* i. arch. 'to be at war', ii. 'to conquer, win'
→ *čaala-š-* (same as i. but not arch.) (T. 504)
- b. *čörü-* arch. 'to be obstinate/contradict'
→ *čörü-š-* (same but not arch.) (T. 544)
- c. *duš-* i. arch. 'to see each other', ii. 'to meet sb.DAT (by accident)'
→ *duž-uš-* (same as (i.) but not arch.) (T. 185)
- d. *margə-* arch. 'to argue/insist on one's opinion'
→ *margə-š-* i. same but not arch., ii. 'to compete' (T. 289)
- e. *öže-* 'to do sth to spite sb'
→ *öže-š-* i. (same), ii. 'to be obstinate' (T. 332, 333).

2. Curiously enough, the reciprocal suffix is added to the following group of verbs, without changing their meaning. The reason for the use of *-š* is not clear.

- (145) *bergede*- 'to be in a difficulty' → *bergede-š-* (same) (T. 99)
čada- 'to be unable' → *čada-š-* (same) (T. 507–8)
šada- 'to be able/endure sth' → *šada-š-* i. arch.(same), ii. 'to endure' (T. 586; M1. 380; M2. 165).
- (146) a. *Men berge-ler-ni šada-p / šada-ž-əp ert-er men.*
I hardship-PL-ACC endure-CONV endure-REC-CONV pass-NPAST 1SG
'I will endure all hardships.'
- b. *Egzamen-ner-de bergede-p / bergede-ž-ip tur men.*
exam-PL-DAT have.difficulty-CONV have.difficulty-REC-CONV AUX 1SG
'I experience difficulties at examinations.'

7. Derivatives with the suffix *-la-š*

7.1 Verbs

Verbs with this suffix are reciprocal in meaning. They are formed from mostly nouns (usually with a reciprocal meaning) and from one or two adjectives. The following list contains

practically all these derivations registered in Tenišev (1968); all of them are intransitive. Most of these verbs are used in the simple construction with a semantically plural subject or in the discontinuous construction with an object introduced by the postposition *-bile* ‘with’ (see (147a)), a few also taking the object in the dative case (see (147b)), and two verbs of the list below are used with a plural subject only (see (147c)).

- (147) a. *adaan-naš-* ‘to be enemies/vengeance on each other’ ← *adaan* ‘vengeance/enmity’
adak-taš- ‘to lie down head to feet (of two)’ ← *adak* ‘lower part’ (T. 37)
beldir-leš- ‘to flow together/merge/intersect’ ← *beldir* ‘confluence/intersection’
bölgüm-neš- ‘to unite, group themselves together’ ← *bölgüm* ‘a group’ (T. 117)
čüül-deš- ‘to be alike’ ← *čüül* ‘thing’ (T. 522)
dajəl-daš- ‘to fight/struggle’ ← cf. *dajən* ‘war’ (T. 144)
dem-neš- ‘to help each other’ ← *dem* ‘help’ (T. 155)
domak-taš- ‘to talk/converse’ ← *domak* ‘speech, language’ (T. 170)
dəl-daš- dial. ‘to talk/converse’ ← *dəl* ‘speech, language’ (T. 193)
eelčeg-leš- ‘to change each other’ ← *eelčeg* ‘queue’ (T. 622-3) (arch.)
elege-leš- ‘to be in blood relations with sb’ ← *elege* ‘relative’ (T. 611) (arch.)
izig-leš- ‘to argue/get excited’ ← *izig* ‘hot’ (T. 203)
kolxoz-taš- ‘to join into a collective farm’ ← *kolxoz* ‘collective farm’
najəral-daš- ‘to become friends’ ← *najəral* ‘friendship’ (T. 307)
öñnik-teš- ‘to become friends’ ← *öñnik* ‘friend’ (526)
öžeən-neš- ‘be enemies/vengeance on each other’ ← *öžeən* ‘vengeance/enmity’ (T.333)
sodaa-laš- ‘to fight’ ← *sodaa* ‘a fight’ (T. 379)
sülčee-leš- ‘to conspire’ ← *sülčee* ‘plot/conspiracy’ (T. 393)
tala-laš- ‘to be friends’ ← *tala* ‘friend’ (T. 405)
- b. *čargəl-daš-* ‘to be at law’ ← *čargəl* ‘lawsuit’ (T. 155) (*čargəl-* is non-existent)
čerge-leš- ‘to be equal in height/age, etc.’ ← *čerge* ‘degree’ (T. 529)
üe-leš- ‘to be of the same age’ ← *üe* ‘age’, ‘same age’ (T. 444)
- c. *daraa-laš-* ‘follow one another’ ← cf. *udaa-daraa* ‘one after another’ (T. 148, 433)
udaa-laš- i. ‘to coincide in time’, ii. ‘follow one another’, iii. ‘to be alike’
← *udaa* ‘once, (several) times’ (cf. *kaš udaa* ‘several times’) (T. 433).

The verb *čərak-taš-* (← *čərak* ‘corners of the mouth’) of this group is of special interest due to its lexical meaning as it describes a traditional act: ‘to pull at a piece of boiled skin from the head of an animal with teeth from two sides (of a bride and groom during the wedding ceremony)’ (T. 559).

7.2 Nouns and adjectives

This suffix is rare on nouns, but in Isxakov & Pal’mbox (1961:172) and/or in the dictionaries we find the following derivatives – nouns and adjectives; see (148) and (149) respectively:

- (148) *ada-čurt-taš* ‘compatriot’ ← *ada-čurt* ‘motherland’
at-taš ‘namesake’ ← *at* ‘name’
čurt-taš ‘fellow countryman’ ← *čurt* ‘country’ (T. 547)
oruk-taš ‘fellow traveller’ ← *oruk* ‘road’ (M1. 560).

- (149) *aas-taš* ‘with the same size/kind of lid’ ← *aas* ‘lid’ (of pots) (T. 30)
aas-taš ‘(houses) with doors opposite each other’ ← *aas* ‘entrance, aperture’ (T. 30)
čüzün-neš ‘of the same coat (of horses)’ ← *čüzün* ‘colour, coat’ (T. 551).

I might as well mention here the unique derivational pair *margə-lda-š-* i. ‘to argue’, ii. ‘to compete’, cf. *margə-ldaa* i. ‘argument’, ii. ‘competition’ (← *margə-* ‘to argue’) (T. 289).

8. Lexical reciprocals and their derivatives

8.1 *Reciproca tantum*

The following lexical reciprocals have no verbal bases without *-š* at all or with corresponding meanings (where material identity is most likely accidental, i.e. we observe homonymy here). Like suffixed reciprocals, they are used in both simple and/or discontinuous constructions, the latter with a co-agent mostly expressed by a noun phrase with the postposition *bile* ‘with’. Some of these verbs have derivatives with pleonastic *-š*; e.g.:

- (150) *Men seen-bile duš-č-u be-er men dep boda-va-də-m.* (NO.)
 I you-with meet-REC-CONV AUX-NPAST 1SG that expect-NEG-PAST-1SG
 ‘I did not expect to meet you.’

The list below contains not only verbs with two symmetrical arguments, like verbs of hostile actions, but also verbs of connecting requiring a plural subject, or, as in the case of the verb ‘to wrinkle’ implying a change in the subject referent like wrinkles, i.e. multiple homogeneous features (details, parts of a whole); I have also entered here verbs which imply converse relations between agent and co-agent, like ‘to contradict’, as such meanings are closely related to reciprocal relations. Most of the verbs listed in (151) are intransitive. As in some other languages, the most common lexical meanings here are ‘to fight’, ‘to quarrel’, ‘to meet’, ‘to join’, ‘to coincide’ – ‘to deviate’, ‘to agree’ – ‘to persist’, ‘to untie’ – ‘to be entangled/intertwined’, ‘to compete’, and the like. Most of these verbs are used in the simple construction with a semantically plural subject or in the discontinuous construction with an object introduced by the postposition *-bile* ‘with’ (151a), a few taking also or only an object in the dative case (151b); one verb is used with a plural subject only (151c); a number of verbs are transitive (151d); a few derivatives combine with a singular (usually inanimate) subject (151e).

It is likely that some verbs are entered in the list by mistake, viz. verbs in which the final *-š* is an inherent part of the root and was not added to a root as a suffix (adding the reciprocal meaning or by analogy). It is for etymologists to clear up this issue. To repeat, the list below contains verbs which, firstly, have a meaning more or less reciprocal or close to it (periphery) and, secondly, end in *-š*. There is a number of verbs with final *-š* which seem to be in no way related to the reciprocal meaning (e.g. *dalaš-* ‘to be in a hurry’ (T. 143), *oraldaš-* ‘to try, endeavour’ (T. 325)); on the other hand, there are lexical reciprocals without the final *-š* (e.g. *birik-* ‘to unite’ (vi)), nevertheless the list below is not

accidental. The verbs listed here may have non-reciprocal meanings if the arguments in the discontinuous construction are of different semantic classes.

- (151) a. *algəš-* 'to quarrel' (T. 53; cf. *algə* 'yell' and *algər-* 'shout', *algəš* 'quarrel')
- aralaš-* 'to associate, to alternate' (T. 65) (? ← *arala-* 'to choose')
- baarlaš-* 'to become relatives' (T. 81)
- čarəš-* arch. i. 'to compete in running', ii. 'to compete/vie' (T. 519)
- čoguš-* 'to fight' (T. 538)
- demiseš-* 'to struggle' (cf. *demisel* 'struggle, contest'; T. 155)
- duguruš-* 'to come to an agreement' (T. 181)
- düüš-* 'to coincide/respond' (T. 185)
- eelčəš-* 'to alternate' (T. 623)
- eptereš-* arch. 'to break friendship/quarrel' (T. 615)
- karəš-* i. 'miss (not to meet) each other on the way', ii. 'to not coincide (of sides)', iii. 'to intersect', iv. fig. 'to wrangle' (T. 230)
- koldamnaš-* coll. i. 'to wrestle/romp', 'to fight' (T. 246)
- kərəš-* 'to quarrel/squabble' (T. 279)
- mesildeš-* 'to fight/struggle' (T. 293)
- səmərə[nə]š-* 'to whisper to each other' (T. 397)
- tuluš-* 'to fight/struggle' (T. 423)
- užuraš-* 'to meet/see each other' (T. 436)
- xarəlzaš-* 'to associate' (cf. *xarəlzaa* 'relation/connection'; T. 470)
- xüliüreš-* 'to whisper to each other'
- xüreš-* 'to wrestle' (T. 498)
- əjmaktaš-* 'to romp playing and teasing each other' (T. 593)
- b. *baštaš-* 'to meet on the way' (T. 97)
- bərəš-* 'to be equal (in strength, etc.)' (T. 131)
- čaržalaš-* i. 'to interfere in a conversation', ii. 'to vie/compete' (T. 519)
- dužaaš-* 'to come alongside (of)' (T. 181)
- kattəš-* 'to join/unite' (vi) (T. 232)
- özeš-* 'to persist/be obstinate' (T. 332)
- taarəš-* i. 'suit/respond', ii. 'get along together', iii. 'to be liked' (T. 401)
- tavarəš-* i. 'to meet', ii. 'to coincide', iii. 'to be subjected to' (T. 402)
- uškaš-* 'to mount (of two together, a horse, etc.)' (T. 442)
- üreldeš-* 'to pester sb/carp at sb' (T. 451)
- xamaarəš-* 'to have relations/concern' (cf. *xamaan* 'relation'; T. 466)
- c. *šuuš-* 'to walk single file' (T. 583)
- d. *čəš-* 'to untie' (T. 526)
- eereš-* 'to urge/persuade' ('to cause to agree') (T. 623)
- keš-* 'to cross (e.g. a street, river)' (T. 235)
- koš-* i. 'to mate', ii. 'to join/couple sth', 'to patch sth on' (T. 245)
- e. *bürüš-* 'to wrinkle one's forehead' (T. 128)
- bərəš-* 'to wrinkle one's face' (T. 131)
- düüš-* 'to get knotted (of thread)' (T. 185)
- dərəš-* i. 'to wrinkle one's forehead', ii. 'to crumple (of clothes)' (T. 195)
- šavəš-* 'to deviate/become warped/distorted' (T. 563)
- šorbaš-* arch. 'to be entangled/intertwined' (T. 579).

The adjective-adverb *aškaš* ‘alike/like’ (T. 601) is also a reciprocal *tantum* and may be added to this list.

8.2 Anticausatives

In the case of anticausatives the underlying transitive lexical (and sometimes a morphological) causative verb takes two objects or one denoting a plurality of objects (cf. ‘to gather sth’), and the derivative is intransitive, the object of the base verb turning up as subject (sometimes, this relationship is complicated by a difference in the lexical meaning of the arguments; i.e. the object of a transitive verb cannot be transformed into the subject of an intransitive anticausative, due to its lexical meaning); cf.:

- (152) a. *Ol kudumču-nuŋ ool-dar-ə bölügle-ž-ıp tur-gan.* (cf. (155))
 that street-GEN youth-PL-its group(vt)-REC-CONV AUX-3.PAST
 ‘The youths of that street grouped themselves together.’
- b. *Kömčə ool-du bir oraa-ž-ə ber-gen.* (cf. (185))
 whip boy-LOC once wind-REC-CONV AUX-3.PAST
 ‘The whip wound itself round the boy.’
- c. *Čep doŋna-ž-əp kal-gan.* (cf. (163))
 rope tie-REC-CONV AUX-3.PAST
 ‘The rope got tied tightly.’
- d. *Bujan duŋma-lar-ə-n-ga dömejle-š-pes.* (KK.) (cf. (179))
 B. younger.brother/sister-PL-his-n-DAT liken-REC-NEG.NPAST
 ‘Bujan does not look like his younger brothers and sisters.’

The following verbs are anticausatives derived from lexical reciprocals:

- (153) a. *borbakta-* ‘to roll sth up into a ball/lump’
 b. *borbakta-š-* ‘to roll oneself into a ball’ (T. 114).
- (154) a. *bökpekte-* ‘to gather sth into a heap’
 b. *bökpekte-š-* ‘to gather into a heap/crowd/to unite’ (T. 117).
- (155) a. *bölügle-* ‘to group sb together’ (cf. *bölük* ‘group’)
 b. *bölügle-š-* ‘to group oneself’ (T. 117).
- (156) a. *čoçakta-* ‘to crumple, roll sth into a ball/clod’ (cf. *čoçak* ‘lump/clod/ball’)
 b. *čoçakta-š-* ‘to form/stick into a lump/clod’ (T. 541).
- (157) a. *čokpakta-* ‘to roll sth into a ball/clod’
 b. *čokpakta-š-* i. ‘to form (of a lump/clod);
 ii. ‘to grow and entwine thickly (of branches)’ (T. 538).
- (158) a. *dakpər-la-* i. ‘to combine (e.g. two posts); ii. ‘to repeat sth’
 b. *dakpər-la-š-* i. ‘to be combined’, ii. ‘to repeat itself/coincide’ (T. 144).
- (159) a. *deg-* ‘to touch sth’
 b. *de-eš-* ‘to touch upon each other’ (T. 151).
- (160) a. *deŋne-* ‘to make sth even/equal’
 b. *deŋne-š-* ‘to be even/equal’ (T. 157).

- (161) a. *deskile-* 'to make sth even/smooth'
 b. *deskile-š-* i. 'to become even/smooth/alike', ii. 'to be clouded over' (T. 159).
- (162) a. *dolga-* 'to coil/wind sth'
 b. *dolga-š-* 'to get entangled' (T. 169).
- (163) a. *doḡna-* 'to tie sth in a strong knot, to knot' (cf. *doḡ* 'strong knot')
 b. *doḡna-š-* 'to get tied firmly' (T. 172).
- (164) a. *düj-* 'to tie sth in a knot/wrinkle'
 b. *dü-üš-* 'to become tied/tie itself in a knot' (T. 185, 186).
- (165) a. *dür-* 'to roll up, wind sth into a ball'
 b. *dür-üš-* 'to roll up, get entwined' (T. 190).
- (166) a. *dəgə-* i. 'to stuff sth (with)', ii. 'to push/force sth through', 'to swallow'
 b. *dəgə-š-* 'to become caked/compressed (of hay)' (cf. *dəgəj/dəgə-š* 'dense'; T. 192).
- (167) a. *ešte-* 'to make sth a pair' (cf. *eš* i. 'comrade', ii. 'pair')
 b. *ešte-š-* i. 'to make up/be a pair', ii. 'to be friends' (T. 621).
- (168) a. *mööhne-* 'to save, accumulate, gather, concentrate sth'
 b. *mööhne-š-* 'to accumulate, pile up, gather, crowd' (T. 301).
- (169) a. *neme-* 'to add/increase sth'
 b. *neme-š-* 'to be added/increase' (T. 309).
- (170) a. *oj-* 'to pass sth round' ((b) retains the component 'not straight' only)
 b. *oj-uš-* arch. 'to become crooked/bent' (T. 329).
- (171) a. *öjle-* 'to fix the limit' (cf. *öj* 'the right size/hust right')
 b. *öjle-š-* 'to fit (in size)' (T. 334).
- (172) a. *öörle-* arch. 'to group sb' (cf. *öör* 'group; friends')
 b. *öörle-š-* i. 'to group oneself/unite', ii. 'to be friends' (T. 338).
- (173) a. *səvər-* i. 'to couple (cattle)' (vt), ii. 'to drive (cattle)'
 b. *səvər-əš-* i. 'to couple (of cattle)' (vi), ii. 'to chase' (T. 395).
- (174) a. *taar-* 'to adjust/fit sth to sth' (arch.)
 b. *taar-əš-* 'to match sth/correspond' (T. 401, 402).
- (175) a. *xala-* i. 'to change (sb on duty)', ii. 'to demobilize', iii. 'to dismiss'
 b. *xala-š-* i. 'to take turns', ii. 'to get demobilized', iii. 'to resign' (T. 468).

8.3 Synonymous anticausatives with the suffixes *-š* and *-l*

As mentioned above (see 2.5), anticausatives can be derived by means of reflexive and passive suffixes as well. These suffixes may derive anticausatives from lexical reciprocals. The latter derivatives are sometimes synonymous to anticausatives with the reciprocal suffix derived from the same stem; cf.:

- (176) a. *ka"tta-l-* 'to form layers'; cf. *ka"tta-š-* (same)
 b. *əlga-l-* 'to differ from each other'; cf. *əlga-š-* (same).

Sentential examples:

- (177) a. *Doj borbakta-ž-əp / borbakta-l-əp kal-gan.*
 clay roll.into.lump-REC-CONV roll.into.lump-PASS-CONV AUX-3.PERF
 ‘The clay turned into a lump.’
- b. *Čoduraa-nəŋ kad-ə čokpakta-ž-ə / čokpakta-l-ə*
 bird.cherry-GEN berry-its make.round-REC-CONV make.round-PASS-CONV
ber-gen.
 AUX-3.PERF
 ‘Bird-cherries became round.’
- c. *Ča”s-ka bižik bala-ž-əp / bala-l-əp kal-gan.*
 rain-DAT letter erase-REC-CONV erase-PASS-CONV AUX-3.PERF
 ‘After rain the writing got washed away.’
- d. *Saazən dürü-ž-e / dür-l-ü ber-gen.*
 paper roll.up-REC-CONV roll.up-PASS-CONV AUX-3.PERF
 ‘The paper rolled up into a tube.’
- e. *Arn-əm bəlcakta-ž-ə / bəlcakta-l-ə ber-ip-tir.*
 face-my make.dirty-REC-CONV make.dirty-PASS-CONV AUX-ASP-PTL
 ‘It turned out my face became dirty’ (-*tir/-tər/-dir/-dər* = ‘it turned out’).

But this kind of synonymy is not found in all derivatives in *-š*. Thus, for instance, judging by the dictionaries, the following anticausatives do not have such same root synonyms: *salča-š-* ‘to get entangled/mixed’, *xolu-š-* ‘to become mixed/intermingled’, *ula-š-* ‘to join/become tied’. On the other hand, there are anticausatives in *-l* or *-n* derived from lexical reciprocals which do not have synonymous parallels in *-š*, e.g. *koš-* i. ‘to join’, ii. ‘to mate/couple’ (vt) → *koš-tun-* i. ‘to join’, ii. ‘to mate/couple’ (vi) (cf. **kož-uš-*) (T. 255). Compare also (193c). And lastly, there are cases of synonymy between same root anticausatives in *-š* and those with the complex suffix *-n-əš*, e.g.: *badəla-* ‘to register sth (e.g. marriage)’ → *badəla-š-* ‘to get registered/married at the registrar’s’; *badəla-n-əš-* (same meaning, but more common in use) (T. 83). Note that the “underlying” reflexive form *badəla-n-* is non-existent.

8.4 Object-oriented reciprocals; the complex reciprocal-causative suffix *-š-tər*

In principle, any verb considered in 8.1 and 8.2 can be causativized. In this case, given the proper lexical meaning, reciprocal relations between two or many objects will find expression.

Basically, an object-oriented reciprocal can be formed from any of these verbs by means of a causative suffix; cf.:

- (178) a. *Arn-ə dərəš-tə.*
 face-his wrinkle-3.PAST
 ‘His face wrinkled.’
- b. *Ol arn-ə-n dərəš-tər-də.*
 he face-his-ACC wrinkle-CAUS.3.PAST
 ‘He wrinkled his face’ (M1. 543) (see also 3.3.2).

There seems to be a tendency to mark three-place lexical reciprocals by means of the double suffix *-š-tər*. This is particularly obvious when there is no standard semantic relation-

ship between the second and the third members of a derivational chain, but an unmarked reciprocal relationship is replaced by a marked expression. In derivation of object-oriented reciprocals from anticausatives, three types of derivational chains can be distinguished, one of them with a standard semantic relationship and two with non-standard relations.

1. The principal and most frequent case: at each stage of derivation a standard change of meaning takes place: from a lexical causative reciprocal the causative meaning is “subtracted” which is restored at the second stage of derivation. As a result, the final derivative is more or less synonymous to the base verb (see 3.2.2), but it presents an action as divisible.

- (179) a. *dömejle-* ‘to compare, liken’ (cf. *dömej* ‘alike/same’)
 b. *dömejle-š-* ‘to be alike/like each other’
 c. *dömejle-š-tir-* (same as (a)) (T. 177).
- (180) a. *ešte-* ‘to make sth one of a pair’ (cf. *eš* i. ‘comrade’, ii. ‘pair’)
 b. *ešte-š-* i. ‘to become one of a pair’, ii. ‘to become a partner’
 c. *ešte-š-tir-* (same as (a)) (T. 621).
- (181) a. *ka”tta-* i. ‘to put one layer on another’, ii. ‘to twist (a rope, etc.)’,
 iii. ‘to double (in chess)’ (cf. *ka”t* ‘row/layer/stratum’)
 b. *ka”tta-š-* i. ‘to coincide’, ii. ‘to form layers’, iii. ‘to be doubled’
 c. *ka”tta-š-tər-* (same translation as (a)) (T. 233).
- (182) a. *ula-* ‘to join/tie sth together’
 b. *ula-š-* ‘to join/become tied’
 c. *ula-š-tər-* (same translation as (a)) (T. 438).
- (183) a. *xolu-* ‘to mix sth with sth’
 b. *xolu-š-* ‘to become mixed/intermingled’
 c. *xolu-š-tur-* (same translation as (a)) (T. 481).
- (184) a. *älga-* i. ‘to choose/sort out’, ii. ‘to distinguish’
 b. *älga-š-* ‘to differ from each other’
 c. *älga-š-tər-* (same translation as (a)) (T. 594).

2. In this derivational chain the standard change of meaning is observed only at the second stage of derivation, and though the semantic connection at the first stage is obvious it is overlaid by a slight shift of meaning; e.g.:

- (185) a. *oraa-* i. ‘to wrap sth’, ii. ‘to twine sth’
 b. *oraa-š-* i. ‘to get entangled (of threads)’, ii. ‘to twine (of plants)’,
 ii. ‘to pester sb’
 c. *oraa-š-tər-* i. ‘to entangle sth’, ii. ‘to beat/whip sb’ (T. 324).
- (186) a. *tut-* i. ‘to hold’, ii. ‘to press’, iii. ‘to catch’, etc.
 b. *tud-uš-* i. ‘to join’, ii. ‘to flow together’, iii. ‘to knit (of bones)’
 c. *tud-uš-tur-* i. ‘to join sth with sth’, ii. ‘to make flow together’ (T. 427).

3. There are instances when the first stage of derivation does not result in any anticausative meaning proper, and what happens is not addition of the causative suffix to the second member of the chain but addition of the complex suffix *-š-tər* to the first member.

This is particularly clear in (189) where (a) and (c) are not reciprocal in meaning and (b) contains the reciprocal suffix but it is semantically unrelated to (a) and (b).

- (187) a. *šüg-* 'to collate/correct'
 b. *šü-üş-* 'to collate together' (sociative)
 c. *šü-üş-tür-* i. (same as (a)), ii. 'to make collate/correct' (T. 283-4).
- (188) a. *xolba-* 'to tie sth (two or more objects)'
 b. *xolba-š-* i. 'to have to do with sb' (usu negative), ii. lit. 'be related to sth'
 c. *xolba-š-tər-* (same as (a)) (T. 480).
- (189) a. *dužaa-* i. 'to suppose', ii. 'to estimate/determine approximately'
 b. *dužaaš-* 'to catch up with/come alongside of sb'
 c. *dužaa-š-tər-* (same translation as (a)) (T. 181).

8.5 Verbs of dividing and exchanging and their derivatives

These two groups of object-oriented lexical reciprocals comprise verbs close semantically but differing in the range of meanings characteristic of derivatives in *-š*, and to a greater or lesser degree determined by the lexical meaning of the base verbs:

1. The derivatives of some of the verbs denote actions performed between the subject referents (this type reminds of "indirect" reciprocals because the direct object is retained; the difference is in the fact that the semantic role of the addressee is not necessarily included in the lexical meaning of the base verb; see (190b), (191b.i), (194b), (195b.i);
2. The derivatives of other verbs are anticausative in meaning; see (191b.ii), (192b), (195b.ii), (196b);

3. The third type of derivatives may have both meanings; cf. (191b) and (195b).

And, lastly, there are verbs close to the base verbs of these in meaning whose derivatives in *-š* have neither of these two meanings (see (193)).

The groups named here are illustrated below by seven typical verbs and their derivatives.

(a) *Verbs of division* denote division of an object into parts/shares (and allow an addressee); they acquire the meaning of dividing and distributing the parts between the subject referents when the suffix *-š* is added.

- (190) a. *üle-* 'to divide sth into parts/to sb (DAT)'
 b. *üle-š-* 'to divide sth between/among oneself' (T. 447) ("indirect")
- (191) a. *xuvaa-* 'to divide sth/sb into sth /distribute sth'
 b. *xuvaa-š-* i. 'to divide/distribute sth among/between oneself' ("indirect")
 ii. '(of sth) to become sb's share' (T. 493) (anticausative)
- (192) a. *onaa-* 'to distribute sth'
 b. *onaa-š-* '(of sth) to become sb's share' (T. 319) (anticausative)
- (193) a. *čar-* 'to divide sth into sth, separate sth from sth'
 b. **čar-əš-* (asterisk indicates the absence of both (i) and (ii) derivatives in *-š*); cf.:
 c. *čar-əl-* 'to part/separate' (anticausative)

(b) *Verbs of exchanging sth for sth* can produce derivatives in -š with analogous sets of meanings; cf.:

- (194) a. *orna-* ‘to exchange sth for sth’
 b. *orna-š-* ‘to exchange between/among themselves’ (T. 326) (“indirect”)
- (195) a. *solu-* ‘to exchange/change sth for sth’
 b. *solu-š-* i. ‘to exchange with sb, between/among oneself’ (“indirect”)
 ii. ‘to change’ (T. 381) (anticausative)
- (196) a. *salča-* ‘to entangle/mix (up) sth with sth’
 b. *salča-š-* ‘to get entangled/mixed’ (T. 365) (anticausative)

Verbs on which the reciprocal marker cannot express the meaning ‘between/among themselves’ acquire it if the subject-oriented benefactive auxiliary is added. (197) illustrates such use of the verb under (193a):

- (197) *Begzi bile Bilzej tarǝlga šöl-ü-n čar-əp al-gan-nar.*
 B. and B. cultivated land-their-ACC divide-CONV S.BEN-AUX-PERF.3PL
 ‘Begzi and Bilzej have divided the land for cultivation between (lit. for) themselves.’

The following examples illustrate the use of the verbs under (191) and (195), with the addition of the causative form. The latter form can be roughly synonymous to the base verb, sometimes differing in the emphasis on the involitional character of the action (cf. (199c)), or it may denote an action between the object referents.

- (198) a. *Direktor baškə-lar-ga šak-tar-nə xuvaa-gan.*
 headmaster teacher-PL-DAT hour-PL-ACC divide-3.PERF
 ‘The headmaster divided the teaching load (lit. ‘hours’) among the teachers.’
- b. i. *Baškə-lar šak-tar-nə xuvaa-ž-əp al-gan-nar.* (“indirect”)
 teacher-PL hour-PL-DAT divide-REC-CONV S.BEN-3.PERF
 ‘The teachers divided the “hours” among themselves.’
 ii. *Badə baškə-ga 300 šak xuvaa-š-kan.* (anticausative)
 B. teacher-DAT 300 hour.NOM divide-REC-3.PERF
 ‘Teacher Bady got 300 “hours” to teach’ (lit. ‘300 “hours” fell to Bady.’)
- c. *Direktor baškə-lar-ga šak-tar-ə-n xuvaa-š-tər-gan.*
 headmaster teacher-PL-DAT hour-PL-his-ACC divide-REC-CAUS-3.PERF
 (same translation as (a)).
- (199) a. *Sajdaš sumka-zə-n solu-p-kan.*
 S. handbag-her-ACC mix.up-ASP-3.PERF
 ‘Sajdash exchanged/mixed up her handbag [with sb/sb’s].’
- b. i. *Sajdaš Ajana-bile sumka-lar-ən solu-š-kan-nar.* (“indirect”)
 S. A.-with handbag-PL-ACC mix.up-REC-PERF-3PL
 ‘Sajdash and Ajana exchanged/mixed up their handbags.’
 ii. *Sajdaš bile Ajana-nəη sumka-lar-ə solu-š-kan.* (anticausative)
 S. and A.-GEN handbag-PL-their.NOM mix.up-REC-3.PERF
 ‘The handbags of Sajdash and Ajana got mixed up.’

- c. *Sajdaš sumka-zə-n Ajana-nəŋ sumka-zə-bile*
 S. handbag-her-ACC A.-GEN handbag-her-with
solu-š-tir-ip-kan-dər. (AD.) (on *-dər* see (177e))
 mix.up-REC-CAUS-ASP-PERF-PRTL
 ‘It turns out Sajdash mixed up her handbag with Ajana’s.’

9. Non-reciprocal suffixes materially identical with the reciprocal *-š* or containing component *-š*

It is difficult to claim anything definite about the genetic relatedness of the suffixes listed below to the reciprocal suffix and their interrelatedness, though such attempts have been made with regard to at least some of them. Some of these suffixes are mentioned in Section 14.2 of Ch. 26 on Yakut reciprocals, and the material mentioned here is a kind of supplement. When investigating the issue of genetic relatedness, not only the data of the Turkic languages should be taken into consideration but also cross-linguistic data. The point is, the semantic development of these suffixes may have been consecutive and retained the link with the original meaning, and it may have followed a path with sharp shifts in meaning. Besides, intermediate semantic stages may have been lost. Although their set of meanings may look accidental, I think it may be useful to list all of these suffixes most of which are nominal.

Below, the reader will find material for reflection. We give all the data we have at our disposal, with references to the data that have already been considered above. The component *-š* occurs in three usages: (1) as the only suffix, (2) as a component of a complex suffix, and (3) as part of the stem (at least from the viewpoint of modern Tuvan). In this material, we can trace the idea of plurality, (rhythmical) iterativity, paired objects, etc., i.e. the meanings contiguous to the reciprocal and sociative which also presuppose plurality of actions and/or participants. Two groups of words with the component *-š* can be distinguished.

1. Nouns denoting *collective* entities; they may be (1.1) *derived* nouns, they include collective nouns in *-škə* and *-lə-škə* (see (6) and the relevant text preceding it); (1.2) *non-derived* nouns with the final *-š* denoting (a) one of a set of objects which do not usually appear separately, e.g. *dış* ‘tooth’; (b) a group of objects (collective nouns): *čiš* ‘cattle for slaughtering’, *ünüş* ‘vegetation, plants’, *koš* ‘caravan, load’, ‘doubled’, *adaš* ‘palm (of the hand)’, *idiš* ‘dishes’, *artəš* ‘junipers’, etc.; (c) objects that move back and forth: *aatkəš* ‘swing’, *kiriš* ‘bow-string’, etc.; (d) paired objects or one of a pair: *koš* ‘doubled/paired thing’, *majəktaaş* ‘shoe’, *čuldurguuš* ‘muff’ (usu. two worn together), *ka”ttaš* ‘wife’ (arch.), etc.; (e) space between objects: *beldireš* ‘hollow between two mountain tops’, *ooraš* ‘small hollow between hill tops’ (cf. *oorga* i. back’, ii. ‘small mountain range’).

2. *Deverbal* nouns, adjectives and adverbs: (a) with the unproductive suffix *-š* (see 3.5.1.3); (b) with the productive suffix (for nouns) *-əškan* (see 3.5.1.2); (c) with the productive suffix of instrumental nouns *-aš*; cf. *širbi-* ‘to sweep’ → *širbi-iš* ‘broom’; (d) with the productive suffix (for deverbal adjectives and nouns) *-aš/-eš*. Adjectives with this suffix

are formed, it seems, mostly from verbs denoting rhythmical, iterative or multidirectional actions, i.e. actions consisting of uniform acts, e.g. *čaja-ηna-* ‘to rock/swing’ → *čaja-ηna-aš* ‘swinging/rocking (of branches, trees)’ (*-ηna* denotes a rhythmic action). Nouns with this suffix may name an object composed of divided uniform parts (sounds, lines, details of relief, etc.), e.g. *kəza-ηna-* ‘to flash (of lightning)’ → *kəza-ηna-aš* ‘lightning’.

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Sentential examples are borrowed from the writings of the following authors:

AD.	– Aleksandr Daržaj	K-L.	– Kenin-Lopsan Monguś
DB.	– Dongak Begzi	NO.	– Nikolaj Ooržak
ED.	– Eduard Dongak	ST.	– Salčak Toka
ET.	– E. Tanova	SA.	– Sarəg-ool Stepan Aə
KK.	– Kudaža	SS.	– Surun-ool Salim

From collections of fairytales:

K-M.	– “Kangəvaj-Mergen” (Kyzyl, 1979)
AA.	– “Aksagaldaj ašak” (Kyzyl, 1992).

From a collection of proverbs:

“Čonnuη čečeni” [People’s wisdom] (Kyzyl, 1976).

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Authorized translation from Russian by E. Geniušienė

Reciprocals, assistives, and plural in Kirghiz

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 - 13.4.1 Verbs with root final -š. *Reciproca tantum* (?)

13.4.2 Verbs without root final -š

13.5 Anticausatives with the suffixes -l and -n and their relation to anticausatives in -š

Sources

References

1. Introduction

1.1 Kirghiz

Kirghiz belongs to the Aralo-Caspian (Central Turkic) subgroup of the Western Turkic (Kipchak) group of the Turkic languages. It is spoken natively by more than 2,500,000 Kirghiz. The other closely related languages of the Aralo-Caspian subgroup are Kazakh (over 9 million speakers), Karakalpak (more than 400,000), Turkmen (4,300,000), Ujghur (7,500,000) and Uzbek (18,500,000 speakers). About 90 per cent (2,230,000) Kirghiz live in the Kirghiz Republic, and there are Kirghiz minorities in the neighbouring countries of Middle Asia: Uzbekistan, Tajikistan, Afganistan, Mongolia and China.

1.2 Overview

There are two principal means of expressing reciprocity, the reciprocal suffix -š and the reciprocal pronoun *birin-biri* ‘each other’ which are used singly or co-occur in the same clause; cf. (traditionally, the Kirghiz kiss on the neck and not on the lips).

- (1) a. *Kəz apa-sə-n öp-tii.*
 girl.NOM mother-her-ACC kiss-3SG/PL.PAST
 ‘The girl kissed her mother.’
- b. *Kəz menen apa-sə öb-üš-tii.*
 girl.NOM and mother-her.NOM kiss-REC-3SG/PL.PAST
 ‘The girl and her mother kissed.’

Both types of reciprocals occur in all the three diathesis types of both subject-oriented and object-oriented constructions.

Verbal forms with the suffix -š can also express the assistive meaning:

- (2) a. *Apa-m kamər žuuru-du.*
 mother-my.NOM dough.NOM knead-3SG/PL.PAST
 ‘My mother kneaded the dough.’
- b. *Men apa-m-a kamər žuuru-š-tu-m.*
 I.NOM mother-my-DAT dough.NOM knead-REC-PAST-1SG
 ‘I helped my mother to knead the dough.’

Kirghiz differs from Yakut in that its reciprocal suffix lacks the sociative and comitative meanings. Sociatives are attested only in folklore and they are rejected by native speakers. With rather restricted groups of verbs, the reciprocal suffix marks the competitive and the anticausative meanings.

The most interesting function of the Kirghiz reciprocal suffix is optional marking of 3PL on verbs (see (3a)). Thus, though extremely rarely, this suffix may occur twice in a verb form, as a reciprocal and as a plural marker, as in (3b):

- (3) a. *Alar kamər žuuru-š-tu.*
 they dough knead-3PL-3SG/PL.PAST
 ‘They kneaded the dough.’
- b. *Alar kamər žuuru-š-əš-tu.*
 they dough knead-REC-3PL-3SG/PL.PAST
 ‘They helped (sb) to knead dough.’ (assistive)

The interpretation of the suffix *-š* as reciprocal or 3PL may not be obvious (see also 5.2.1.3).

The reciprocal pronoun *birin-biri* is inflected for case and it takes possessive plural markers in agreement with the person of the subject. This reciprocal pronoun stands in complex relation to the reciprocal suffix; they are in overlapping distribution. Thus the reciprocal pronoun is odd with the verb *öp-* ‘to kiss’ in (4) (cf. (1b)), but on the other hand the reciprocal suffix is ungrammatical in (5b) and it is lexicalized in (5c).

- (4) [?]*Alar birin-biri öp-tü.*
 they each-other-ACC kiss-3SG/PL.PAST
 ‘They kissed each other.’
- (5) a. *Men anə terek-ke bajla-də-m.*
 I.NOM he.ACC tree-DAT tie-PAST-1SG
 ‘I tied him to a tree.’
- b. **Biz terek-ke bajla-š-tə-k.*
 we tree-DAT tie-REC-PAST-1PL
 (intended meaning:) ‘We tied each other to a tree.’
- c. *Men anə menen bajla-š-tə-m.*
 I.NOM he.ACC with tie-REC-PAST-1SG
 ‘I made a bet with him.’ (lexicalized meaning)
- d. *Biz birin-biri terek-ke bajla-də-k.*
 we each-other tree-DAT tie-PAST-1PL
 ‘We tied each other to a tree.’

There are no less than 160 verbs and nouns with the reciprocal meaning derived mostly from nominal bases by means of the suffix *-laš* (in Yakut, the respective suffix *-las* is used to derive verbs only, not nouns).

- (6) a. *bet* ‘face’ → *bet-laš-* ‘to meet face to face’
 b. *aj* ‘moon’ → *aj-laš* ‘women in the same month of pregnancy’.

1.3 Database

The bulk of the material used in this chapter is borrowed from a two-volume *Kirghiz-Russian dictionary* (Ju.1 and Ju.2) and a one-volume *Russian-Kirghiz dictionary* (Ju.3; see Sources), and also from specialist literature. The evaluations of grammaticality and acceptability reflect the intuitions of the young Kirghiz linguist Talaj Abdiev who has also supplied the examples cited without references. I am grateful to him for his invaluable

help. Sometimes, his evaluations are at variance with the dictionary data, which may be due to dialectal factors.

2. Grammatical notes

The principal outline and some important features of Kirghiz grammar coincide with those of Yakut, therefore I refer the reader to the chapter on Yakut and advise to read it prior to this chapter. I shall list only some important points of difference:

2.1 Morphology

The suffixes in Kirghiz have fewer allomorphs than in Yakut: not more than 12, as a rule. Thus, for instance, the dative case marker has only 8 variants (*-ga/-ge/-go/-gö; -ka/-ke/-ko/-kö*) corresponding to the 20 variants in Yakut.

2.2 Case and number. Possessivity

There are only six cases in the Kirghiz noun. Kirghiz lacks the comitative case but it has the genitive which is lost in Yakut. The case endings follow the markers of plurality and possessivity (cf. *apa-sə-n* in (1a) and *apa-m-a* in (2b)). Here is the non-possessive case paradigm of the noun *kəz* 'girl' in the singular:

(7)	NOM	<i>kəz-Ø</i>	ACC	<i>kəz-də</i>
	GEN	<i>kəz-dən</i>	LOC	<i>kəz-da</i>
	DAT	<i>kəz-ga</i>	ABL	<i>kəz-dan.</i>

In this paper, the nominative case is not as a rule indicated in the glosses.

In the possessive declension the endings may differ, e.g. the dative case endings are *-a/-e/-o/-ö* (see (2b)). If the 1PL or 2PL possessive marker is used the accusative case ending is *-d/-di/-du/-dü*, while the accusative ending co-occurrent with the 3rd person possessive marker (common for SG and PL) is *-n*. The plural marker which is not always used is the suffix *-lar/-tar/...* (cf. *at* 'horse' – *at-tar* 'horses', *kəz* 'girl' – *kəz-dar* 'girls'). When used attributively an adjective precedes the head noun and it is not inflected. An attributive possessive phrase is an izafet construction: both components are mutually dependent, the head noun requiring the genitive case of the attribute and the possessive suffix of the head noun being in agreement with the person and number of the attribute; cf.:

(8)	<i>at-tən</i>	<i>baş-ə</i>
	horse-GEN	head-its
	'a horse's head.'	

2.3 Tense/aspect system

Like Yakut, Kirghiz has two sets of agreement markers on the verb: one is used on verbs only (see (9)) and the other coincides with the possessive markers on the noun (see (10)). The 3rd person verb form has no plural marker, while Yakut has the plural suffix *-ler*; therefore, when the optional 3PL marker *-š* (which is placed before the tense marker and converbal marker) is not used the SG and PL are not distinguished in the 3rd person. The following tables illustrate the present (more precisely, present-future) and past tense paradigms which make use of different agreement paradigms.

These agreement markers are also used in the perfect marked by *-gan/-kan/...*, past habitual in *-ču*, future in *-ar* and also in nominal predicates.

(9)	Present-future (the marker <i>-a/-e/-o/-ö/-j</i>)			
	SG		PL	
	1. <i>al-a-mən</i>	'I take'	<i>al-a-bəz</i>	'we take'
	2. <i>al-a-səŋ</i>	'you take'	<i>al-a-səŋar</i>	'you take'
	3. <i>al-a-t</i>	's/he takes'	<i>al-a-t</i>	'they take'
			<i>al-əš-a-t</i>	'they take'.

The following set of agreement markers is used in the past and present tenses:

(10)	Past (the marker <i>-də/-di/-du/-dü; -tə/-ti/-tu/-tü</i>)			
	SG		PL	
	1. <i>al-də-m</i>	'I took'	<i>al-də-k</i>	'we took'
	2. <i>al-də-ŋ</i>	'you took'	<i>al-də-ŋar</i>	'you took'
	3. <i>al- də-Ø</i>	's/he took'	<i>al-də-Ø</i>	'they took'
			<i>al-əš-tə</i>	'they took'.

There are numerous periphrastic verbal forms comprised of converbs and auxiliaries which render various aspectual meanings.

2.4 Reflexive and reciprocal pronouns

Kirghiz differs from Yakut in that these pronouns are formed from different bases. The reflexive pronoun is formed from the root *öz* 'self' (cf. nominative *özü-m* '(I) myself', *özü-ŋ* '(you) yourself', *özü* '(s/he) him/herself', *özü-lör-ü/öz-dör-ü* '(they) themselves', etc.), while the reciprocal pronoun is formed from the numeral *bir* 'one' by reduplication. Both pronouns are inflected for person and case, the reflexive pronoun having both singular and plural forms, and the reciprocal only plural forms. Both pronouns take the case endings of the possessive declension. The reflexive pronoun has the nominative case while the reciprocal does not have it. The reciprocal pronoun has two variants for each person, (11b') and, less frequently, (11b'') (for the latter see (52b), (60) and (61)). Here are the *accusative* case forms of both pronouns (see (40) for the forms of four cases):

- | | |
|------------------------------------|---|
| (11) a. Reflexive pronoun | b. Reciprocal pronoun |
| 1SG <i>özü-m-dü</i> ‘myself’ | – |
| 2SG <i>özü-ŋ-dü</i> ‘yourself’ | – |
| 3SG <i>özü-ŋ</i> ‘him/herself’ | – |
| 1PL <i>özü-büz-dü</i> ‘ourselves’ | b. <i>bir[i]-biri-biz-di</i> = b’. <i>biri-biz-di biri-biz</i> ‘each other’ |
| 2PL <i>özü-ŋör-dü</i> ‘yourselves’ | <i>bir[i]-biri-ŋer-di</i> = <i>biri-ŋer-di biri-ŋer</i> ‘each other’ |
| 3PL <i>öz-dör-ün</i> ‘themselves’ | <i>biri-n-biri</i> = <i>bir[i]-biri-n</i> ‘each other’. |

In Kirghiz orthography, the reciprocal pronouns under (11) are usually spelt as *birin-biri*, *biri-biribizdi*, *biribizdi* *biribiz*, etc.; in the examples, they are divided into morphemes.

2.5 Voices (means of valency change)

Kirghiz is like Yakut in that it has three valency decreasing voices and one valency increasing voice. What follows is a list of the voice markers and their principal and additional meanings. The names of the suffixes only partly reflect their functions; moreover, the passive and the reflexive suffixes seem to be used in the functions reflected in their name less commonly than in other functions. The meanings of different markers may be similar (cf. 13.5); thus if we take into account lexicalizations the general overview is very complicated. Among all the verbs (11,645 items) registered in the *Kirghiz-Russian Dictionary* (Ju.1, Ju.2), verbs with the voice markers comprise 5,350 items, or 46 per cent; verbs with causative suffixes number 3,200 (Sadykov 1995:23; Abdiev 1995:36).

1. The passive suffix *-əl/-il/-ul/-ül/-l-*; forms with this marker can also express the reflexive proper, anticausative, and a number of other meanings; cf.:

- | | | |
|---|---|-----------------|
| (12) a. <i>žaz-</i> ‘to write’ | → <i>žaz-əl-</i> ‘to be written’ | (passive) |
| b. <i>əgər-</i> ‘to press sb/sth to sb/sth’ | → <i>əgər-əl-</i> ‘press oneself to sb/sth’ | (autocausative) |
| c. <i>žəjna-</i> ‘to gather sth/sb’ | → <i>žəjna-l-</i> i. ‘to be gathered’ | (passive) |
| | ii. ‘to gather’ | (anticausative) |
| d. <i>as-</i> ‘to hang sb/sth’ | → <i>as-əl-</i> i. ‘to be hanged’ | (passive) |
| | ii. ‘to hang oneself’ | (reflexive). |

2. The reflexive suffix *-ən/-in/-un/-ün/-n-*; this marker can also express a number of other meanings, e.g. the possessive-reflexive, passive (after root-final *-l*), anticausative, etc.:

- | | | |
|-----------------------------------|---------------------------------------|------------------------|
| (13) a. <i>žuu-</i> ‘to wash’ | → <i>žuu-n-</i> ‘to wash oneself’ | (reflexive proper) |
| b. <i>as-</i> ‘to hang sb/sth’ | → <i>as-ən-</i> i. ‘to hang oneself’ | (reflexive proper) |
| | ii. ‘to hang sth on oneself’ | (reflexive-possessive) |
| c. <i>ujpala-</i> ‘to tangle sth’ | → <i>ujpala-n-</i> ‘to get entangled’ | (anticausative) |
| d. <i>al-</i> ‘to take’ | → <i>al-ən-</i> ‘to be taken’ | (passive). |

3. The reciprocal suffix *-əš/-iš/-uš/-üš/-š-*; this suffix may also express the assistive and the anticausative and competitive meanings; it also has a special function of marking plurality in the 3rd person (see (3a, b)). Kirghiz differs from Yakut in that the reciprocal meaning is not rendered by a reduplicated reciprocal suffix. This may be due to the fact that the suffix *-š* may be repeated in the same form as a 3PL marker only, the first suffix

being reciprocal or assistive (see (3b)). In the *Kirghiz-Russian Dictionary*, 960 verb forms with the reciprocal suffix are registered (Abdiev 1995: 114), of which in our opinion not more than half have the standard reciprocal meaning (see 9.3).

4. The productive causative suffixes *-t* and *-där/-dir/-dur/-dür; -tär/-tir/-tur/-tür*, and the unproductive suffixes *-ar, -kar, -az* (and their variants), and two or more very rare suffixes; the suffix *-t* occurs in 82 per cent and *-där* in 15.5 per cent of all the causatives (Abdiev 1996: 33). In the *Kirghiz-Russian Dictionary*, 78 per cent of causatives are derived from intransitives (Abdiev 1995: 136). The productive causative suffixes can also render the passive meaning, viz. permissive-passive (see Kudajbergenov 1987b: 252–3). Compare:

- (14) a. *öl-* ‘to die’ → *öl-tür-* ‘to kill’ → *öl-tür-t-* ‘to order/allow to kill’ (causative proper)
 b. *čap-* ‘to catch (of a trap)’, lit. ‘to hit’ → *čap-tär-* ‘to get caught (in a trap)’
 (permissive passive)
 c. *žen-* ‘to win’ → *žen-dir-/žen-dir-t-* i. ‘to let oneself be conquered’
 ii. ‘to be conquered’
 ii. ‘to submit/resign oneself’ (Ju.1. 248).

Among verbal derivatives registered in the *Kirghiz-Russian dictionary* (Ju.1, Ju.2) the forms considered below are represented as follows: causatives – 60 per cent, reciprocals – 17.9 per cent, passives – 12.5 per cent, and reflexives – 9.8 per cent (Abdiev 1996: 33).

3. Combinability of voice markers

The voice markers may co-occur in the same verbal form in various combinations. The purpose of the following survey is to give an approximate idea of the place of the reciprocal suffix among other voice markers.

1. The causative markers derive verbs from reflexives, and reciprocals, and passives (but not from passives proper), and causatives (cf. (21h), (15)). Alongside a double causative suffix (14a), there are mentions in the literature of triple use of the causative suffixes (cf. (16); Junusaliev 1966: 495). A combination with the reciprocal suffix in which the causative suffix *-där* alone appears, i.e. *-štär* (< *-š-där*), may function as a single derivational morpheme (see (21k); cf. 10.2 and 13.3).

- (15) *kak-* ‘to hit/beat’
 → *kag-ən* ‘to clean oneself by beating dirt, dust, etc. off one’s clothes, shoes, etc.’
 → *kag-ən-där-* ‘to make sb clean his clothes, shoes, etc.’
- (16) a. *žaz-* ‘to write’
 → b. *žaz-där-* ‘to order to write’
 → c. *žaz-där-t-* ‘to order to write sb via a second person’
 → d. *žaz-där-t-tär-* ‘to order to write sb via a third person.’

2. The reciprocal marker may combine with causatives derived from intransitives, but it does not combine with causatives derived from transitives, with a few exceptions. It combines with two-place intransitives containing the passive or the reflexive marker (not in their proper meaning; see (17) and (21g)). In its anticausative function, it appears jointly

with the passive or reflexive marker thus forming derivatives from transitives (including lexicalized reciprocals) (see 13.5).

- (17) *əgər-əl-* 'to press oneself to ...' (cf. (12b))
 → *əgər-əl-əš-* 'to press oneself to each other' (reciprocal proper)

3. The passive marker does not as a rule combine with reflexive or with reciprocal derivatives. In exceptional instances of this type the meaning of the suffixes *-n* and *-š* on the intransitive underlying verbs is not felt; semantically, the passive form is related to the first verb in the derivational chain; cf. (18c) and (18a), and (19c) and (19a):

- (18) a. *ojlo-* 'to think'
 b. *ojlo-n-* 'to fall to thinking'
 c. *ojlo-n-ul-* 'to be the object of thinking' (Ju.2. 63).
 (19) a. *čirke-* 'to tie/link camels (etc.) in single file'
 b. *čirke-š-* 'to stretch (being tied) in single file'
 c. *čirke-š-il-* 'to be tied/linked in single file' (Ju.2. 364).

The passive suffix combines freely with causatives, in particular with two-place causatives; cf.:

- (20) *öl-* 'to die'
 → *öl-tür-* 'to kill'
 → *öl-tür-ül-* 'to be killed' (see also (21i)).

4. The reflexive marker seems to be the least capable of being added to other voice markers; at least the *Kirghiz-Russian dictionary* does not register any derivatives of this kind (Abdiev 1995:40).

I have cited above only some of the meanings of voice derivatives. To give an idea of the complexity of derivational relations, here is a set of all the derivatives of the verb *bajla-* 'to tie sth to sth/tie up' that are registered in the dictionary (Ju.1. 96–7).

- (21) a. *bajla-* 'to tie sth to sth/tie up' (three-place vt)
 b. *bajla-l-* 'to be tied to sth/tied up' (passive)
 c. *bajla-n-* i. 'to tie sth to oneself' (reflexive possessive)
 ii. 'to be tied to sth/tied up' (passive)
 d. *bajla-t* 'to order to tie, etc.' (causative)
 e. *bajla-t-tər-* 'to order to tie via sb' (causative)
 f. *bajala-n-t-* 'to order to tie sth to oneself' (causative)
 g. *bajla-n-əš-* 'get connected with sb on the phone, etc.' (lexicalized reciprocal)
 h. *bajla-n-əš-tər-* i. 'to tie sb/sth with sb/sth' (lexicalized causative)
 ii. 'to coordinate sth with sth' (lexicalized causative)
 i. *bajla-n-əš-tər-əl-* 'to be tied together' (passive from (h))
 j. *bajla-š-* i. *'to tie each other' (*reciprocal)
 ii. 'to help to tie' (assistive)
 iii. 'to wager, compete' (lexicalized reciprocal)
 k. *bajla-š-tər-* 'to tie sth/sb together/with each other' (causative) (see 13).

The following example illustrates (21i) in which the reciprocal suffix is followed by two more suffixes, causative and passive:

1. *At-tar bajla-n-aš-tər-əl-əp, koštošturul-up tur-gan-ən*
 horse-PL tie-REFL-REC-CAUS-PASS-CONV tied.in.pairs-CONV stand-PAST.PART-ACC
kör-ö-süñ. (Ju.1. 97)
 see-NPAST-2SG
 ‘You will see how the horses tied together are standing in pairs.’

4. Diathesis types of reciprocals with the suffix -š only

4.1 Subject-oriented reciprocal constructions

4.1.1 “Canonical” reciprocals

4.1.1.1 *Derived from two-place transitives.* The lexical range of this type of verbs is similar to that in Yakut; therefore I will confine myself to a list of base verbs and a few sentential examples: *alda-* ‘to deceive’, *aŋdə-* ‘to watch/spy on’, *arba-* ‘to enchant’, *at-* ‘to fire’, *bil-* ‘to know’, *čakar-* ‘to call’, *kabarla-* ‘to inform’, *kapa kəl-* ‘to offend’, *karasotto-* ‘to judge/try/put on trial’, *kör-* ‘to see’, *kuu-* ‘to chase’, *makta-* ‘to praise’, *mušta-* ‘to hit (with a fist)’, *ojrondo-* ‘to destroy’, *öp-* ‘to kiss’, *sök-* ‘to scold’, *səjla-* ‘to respect’, *sura-* ‘to ask’, *tab-* ‘to find’, *tikte-* ‘to look’, *türt-* ‘to push’, *šaldənda-* ‘to tease’, *žala-* ‘to lick (of animals)’, *žanč-* ‘to hit/beat’, *žət-* ‘to smell’, etc.; cf.:

- (22) a. *Al meni sotto-du.*
 he I.ACC sue-3.PAST
 ‘He sued me.’
 b. *Biz sotto-š-tu-k.*
 we sue-REC-PAST-1PL
 ‘We sued each other.’
- (23) *Sura-š-pa-j tab-aš-kan.*
 ask-REC-NEG-CONV find-REC-PERF
 ‘They found each other without asking each other (questions).’

The latter example is a saying with a pejorative meaning (used of thieves, drunkards, etc.).

4.1.1.2 *Derived from two-place transitives with a split object valency.* This type is entirely parallel to the respective Yakut type; cf.:

- (24) a. *Al meni kökürök-kö türt-tü.*
 he I.ACC chest-DAT push-3.PAST
 ‘He pushed me on the chest.’
 b. *Biz ekö-büz kökürök-kö türt-üş-tü-k.*
 we two-we chest-DAT push-REC-PAST-1PL
 ‘We pushed each other on the chest.’

4.1.1.3 *Derived from two-place intransitives.* Reciprocals are formed from the following limited group of verbs most of which require a dative object: *ačuulan-* ‘to get angry with’, *čende-* ‘to approach’, *katta-* ‘to pay a visit to’, *kəzuulan-* ‘to be/become furious (while speaking) with’, *kork-* ‘to become afraid/scared of’ (this stem takes an ablative object), *koržongdo-* ‘to swear at/abuse’, *söjkön-* ‘to rub against’, *süjön-* ‘to lean against’, *taarən-* ‘to get offended with’, *əmda-* ‘to wink at’, *əškər-* ‘to whistle to’, *žoluk-* ‘to wink at’, etc.; cf.:

- (25) a. *Men alar-ga əškər-də-m.*
I.NOM they-DAT whistle-PAST-1SG
‘I whistled to them.’
b. *Biz alar menen əškər-əš-tə-k.*
we they with whistle-REC-PAST-1PL
lit. ‘We with them whistled to each other.’

Derived two-place intransitives, including autocausatives with the reflexive suffix *-n*, can form reciprocals in *-š* (note that reciprocals cannot be formed from the underlying three-place intransitives):

- (26) a. *Al tajak-tə dubal-ga süjө-dü.*
he stick-ACC wall-DAT lean-3.PAST
‘He leaned the stick against the wall.’
b. *Al dubal-ga / maga süjө-n-dü.*
he wall-DAT I.DAT lean-REFL-3.PAST
‘He leaned against the wall/on me.’
c. *Biz süjө-n-üş-tü-k.*
we lean-REFL-REC-PAST-1PL
‘We leaned against each other.’

4.1.1.4 *Derived from one-place intransitives.* This type corresponds to the Yakut reciprocals considered in 4.1.1.6 (Nedjalkov & Nedjalkov, Ch. 26). Compare:

- (27) a. *aŋkušta-* ‘to squeak/cry (of marmots)’
b. *aŋkušta-š-* ‘to exchange squeaks (of marmots)’ (Ju.1. 59).
(28) a. *kišene-* ‘to neigh’
b. *kišene-š-* ‘to communicate by neighing’ (Ju.1. 390).

4.1.2 “Indirect” reciprocals

These reciprocals retain the direct object of the underlying construction expressed by a noun either with zero ending or in the accusative case form. The base verbs producing this type of derived diathesis may be divided into two groups: (1) three-place transitives with an obligatory indirect object, like ‘to give’; (2) three-place causatives derived from two-place transitives, like ‘to cause sb to build a house, etc.’.

1. Three-place transitives fall into two syntactic subtypes: (a) verbs taking an indirect object in the dative case, e.g. *ajt-* ‘to tell’, *at-* ‘to throw’, *ber-* ‘to give’, *sat-* ‘to sell’, *süjlө-* ‘to tell’, *sun-* ‘to offer’, *šəbəra-* ‘to whisper’, *taši-* ‘to carry (sth to sb)’, *ubada kəl-* ‘to promise’, *ərgət-* ‘to throw’, *žaz-* ‘to write’; and (b) verbs requiring an indirect object in the ablative case: *al-* ‘to take’, *bekit-* ‘to hide’, *sura-* ‘to ask’. Compare:

- (29) a. *Men koşu-m-a kese sun-du-m.*
 I neighbour-my-DAT cup offer-PAST-1SG
 ‘I offered my neighbour a drink.’
 b. *Men menen koşu-m kese sun-uş-tu-k.*
 I with neighbour-my cup offer-REC-PAST-1PL
 ‘My neighbour and I offered each other drinks.’
- (30) *Alar saat al-əş-əş-tə.*
 ‘They swapped (lit. ‘took from each other’) watches.’

2. Three-place causatives. An instance of this type of base verbs is *körsöt-* ‘to show’ derived from the two-place transitive *kör-* ‘to see’:

- (31) a. *Men koşu-m-a kitep-ti körsöt-tü-m.*
 I neighbour-my-DAT book-ACC show-PAST-1SG
 ‘I showed the book to my neighbour.’
 b. *Biz [koşu-m] eköo-büz kitep-ter-ibiz-di körsöt-üş-tü-k.*
 we neighbour-my two-we book-PL-OUR-ACC show-REC-PAST-1PL
 ‘We two [(with) my neighbour] showed our books to each other.’

4.1.3 “Possessive” reciprocals

This type involves a possessive or part-whole relation between the subject and direct or indirect object referents. The object is either in the nominative, with zero marking (as in (34b)) or in the accusative case of possessive declension (as in (34c)); in the underlying construction the possessor of the object referent is expressed by the genitive case of a noun, or it may be implied. These reciprocal forms can be derived from either transitive or intransitive two-place verbs. In both cases the valency is retained, the possessive attribute to an object being omitted (cf. *uul-um-un* in (32a)). The possessors are expressed by the subject of the reciprocal construction. (cf. *uul-um* in (32b)).

4.1.3.1 *Derived from two-place transitives.* The reciprocal form of a number of transitive verbs can occur in a “possessive” construction as well as in the “canonical” type, with the difference that the object of the underlying construction contains an indication of the possessor (expressed by a possessive attribute and/or a possessive suffix) which is expressed by the subject in the derived construction; (cf. ‘to kiss a girl’ → ‘to kiss each other’; ‘to kiss a girl’s cheek’ → ‘to kiss each other’s cheeks’). The reciprocal form of the following base verbs can be used in “possessive” constructions: (*ün*) *al-* ‘to hear (sb’s voice)’, (*kol*) *karma-* ‘to seize (sb’s hand)’ (the converb of its reciprocal form is used as a formula: *kol karma-ş-əp* ‘holding each other by the hand’; Ju.1. 392), (*but-ə-n*) *kemir-* ‘to bite off (sb’s leg)’, (*kol*) *kəs-* ‘to shake sb’s hand’ (32), *öp-* ‘to kiss’, (*čač*) *ör-* ‘to braid (sb’s hair)’, (*üj/üj-lör-dü*) *örttö-* ‘to burn (sb’s house)’, (*kan*) *tök-* ‘to shed (sb’s blood)’, (*arka-lar-ən*) *žəşə-* ‘to wash/rub/clean by rubbing (sb’s neck)’, (*mojnuman*) *žətta-* ‘to kiss (sb’s neck)’, and the like.

- (32) a. *Men uul-um-un kol-u-n kəs-tə-m.*
 I son-my-GEN hand-his-ACC shake-PAST-1SG
 ‘I shook my son’s hand.’

- b. *Biz uul-um eköö-büz kol käs-əš-tə-k.*
 we son-my two-we hand shake-REC-PAST-1PL
 ‘My son and I shook hands with each other.’
- (33) a. *Men koŋšu-m-un kol-u-n karma-də-m.*
 I neighbour-my-GEN hand-his-ACC grasp-PAST-1SG
 ‘I grasped my neighbour’s hand.’
- b. *Biz koŋšu-m eköö-büz kol karma-š-tə-k.*
 we neighbour-my two-we hand grasp-REC-PAST-1PL
 ‘My neighbour and I grasped each other’s hands.’
- (34) a. *Kəz-əm menin čaç-əm-ə ör-dü.*
 daughter-my I.GEN hair-my-ACC braid-3.PAST
 ‘My daughter braided my hair.’
- b. *[Biz] kəz-əm eköö-büz čaç ör-üş-tü-k.*
 we daughter-my two-we hair braid-REC-PAST-1PL
 ‘My daughter and I braided each other’s hair.’
- c. *[Biz] kəz-əm eköö-büz čaç-əbəz-də ör-üş-tü-k.*
 we daughter-my two-we hair-our-ACC braid-REC-PAST-1PL
 ‘My daughter and I braided each other’s hair.’

4.1.3.2 *Derived from two-place intransitives.* There are few instances of this kind of derivation; examples are *kara-* ‘to look at’, which requires a dative object (35), and *öp-* ‘to kiss’ which is usually transitive but can also occur with an ablative object (36):

- (35) a. *Men kəz-əm-ən bet-i-ne kara-də-m.*
 I daughter-my-GEN face-her-DAT look-PAST-1SG
 ‘I looked into my daughter’s face.’
- b. *Biz eköö-büz bet-ibiz-ge kara-š-də-k.*
 we two-we face-our-DAT look-REC-PAST-1PL
 lit. ‘We looked into each other’s faces.’
- (36) a. *Men kəz-əm-ən bet-i-nen öp-tü-m.*
 I daughter-my-GEN face-her-ABL kiss-PAST-1SG
 lit. ‘I kissed my daughter’s face.’
- b. *Biz kəz-əm eköö-büz bet-ten öb-üş-tü-k.*
 we daughter-my two-we face-ABL kiss-REC-PAST-1PL
 lit. ‘My daughter and I kissed each other’s faces.’

4.2 Object-oriented reciprocal constructions

Basically, any subject-oriented construction can be transformed into an object-oriented construction embedded in a causative construction. The reciprocal relationship of the former is retained in the latter; e.g.:

- (37) a. *Ak it kara it-ti kap-tə.*
 white dog black dog-ACC bite-3.PAST
 ‘The white dog bit the black dog.’

- b. *Ak it menen kara it kab-əš-tə.*
white dog and black dog bite-REC-3.PAST
'The white and the black dogs bit each other.'
- c. *Čal menen koŋšu-su it-ter-di kab-əš-tər-əš-tə.*
old.man and neighbour-his dog-PL-ACC bite-REC-CAUS-PL-3.PAST
'The old man and his neighbour set the dogs on each other.'

For some reason, object-oriented reciprocals of this type sometimes sound unnatural, the reciprocal pronoun instead of the reciprocal suffix being more acceptable.

- (38) a. *Kiři-ler öl-tür-üş-tü.*
man-PL die-CAUS-REC-3.PAST
'People killed each other.'
- b. **Al kiři-ler-di öl-tür-üş-tür-bo-dü.*
he man-PL-ACC die-CAUS-REC-CAUS-NEG-3.PAST
(intended meaning) 'He did not allow people to kill each other.'
- c. *Al kiři-ler-di biri biri-ne öl-tür-t-po-dü.*
he man-PL-ACC each other-DAT die-CAUS-CAUS-NEG-3.PAST
'He did not allow people to kill each other.'

4.3 *Nomina actionis*

Deverbal nouns are derived mostly by means of the suffixes *-əš/-iř/-uř/-üş/-ř* and *-oo/-öö/-uu/-üü*. The latter suffix alone is registered on nouns derived from standard reciprocal verbs. These nouns retain the object (both direct and non-direct) valencies of the base verbs, the subject valency being transformed into genitive; cf.:

- (39) a. *Kəz apa-sə-n kučakta-də.*
daughter mother-her-ACC embrace-3.PAST
'The daughter embraced her mother.'
- b. *Kəz-dən apa-sə-n kučakt-oo-su.*
daughter-GEN mother-her-ACC embrace-NR-her.NOM.SG
lit. 'The daughter's embracing of her mother.'

5. Diathesis types of reciprocals with the pronoun *biri-biri* 'each other'

5.1 Introductory

The forms of the reciprocal pronoun for the four most frequently used cases are (see also (11)):

(40)	1PL	2PL	3PL
ACC	<i>biri-biri-biz-di</i>	<i>biri-biri-ŋer-di</i>	<i>biri-biri-n / biri-n-biri</i>
GEN	<i>biri-biri-biz-din</i>	<i>biri-biri-ŋer-din</i>	<i>biri-biri-nin</i>
DAT	<i>biri-biri-biz-ge</i>	<i>biri-biri-ŋer-ne</i>	<i>biri-biri-ne</i>
ABL	<i>bir-biri-biz-den</i>	<i>biri-biri-ŋer-den</i>	<i>biri-biri-nen.</i>

5.2 Subject-oriented reciprocal constructions

5.2.1 “Canonical” reciprocals

5.2.1.1 *Derived from two-place transitives.* The same verbs can be used in these constructions as those considered in 4.1.1.1, but there are certain preferences (see 5.4).

- (41) a. *Men kečik-pe-š üčün anə šaš-tər-də-m.*
 I be.late-NEG-NR in.order he-ACC hurry-CAUS-PAST-1SG
 ‘In order not to be late I made him hurry.’
 b. *Biz eköo-büz kečik-pe-š üčün biri-biri-biz-di šaš-tər-də-k.*
 ‘In order not to be late we made each other hurry.’
- (42) *Biz biri-biri-biz-di zemele-di-k.*
 ‘We reproached each other.’

5.2.1.2 *Derived from two-place transitives with a split object valency.* This type is parallel to the reciprocals discussed in 4.1.1.2. Compare:

- (43) a. *Al anə koltuk-ka uku-du.*
 he he.ACC side-DAT push-3.PAST
 ‘He pushed him in the ribs.’
 b. [*Alar*] *biri-n-biri koltuk-ka uku-š-up ...* (Ju.2. 302)
 they each-ACC-other side-DAT push-REC-CONV
 ‘[They] pushing each other in the ribs.’

5.2.1.3 *Derived from two-place intransitives.* This type seems to be more common among pronominal reciprocals than among suffixed ones (cf. 4.1.1.3). Some of the verbs require simultaneous use of the reciprocal suffix and reciprocal pronoun. As mentioned with regard to example (3), the suffix -š may also function as a 3PL marker. Thus, this suffix is interpreted by an informant as 3PL in (46b), (47b), (50), (53), (54c, d, e), (58), (72c), (73a) (for details see 9.2). Sometimes the informant may hesitate in such cases (see, for instance, (60)).

- (44) a. *Al ata-sə-na ačuulan-də.*
 he father-his-DAT get.angry-3.PAST
 ‘He got angry with his father.’
 b. *Alar biri-biri-ne ačuulan-əš-tə.*
 they each-other-DAT get.angry-REC-3.PAST
 ‘They got angry with each other.’
- (45) a. *Al ata-sə-nan kork-tu.*
 he father-his-ABL get.scared-3.PAST
 ‘He got scared of his father.’
 b. *Alar biri-biri-nen kork-uš-tu.*
 they each-other-ABL get.scared-REC-3.PAST
 ‘They got scared of each other.’
- (46) a. *Uj dubal-ga sōjkö-n-dü.*
 cow wall-DAT rub-REFL-3.PAST
 ‘The cow rubbed against the wall.’

- b. *Uj-lar biri-biri-ne söjkö-n-üş-tü.*
 COW-PL each-other-DAT rub-REFL-3PL-3.PAST
 ‘The cows rubbed against each other.’

5.2.2 “Indirect” reciprocals

Unlike suffixed “indirect” reciprocals, those with the reciprocal pronoun occur in constructions derived from base constructions both with three-place transitives and three-place causatives from transitives, and also from constructions with a benefactive or assistive object (i.e. there are pronominal reciprocals from assistives); cf. respectively:

- (47) a. *Ata-m dos-u-na et bəşər-t-tə.*
 father-my friend-his-DAT meat cook-CAUS-3.PAST
 ‘My father asked his friend to cook the meat.’
 b. *Ata-m menen dos-u biri-biri-ne et bəşər-t-əş-tə.*
 father-my and friend-his each-other-DAT meat cook-CAUS-3PL-3.PAST
 ‘My father and his friend asked each other to cook meat.’
- (48) a. *Ata-m maga ot taşə-də.* (benefactive)
 ‘My father carted hay to/for me.’
 b. *Ata-m eköö-büz biri-biri-biz-ge ot taşə-də-k.*
 ‘My father and I carted hay to/for each other.’
- (49) a. *Ata-m ma-ga ot taşə-ş-tə.* (assistive)
 father-my I-DAT hay.NOM cart-REC-3.PAST
 ‘My father helped me to cart hay.’
 b. *Ata-m eköö-büz biri-biri-biz-ge ot taşə-ş-tə-k.*
 father-my two-we each-other-DAT hay cart-REC-PAST-1PL
 ‘My father and I helped each other to cart hay.’

5.2.3 “Possessive” reciprocals

As well as in constructions with a direct object of alienable and inalienable possession, the possessor is denoted by the genitive case.

- (50) *Karəşkər-lar biri-biri-nin but-u-n kemir-iş-ti.*
 wolf-PL each-other-their.GEN foot-his-ACC gnaw-3PL-3.PAST
 lit. ‘Wolves gnawed off each other’s paws.’
- (51) *Biz eköö-büz biri-biri-biz-din bal-dar-əbəz-də taanə-j-bəz.*
 we two-we each-other-our.GEN child-PL-our-ACC know-PRES-1PL
 ‘We know each other’s children.’

5.3 Object-oriented reciprocal constructions

Constructions of this type are formed freely from subject-oriented constructions. Note the peculiarity of expressing the reciprocal sense if the referents of both objects (accusative and dative) coincide:

- (52) a. *Al soldat-ka biz-di öl-tür-t-öt.*
 he soldier-DAT we-ACC kill-CAUS-CAUS-PRES-3SG
 ‘He orders the soldier to kill us.’

- b. *Al biri-biz-di biri-biz-ge öl-tür-t-ö-t.*
 he one-our-ACC one-our-DAT die-CAUS-CAUS-PRES-3SG
 ‘He orders us to kill each other.’

Compare the analogous construction with *biri* in a non-reciprocal meaning:

- c. *Biri-ŋ-di biri-ŋ-e öl-tür-t-ö-m.* (Ju.2. 93)
 one-your.SG-ACC one-your.SG-DAT die-CAUS-CAUS-PRES-1SG
 ‘I will make one of you kill the other.’

5.4 Interrelation of the reciprocal suffix and reciprocal pronoun. Their co-occurrence

Five main types of interrelation of these reciprocal markers can be distinguished. Let us consider the following sentence:

- (53) *Ördök-tör keede biri-n-biri kubala-š-əp ...* (Ju.1. 435)
 duck-PL sometimes each-other chase-3PL-CONV
 ‘Ducks sometimes chase each other.’

This verb may assume the following reciprocal forms:

- (54) a. ... *kubala-š-əp* – the reciprocal suffix only
 b. ... *biri-n-biri kubala-p* – the reciprocal pronoun only
 c. ... *biri-n-biri kubala-š-əp* – both the reciprocal pronoun and suffix/3PL
 d. ... *kubala-šə-š-əp* – both the reciprocal and 3PL suffixes
 e. ... *biri-n-biri kubala-šə-š-əp* – the reciprocal pronoun and both suffixes.

Variant (54e) is rejected by the informant and it is not registered in the dictionaries. Variant (54d) is rather uncommon, because context usually makes it clear whether variant (54a) is reciprocal or plural. In isolated sentences, however, the informant may opt for (54d) (cf. 9.2).

The main opposition here is between (54a) and (54b). Some verbs are preferable in form (54a) and other verbs in (54b). This is relevant for the cases considered in Section 7 on restrictions. A number of verbs seem to be used in either form indiscriminately, like the verb in (53)–(54), though the informant prefers variant (54a) for this particular verb. Here are examples of verbs of this type:

- (55) a. *Biz eköö-büz köpkö kuu-š-tu-k.*
 we two-we long.time chase-REC-PAST-1PL
 ‘We chased each other for a long time.’
 b. *Biz eköö-büz köpkö biri-biri-biz-di kuu-du-k.*
 we two-we long.time each-other-our-ACC pursue-PAST-1PL (same meaning).
- (56) a. *Biz eköö-büz səjla-š-ču-buz.* ‘We respected each other.’ (-ču = HAB)
 b. *Biz eköö-büz biri-biri-biz-di səjla-ču-buz.* (same meaning).

The verb in (57) usually occurs in form (57a), (57b) being characterized as possible but very uncommon. This is probably due to the high frequency of the reciprocal situation described. This also pertains to the reciprocal *teb-iš-* ‘to kick each other’ (about

horses) which however has occurred with the reciprocal pronoun in a text (probably for emphasis). The informant sees the suffix *-š-* as unambiguously reciprocal.

- (57) a. *Alar kuçakta-š-tə.* 'They embraced each other.'
 b. *Alar biri-n-biri kuçakta-da.* (same).
 (58) ... *čunaŋda-š-əp kel-iš-e-t, biri-n-biri teb-iš-e-t.* (Ju.2. 377)
 press.ears-3PL-CONV come-3PL-PRES-3 each-other kick-REC-PRES-3
 '... (they = horses) approach each other pressing their ears, kick each other.'

The verb *žala-* 'to lick' is preferable in form (59b):

- (59) a. *Küçük-tör žala-š-tə.* 'The puppies licked (whom?)'
 b. *Küçük-tör biri-n-biri žala-š-tə.* 'The puppies licked each other.'

Verbs with different means of encoding reciprocity may occur in one sentence:

- (60) *Bir-biri-ne kön-üş-kön-dön kijin süj-üş-üp*
 each-other-DAT get.used-REC/3PL(?)-PART-ABL later love-REC-CONV
ket-e-t. (Ju.1. 423) (cf. *süj-* in (70))
 AUX-PRES-3
 'After [they] get used to each other, they will fall in love with each other.'

Instances like (54c) with the reciprocal *-š* are hard to find among sentences in the 3rd person because this suffix may be interpreted as 3PL, and, as I have mentioned above, the informant rejects the doubling of *-š* in these cases. Here is an example with a 1st person predicate which shows the possibility of co-occurrence of the two suffixes:

- (61) *Sen eköb-büz biri-biz-di biri-biz köz-gö saj-əš-pas-bəz.* (Ju.2. 123)
 you two-we each-our-ACC other-our eye-DAT put.out-REC-NEG.FUT-1PL
 'We [you and I] won't put out each other's eyes.'

5.5 *Nomina actionis*

They are formed in the same way as deverbal nouns from suffixed reciprocals (see 4.3); cf.:

- (62) a. *Koŋšu-m menen apa-m biri-n biri səjla-š-a-t.*
 neighbour-my and mother-my each-ACC other respect-REC-PRES-3
 'My neighbour and my mother respect each other.'
 b. *Koŋšu-m menen apa-m-ən biri-n biri səjla-š-uu-sə.*
 neighbour-my and mother-my-GEN each-ACC other respect-REC-NR-their
 lit. 'My neighbour and my mother's [their] respect for each other.'

6. Simultaneity and succession of reciprocal acts

In this respect Kirghiz reciprocals are similar to those of Yakut and other languages, because temporal sequence of reciprocal acts is dependent on the lexical meaning of a verb. Simultaneity of reciprocal acts is inherent in the verbal meaning in (1b), (26), (32), (33), etc. The following are examples of non-simultaneous successive actions:

- (63) *Biz eköö-büz katta-š-a-bəz.*
 we two-we come.and.go-REC-PRES-1PL
 ‘We visit each other.’
- (64) *Biz eköö-büz köpkö kezektešip kuu-š-tu-k.*
 we two-we long.time by.turns chase-REC-PAST-1PL
 ‘We chased each other by turns for a long time.’
- (65) *Biz eköö-büz köpkö kajtar-əš-tə-k.*
 we two-we long.time guard-REC-PAST-1PL
 ‘We two guarded one another for a long time.’ (= ‘by turns’); cf. *kajtar-* in (70).

The following is an example of chain relations within a reciprocal situation:

- (66) *Karkəra-daj eerči-š-ip ...* (Ju.2. 473)
 crane-like follow-REC-CONV
 ‘Following each other like cranes...’

7. Productivity and restrictions on reciprocal formation with the suffix -š

Kirghiz suffixed reciprocals are formed from a large number of verbs and are numerous in the dictionary, though they are somewhat less productive than in Yakut. This section contains fragmentary observations meant to give the reader an idea of possible restrictions on their formation. Some of the restrictions are general, such as absence of reciprocals from causatives derived from transitive verbs (as it happens, this restriction is observed in Yakut as well). Reciprocals are not derived from some two-place causatives, nor from some two-place transitives and intransitives in general, which seem to be subject to individual restrictions (see (5b)). A number of verbs do have a form in -š but with a lexicalized meaning (cf. (5c)) rather than with a standard reciprocal meaning. In these cases, as well as in the previous ones, the reciprocal meaning is commonly rendered by the reciprocal pronoun (cf. (5d)). The existence of a lexicalized meaning in the reciprocal form (5c) is unlikely to be the reason for the absence of the reciprocal meaning proper, the form in -š of other verbs often combining both the reciprocal proper and a lexicalized meaning. Here are a few causatives derived from intransitives (see (67)) and transitives (see (68)) which do not take a reciprocal form:

- | | |
|---|-------------------------------------|
| (67) <i>kal-tur-</i> ‘to leave (sb)’ | (← <i>kal-</i> ‘to stay’) |
| <i>kel-tir-</i> ‘to bring (sb)’ | (← <i>kel-</i> ‘to come’) |
| <i>šaš-tər-</i> ‘to make (sb) hurry’ | (← <i>šaš-</i> ‘to be in a hurry’) |
| <i>žat-kər-</i> ‘to make (sb) lie down’ | (← <i>žat-</i> ‘to lie down’), etc. |
| (68) <i>bil-dir-</i> ‘to inform (sb)’ | (← <i>bil-</i> ‘to know’) |
| <i>ez-dir-</i> ‘to order (sb) to press’ | (← <i>ez-</i> ‘to press’) |
| <i>sat-tər-</i> ‘to make (sb) sell’ | (← <i>sat-</i> ‘to sell’), etc. |

But a reciprocal is derived from the following three-place causative (with a unique lexicalized causative suffix) due to its lexical meaning:

- (69) *kör-* ‘to see’ → *kör-söt-* ‘to show’ → *kör-söt-üš-* ‘to show sth to each other.’

In the informant's opinion, suffixed reciprocals from the following verbs sound unnatural, though some of them are registered in the dictionary (it is hard to say whether this is related to the time factor, as the dictionaries at our disposal were compiled in the 1950s). With these verbs the informant prefers the reciprocal pronoun instead of the suffix. Here are a few two-place transitives (see (70)) and two-place intransitives (see (71)) from which suffixed reciprocals are not formed:

- | | | |
|------|--|--|
| (70) | <i>kajtar-</i> 'to guard' (cf., however, (65)) | <i>sij-</i> 'to love' (cf., however, (60)) |
| | <i>korgo-</i> 'to guard/defend' | <i>sala-</i> 'to stroke' |
| | <i>küülö-</i> 'to egg on' | <i>tüšün-</i> 'to understand' |
| | <i>mojso-</i> 'to destroy/kill' | <i>unut-</i> 'to forget.' |
| | <i>sat-</i> 'to sell/betray' | |
| (71) | <i>ačuulan-</i> | 'to be angry/swear' |
| | <i>kork-</i> | 'to be afraid/scared of' |
| | <i>modəraj-</i> | 'to stare with wide open eyes.' |

The pronominal reciprocal in (72) is more acceptable than the suffixed derivative which the informant considers somewhat unnatural, though it is registered in the dictionary and illustrated by a sentential example; the informant suggests a suffixed reciprocal *tikte-š-* from the verb *tikte-* 'to look fixedly/stare' which is very close in meaning. Curiously enough, in the dictionary the reciprocal meaning of this verb is illustrated by a sentence with the reciprocal pronoun (see (73)); as it happens, the verb *kara-* 'to look' is cited in the specialist literature both with the reciprocal suffix and reciprocal pronoun (72c). This shows that the boundary between the acceptable and non-acceptable is not clear-cut.

- (72) a. *Biz eköö-büz kara-š-tə-k.*
 we two-we look-REC-PAST-1PL
 'We (he and I) looked at each other.'
- b. *Biz eköö-büz biri-biri-biz-dī kara-də-k.*
 we two-we each-other-our-ACC look-PAST-1PL
 (same meaning).
- c. ... *bir neče sekund biri-n-biri kara-š-tə.* (Gr. 243)
 one several second each-ACC-other look-3PL-3.PAST
 '...(they) looked at each other for a few seconds.'
- (73) a. ... *biri-n-biri tikte-š-ip ...* (Ju.2. 235)
 each-ACC-other stare-3PL-CONV
 '... staring at each other.'
- b. ... *tikte-š-ip tur-a-t eki šer.* (Ju.2. 235)
 stare-REC-CONV AUX-PRES-3 two athlete
 '... two athletes staring at each other.'

In the following two examples the suffixed reciprocal is correct but it sounds less natural than with the reciprocal pronoun, though it is registered in the dictionary (Ju.1. 49). I cite these data in order to give the reader an idea of live perception of various reciprocals by a native speaker and divergences from the dictionary.

- (74) a. *Biz alda-š-pa-j-bəz.*
 we deceive-REC-NEG-PRES-1PL
 ‘We do not deceive each other.’
- b. *Biz biri-biri-biz-dī alda-ba-j-bəz.*
 we each-other-our-ACC deceive-NEG-PRES-1PL
 (same meaning).

As a rule, suffixed reciprocals based on compound verbs (comprised of a noun and a de-semanticized verb) sound unintelligible, and the reciprocal pronoun is used for rendering the reciprocal sense; cf.:

- (75) a. **Biz ekö-ö-büz kapa kəl-əš-tə-k.*
 we two-we grief do-REC-PAST-1PL
 (intended meaning:) ‘We grieved over each other.’
- b. *Biz ekö-ö-büz biri-biri-biz-dī kapa kəl-də-k.*
 we two-we each-other-our-ACC grief do-PAST-1PL
 (same meaning).
- (76) a. **Biz žek kör-üş-ö-büz.*
 we hatred see-REC-PRES-1PL
 (intended meaning:) ‘We hate each other.’
- b. *Biz biri-biri-biz-dī žek kör-ö-büz.*
 we each-other-our-ACC hatred see-PRES-1PL
 (same meaning).

In one instance a diathesis restriction seems to be in force which forbids the use of a suffixed reciprocal: the latter are not used to express benefactive reciprocal relations:

- (77) a. *Men aga et bəšər-də-m.*
 I he.DAT meat cook-PAST-1SG
 ‘I cooked meat for him.’
- b. **Biz ekö-ö-büz kezekteš et bəšər-əš-tə-k.*
 we two-we by.turns meat cook-REC-PAST-1PL
 (intended meaning:) ‘We cooked meat for each other by turns.’
- c. *Biz ekö-ö-büz kezekteš biri-biri-biz-ge et bəšər-də-k.*
 we two-we by.turns each-other-our-DAT meat cook-PAST-1PL
 (same meaning).

8. Expression of reciprocal arguments

Subject expression in reciprocal constructions is no different from that in non-reciprocal constructions. It is also more or less the same as in Yakut. Constructions with the reciprocal pronoun can be simple only, while constructions with suffixed reciprocal verbs can be either simple or discontinuous. In the former case the subject is expressed by a conjunctive phrase with the conjunction *menen* ‘and’. In the latter case the second argument is expressed by a comitative phrase with the postposition *menen* ‘with’ and the predicate agrees with the first argument only. (Note that in Yakut *kätta* ‘and’/‘with’ takes the same position between the arguments in both the conjunctive and postpositional functions and

the predicate agrees either with the first argument or with both.) The 3PL marker in (78a) is seen by the informant as quite grammatical but not the best variant (though it is quite acceptable with some reciprocals), while in (78b) it is ungrammatical because the first argument is in the singular. This pertains to sentences with the second argument in the plural as well (see (78c)):

- (78) a. *Kəz menen apa-sə öb-üş-tü / öb-üş-üş-tü.*
 daughter and mother-her kiss-REC-PAST.3 / kiss-REC-3PL-3.PAST
 ‘The daughter and her mother kissed each other.’
- b. *Kəz apa-sə menen öb-üş-tü / *öb-üş-üş-tü.*
 daughter mother-her with kiss-REC-3.PAST kiss-REC-3PL-3.PAST
 (same meaning) lit. ‘The daughter kissed with her mother.’
- c. *Kəz alar menen öb-üş-tü / *öb-üş-üş-tü.*
 daughter they with kiss-REC-PAST.3 kiss-REC-3PL-3.PAST
 lit. ‘The daughter kissed with them.’

Note that the grammar of Kirghiz interprets both expressions of the arguments with *menen* ‘and’ and *menen* ‘with’ as subjects: “The grammatical subject in this case is expressed by a combination of at least two words which are joined by the conjunction *menen* or by the postposition *menen*” (Kudajbergenov 1987b:242–3). I hesitate to interpret the comitative group with the postposition *menen* ‘with’ as a real object, but at the same time agreement of the predicate with the first component only hinders viewing the second argument as a part of the subject, as in sentences with the conjunction *menen*. This is probably an intermediate type of constructions which can be interpreted either as semi-simple or semi-discontinuous.

In constructions with the conjunction *menen* of the (78a) type the reciprocal pronoun can be added, as a rule, while in constructions with the postposition *menen* of the (78c) type this is impossible. This may be an additional argument in favour of interpreting constructions with a comitative phrase as discontinuous.

Kirghiz has special expressions for dual subject in all the three persons.

- (79) a. [*Biz*] *ata-m eköö-büz.*
 we father-my two-we
 ‘my father and I.’
- b. [*Siler*] *ata-m eköö-ñör.*
 you.PL father-my two-you
 ‘my father and you.’
- c. [*Alar*] *ata-m eköö-Ø.*
 they father-my two-they
 ‘my father and s/he.’

The following lexicalized reciprocal seems to allow either the dative or the accusative case of the second argument:

- (80) a. *ur-* ‘to beat’ → *ur-uš-* ‘to fight/quarrel/squabble’
- b. *Men anə menen / aga / anə ur-uš-tu-m.*
 I he.GEN with he.DAT he.ACC beat-REC-PAST-1SG
 ‘I scolded him’/‘I quarreled with him.’
 (the first *anə* is an abridged form of the genitive *anən*).

9. The suffix *-š* as a plural, sociative and assistive marker. *Nomina actionis* in *-š*

9.1 Introductory

In Yakut, the productive meanings immediately related to the reciprocal meaning are sociative, comitative and assistive. Of these three meanings the assistive alone is productive in Kirghiz, the sociative meaning being practically non-existent. The plural meaning is grammaticalized and enters into a different grammatical category, because its marker, i.e. the suffix *-š*, can co-occur with the reciprocal/assistive marker. Therefore this suffix as a plural marker may be viewed as its homonym, though they are close enough semantically since both imply plurality of participants.

It may be not quite justified to include *nomina actionis* in *-š* in this section, accidental coincidence being very likely, though in specialist literature there are indications of their genetic relatedness (see Nedjalkov & Nedjalkov, Ch. 26 on Yakut, §14.2).

9.2 Plural

The suffix *-š* is used as a 3PL marker not only in Kirghiz but also in the neighbouring Kazakh and Uzbek languages. This function of *-š* is also attested in Ancient Turkic. As it happens, the examples cited for Ancient Turkic are often interpreted as sociative, though all the relevant verb forms are in the 3rd person, therefore it is not clear whether they contain the inflectional plural suffix (i.e. an agreement marker) and not a marker of the sociative meaning. In Kirghiz it is clearly a pure agreement marker, though an optional one. Unlike the purely inflectional 1PL and 2PL markers, this suffix is also used on converbs (see (84), (86)). Most likely, this usage is descended from the sociative use and this may be related to the loss of the latter function. Note that in the 1st and 2nd person the singular and the plural are sharply distinguished, while in the 3rd person the endings coincide.

- (81) a. *Biz dušman-də at-tə-k.*
 we enemy-ACC shoot-PAST-1PL
 ‘We shot at the enemy.’
- b. *Biz at-əš-tə-k.*
 we shoot-REC-PAST-1PL
 ‘We exchanged shots.’
- c. *Alar dušman-də at-əš-tə.*
 they enemy-ACC shoot-3PL-3.PAST
 ‘They shot at the enemy.’
- d. *Alar at-əš-əš-tə.*
 they shoot-REC-3PL-3.PAST
 ‘They exchanged shots.’

In sentences of the (81c) type when used in a context, the direct object may be ellipted, in which case the verbal form with the suffix *-š* (unlike the (81d) type) may be ambiguous:

- e. *Alar at-əš-tə.*
 they shoot-REC/3PL-3.PAST
- i. ‘They shot [at sb].’ (-əš = 3PL)
- ii. ‘They exchanged shots.’ (-əš = REC)

In textual examples cited in the dictionary, constructions of the (81d) type, i.e. with double -š, are very rare, because context, including the lexical meaning of the predicate, usually contains an indication of the reciprocal meaning or of 3PL, but in isolated sentences of the (81e) type presented to the informant his first interpretation is 3PL, and second the reciprocal, other things being equal; cf. also:

- (82) *Alar sagən-aš-a-t.*
 they miss-REC/3PL-PRES-3
 i. ‘They are missing somebody.’ (-aš = 3PL)
 ii. ‘They are missing each other.’ (-aš = REC).

In causative derivatives from reciprocals the plural marker -š follows the derivational marker but, as usual, it precedes the tense marker (with the verb in (83a) the plural marker is not used as a rule):

- (83) a. *Alar kučakta-š-tə.*
 they embrace-REC-3.PAST
 ‘They embraced.’
 b. *Alar ... kučakta-š-tər-aš-tə.*
 they embrace-REC-CAUS-3PL-3.PAST
 ‘They made them embrace each other.’

There seem to be no rigid rules of the use of the suffix -š as a plural marker. The following tentative observations can be made with respect to the reciprocal -š and plural -š:

(a) if the underlying verb is a one-place intransitive the suffix -š usually has the 3PL meaning; the same reading obtains in those cases when a two-place transitive is used with a non-possessive direct object; in the following example the informant allows the omission of the plural suffix -š, though he prefers the variant with this suffix.

- (84) a. *Kəz-kelin-der tur-uš-a-t, ərdə ug-uš-up sənd-aš-əp.* (Ju.2. 181)
 girl-bride-PL stand-3PL-PRES-3 song listen-3PL-CONV appraise-3PL-CONV
 ‘The young brides stand listening to the song and appraising it.’
 b. ... *belsen-iš-ip tur-uš-up.* (Ju.2. 192)
 prepare.for.a.fight-3PL-CONV stand-3PL-CONV
 ‘...[they] stand preparing for a fight.’ (see also *kel-iš-e-t* in (58))

(b) If the underlying verb is a two-place intransitive or transitive and if the object is absent, the suffix -š is interpreted either as a reciprocal or as a plural marker, depending on the context and frequency of the given reciprocal (see (84)):

- (85) a. *Kişi-ler öl-tür-üş-üş-pö-dü.*
 man-PL die-CAUS-REC-3PL-NEG-3.PAST
 ‘People did not kill each other.’
 b. *Kişi-ler öl-tür-üş-pö-dü.*
 man-PL die-CAUS-3PL-NEG-3.PAST
 ‘People did not kill [anybody].’
 (86) *Ene-si menen kör-üş-üp, ez-il-iš-ip öb-üş-üp.* (Ju.2. 445)
 mother-his.ACC with see-REC-CONV press-PASS-REC-CONV kiss-REC-CONV
 ‘He met with his mother, they kissed heartily.’

(c) If a sentence contains the reciprocal pronoun and the verb is suffixed with *-š* the interpretation of the latter suffix as reciprocal or as plural is not clear, but it does not affect the interpretation of the sentence (nevertheless, the informant views this suffix either as plural or as reciprocal with a degree of certainty) (see (88a)).

(d) If a verb contains two suffixes *-š* the first of them is naturally reciprocal and the second is plural. In these cases the informant usually objects to the use of the reciprocal pronoun (or requires that one of the suffixes should be omitted).

- (87) *Küçük-tar biri-biri-n žala-š[*-aš-]-tə.*
 puppy-PL each-other-ACC lick-REC[-3PL]-3.PAST
 ‘The puppies licked each other.’

In some frequent reciprocals, the informant does not accept the second (plural) suffix *-š*.

- (88) a. *Alar biri-n biri süj-dü / süj-üş-tü.*
 they each-ACC other love-3.PAST love-REC/3PL?-3.PAST
 ‘They fell in love with each other.’
 b. *Alar süj-üş[*-üş]-tü.*
 they love-REC-3PL-3.PAST
 ‘They fell in love with each other.’

But in the following cases with frequently used reciprocals, the informant allows the optional plural marker; e.g.:

- (89) *Alar əmda-š[-aš]-tə.*
 they wink-REC[-3PL]-3.PAST
 ‘They winked at each other.’
 (90) *Alar koŋšu-m menen ajant-tə süjlö-š[-üş]-tü.*
 they neighbour-my with square-ACC talk-REC-3PL-3.PAST
 ‘They talked with my neighbour about the square.’

9.3 Sociative

The sociative meaning is ascribed to the reciprocal suffix both in specialist literature and in dictionaries. But the examples do not as a rule have this meaning: they usually contain the suffix *-š* marking the 3PL meaning instead of the sociative (this confusion is natural, since these meanings are contiguous; see also case (3) in 2.5), therefore substitution of the 1PL or 2PL subject for a 3rd person subject involves omission of this suffix (existence of a sociative form for the 3rd person only is rather unlikely); thus (91a) which is used as an illustration of the sociative meaning in a modern grammar of Kirghiz cannot be transformed into a sentence with a 1PL or 2PL subject; in (91b) and (91c) the 1PL agreement marker is the ending *-k*:

- (91) a. *Ajša menen Kaləjša kül-üp žat-aš-tə.* (Gr. 242)
 A. and K. laugh-CONV AUX-3PL-3.PAST
 ‘Ajsha and Kalyjša laughed.’
 b. **Biz kül-üp žat-aš-tə-k.*
 we laugh-CONV AUX-3PL-PAST-1PL
 ‘We laughed.’

- c. *Biz küł-üp žat-tə-k.*
 we laugh-CONV AUX-PAST-1PL
 (same meaning).

A distinctive feature of the sociative meaning is simultaneity of actions. If the suffix *-š* in the following sentence were sociative in meaning rather than plural, the verb would not collocate with an adverb with the meaning ‘one after another’, but this is not the case:

- (92) *Alar biri-nin art-ə-nan biri kel-iš-ti.*
 they one-GEN back-ə-ABL one come-PL-3.PAST
 ‘They came one after another.’

Sentences with a 1PL or 2PL subject can be convincing examples that would prove the sociative reading. In present-day Kirghiz the sociative meaning has practically disappeared; it is only preserved in folklore texts. In the dictionary, I have found the following folklore examples with the sociative meaning:

- (93) a. *Olžolo-š-up mal al-də-k.* (Ju.2. 67)
 capture-REC-CONV cattle take-PAST-1PL
 ‘We took the cattle as loot.’
- b. *Sabak-tə birge oku-š-tu-k köñül-go akal*
 lesson-ACC together learn-REC-PAST-1PL heart-DAT reason
toku-š-tu-k. (Ju.2. 246)
 weave-REC-PAST-1PL
 ‘We learnt lessons together, grew wise together.’
- c. *Emček-ti birge em-iš-ken ene-leš-im de-er...*
 breast-ACC together suckle-REC-PART mother-SUFF-my say-PART
ele-m. (Ju.2. 455)
 AUX-1SG
 ‘I called my milk-brother [who] suckled the breast together [with me].’
- d. *Bir tuugan-daj tuu-š-tu-k.*
 one blood.relative-like be.born-REC-PAST-1PL
 ‘We were born together like blood relatives.’
- e. *Čalgan-də birge čal-əš-tə-k.* (Ju.2. 340)
 reconnaissance-ACC together reconnoitre-REC-PAST-1PL
 ‘We did reconnaissance together.’
- f. *Tooru-l-du birge tooru-š-tu-k.* (Ju.2. 251)
 reconnaissance-ACC together reconnoitre-REC-PAST-1PL
 ‘We did reconnaissance together.’
- g. ... *kaj žer-de köñül kal-əš-tə-k?* (Ju.2. 340)
 why earth-LOC heart leave-REC-PAST-1PL
 ‘... why did we grow cold?’ (implying ‘to each other’).

About half the forms with the sociative meaning of the suffix *-š* occurred in hortative sentences (the hortative marker for 1PL is *-alə[k]/...*), i.e. the speaker urges the addressee to perform a joint action. This meaning is also evident in (94f) with the present-future tense of a 1PL predicate:

- (94) a. *Taarənəç-tə žoj-uš-alək.* (Ju.1. 263)
 resentment-ACC stop-REC-IMP.1PL
 ‘Let us forget our resentments.’
- b. *Ötkön-ketken-di unut-uš-alək.* (Ju.2. 306)
 past-ACC forget-REC-IMP.1PL
 ‘Let us forget the past.’
- c. *ədəjla-š-əp kel-eli.* (Ju.2. 430)
 go.down-REC-CONV AUX-IMP.1PL
 ‘Let’s go down [from the mountains to the valley].’
- d. *Sonun turmuš bal-ə-nan sor-uš-ala, žalžal-əm.* (Ju.2. 157)
 wonderful life honey-its-ABL suckle-REC-IMP.1PL darling-my
 ‘Let us taste the honey of wonderful life, my darling.’
- e. *Ojlo-š-up kör-öliü!* (Ju.2. 63)
 think-REC-CONV see-IMP.1PL
 ‘Let us think!’
- f. *Kijin ojlo-n-uš-a-bəz.* (Ju.2. 63)
 then think-REFL-REC-PRES-1PL
 ‘Then we’ll think about it.’

9.4 Assistive

This meaning of the Kirghiz reciprocal marker is highly productive. If the subject is singular the meaning of the reciprocal suffix is usually assistive, excluding cases with a lexicalized or unproductive meaning. The person who receives help is denoted by the dative case (cf. *ma-ga* in (95b, c)), or it is not mentioned (cf. (96c, d, e)). The following examples contain the assistive forms of an intransitive and a transitive verb respectively (see also (2) and (3)):

- (95) a. *Men işte-di-m.*
 I work-PAST-1SG
 ‘I worked.’
- b. *Al ma-ga işte-š-ti.*
 he I-DAT work-REC-3.PAST
 ‘He helped me to work.’
- c. *Alar ma-ga işte-š-iš-ti.*
 they I-DAT work-REC-3PL-3.PAST
 ‘They helped me to work.’
- (96) a. *Al koj-du sat-tə.*
 he sheep-ACC sell-3.PAST
 ‘He sold sheep.’
- b. *Alar koj-du sat-əš-tə.*
 they sheep-ACC sell-3PL-3.PAST
 ‘They sold sheep.’
- c. *Al koj-du sat-əš-tə.*
 he sheep-ACC sell-REC-3.PAST
 ‘He helped [sb] to sell sheep.’

- d. *Biz koj-du sat-əš-tə-k.*
 we sheep-ACC sell-REC-PAST-1PL
 ‘We helped [sb] to sell sheep.’
- e. *Alar koj-du sat-əš-əš-tə.*
 they sheep-ACC sell-REC-3PL-3.PAST
 ‘They helped [sb] to sell sheep.’

Causative forms cannot be derived from assistives; cf.:

- f. **Al sat-əš-t-tə.*
 he sell-REC-CAUS-3.PAST
 (intended meaning:) ‘He ordered [someone] to help [someone] sell [something].’

The assistive reading is the only one possible in (96d), i.e. in a situation when *-š* cannot be interpreted either as a 3PL marker (because the verb is in the 1st or 2nd person) or as a marker of reciprocity (because, in particular, this meaning is rendered by the reciprocal pronoun), on condition that the lexical meaning of the verb allows the assistive meaning; cf.:

- (97) a. *Siler makta-š-tə-ŋar.*
 YOU.PL praise-REC-PAST-2PL
 i. *‘You praised *each other*.’
 ii. ‘You *helped* sb to praise sb.’
- b. *Siler biri-biri-ŋer-di makta-də-ŋar.*
 YOU.PL each-other-YOUR-ACC praise-PAST-2PL
 ‘You praised each other.’

If *-š* is omitted the sentence retains its grammaticality but the dative case form acquires the meaning of beneficiary, its referent not taking part in the action described; cf.:

- (98) a. *Al eže-si-ne paxta ter-iš-ti.*
 he sister-his-DAT cottonwool gather-REC-3.PAST
 ‘He helped his sister to gather cottonwool.’
- b. *Al eže-si-ne paxta ter-di.*
 he sister-his-DAT cottonwool gather-3.PAST
 ‘He gathered cottonwool for his sister.’

Reciprocal constructions based on assistives can be formed with the help of the reciprocal pronoun only (see (49b) in 5.2.2).

9.5 *Nomina actionis* in *-š*

This suffix is not semantically related to the reciprocal suffix *-š* on verbs. There is an opinion that these suffixes are genetically related (Radloff 1897: 57–8), therefore I will briefly consider *nomina actionis* with this suffix and its relation to another suffix of *nomina actionis*, namely, *u/-üü/-oo/-öö*. As mentioned above (see 4.3 and 5.5), in nominal derivation from reciprocal verbs this suffix is favoured over *-š*. Both suffixes are highly productive and derive nouns of action practically from any verbal stem. Roughly speaking, these nouns correspond to infinitives of European languages. Nouns with both suffixes are semantically

contiguous and sometimes entirely synonymous, but the latter suffix tends to be more “concrete” in meaning (see Tojchubekova 1987:310, 312). At least the following cases of relationship between the two formal types of *nomina actionis* can be distinguished.

1. The main case is probably the one in which *nomina actionis* are formed from non-reciprocals by means of both suffixes that are synonymous and interchangeable, while from reciprocals they are formed by means of *uu-*; e.g.:

- (99) a. *süjlä-* ‘to say’ → a’. *süjlä-ö* ‘speaking, speech’
 a”. *süjlä-š* ‘speaking, speech’
 b. *süjlä-š-* ‘to talk/converse’ → b’. *süjlä-š-üü* ‘conversation’ (Ju.2. 171).

2. In another case, *nomina actionis* from non-reciprocals are not synonymous when derived with different suffixes: the derivative in *-uš* (100a”) has a more “concrete” meaning than (100a’) and it is formally identical with and semantically contiguous to the reciprocal under (100b), which makes them different from (99a”) and (99b) whose stems are only formally identical. The relationship between (100b) and (100b’) is the same as between (99b) and (99b’).

- (100) a. *ur-* ‘to beat/hit’ → a’. *ur-uu* ‘beating’
 a”. *ur-uš* ‘(a) fight’
 b. *ur-uš-* ‘to fight’ → b’. *ur-uš-uu* ‘fighting’ (Ju.2. 309).

3. This case differs from the above two in that it includes *reciproca tantum* (see 13.4.1) but it is semantically similar to them, therefore it is expedient to mention it here. These verbs have parallel materially identical and semantically correlated nouns which do not quite meet the description of *nomina actionis*, because the root-final component *-š* is not a suffix, at least not synchronically.

- (101) a. *almaš-* ‘to change’ (vi) → a’. *almaš-uu* ‘change, exchange’
 a”. *almaš* ‘change, replacement’ (Ju.1. 52).

This latter type is also represented by the following pairs for which forms like (101a’) are derived automatically (cf. *eregiš-* ‘to argue’ → *eregiš-üü* ‘arguing’):

- (102) *eregiš-* ‘to argue’ – *eregiš* ‘argument’
 keŋeš- ‘to counsel each other’ – *keŋeš* ‘advice’
 meldeš- ‘to wager/compete’ – *meldeš* ‘wager, competition’
 talaš- ‘to argue/squabble’ – *talaš* ‘argument, squabble’
 tartäš- ‘to argue’ – *tartäš* ‘argument.’

10. Other meanings of the suffix *-š*

10.1 Verbs with the suffix *-š*

The unproductive meanings of this suffix include the sociative, or rather, this meaning is lost in present-day Kirghiz. It is considered above alongside the assistive meaning because it is also very close to the reciprocal and the assistive meanings. Kirghiz differs from Yakut

in that it lacks the converse meaning in the reciprocal suffix, and it has a larger number of competitive verbs. Let us consider the unproductive meanings of the suffix in question.

10.1.1 Anticausative

This meaning is registered not only in derivatives from lexical reciprocals (cf. *batta-* ‘to glue sth to sth’ → *batta-š-* ‘to get glued’; see 13.2) but also in a number of derivatives from other verbs that are lexical causatives; in the example below the suffix *-š* occurs with the passive marker *-l* but it is not related to the passive in any way:

- (103) a. *Men čač-am-ə nəmda-də-m.*
I hair-my-ACC wet-PAST-1SG
‘I wetted my hair.’
b. *Čač nəmda-l-də.*
hair wet-PASS-3.PAST
lit. ‘The hair is wetted [by someone].’
c. *Čač nəmda-l-əš-tə.*
hair wet-PASS-REC-3.PAST
‘The hair became wet.’
- (104) a. *majla-* ‘to smear (with fat)’
b. *Bet-i majla-n-əš-əp tur-a-t.*
face-his smear-REFL-REC-CONV AUX-PRES-3
‘His face shines (with fat).’
- (105) a. *Toŋ alma tiš-im-di kama-də.*
sour apple tooth-my-ACC make.sore-3.PAST
lit. ‘A sour apple made my teeth sore.’
b. *Tiš-im kama-š-tə.*
tooth-my.NOM make.sore-REC-3.PAST
lit. ‘My teeth became sore.’

10.1.2 Competitive

The verbs with this meaning denote all kinds of contests. Some of them may have other, reciprocal proper or lexicalized meanings alongside the competitive. Most likely, these are cases of the development of a reciprocal or sociative meaning in each verb rather than derivation according to a given pattern. Examples:

- (106) *ajt-* ‘to tell, speak’ → *ajt-əš-* i. ‘to compete in improvisation’
(about narrators of folk tales),
ii. ‘to argue/squabble’
at- ‘to shoot’ → *at-əš-* i. ‘to compete in shooting’
ii. ‘to exchange shots’
atta- ‘to jump/jump over’ → *atta-š-* ‘to compete in jumping over sth’
čap- ‘to run/ride fast’ → *čab-əš-* ‘compete in running/riding’
(Ju.2. 333)
čert- ‘to play a string instru- → *čert-iš-* ‘to compete in playing a string
ment’ instrument’ (Ju.2. 359)
eŋ- ‘to touch ground (of riders)’ → *eŋ-iš-* ‘to compete in dismounting the rival
riders’

<i>saj-</i> ‘to stab with a spear’	→ <i>saj-əš-</i>	i. ‘to compete in spear fighting (of riders)’ ii. ‘to put out each other’s eyes, etc.’
<i>sal-</i> ‘to direct the horse’	→ (<i>at</i>) <i>sal-əš-</i>	‘to compete in horse racing’
<i>salmakta-</i> ‘to estimate’	→ <i>salmakta-š-</i>	‘measure one’s strength, wit with sb’
<i>tart-</i> ‘to pull/drag’	→ (<i>ulak</i>) <i>tart-əš-</i>	‘compete in goat-pulling (of riders)’
<i>taskakta-</i> ‘to trot fast’(of horses)	→ <i>taskakta-š-</i>	‘to compete in horse trotting races’
<i>žeq-</i> ‘to win’	→ <i>žeq-iš-</i>	‘to compete, try to win.’

10.1.3 *The meaning of diminishing and entangling*

A number of rather heterogeneous derivatives in *-š* from one-place intransitives have the meanings of diminishing in size, entangling of parts of a whole, and the like (sometimes the derivative verb is close in meaning to the underlying verb):

(107) <i>čipta-</i> ‘to fit closely’	→ <i>čipta-l-əš-</i> ‘to get matted’
<i>kuru-</i> ‘to dry (up)’ (vi)	→ <i>kuru-š-</i> ‘to shrink/contract’
<i>uju-</i> ‘to curdle/coagulate’, ‘to accumulate’	→ <i>uju-š-</i> ‘to get matted/crumpled.’

10.2 Verbs with the complex reciprocal-causative suffix *-š-tər*; the intensifying meaning

This suffix is a combination of the reciprocal and the causative suffixes, but in the derivatives considered below it functions as a single morpheme, because verbs with the reciprocal suffix alone do not correlate with the respective derivatives with this complex suffix (see the (b) examples in (108)–(112)). The underlying verb (see the (a) examples below) and the derivative (which does not manifest a causative meaning) are usually very similar in lexical meaning, the latter verb denoting a more intensive and/or repeated action (see Abдиеv 1995: 97–8). The analogous Turkish suffix *-(i)ş-tir* is also used in this meaning (see Lewis 1967: 148).

(108) a. <i>ojlo-</i>	‘to think’
→ a. <i>ojlo-n-</i>	‘to start thinking’
[→ b. <i>ojlo-n-uš- ?</i>]	(cf. (94f))
→ c. <i>ojlo-n-uš-tur-</i>	‘to ponder/think hard about sth.’
(109) a. <i>kara-</i>	i. ‘to look’, ii. ‘to look after’
[→ b. <i>kara-š-</i>]	i. ‘to look at each other’, ii. ‘to help to look after’]
→ c. <i>kara-š-tər-</i>	‘to look for sth intensely.’
(110) a. <i>aŋda-</i>	i. ‘to understand/go deep (into)’, ii. ‘to notice’
[→ b. <i>ʔaŋda-š-</i>]	(not registered in the dictionaries)]
→ c. <i>aŋda-š-tər-</i>	‘to find out/make inquiries’ (Ju.1. 59).
(111) a. <i>sura-</i>	‘to ask’
[→ b. <i>sura-š-</i>]	‘to question each other’]
→ c. <i>sura-š-tər-</i>	‘to question again and again’ (Ju.2. 166).
(112) a. <i>izde-</i>	‘to look for’
[→ b. <i>izde-š-</i>]	‘to look for each other?’]
→ c. <i>izde-š-tir-</i>	‘to look for sth intensively.’

Sentential examples:

- (113) *Men munu ojlo-n-uš-tur-aj-əm.*
 I this think-REFL-REC-CAUS-OPT-1SG
 ‘I am thinking it over’; ‘I will think it over again and again.’
- (114) *Kara-š-tər-əp, akča taap ber-iñiz.* (Ju.1. 350)
 look-REC-CAUS-CONV money find.CONV give-IMP.2PL
 ‘Look for some money (for me).’
- (115) *Men akča izde-š-tir-dī-m.*
 I money ask-REC-CAUS-PAST-1SG
 ‘I asked around for money (intensively, asking many people).’

On other usages of the complex *-š-tər* see 13.2–13.3.

The meanings of intensity and iterativity of the reciprocal-causative suffix are pointed out in other Turkic languages (see, among others, Gordlevskij 1928:35; Sevortjan 1962:356–8; Lewis 1967:148; Schlögel 1985:106–9).

11. Lexicalization

11.1 Introductory

Lexicalized verbs with the suffix *-š* are represented by derivatives, with the exception of those dealt with above, on which this suffix cannot be substituted for by the reciprocal pronoun (on condition the meaning is more or less retained), i.e. by those derivatives whose meaning does not include that of the underlying verb in a more or less standard way. The main lexical domains of these reciprocals, with the exception of individual instances, are similar to lexicalizations in Yakut to a greater or lesser extent. Lexicalized derivatives are usually reciprocal in meaning. Some of them retain a standard reciprocal meaning alongside the lexicalized one. In some cases the meanings of the underlying base and the derivative differ to such a degree that they may be viewed as occasional coincidences of the stems (this does not concern metaphorical shift in instances like *tajə-* ‘to slide/glide’ → *tajə-š-* ‘to compete’).

11.2 Some types of lexicalization

We shall list the main lexical groups of lexicalized reciprocals, to give an idea of their semantic range in Kirghiz. References to the entries in (Ju.1) and (Ju.2) are not given: they can be found according to the alphabet (this also concerns the lists of verbs in Section 12).

1. The most numerous group comprises intransitive reciprocals denoting various hostile actions, competing, etc., like the following:

(116) <i>ajt-</i> ‘to speak/say’	→	<i>ajt-əš-</i> ‘to quarrel/argue’
<i>čalkalda-</i> ‘to churn’ (vi)	→	<i>čalkalda-š-</i> ‘to thrash/flog each other’
<i>čel-</i> ‘to catch with horns’	→	<i>čel-iš-</i> i. ‘to engage in single combat’ ii. ‘to catch each other with horns (of bulls)’
<i>čelkilde-</i> ‘to bubble’	→	<i>čelkilde-š-</i> ‘to thrash/flog each other’
<i>čuku-</i> ‘to pick’	→	<i>čuku-š-</i> ‘to trip each other’
<i>kajra-</i> ‘to break’ (vi)	→	<i>kajra-š-</i> ‘to come to blows’
<i>kazar-</i> ‘to blush’	→	<i>kazar-əš-</i> ‘to attack each other like cocks’
<i>majmakta-</i> ‘to tie a horse by the front leg’	→	<i>majmakta-š-</i> ‘to accuse each other’ (Ju.2. 12)
<i>ooru-</i> ‘to be ill’	→	(<i>könül</i> ‘heart’) <i>ooru-š-</i> ‘offend/hurt each other’
<i>tajǰ-</i> ‘to slide/glide’	→	<i>tajǰ-š-</i> ‘to compete’, etc.

2. Another group comprises intransitive verbs with the lexical meanings of coming to an agreement, becoming friends, getting reconciled and the like:

(117) (<i>žət</i> ‘smell’) <i>al-</i> ‘to smell/catch the smell of’	→	<i>žət al-əš-</i> ‘to live in concord’
<i>agar-</i> ‘to glitter’	→	<i>agar-əš-</i> ‘to forgive the past to each other’
<i>beki-</i> ‘to strengthen’	→	<i>beki-š-</i> ‘to become friends’
<i>čik-</i> ‘to go out of’	→	<i>čig-əš-</i> ‘to get on/along with sb’
<i>de-</i> ‘to say’	→	<i>de-š-/de-š-iš-</i> ‘to come to an agreement’
<i>kel-</i> ‘to come’	→	<i>kel-iš-</i> ‘to agree’
<i>košto-l-</i> (PASS) ‘to take a spare horse’	→	<i>košto-l-uš-</i> i. ‘to accompany each other’ ii. ‘to become friends/close’
<i>tap-</i> ‘to find’	→	<i>tab-əš-</i> i. ‘to get reconciled’, ii. ‘to find each other’
<i>žara-</i> ‘to like’	→	<i>žara-š-</i> ‘to make peace/get reconciled’
<i>žuuru-l-</i> PASS of ‘to knead’	→	<i>žuuru-l-uš-</i> ‘to become close (friends).’

3. Reciprocals with the main meaning of intention to obtain or achieve something with an implied response action from another referent comprise a separate group:

(118) <i>söjkön-</i> ‘to rub against sth’	→	<i>söjkön-üş-</i> ‘to pester/badger’
<i>šalkalda-</i> ‘to be loosely attached (of a horseshoe, etc.)’	→	<i>šalkalda-š-</i> ‘to flirt with sb’ (Ju.2. 420)
<i>tij-</i> ‘to touch’	→	<i>tij-iš-</i> ‘to flirt with sb’, etc.

4. Individual derivatives:

(119) <i>al-</i> ‘to take’	→	<i>al-əš-</i> ‘to exchange’ (lit. ‘take from each other’)
<i>bošo-</i> ‘to weaken (of a joint)’	→	<i>bošo-š-</i> ‘to weaken (of a person)’
<i>čak-</i> ‘to strike fire’	→	<i>čag-əš-</i> ‘to shine by reflecting light’
<i>kir-</i> ‘to enter’	→	<i>kir-iš-</i> ‘to begin sth’
<i>saj-gəla-</i> ‘to stab repeatedly’	→	<i>saj-gəla-š-</i> ‘to have a stabbing pain’
<i>tište-</i> ‘to bite/take with one’s teeth’	→	(<i>ok</i> ‘arrow’) <i>tište-š-</i> ‘to give an oath to each other (with an arrow in the teeth)’ (Ju.2. 65)
<i>žal-</i> ‘to move slowly’	→	<i>žal-əš-</i> ‘to be deprived of sth’, etc.

12. Denominal lexical reciprocals with the suffix *-la-š*

In this section I will also consider the few deverbal derivatives with this suffix.

12.1 Introductory

The main means of verbal derivation from other parts of speech is the suffix *-la/-da/-ta*. It is extremely productive. As is obvious, *-la-š* is a combination of the suffix *-la* and the reciprocal suffix *-š*. Initially, from verbs in *-la* reciprocal verbs were formed by means of *-š*, i.e. in the regular way described in Section 4 (cf. *sojul* ‘cudgel’ → *sojul-da-* ‘to beat with a cudgel’ → *sojul-da-š-* ‘to beat each other with a cudgel’ (Ju.2. 158)), and later the complex *-laš* came to function as a single suffix and derive verbs which do not have correspondences in *-la* (see Kudajbergenov 1987a:212); cf. *araz* ‘quarrel’ → [**araz-da-* →] *araz-daš-* ‘to quarrel’ (Ju.1. 63)). As these derivatives do not have respective words with a non-reciprocal meaning, they are included among lexical reciprocals by definition. A peculiarity of the Kirghiz suffix *-laš* in comparison with its Yakut counterpart is that it derives both verbs and nouns. This is probably related to the existence of *nomina actionis* in *-š*. This complex suffix forms three groups of derivatives: verbs only, nouns only and both verbs and nouns from the same base (over 160 derived verbs and nouns are cited below).

12.2 Verbs with the suffix *-la-š*

These derivatives commonly belong to the lexical groups of competing, aggressive actions, entering into friendly relations, uniting, belonging to a group, joint actions, exchange of information, coming to an agreement, greeting, position opposite each other, meeting, etc. Some of the derivatives are slightly lexicalized. There are over 60 items of this type in our data. Here are representative lists of these lexical groups.

12.2.1 *Verbs of hostile relations, competing, etc.*

(120) <i>akaj</i> ‘a singing competition’	→	<i>akaj-laš-</i> ‘to compete in singing’
<i>araz</i> ‘quarrel’	→	<i>araz-daš-</i> ‘to quarrel’
<i>arəz</i> ‘complaint’	→	<i>arəz-daš-</i> ‘to quarrel/be at law’
<i>arip</i> ‘witchcraft, magic’	→	<i>arip-teš-</i> ‘to compete in witchcraft’
<i>azuu</i> ‘fang’	→	<i>azuu-laš-</i> ‘to fight furiously’
<i>bas (kel-)</i> ‘(to be) equal’	→	<i>bas-taš-</i> ‘to compete, to bet’
<i>čatak</i> ‘quarrel, wrangling’	→	<i>čatak-taš-</i> ‘to quarrel, wrangle, argue’
<i>čər</i> i. ‘squabble’, ii. ‘squabbler’	→	<i>čər-daš-</i> ‘to squabble/begin a squabble’
<i>karši</i> ‘enemy’	→	<i>karši-laš-</i> ‘to set out against each other’
<i>kəsa</i> ‘revenge’	→	<i>kəsa-laš-</i> ‘to reproach each other for the past’
<i>mijzam</i> arch. ‘law’	→	<i>mijzam-daš-</i> ‘to be at law/litigate’
<i>möröj</i> ‘the result of a victory’	→	<i>mörörj-löš-</i> ‘to compete’
<i>ökmöt</i> ‘government, authorities’	→	<i>ökmöt-töš-</i> ‘to be at law/litigate’
<i>til</i> ‘quarrel’	→	<i>til-deš-</i> ‘to quarrel’
<i>žaaκ</i> ‘jaw’	→	<i>žaaκ-taš-</i> ‘to squabble’

- žadaal* ‘quarrel/wrangling’ → *žadaal-daš-* ‘become embittered against each other’
- žaŋžal* ‘quarrel/wrangling’ → *žaŋžal- daš-* ‘to quarrel, wrangle.’
- 12.2.2** *Verbs of friendly relations*
- (121) *dos* ‘friend’ → *dos-toš* ‘to become friends’
- kuda* ‘father of son-in-law’ → *kuda-laš* ‘to become in-laws’
- mojun* ‘neck’ → *mojun-daš* ‘to embrace each other by the neck’
- munaza* ‘reconciliation’ → *munaza-laš* ‘to get reconciled’
- šerik* ‘friend’ → *šerik-teš* ‘to become friends’
- tamər* ‘friend, pal’ → *tamər-laš* ‘become friends on exchanging presents’
- tatuu* ‘peaceful, friendly’ → *tatuu-laš* ‘to get reconciled/become friends’
- ələm* ‘sympathy, liking’ → *ələm-daš* ‘to be on friendly terms with’
- əraj* ‘mood’ → *əraj- laš-* ‘to make peace/get reconciled’, etc.
- 12.2.3** *Verbs of uniting, belonging to a group, joint actions, etc.*
- (122) *algoo* arch. ‘mutual help in farming’ → *algoo-loš-* ‘to help each other in farming’
- artel* ‘artel’ → *artel-deš-* ‘to join in an artel’
- bir* ‘one’ → *bir-deš-* ‘to unite’ (vi)
- borbor* ‘centre’ → *borbor-doš-* ‘to get centralized’
- kiidip* ‘chase’ → *kiidip-daš-* ‘to unite for a chase’ (Ju.1. 454)
- majdan* ‘battle field’ → *majdan-daš-* ‘to fight jointly’
- öz* ‘(one’s) own’ → *öz-döš-* ‘to become close/one of’
- ujum* ‘organization’ → *ujum-daš-* ‘to become organized’
- üj-* ‘to put into a heap’ → *üj-löš-* ‘to gather together’
- žamaat* arch. ‘community’ → *žamaat-taš-* ‘to be a member of community.’
- 12.2.4** *Verbs of communication*
- (123) *akə* ‘payment’ → *akə-laš-* ‘to make mutual payments, bargain’
- ant* ‘oath’ → *ant-taš-* ‘to give an oath to each other’
- aŋgme* ‘conversation’ → *aŋgme-leš-* ‘to converse’
- sooda* ‘trade, trading’ → *sooda-laš-* ‘to bargain’
- ubada* ‘promise’ → *ubada-laš-* ‘to give each other promises’
- žoop* ‘reply’ → *žoop-toš-* ‘to talk, to make a deal’
- žüjö* ‘reasonable argument’ → *žüjö-löš-* ‘to give each other arguments’
- žüz* ‘face, cheek’ → *žüz-döš* ‘to talk standing face to face’, etc.
- 12.2.5** *Verbs of greeting and saying goodbye*
- (124) *aman (bol!)* ‘(be) well, happy(!)’ → *aman-daš-* ‘to inquire after each other’s health’
- esen* ‘well, happy’ → *esen-deš-* ‘to inquire after each other’s health’
- koš!* ‘goodbye!’ → *koš-toš-* ‘to say goodbye’
- salam* ‘hello’ → *salam-daš-* ‘to say hello to each other.’

12.2.6 *Verbs of spatial relations*

- | | | |
|--------------------------|---|--|
| (125) <i>arka</i> ‘back’ | → | <i>arka-laš-</i> ‘to be back to back to each other’ |
| <i>bet</i> ‘face’ | → | <i>bet-teš-</i> ‘to meet face to face’ |
| <i>but</i> ‘foot’ | → | <i>but-taš-</i> ‘to get entangled (of feet)’ |
| <i>kanat</i> ‘wing’ | → | <i>kanat-taš-</i> i. ‘to become close neighbours’
ii. ‘to fly wing to wing’ |
| <i>köz</i> ‘eye’ | → | <i>köz-döš-</i> ‘to meet <i>tête-à-tête</i> , etc.’ |

12.2.7 *Verbs with non-reciprocal (or peripheral reciprocal) meanings*

- | | | |
|---|---|---|
| (126) <i>kata</i> ‘mistake’ | → | <i>kata-laš-</i> ‘to make mistakes’ |
| <i>kərgəz</i> ‘Kirghiz’ | → | <i>kərgəz-daš-</i> ‘to become like a Kirghiz’ |
| <i>kəštak</i> ‘kishlak (village in Central Asia)’ | → | <i>kəštak-taš-</i> ‘to become settled’ |
| <i>madanijat</i> ‘culture’ | → | <i>madanijat-taš-</i> ‘to become cultured’ |
| <i>načar</i> ‘weak’ | → | <i>načar-laš-</i> ‘to become worse’ |
| <i>sistema</i> ‘system’ | → | <i>sistema-laš-</i> ‘to be(come) systematized’ |
| <i>žergilik</i> ‘indigenous, local’ | → | <i>žergili-teš-</i> ‘to start using the local language (in business, clerical work).’ |

12.2.8 *Lexicalized derivatives*

These are verbs without semantically more or less related underlying bases:

- | | |
|-------------------------|--|
| (127) <i>ataan-daš-</i> | ‘to shift work, etc. on each other/argue’ (cf. <i>ata-/ataa-</i> ‘to call/name’) |
| <i>boor-doš-</i> | ‘to fraternize’ (cf. <i>boor</i> ‘liver’) |
| <i>kez-deš-</i> | ‘to meet, come across’ (cf. <i>kez</i> ‘moment, time, occasion’) |
| <i>sep-teš-</i> | ‘to help each other’ (cf. <i>sep</i> ‘dowry’). |

12.3 Nouns with the suffix *-la-š*

This is a set of about 100 nominal derivatives of which about 20 have verbal homonyms. Below, the lexical groups of nouns with the reciprocal meaning are enumerated. The nouns denote similarity of two (or more) persons or entities with respect to the feature named by the root. This motivation may be literal or rather metaphorical. The respective nouns are non-existent in Yakut, or at least they are not registered in the dictionaries.

Within the groups below, first reciprocal nouns are listed that have no parallel verbs with the same root, and then, under a separate number, nouns with parallel materially identical and usually semantically related verbs.

12.3.1 *Nouns denoting persons sharing a spiritual feature*

- | | | |
|-----------------------------------|---|--|
| (128) <i>bikir</i> ‘thought’ | → | <i>bikir-deš</i> ‘like-minded person’ |
| <i>din</i> ‘belief, religion’ | → | <i>din-deš</i> ‘co-religionist’ |
| <i>keŋeš</i> ‘advice’ | → | <i>keŋeš-teš</i> ‘person with whom one exchanges advice’ |
| <i>sanaa</i> ‘thought, care’ | → | <i>sanaa-laš</i> ‘friend, like-minded person, confidant’ |
| <i>sər</i> ‘secret’ | → | <i>sər-daš</i> ‘like-minded person’ |
| <i>talap</i> ‘search, aspiration’ | → | <i>talap-taš</i> ‘(person) seeking the same goal’ |
| <i>əman</i> ‘(religious) belief’ | → | <i>əman-daš</i> ‘co-religionist’, etc. |

- (129) *akəl* ‘mind, reason, intelligence’ → *akəl-daš* i. ‘advisor’, ii. ‘like-minded person’
akəl-daš- ‘to consult/take counsel.’

12.3.2 Nouns denoting personal relations (*‘friend’, ‘enemy’, etc.*)

- (130) *könül* ‘heart’ → *könül-döš* ‘intimate friend’
opaa ‘loyalty, faithfulness’ → *opaa-laš* ‘persons faithful/loyal to each other’
tanap ‘rope, linking thread’ → *tanap-taš* lit. ‘(persons) tied by a common thread’
ubar ‘dear’ → *ubar-laš* ‘bosom friend’
žaldəz ‘star’ → *žaldəz-daš* ‘(persons) living in concord, happily.’
- (131) *əntəmak* ‘agreement, unanimity’ → *əntəmak-taš* ‘person in agreement with sb’
əntəmak-taš- ‘to become friends/act together’
žurt ‘people, relatives’ → *žurt-taš* ‘living in peace between themselves (about tribes, families)’
žurt-taš- ‘to make peace.’

12.3.3 Nouns denoting membership in a group

- (132) *brigada* ‘brigade’ → *brigada-laš* ‘(person) from the same brigade’
klass ‘class’ → *klass-taš* ‘classmate’
kolxoz ‘collective farm’ → *kolxoz-doš* ‘(person) from the same farm’
kurs ‘course’ → *kurs-taš* ‘fellow-student (from the same year)’
ot ‘fire’ → *ot-toš* i. ‘(person) sharing the hearth’, ii. ‘friend’
sabak ‘lesson’ → *sabak-taš* ‘classmate’
žamaat ‘community, society’ → *žamaat-taš* ‘member of the same community’
žol ‘road, way’ → *žol-doš* ‘fellow-traveller, comrade’, etc.
- (133) *önök* ‘partner (in a game)’ → *önök-töš* ‘partner (in a game)’, ‘co-participant’
önök-töš- ‘to play divided into two groups’
žaat ‘(hostile) side, party’ → *žaat-taš* ‘adherent of one of hostile parties’
žaat-taš- ‘to break into hostile groups.’

12.3.4 Nouns denoting kinship, blood relations, common origin

- (134) *ata* ‘father’ → *ata-laš* ‘born of the same father’
boor ‘liver’ → *boor-doš* ‘blood relative’
emček ‘(woman’s) breast’ → *emček-teš* ‘foster-brother/sister’
ene ‘mother’ → *ene-leš* ‘born of the same mother’
karən ‘belly’, ‘generation’ → *karən-daš* ‘niece, younger sister, relative’
künü ‘wives of one husband’ → *künü-löš* ‘one wife in relation to the other wives’
sijdik i. ‘urine’, ii. flk. ‘sperm’ → *sijdik-tiš* ‘children of the same father and different mothers’
tek ‘origin (by birth)’ → *tek-teš* i. ‘relative’, ii. ‘equal by origin’
tuu- ‘to give birth, to be born’ → *tuu-daš* ‘relative’
uja ‘nest’ → *uja-laš* ‘of the same hatch/brood’
žatən ‘uterus’ → *žatən-daš* ‘born of the same mother’
žer ‘earth’ → *žer-deš* ‘compatriot.’

- (135) *el* ‘tribe, kin, people’, ‘peaceful dweller’ → *el-deš* ‘tribesman, compatriot’
el-deš- ‘to make peace/get reconciled’
söök ‘relative by marriage’ → *söök-töš* ‘relative by marriage of one’s relative’
söök-töš- ‘to become related by marriage’
uruk ‘tribe, kin, family’ → *uruk-taş* ‘tribesman’
 i. ‘to be divided into tribes, etc.’
 ii. ‘to be at war (of tribes).’

12.3.5 Nouns denoting partnership in an activity

- (136) *bajda* ‘gain, advantage, benefit’ → *bajda-laš* ‘companion in profit, benefit’
bötölkö ‘bottle’ → *bötölkö-leš* ‘boon companion’
enči ‘share in inheritance’ → *enči-leš* ‘co-heir, co-parcener’
karal ‘support’ → *karal-daš* ‘(persons) helping each other’
koš ‘roaming’, ‘camp of nomads’ → *koš-toš* ‘member of a roaming group’
olžo ‘loot, bag’ → *olžo-loš* ‘(one) sharing the loot, bag’
oroo arch. ‘storage pit for grain’ → *oroo-loš* ‘(one) sharing a storage pit for grain’
sonor ‘hunting with dogs’ → *sonor-loš* ‘hunting companion’
šabaga ‘share in fate’ → *šabaga-laš* ‘(one) sharing fate’
tabak ‘dish’ → *tabak-taş* ‘table companion’
tastarkon ‘table cloth with food’ → *tastarkon-doš* ‘table companion’
til ‘tongue’ → *til-deš* ‘(person) in collusion’
tuz ‘salt’ → *tuz-daš* ‘table companion.’
- (137) *kol* ‘hand’ → *kol-doš* i. ‘(person) who carries sth with sb’
 ii. ‘(person) who helps’
kol-doš- i. ‘to carry sth together’, ii. ‘to help sb’
kəzmat ‘service, work’ → *kəzmat-taş* i. ‘colleague’, ii. ‘assistant’
kəzmat-taş ‘to collaborate, to assist’
meder ‘help, support’ → *meder-leš* ‘(persons) helping each other’
meder-leš ‘to help each other’
sər ‘secret’ → *sər-daš* ‘confidant’
sər-daš- ‘to confide in each other’
šerik ‘companion, comrade’ → *šerik-teš* ‘companion, co-participant’
šerik-teš- ‘to become companions’
žardam ‘help, assistance’ → *žardam-daš* ‘(those) who help each other’
žardam-daš- ‘to help each other’
žarnak ‘share, part’ → *žarna-laš* ‘(person) who gets his share (of loot, etc.)’
žarna-laš- ‘to take part in an action involving sharing.’

12.3.6 Nouns denoting persons of the same age

- (138) *kurak* ‘time, age, moment’ → *kurak-taş* ‘(person) of the same age’
tuš ‘time, moment, occasion’ → *tuš-taş* ‘(person) of the same age/contemporary’
zaman ‘time, epoch’ → *zaman-daš* ‘contemporary’
žan ‘man’ → *žan-taş* ‘(person) of the same age/year of birth’
žal ‘year’ → *žal-daš* ‘(person) of the same age/year of birth.’

12.3.7 *Nouns denoting persons with similar features*

- (139) *aj* ‘moon’ → *aj-laš* ‘women in the same month of pregnancy’
boj ‘height’ → *boj-loš* ‘(persons) equal in height, age’
čama ‘strength, power’ → *čama-laš* ‘equal in strength, power’
en ‘earmark’ (on cattle) → *en-deš* ‘(cattle) with the same earmark’
sajak ‘likeness, similarity’, ‘face’ → *sajak-taš* ‘(sb, sth) analogous to sb/sth’
sən ‘merit’ → *sən-daš* ‘(person) equal to sb in some respect’
tagdər ‘fate’ → *tagdər-laš* ‘(person) of the same fate’
teŋ ‘equal’ → *teŋ-deš* ‘an equal’
tür ‘appearance, shape’ → *tür-döš* ‘of the same shape, homogeneous’
ün ‘voice, sound, tone’ → *ün-döš* ‘consonant with, of the same voice’
žen ‘sleeve’ → *žen-deš* ‘of the same build, height’
žərgal ‘pleasure, prosperity’ → *žərgal-daš* ‘equal in prosperity’
žün ‘hair, wool’ → *žün-döš* ‘of the same colour/coat.’
- (140) *deŋgel* ‘level’ → *deŋgel-deš* ‘an equal’
deŋgel-deš- ‘to rival, try to equal sb’
öŋ ‘face, complexion, colour’ → *öŋ-döš* ‘of the same colour, alike’
öŋ-döš- ‘to be of the same colour.’

12.3.8 *Nouns denoting persons or things in spatial proximity*

- (141) *ajal* ‘aul’ → *ajal-daš* ‘inhabitants of the same aul’
boluš ‘small rural district’ → *boluš-taš* ‘inhabitants of the same rural district’
čada ‘border, boundary’ → *čada-laš* ‘neighbouring’
čəlbər ‘bridle, rein’ → *čəlbər-daš* ‘riders (riding) next to each other’
ešik ‘door’ → *ešik-teš* ‘next door neighbour’ (‘living side by side’)
kabərga ‘rib’ → *kabərga-laš* ‘next door neighbour’
kəštak ‘settlement, aul’ → *kəštak-taš* ‘fellow villager’
meken ‘abode, shelter’ → *meken-deš* ‘compatriot’
örüš ‘pasture’ → *örüš-töš* ‘(person) in the same pasture with sb’
suu ‘water, river’ → *suu-laš* ‘(settlement) situated on the same river’
tuš ‘a place opposite’ → *tuš-taš* ‘situated against/opposite each other’
üjür ‘herd’ → *üjür-döš* ‘(horse) in the same herd with others’
üstöl ‘table’ → *üstöl-döš* ‘(person) sitting next to sb at the table.’
- (142) *irege* ‘place by the threshold’ → *irege-leš* ‘next door neighbour’ (‘threshold to threshold’)
irege-leš- ‘to be friends with sb’
kanat ‘wing’ → *kanat-taš* ‘next door neighbour’
kanat-taš ‘to be next (wing to wing) to each other’
maŋdaj i. ‘forehead’ ii. ‘opposite side’ → *maŋdaj-laš* ‘(sb/sth) opposite each other’
maŋdaj-laš- i. ‘to collide’, ii. ‘to come to blows.’

12.3.9 Lexicalized nouns

These nouns are also reciprocal in meaning but they have no underlying bases at all or they are unrelated semantically:

- (143) *baar-daš* i. 'close friend', ii. 'beloved' (cf. *baar-daš* 'to have a heart to heart talk')
marka-laš 'person from a group with common interests' (cf. *marka* 'youngest child').

13. Lexical reciprocals and their derivatives. Verbs of joining and separating

13.1 Introductory

This domain of reciprocals seems to be more elaborate in Kirghiz than in Yakut. Three main groups of lexical reciprocals and their derivatives can be distinguished. In Groups A and B the underlying verbs are three-place transitives (including verbs taking a plural object). These groups differ in the character of derivation. Thus in Group A the derivation is consecutive: $a > b > c$ (144). Group B derivatives are both related immediately to the underlying verb: $a > b$ and $a > c$ (145).

The underlying (and the derived reciprocals of the (c) type in Group B) lexical reciprocals of Groups A and B have typical meanings (denoting mostly connecting) like 'to connect', 'to gather', 'to mix', 'to glue/paste', 'to make closer', 'to make denser', 'to part', 'to compare', 'to replace', 'to tie', etc. As we can see, the final derivatives of the (c) type in both groups are more similar to the underlying transitives (sometimes, in the *Russian-Kirghiz dictionary* a Russian verb is translated into Kirghiz by two, types (a) and (c), transitives at once; thus the Russian verb *sojedinjat* 'to connect' is translated by *ula-* and *ula-š-tər-* (Ju.3. 803); the Russian verb *svjazyvat* 'to tie' is translated by *bajla-* and *bajla-š-tər-* (Ju.3. 763). In Group A, derivation of the $a > b$ type results in an anticausative meaning, and derivation $b > c$ brings back the causative meaning. In Group B, derivation $a > b$ results in a variety of meanings, most commonly the assistive. In the case of $a > c$ derivation the meaning is more or less retained or changes slightly.

Group A

- (144) a. *ula-* 'to join sth with sth'
 → b. *ula-š-* 'to join' (vi)
 → c. *ula-š-tər-* 'to join sth with sth' (Ju.2. 302, 304)

Group B

- (145) a. a. *bajla-* 'to tie sth to sth/tie up'
 [→ b. *bajla-š-* 'to help to tie', *'to tie each other'
 → c. *bajla-š-tər-* 'to tie (e.g. horses) together' (Ju.1. 96–7).

In Group C, contrary to the first two groups, the underlying verbs are two-place intransitives (including those with a plural subject) (see (146)). Typical meanings of these intransitives are 'to gather', 'to meet', 'to compete', 'to argue', 'to join', 'to divorce/part', and also such peripheral reciprocal meanings as 'to get entangled', 'to wrinkle', 'to catch (on)',

etc. The difference within pairs (146a) and (146b) is minimal (note the highly developed synonymy of derivatives in Kirghiz). (146) contains a maximum derivational chain for the types of morphological derivatives with the chosen suffixes. In most cases, however, the opposition (146a) seems to be valid.

Group C

- (146) a. *birik-* ‘to unite’ (vi) → *birik-tir-* ‘to unite’ (vt)
 b. *birig-iš-* ‘to unite’ (vi) → *birig-iš-tir-* ‘to unite’ (vt) (Ju.1. 136).

13.2 Group A: Three-member derivational chain vt > vi > vt; anticausatives with the suffix -š

At least 10 three-place transitives and two-place transitives with a plural object belong in this group. They are lexical causatives. Nearly all of them denote combining or joining of two or more entities. Besides the above mentioned (144a, b, c), the following verbs meet this description:

- (147) a. *batta-* ‘to paste sth with starch’
 → b. *batta-š-* ‘to get glued/stuck together’
 → c. *batta-š-tər-* ‘to paste/glue sth together’ (Ju.1. 117).
- (148) a. *čapta-* ‘to glue sth to sth’
 → b. *čapta-š-* ‘to get glued together’
 → c. *čapta-š-tər-* ‘to glue sth together’ (Ju.2. 348).
- (149) a. *čatə-* ‘to tangle sth (threads, strings, etc.)’
 → b. *čatə-š-* ‘to become tangled’
 → c. *čatə-š-tər-* ‘to tangle sth’ (Ju.2. 352–3).
- (150) a. *epte-* ‘to join/glue together’ (rare)
 → b. *epte-š-* ‘to become joined’
 → c. *epte-š-tir-* ‘to glue/join into one’ (Ju.2. 459).
- (151) a. *tij-* ‘to touch (e.g. of one knee against the other)’
 → b. *tij-iš-* ‘to come into contact/adjoin’
 → c. *tij-iš-tir-* ‘to make sth (e.g. knees) come into contact’ (Ju.2. 233–4).
- (152) a. *topto-* ‘to gather (e.g. people) into a crowd’
 → b. *topto-š-* ‘to gather into a crowd’ (vi)
 → c. *topto-š-tur-* ‘to gather sth into a pile’ (Ju.2. 253).
- (153) a. *əkta-* ‘to press’
 → b. *əkta-š-* ‘to press oneself to each other’
 → c. *əkta-š-tər-* ‘to press two entities tightly together’ (vt) (Ju.2. 428).

Compare sentential examples for (151):

- (154) a. *Anən üstünkü tiš-i astəŋkə tiš-i-ne tij-di.*
 he.GEN upper tooth-his lower tooth-his-DAT touch-3.PAST
 ‘His upper teeth clenched with (lit. ‘touched’) his lower teeth.’

- b. *Anən üstünkü tiş-i menen astənkə tiş-i tij-iş-ti.*
 he.GEN upper tooth-his and lower tooth-his touch-REC-3.PAST
 ‘His upper and lower teeth clenched.’ (lit. ‘touched each other.’)
- c. *Al tiş-ter-i-n tij-iş-tir-di.*
 he tooth-PL-his-ACC touch-REC-CAUS-3.PAST
 ‘He clenched his teeth together.’

The following verbs are close to these verbs, but the semantic opposition between the first and the second members is not quite (standard) causative: in general, here as well as in some other cases and, it seems, cross-linguistically, the semantic relation between (b) and (c) is more regular than between (a) and (b), i.e. valency decrease involves a greater shift in meaning than valency increase. The relation between (a) and (b), e.g. in (157) and (158), is not so much purely semantic (in the sense that meaning ‘a’ can be obtained from meaning ‘b’ by subtracting a certain sense) as metaphoric and figurative.

- (155) a. *kak-* ‘to hit’
 → b. *kag-əš-* ‘?to collide/come to blows’
 → c. *kag-əš-tər-* ‘to hit one thing against another’ (Ju.1. 312–3).
- (156) a. *žap-* ‘to close/cover’
 → b. *žab-əš-* ‘to get glued/stuck together’
 → c. *žab-əš-tər-* ‘to glue sth together’ (Ju.1. 209).
- (157) a. *arala-* ‘to walk between sth’ (vt)
 → b. *arala-š-* ‘to get mixed’
 → c. *arala-š-tər-* ‘to mix sth’ (Ju.1. 63–4).
- (158) a. *kajčəla-* ‘to cut sth with scissors’
 → b. *kajčəla-š-* ‘to cross like scissors’ (vi)
 → c. *kajčəla-š-tər-* ‘to cross/fold sth like scissors’ (Ju.1. 323–4); cf.:
- (159) a. *Oη but-u sol but-u-na kajčəla-š-tə.*
 right leg-his left leg-his-DAT CROSS-REC-3.PAST
 ‘His right leg crossed his left leg.’
- b. *Al oη but-u-n sol but-u-na kajčəla-š-tər-də.*
 he right leg-his-ACC left leg-his-DAT CROSS-REC-CAUS-3.PAST
 ‘He crossed his legs.’ (lit. ‘He placed his right leg across his left leg.’)

The data discussed in this section seem to indicate that there is a tendency for opposition *vi* > *vt* (where both members are marked, cf. *-š* > *-š-tər*) to acquire a more important role, i.e. to cover a larger number of verbal pairs, and, correspondingly, for the opposition *vt* > *vi* to lose in importance. This is particularly obvious when the semantic opposition of *vi* > *vt* is more standard than *vt* > *vi*; cf., for instance, (155)–(159). It may be tentatively proposed that one of the functions of the suffix *-š-tər* is to mark object-oriented reciprocals. In this role, it appears not only with standard reciprocals (see 5.3), but also in the domain of lexical reciprocals. And in view of this the material of the subsequent section

is particularly significant, because in this case the suffix in question is added to transitive lexical reciprocals (see also 10.2).

13.3 Group B: Two-member derivational chains $vt_i > vt/vi$ and $vt_i > vt$;
complex suffix *-š-tər*

In this group, derivatives with the suffix *-š* are assistive in meaning (most commonly), or lexicalized, etc., and thus their meaning is not part of the meaning of the respective derivative with the suffix *-tər*. Therefore we can assume that *-š-tər* functions as a single derivational morpheme: it came to be perceived as such probably due to the existence of oppositions considered in 13.2 where it is not a compound suffix. In this group a transitive verb is derived from another transitive, and the moment of joining two entities rather than joining one of them to the other is implied by the derivatives more strongly than by the base verbs; besides, there may be various individual differences between the base and the derivative, but generally their meanings are close enough. This probably reveals a tendency to express the joining or combining of two or more entities by morphological means.

- (160) a. *kotor-* i. 'to change horses', ii. 'move horses from one pasture to another'
 [→ b. *kotor-uš-* 'to help to change horses or move them ...']
 → c. *kotor-uš-tur-* 'to move many horses from one pasture to one place' (Ju.1. 409–10).
- (161) a. *kuj-* 'to pour sth (into)'
 [→ b. *kuj-uš-* 'to help to pour sth (into)']
 → c. *kuj-uš-tur-* 'to pour sth from several vessels into one' (Ju.1. 457).
- (162) a. *kura-* i. 'to make sth out of pieces' (e.g. a patchwork quilt)
 ii. 'to accumulate/save/gather' (e.g. cattle)
 iii. 'to put sth in order'
 [→ b. *kura-š-* 'to help to accumulate, etc.']
 → c. *kura-š-tər-* i. 'to accumulate/save/gather' (e.g. cattle)
 ii. 'to put sth in order'
 iii. 'to construct (one object out of several)' (Ju.1. 247, 248).
- (163) a. *sal-* 'to put sth into sth'
 [→ b. *sal-aš-* 'to help to put sth into sth']
 → c. *sal-aš-tər-* i. 'to put several things one into another'
 ii. 'to compare' (Ju.2. 125).
- (164) a. *səna-* 'to check/test sth'
 [→ b. *səna-š-* 'to help to check/test']
 → c. *səna-š-tər-* 'to compare sth with sth' (Ju.2. 181).
- (165) a. *togo-* 'to count sth as sth (e.g. as part of a debt)'
 [→ b. *togo-š-* 'to stand against/opposite each other']
 → c. *togo-š-tur-* 'to count sth as sth' (e.g. as part of a debt)' (Ju.2. 241–2).
- (166) a. *teŋe-* 'to equalize/make sth equal'
 [→ b. *teŋe-š-* 'to compare (e.g. one's height) with sb' (vi)]
 → c. *teŋe-š-tir-* i. 'to equalize/make sth equal'
 ii. 'to compare with respect to height and length' (Ju.2. 226).

- (167) a. *tüj-* i. 'to knit (a net)', ii. 'to tie into a bundle'
 [→ b. *tüj-üš-* 'to help to knit, to tie ...']
 → c. *tüj-üš-tür-* 'to tie (e.g. several bundles) together' (Ju.2. 278–9).
- (168) a. *ur-* 'to hit/beat'
 [→ b. *ur-uš-* 'to fight/squabble']
 → c. *ur-uš-tur-* i. 'to hit one against another'
 ii. 'to bring together for a fight' (Ju.2. 306, 308, 309).
- (169) a. *žəjna-* 'to gather sth (e.g. cotton-wool)'
 [→ b. *žəjna-š-* 'to help to gather sth']
 → c. *žəjna-š-tər-* i. 'to gather sth', ii. 'to tidy up (a room, flat, etc.)' (Ju.1.277).
- (170) a. *Men bul kap-tə baška kap-ka sal-də-m.*
 I this sack-ACC another sack-DAT put-PAST-1SG
 'I put one sack into another.'
 b. *Men kap-tar-də (*kap-tə) sal-š-tər-də-m.*
 I sack-PL-ACC sack-ACC put-REC-CAUS-PAST-1SG
 'I put the sacks one into another.'
- (171) a. *Men kazan-ga suu kuj-du-m.*
 I pot-DAT water pour-PAST-1SG
 'I poured water into the pot.'
 b. *Men suu-lar-də bir kazan-ga kuj-uš-tur-du-m.*
 I water-PL-ACC one pot-DAT pour-REC-CAUS-PAST-1SG
 'I poured water (from several vessels) into one pot.'

The following instance probably belongs here too, though it denotes disconnecting:

- (172) a. *böl-* 'to divide (into two or more parts), separate (sth from a whole)'
 [→ b. *böl-üš-* 'to divide between/among oneself']
 → c. *böl-üš-tür-* 'to divide/distribute sth among sb' (Ju.1. 151–2).

13.4 Group C: Two-place intransitives and their causative derivatives

The following subgroups can be distinguished here.

13.4.1 Verbs with root final *-š-*. *Reciproca tantum* (?)

It is expedient to consider verbs with the root final *-š-* here: though the connection of this component with the reciprocal suffix is not always obvious, these verbs are mostly reciprocal in meaning and quite numerous. With regard to the four-member derivational group under (146), only the first pair is registered for these verbs. Syntactically and semantically, **a > b** corresponds to **b > c** of Group A. If the dictionary does not register a causative, it is indicated by a question mark. These verbs fall into a number of distinct lexical groups.

1. The base verbs denote competition:

- (173) a. *eregiš-* 'to argue/rival'
 [→ b. *eregiš-tir-* 'to cause to argue, etc.' (Ju.2. 461).

- (174) a. *küröš-* 'to wrestle with each other'
 [→ b. *küröš-tür-* 'to organize wrestling' (Ju.1. 471).
- (175) a. *meldeš-* i. 'to compete', ii. 'wager', iii. 'to come to an agreement'
 [→ b. ? (Ju.2. 24).
- (176) a. *žarəš-* i. 'to compete', ii. 'to compete in running'
 [→ b. *žarəš-tər-* 'to organize a competition' (Ju.2. 237).

2. The base verbs denote diminishing in volume/size, entangling, wrinkling:

- (177) a. *arpaləš-* 'to interlace' (vi)
 [→ b. ? (Ju.1. 69).
- (178) a. *bərəš-* 'to wrinkle' (e.g. of a face') (vi)
 [→ b. *bərəš-tər-* 'to wrinkle/crumple' (vt) (Ju.1. 172).
- (179) a. *bürüš-* 'to double/huddle oneself up' (vi)
 [→ b. *bürüš-tür-* 'to cause to double/huddle oneself up' (Ju.1. 168).
- (180) a. *čataš-* 'to entangle' (vi)
 [→ b. *čataš-tər-* 'to entangle' (vt) (Ju.2. 352).
- (181) a. *čürüš-* 'to wrinkle' (vi)
 [→ b. *čürüš-tür-* 'to wrinkle/crumple' (vt) (Ju.2. 380).
- (182) a. *karəš-* 'to be cramped' (vi)
 [→ b. *karəš-tər-* 'to cause to be cramped' (vt) (Ju.1. 356).
- (183) a. *kuruš-* 'to shrink/contract' (vi)
 [→ b. *kuruš-tur-* 'to cause to shrink/contract' (vt) (Ju.1. 451).

3. The base verbs denote establishing contact, spatial proximity:

- (184) a. *ajkal-/ajkaləš-* i. 'to be entangled [mutually]'
 ii. 'to meet in single combat'
 [→ b. ? (Ju.1. 30).
- (185) a. *ajkaš-* i. 'to be piled cross-wise', ii. 'to adjoin/be in contact'
 [→ b. *ajkaš-tər-* 'to put cross-wise' (Ju.1. 30).
- (186) a. *ermeš-* 'to clutch/grasp at sth', fig. 'to worry/pester' (vi)
 [→ b. ? (Ju.2. 463).
- (187) a. *tutaš-* 'to adjoin' (vi)
 [→ b. *tutaš-tər-* 'to place next to sth/make contiguous' (vt) (Ju.2. 272).
- (188) a. *žanaš-* 'to be/move next to sb/sth' (vi) (cf. *žan* 'side')
 [→ b. *žanaš-tər-* 'to place next to sth' (vt) (Ju.1. 226).
- (189) a. *žarmaš-* 'to clutch/grasp at sth', fig. 'to adhere/follow sb' (vi)
 [→ b. *žarmaš-tər-* 'to cause to clutch/grasp' (vt) (Ju.1. 236).

4. A residual verb:

- (190) a. *almaš-* 'to change into/take turns' (vi)
 [→ b. *almaš-tər-* 'to change/replace' (vt) (Ju.1. 52).

A sentential example:

- (191) a. *əlaj menen kum aralaš-tə.*
 clay and sand mix-3.PAST
 ‘Clay and sand got mixed.’
 b. *Ata-m ələj menen kum aralaš-tər-də.*
 father-my clay and sand mix-CAUS-3.PAST
 ‘My father mixed clay and sand.’

13.4.2 Verbs without root final -š

Example (146) can be amplified by the following derivational chains obtained from the dictionaries:

- (192) a. *ažəra-* ‘to part’ → *ažəra-t-* ‘to cause to part’
 b. *ažəra-š-* ‘to part from each other/divorce’ → *ažəra-š-tər-* ‘to separate’ (Ju.1. 24).
- (193) *büt-* ‘to knit (of bones)’ (vi) → *büt-tür-* ‘to make (bones) knit’ (vt) (Ju.3. 821).
- (194) a. *čogul-* ‘to gather/crowd’ → *čogul-t-* ‘to gather/pile up’
 b. *čogul-uš-* ‘to meet with/see each other’ → ? (Ju.2. 364).
- (195) *irkil-* ‘to crowd/pile up’ → *irkil-t-* ‘to gather into a pile’ (vt) (Ju.1. 304).
- (196) a. *kabəl-* ‘to meet’ (vi) → *kabəl-t-/ kabəl-dər-* ‘to cause to meet’
 b. *kabəl-əš-* ‘to meet/come to blows’ → ? (Ju.1. 311).
- (197) a. *kezik-* ‘to meet with/run into’ → *kezik-tür-* ‘to meet’
 b. *kezig-iš-* ‘to meet with’ → *kezig-iš-tür-* ‘to cause to meet’ (Ju.1.366; Ju.3.831).
- (198) a. *šire-* ‘to weld’ (of two pieces) → *šire-t-* ‘to weld’ (vt)
 b. *šire-š-* ‘to weld’ (vi) → *šire-tür-* ‘to weld’ (vt) (Ju.2. 409).
- (199) a. *žoluk-* ‘to meet’ (vi) → *žoluk-tur-* i. ‘arrange a meeting’ (of two or more persons) ii. ‘to meet’ (vt)
 b. *žolug-uš-* ‘to meet each other’ → *žolug-uš-tur-* ‘to arrange a meeting’ (Ju.1. 259).
- (200) a. *əkta-* i. ‘to press oneself to sth’ → *əkta-t-* i. ‘to cause/order sb to press oneself to sth’ ii. ‘to press sb to sth’
 ii. ‘to press sb/sth to sb/sth’
 b. *əkta-š-* ‘to press oneself to each other’ → *əkta-š-tər-* ‘to press two or more entities tightly together’ (Ju.2. 427–8).

Synonymous forms of these verbs may differ in shades of meaning and in frequency. Thus, for instance, (146a) *birik-* and *birik-tür-* are much more common in speech than the respective forms in *-iš-*, i.e. *birig-iš-* and *birig-iš-tür-*. The latter form is considered by the informant as grammatical though not used in speech. There occur non-standard, individual semantic relations. Thus, in (197) and (199) the underlying forms *kezik-* and *žoluk-*

happen to be synonymous to the respective causatives *kezik-tir-* and *žoluk-tur-*, the only difference lying in the patterns of government; e.g.:

- (201) a. *Al ma-ga* (DAT) *kezik-ti.* 'He met me.'
 b. *Al me-ni* (ACC) *kezik-tir-di.* 'He met me.'

13.5 Anticausatives with the suffixes *-l* and *-n* and their relation to anticausatives in *-š*

Above, I have considered anticausatives with the suffix *-š*. As has already been mentioned (see 2.5), the anticausative meaning can also be marked by the suffixes *-l* and *-n*; besides, it can also be signalled by the complex suffixes *-l-əš* and *-n-əš*. These affixes can also derive anticausatives from lexical reciprocals. Some of these formations are the only way of deriving anticausatives, while others have parallel forms, therefore the overall picture is very complicated (cf. *bajla-* and its derivatives in (21)). It is relevant to consider derivatives with these suffixes and relations between them as well. Four main cases can be distinguished. The choice of a suffix for a derived anticausative is very complicated and the causes of their selectivity are not clear. The classification given below is based on the dictionary data.

1. Anticausatives with the suffix *-l* or *-n* do not have parallel synonymous forms with the suffix *-š*.

- (202) a. *koš-* 'to join two or more entities'
 b. *koš-ul-* 'to join (of two entities)' (Ju.1. 412)
 c. *?koš-uš-*
 d. *Eki too koš-ul-ba-j-t eki el koš-ul-a-t.* (Ju.1. 412)
 two mountain join-PASS-NEG-PRES-3 two people join-PASS-PRES-3
 'Two mountains will not come together, two people will come together.'
- (203) a. *ujpala-* 'to entangle/ruffle'
 b. *ujpala-n-* 'to get crumpled/entangled/ruffled' (Ju.2. 301)
 c. *?ujpala-š-*

2. Anticausatives with the suffix *-l* or *-n* have parallel synonymous forms in *-š*; cf.:

- (204) a. *čapta-* 'to paste/stick sth to sth'
 b. *čapta-l-* 'to get pasted/stuck to sth'
 c. *čapta-š-* (same) (Ju.2. 348).
- (205) a. *ula-* 'to join sth with sth'
 b. *ula-n-* 'to join' (vi)
 c. *ula-š-* (same) (Ju.2. 302–3).

3. Anticausatives are formed by means of the complex suffixes *-l-əš* or *-n-əš* which are a combination of the above suffixes. Here each of the two components expresses an anticausative meaning. Thus (206) is a kind of combination of (204b) and (204c), and (207) a combination of (205b) and (205c).

- (206) (= (204d)) *čapta-l-əš-* (same as (204b–c)) (Ju.2. 348; Ju.3. 641).
 (207) (= (205d)) *ula-n-əš-* (same as (205b–c)) (Ju.2. 302).

4. In anticausatives with the complex suffixes, the meaning of *-l* or *-n* cannot be singled out: these complexes are idiomatic, i.e. the passive meaning of (208b) is absent in (208c):

- | | | | | |
|-------|----|--------------------|-----------------------------------|-----------------|
| (208) | a. | <i>čirma-</i> | ‘to wind/twine sth round sth’ | |
| | b. | <i>čirma-l-</i> | ‘to be wound/twined’ | (passive) |
| | c. | <i>čirma-l-aš-</i> | ‘to intertwine’ (vi) (Ju.2. 392). | (anticausative) |

Sentential examples:

- (209) *Biz koš-ul-uš-tu-k.*
 we join-PASS-REC-PAST-1PL
 ‘We joined together.’ (cf. (202))
- (210) *Biz karaŋe koridor-do ur-un-uš-tu-k.*
 we dark corridor-LOC hit-REFL-REC-PAST-1PL
 ‘We collided in a dark corridor.’ (Ju.3. 831)
- (211) *Žəlan but-um-a oro-l-uš-tu.* (cf. Ju.2. 80)
 snake leg-my-DAT twine-PASS-REC-3.PAST
 ‘A snake twined itself round my leg.’

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Authorized translation from Russian by E. Geniušienė

Reciprocal, sociative, comitative, and assistive constructions in Buryat and Khalkha-Mongol

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1. Introduction

1.1 Mongolic languages

The language of the Mongolic group spoken by the largest number of speakers is Khalkha Mongol (or Mongol proper). It is the native language of some 1,900,000 Mongols living in the Mongolian Republic (Outer Mongolia) and by 2,700,000 in China (Inner Mongolia). Contemporary Mongolian subsumes a large number of dialects with common morphological and syntactic features, and almost identical with respect to reciprocals, sociatives, comitatives and assistives.

The common written language (literary Mongolian) was formed as early as at the end of the 12th – beginning of the 13th centuries. It uses the Uighur vertical script. It has never had a spoken variant. In the 13th century, “The Secret History of the Mongols”, an outstanding document, was written. This script is still standard in Inner Mongolia. In the 17th century, it was modified to bring it closer to the contemporary Mongolian dialects.

The following languages also belong to the Mongolic language group: Buryat (spoken by approximately 500,000 people of whom 420,000 live in Russia (mostly in the Buryat Republic to the east of the Baikal Lake), Oirat-Kalmyk (about 150,000 speakers in Kalmykia to the north-west of the Caspian Sea, and around 140,000 mostly in China and also in Mongolia, Kirghizia and Orenburg district), Dagur (120,000 speakers reported in Inner Mongolia), Monguor (or Tu, around 25,000 speakers in China), Dongxiang (or Santa, around 365,000 speakers in China), Moghol (200 or fewer elderly speakers reported near Herat, Afganistan), and also Baoan (or Bonan, 12,000 speakers in China), Ordos (or Urdus, less than 100,000 speakers in China), Darkhat (in Mongolia), Shira Yughur (9,000 speakers in China), Khamnigan Mongol (or “Horse Tungus”, spoken by about 2,000 speakers in Transbaikalia).

(See Binnick 1992: 434–8; Comrie 1981: 54–6; Sanzheev 1960: 8–9; Tishkov 1994: 118–22, 178–81, and especially Janhunen 2003.)

1.2 Database

The material for this chapter is drawn from dictionaries, linguistic literature and fiction (original and translations). Most of the examples and verb lists are obtained from the *Buryat-Russian Dictionary* (referred to as Č.) which is much more extensive and detailed than the *Mongolian-Russian Dictionary* (L.). The verbs borrowed from the reverse dictionary of Mongolian by L. Bold (B.) are interpreted by E.A. Kuzmenkov with the help of the other dictionaries listed in the Sources. Much information on Mongolian reciprocals is borrowed from Sanzheev (1960, 1962, 1963). *The Buryat data are marked with references to A., Bur1, Bur2, Bur3, Cd, Č., D., S2, and T.* The data attributed to other sources are Khalkha. The data without attribution are obtained from native speakers or checked by them. Unfortunately, we could check only a part of the material and observations with the informants. This accounts for the absence of some relevant information in this paper.

Native speakers of Buryat and Khalkha-Mongol (see Acknowledgments below) helped to collect the data and check it.

1.3 On transliteration

In this chapter the transliteration is used which is accepted for the Mongolic languages in Janhunen (ed., 2003).

1.4 Overview

The state of things concerning reciprocals in Khalkha and Buryat is rather complicated and some points have to be clarified yet. These languages have polysemous morphological markers for reciprocals and sociatives. The main marker of reciprocity in both languages is the suffix *-lda* which, like many other suffixes, has a number of allomorphs determined by vowel harmony. Much less commonly, the compound suffix *-ca-lda* is used in Khalkha, and *-sa-lda* in Buryat. Moreover, the reciprocal meaning is sometimes encoded by the sociative (more frequently used as comitative) suffixes *-lca* (Khalkha) and *-lsa* (Buryat; henceforth, they are referred to together as *-lca/-lsa* for brevity). On the other hand, the suffix *-lda* is also used as a sociative (less frequently comitative) marker in both languages, interpreted in the dictionaries not only as ‘together’ but also, much more frequently, as ‘many’ (referring to two participants as well), i.e. a meaning which may or must be a part of the meaning ‘together’. Thus, we may claim that each of these suffixes is both a reciprocal and a sociative marker, though to a different degree. We might add that this is related to the much higher frequency of *-lda* than that of *-lca/-lsa* in texts and in dictionaries.¹

1. In the *Buryat-Russian dictionary* by K.M. Cheremisov (Č.), 470 verbs with the suffix *-lda* are registered and 215 with *-lsa*. Since this dictionary is based on an extensive cardfile (compiled from works by Buryat writers and also from newspapers), this distribution is unlikely to be accidental. A similar distribution is observed in the Buryat fairytales (Bur2.), where 156 *-lda* verbs and only 87 *-lsa* verbs are used.

According to the traditional interpretation, *-lda* is always glossed as REC and *-lca/-lsa* as SOC, whatever their meaning in each particular case. Here are Khalkha examples for *-lda*:

- (1) a. *Dordžo Bat-iig dzodo-džo bai-na.*
 D. B.-ACC beat-CONV AUX-PRES
 ‘Dorji is beating Bat.’
- b. *Dordžo Bata xoyor dzodo-ldo-džo bai-na.*
 D. B. and beat-REC-CONV AUX-PRES
 ‘Dorji and Bat are fighting (beating each other).’
- c. *Dordžo Bata-tai dzodo-ldo-džo bai-na.*
 D. B.-COM beat-REC-CONV AUX-PRES
 (same), lit. ‘Dorji is fighting with Bat.’

(1b) is a simple reciprocal construction, as the participants are denoted by the subject composed of noun phrases conjoined by the connector *xoyor* ‘and’, lit. ‘two’. As regards (1c), where the second participant is denoted by a comitative case form, it displays the features of a discontinuous reciprocal construction (for details see 3.1.4).

In both languages reciprocity is also rendered by the reciprocal pronoun *biye biye-/beye beye-* ‘each other’, but some collocations with this pronoun are hardly ever used, though they are clear to native speakers, like the collocation *biye bij-ee dzodo-* lit. ‘to beat each other’. Suffixed reciprocals of the (1b) type are usually more common than the same base with the reciprocal pronoun (Tuvshintogs, p.c.), though in some contexts (and/or with some other bases) a pronominal form may be more appropriate, especially, it seems, if the predicate requires an oblique object; e.g.:

- (2) a. *Tede xoyor bayan beye beye-d-ee bardamla-xa hanaa-tai*
 these two rich.man each other-DAT-REFL.POSS boast-FUT.PART intend-COM
meyerxe-ldē-ne, šadal erdem-ee beye beye-d-ee
 rival-REC-PRES might knowledge-REFL.POSS each other-DAT-REFL.POSS
xar-uul-na-d. (Bur2. 192)
 see-CAUS-PRES-PL
 ‘Two rich men began rivalling, intending (lit. with a thought) to boast to each other showing their might and knowledge to each other.’

Note also that in the Mongolian language of the first half of the 14th century, as it is represented in the dictionary *Mukaddimat al-Adab* (published in Poppe 1938), this distribution is even more expressive: 82 verbs with the suffix *-ldu/-ldü* are registered, and only 5 verbs with the suffix *-lča/-lče* (= *-lca/-lsa*). Curiously enough, the latter verbs have the reciprocal or, in one case, a vague meaning; in four sentences out of five, these verbs co-occur with the reciprocal pronoun; cf. *nim niken-i asyū-lča-ba-lar* (P. 256) ‘they asked each other’ <each other-ACC ask-lča-PAST-PL> (the borrowed Turkic plural suffix *-lar* is often used in this dictionary). (This reciprocal pronoun is a reduplication of the numeral *niken* ‘one’ (Poppe 1938:65); cf. Turkic *bir bir-* lit. ‘one one-’). At the same time, 8 verbs in *-ldu/-ldü* are registered in the sociative and, more often, comitative meaning; compare respectively: *yabu-ldu-ba-lar* (P. 386) ‘they walked together’, *yabu-ldu-ba tün-lē* (P. 386) ‘he walked with him’ (*-lē* is a marker of the case termed Comitativus sociativus by Poppe (1938:78)). Judging by the data of the language represented in this dictionary, sociativity was mostly expressed by the suffix *-ldu/-ldü*, while *-lča/-lče* was not yet finally established in this meaning. But the main device used for expressing joint action of two or more persons was (as it is now, though with a different marker), a combination of an unmarked predicate with an object with the case marker *-lē*.

In texts, simultaneous use of both markers on the same predicate is not uncommon; cf. (2b). Such cases are also registered in the dictionaries. For instance, in Č. (p. 420) the forms *tašuurda-lda-* and *beye bey-ee tašuurda-lda-* (< *tašuurda-* ‘to whip’, p. 421) are entered as synonymous, with the meaning ‘to whip each other’.² Compare also:

- b. *Xaan xatan xoyor ... beye beye-d-ee žütöörxe-lde-n,*
 khan khan’s wife two each other-DAT-REFL.POSS be.jealous-REC-CONV
nanša-lda-xa deeree bolo-n bai-ba. (Bur2. 248)
 beat-REC-FUT.PART before become-CONV AUX-PAST
 ‘The khan and his wife, having become jealous of each other, were on the point of fighting.’

The above mentioned sociative meaning of the suffix *-lda* is most common on intransitive and rare on transitive bases (which is typologically predictable). These sociative derivatives “[...] express joint or cooperative action. In such usage, the reciprocal suffix is functionally more or less equivalent to the cooperative suffix *-lc-*” (Sechenbaatar 2003:121; “cooperative” corresponds to “sociative” in our terminology). The interpretation of isolated relevant sentences may contain words meaning ‘all (of them)’, ‘many’, ‘plural’, ‘simultaneous’, sometimes ‘jointly’. These meanings, and emotive colouring which may be added by the suffix *-lda* are not usually reflected in the translations into other languages, e.g. Russian and English, especially in running texts. On the other hand, translations, e.g. from Russian, may contain the marker *-lda* when the original does not necessarily require its use, though it does not outrule it if the subject is (semantically) plural. Only in very few sentences with the plural subject do we find verbs in *-lda*. In the following Buryat translation from Russian, the suffix *-lda* occurs on the predicates only if the subject is semantically plural, and it is absent on the same verbs when the subject is singular.

2. The reciprocal pronoun is rather rare in texts. For instance, in 112 pages of the Buryat fairytales (Bur2.) there are 243 derivatives in *-lda* and *-lsa* and only 9 usages of the pronoun: once it co-occurs with a reciprocal verb with *-lda* (see (2b)), 3 times with reciprocals in *-lsa* (cf. (8)) and 5 times with unsuffixed verbs (cf. (2a)). The same tendency in the distribution of different types of reciprocals is observed in the *Buryat-Russian dictionary* (Č.): there are 685 verbs with *-lda* and *-lsa* and only 54 verbs with *beje beje-*. Among the latter, the reciprocal pronoun occurs 11 times with verbs in *-lda*, 20 times with verbs in *-lsa* and 23 times with unsuffixed verbs.

If we compare these data with those of the 14th century dictionary (published in Poppe 1938), we shall see both significant differences and certain similarities. The differences concern prevalence of pronominal reciprocals over suffixed ones in the first place: there are 94 verbs with the reciprocal pronoun *nim niken-i / nim niken-dü /...* and 87 suffixed derivatives (82 with *-ldu/-ldü* and 5 with *-lča/-lče*). Among the 94 combinations with the reciprocal pronoun, there are 30 *-ldu/-ldü* verbs, 4 *-lča/-lče* verbs and 60 unsuffixed verbs. As in the prior two cases (folktales and Č.), we observe prevalence of combinations with unsuffixed verbs over the other two types, but the difference lies in the fact that *-lča/-lče* verbs are much less numerous in combination with the reciprocal pronoun. But these verbs are generally much fewer (only 5) than those in *-ldu/-ldü* (82 verbs). However, the fact that out of 5 *-lča/-lče* verbs 4 are registered with the reciprocal pronoun shows that already in the 14th century the tendency to use derivatives with the reciprocal pronoun was more characteristic of *-lča/-lče* verbs than of those in *-ldu/-ldü*.

- (3) a. *Pest xašxar-ža, xajšaas⁴jeb güi-še-be, yüündeb gexede bultadaa*
 P. shout-CONV anywhere run-INTS-PAST because INTS everyone
güi-lde-ne, bultadaa xašxara-lda-na. (T. 49)
 run-REC-PRES everyone shout-REC-PRES
 ‘Pest ran somewhere shouting, because everyone was running and everyone was shouting.’
- b. ... *homon-uud büri yexeer ešxere-lde-n* ... (T. 18)
 bullet-PL more strongly whine-REC-CONV
 ‘... bullets whined even more loudly ...’

The basic component of the sociative meaning of *-lda* is probably the speaker’s perception of two or more objects as a group or as a whole. In this case there cannot be any rigid rules of usage. For instance, the speaker may perceive as a collective object the stars in the sky, the masts of a sunk ship, the bullets whistling over his head, etc., while a description like ‘many’ commonly used in the dictionaries, is simpler and easier to perceive in comparison with this description.

Semantically, sociatives like those in (3a) and (3b) are close to *-lca/-lsa* sociatives, though they may have different preferences, e.g. *-lda* sociatives may occur both with human and non-human (animals and things) subjects while those in *-lca/-lsa* occur almost exclusively with human subjects.

When the predicate is comitative, the subject may be singular, the co-participant being expressed by a comitative object (4a, b) or remaining anonymous (5b). As mentioned, comitatives in *-lda* are much less common than sociatives (i.e. constructions like (3a, b); some of the sociative constructions, e.g. (3b), are as a rule not transformable into comitative constructions), in contrast to the forms in *-lca/-lsa* with the opposite distribution of these meanings. This is obvious in epic texts, fiction and even in the illustrations in linguistic works. Nevertheless, there are instances of synonymous same-root derivatives with both suffixes; cf. Buryat:

- (4) a. *Vlang tan-tai ošo-ldo-xo.* (T. 104)
 V. 2PL-COM go-REC-FUT.PART
 ‘Vlang will go with you.’
- b. *Basagan-tai-gaa exe-ny ošo-lso-bo.* (Bur2. 220)
 girl-COM-REFL.POSS mother-POSS go-SOC-PAST
 ‘Together with the girl, her mother went [to the khan].’

The same derivative may be used both as sociative and comitative, depending on the syntactic structure (note that in sociative constructions all the participants are named by the subject (see (5c)), and in comitative constructions only one of the participants is denoted by the subject (see (5b), (4a, b); for details see 7.3)):

- (5) a. *Dordžo surguuly-d sur-dag.*
 D. school-DAT study-ITER
 ‘Dorji goes to school.’
- b. *Dordžo surguuly-d sura-lca-dag.*
 D. school-DAT study-SOC-ITER
 ‘Dorji goes to school with someone else.’

- c. *Dordžo Bata xoyor surguuly-d sura-lca-dag.*
 D. B. two school-DAT study-SOC-ITER
 ‘Dorji and Bat go to school (lit. ‘study at school’) together.’

Reciprocal derivation decreases the valency of the base verb, with the exception of “possessive” reciprocals (see 3.1.3). Sociative derivation retains valency but it entails an increase in the number of the subject participants (5c). Assistive derivation, as well as comitative, involves valency increase (thus we observe valency multifunctionality of each suffix). This valency increase rather frequently does not find expression in the sentence structure (see (5b) where the second participant is anonymous, and (6) where the possible (bracketed) dative object is absent because its referent-addressee is already denoted by the possessive suffix *-mni*). Assistives in the Mongolic languages are usually marked by *-lca/-lsa*:

- (6) “*Šexee-mni [nam-da] tahala-ls-aad üge laa.*” (Bur2. 38)
 ear-my 1SG-DAT tear.off-SOC-CONV AUX.IMP PRTL
 ‘Help me to tear off my ears.’

The fact that both suffixes are polysemous and sometimes one may be used instead of the other has been repeatedly pointed out in the linguistic literature (see 8.1). The conditions of such substitution are often vague. The following Buryat example contains two reciprocals with the suffix *-lda* and two verbs with *-lsa* used in the reciprocal meaning.

- (7) *Tani-lsa-haar tata-lda-xa, xara-lsa-haar xaza-lda-xa bolo-xo-mnai*
 recognize-SOC-CONV pull-REC-PART look-SOC-CONV bite-REC-PART AUX-PART-OUR
güi, übgen? (Bur2. 164)
 Q old.man
 ‘As soon as we meet we start fighting, as soon as we see each other we start biting each other, old boy?’

This use of *-lsa* instead of *-lda* in the reciprocal meaning manifests their overlap (in (4a) and (4b) we observe an overlap of the comitative meaning). On some base verbs substitution of one suffix for another is possible (e.g., in the original text, the sentence that follows the sentence entered here under (7) contains the form in *-lsa* instead of *tata-lda*; cf. *ühe zühöö tata-lsa-xa* ... ‘pull each other by the hair’), while the use of *-lda* instead of *-lsa* in the verb *tani-lsa* ‘to get acquainted’ is rejected by all our informants (though this form is registered in the *Buryat-Russian Dictionary* (see Č. 414) and has been found in an original Buryat text, though with a different final root vowel, viz. *tanya-lda* ‘to get acquainted’ in Bur2. 152).

As well as reciprocals in *-lda*, those in *-lca/-lsa* combine with the reciprocal pronoun, and probably more frequently than the former. Such collocations are also registered in the dictionaries. For instance, the reciprocal meaning of the verb *etige* ‘to believe, trust’ is expressed in the *Buryat-Russian Dictionary* (Č.) in two ways, by the morphological reciprocal *etige-lse* ‘to believe each other’ and by the collocation of this derivative with the reciprocal pronoun *beye beye-d-ee etige-lse* (Č. 777). A number of other verbs, e.g. *tuhala* ‘to help’ and *durla* ‘to love’ (see Č. 439, 203), also have the same kind of reciprocal counterparts. Here is a sentential example:

- (8) *Ünšen xübüün haixan xoyor-oi beye beye-d-ee*
 orphan son beauty two-GEN each other-DAT-REFL.POSS
durla-lsa-h-iye-ny Üxin Tööxön böö duula-ba xa. (Bur2. 218)
 love-SOC-PART-ACC-3.POSS U. T. shaman hear-PAST PRTL
 ‘Shaman Uxin Toохон heard that the orphan boy and the beauty had fallen in love with each other.’

These processes and context, and also the fact that reciprocals and assistives derive mostly from transitives and sociatives from intransitives, may help to determine the meaning of a derivative even in cases of the interchangeable use of *-lda* and *-lca/-lsa*. In general, interpretation of derivatives in Khalkha and Buryat raises the same problems as in some Turkic languages which employ one and the same suffix for all the functions in question (see, for instance, Nedjalkov & Nedjalkov, Ch. 26, §9.1).

The suffix *-lda* also derives a small group of verbs, often with a reciprocal meaning, from nouns (cf. Khalkha *nüür* ‘face’ → *nüüre-lde-* ‘to meet in confrontation’). A specific feature of Khalkha and Buryat is the large number (about 70) of lexical reciprocals taking the reciprocal suffix pleonastically; cf. Buryat *arsa-/arsa-lda-* ‘to argue’. Both *-lda* and *-lca/-lsa* are also used to encode a number of meanings besides those mentioned so far; for instance, the suffix *-lda* may signal an anticausative and autocasative meaning (e.g. Khalkha *xolyo-* ‘to mix sth together’ → *xolyo-ldo-* ‘to get/be mixed’ and Buryat *xabša-* ‘to press/squeeze sth’ → *xabša-lda-* ‘to squeeze oneself into sth’), and *-lca/-lsa* the meaning of “attendant action” (e.g. Khalkha *gutl-aa awa-* ‘to take one’s own boots’ → *gutl-aa awa-lca-* ‘to take one’s own boots together with sb’s boots’).

2. Grammatical notes

2.1 Distinctions between Khalkha and Buryat

The differences between Khalkha and Buryat are negligible for our purposes. The main phonetic and morphological differences are as follows: in Buryat, unlike in Khalkha,

- there are no affricates /dz/ and /dž/; /z/; /ž/ occur instead;
- the consonant /s/ has changed into /h/;
- final syllables are retained (e.g., Buryat *sahan* ‘snow’ corresponds to Khalkha *cas*);
- Buryat *-lsa* and *-sa-lda* correspond to Khalkha *-lca* and *-ca-lda*;
- there are enclitic pronominal markers that provide agreement both for verbs and predicate nominals (*-b* for 1SG, *-š* for 2SG, \emptyset for 3SG/PL, *-bdi* for 1PL, *-t* for 2PL and optionally *-d* for 3PL).

The Khalkha *biye biy-ee* ‘each other’ (for ACC) corresponds to the Buryat *beye bey-ee*; in both *-ee* is a reflexive-possessive marker which is obligatory in this case. The root-final *-e* in *biye-/beye-* is ousted here, as in other similar cases, by the vowel-initial suffix.

2.2 General characteristics. Sentence structure. Morphology

The basic word order in Khalkha and Buryat is SOV. An auxiliary follows the main verb. Both Khalkha and Buryat are typical agglutinating suffixing languages; both display vowel harmony (cf. the present tense marker *-na/-ne/-no/-nö*, causative suffix *-uul/-üül*). Inflection markers on the noun follow the stem in rigid order: number (or collective), case, possessivity. Inflection markers on the verb follow the sequence voice, aspect, finite marker. Both languages use postpositions and no prepositions. In transliterations, double letters indicate long vowels, as in the Mongolian spelling.

2.3 Case. Number. Personal-possessive and reflexive-possessive markers

The noun has the inflectional categories of case and number and may take a personal possessive marker (a particle in Khalkha, suffix in Buryat). (9) shows the markers of the seven cases. Depending on pragmatic conditions, a direct object can be either accusative (topical) or unmarked, i.e. coincident with the nominative (rhematic; compare Turkic languages).

(9)	Khalkha	Buryat
NOM	-Ø	-Ø
GEN	-ii/-iin/-e/-en/-n	-(g)ai/-(g)ei/-(g)oi, -(ii)n
ACC	-iig/-eg/-g	-(ii)ye
DAT-LOC	-d/-t (glossed as DAT)	-da/-de/-do, -ta/-te/-to
ABL	-aas/-ees/-oos/-öös	-haa/-hee/-hoo/-höö
INST	-aar/-eer/-oor/-öör	-(g)aar/-(g)eer/-(g)oor/-(g)öör
COM	-tai/-tei/-toi	-tai/-tei/-toi

What is sometimes called “double declension” in Khalkha and Buryat is in fact a combination of derivational affixes with regular case affixes (see Skribnik 1981: 60–70). An example may be lexicalization of the genitive forms of personal nouns and personal names in the meaning ‘the household of’, ‘the family of’, cf.:

- (10) a. *ax* ‘elder brother’ (NOM) → *ax-iin* ‘of the elder brother’ (GEN)
 → *axa-d* ‘to the elder brother’ (DAT)
axiin ‘(family) of the elder brother’ (NOM) → *axiin-d* (“*GEN” + DAT) ‘to the elder brother’s (home)’.

Another such example is due to equation of an affix of adnominal adjectives in *-tai/-güi* (‘with’/‘without’) and a comitative marker (*-tai*); when used as dependent predicates, such adjectives take case affixes (e.g. accusative with verbs of seeing, knowing, dative-locative with emotive verbs etc.; cf. (10c)):

- b. *alta* ‘gold’ (NOM) → *alta-tai* ‘with gold’ (COM);
alta ‘gold’ (NOM) → *alta-tai* ‘gold-having’ / *alta-güi* ‘gold-less’ (ADJ)
- c. cf. *alta-tai-g* (ADJ +ACC, e.g. in context ‘I know that he has gold’).

A case marker may be followed either by a personal-possessive marker (see (11a, b)) or by the reflexive-possessive marker (the same for all the persons and numbers; this marker shows that an object belongs to the subject referent; see (11c, d)):

(11)		Khalkha	Buryat
a.	1SG	<i>miny</i>	<i>-mni, -m, -ni</i>
	2SG	<i>činy</i>	<i>-šni, -š</i>
	1PL	<i>many</i>	<i>-mnai, -nai</i>
	2PL	<i>tany</i>	<i>-tnai</i>
	3SG/PL	<i>ny</i>	<i>-ny, -iiny</i>

Here are parallel forms with personal-possessive markers for the nominative of the noun *ax / axa* ‘elder brother’:

	Khalkha	Buryat	
b.	<i>ax miny</i>	<i>axa-m</i>	‘my elder brother’
	<i>ax činy</i>	<i>axa-šni</i>	‘your elder brother’
	<i>ax ny</i>	<i>axa-ny</i>	‘his/her elder brother’
	<i>ax many</i>	<i>axa-mnai</i>	‘our elder brother’
	<i>ax tany</i>	<i>axa-tnai</i>	‘your elder brother’
	<i>ax ny</i>	<i>axa-ny</i>	‘their elder brother’.

If a reflexive-possessive marker is added to an accusative object the accusative case marker is usually omitted (as is shown by the form *beye bey-ee* in (91) and (92)). In this case the reflexive-possessive markers are glossed as REFL for brevity instead of REFL.POSS in the above examples (Note that Mongolic languages lack reflexive suffixes). The markers of the reflexive-possessive declension are:

	Khalkha	Buryat
c.	NOM	(impossible by definition)
	GEN	<i>-xaa /-xee /-xoo /-xöö</i> <i>-ngaa /-ngee /-ngoo /-ngöö</i>
	COM	<i>-gaa /-geel/-gool/-göö</i> <i>-(g)aa /-(g)ee /-(g)oo /-(g)öö</i>
	DAT-LOC	<i>-aa /-ee /-oo /-öö</i> <i>-aa /-ee /-oo /-öö</i>
	ACC	<i>-aa /-ee /-oo /-öö</i> <i>-aa /-ee /-oo /-öö</i>
	ABL	<i>-aa /-ee /-oo /-öö -n</i>
	INST	<i>-aa /-ee /-oo /-öö</i> <i>-aa /-ee /-oo /-öö.</i>

Here is the reflexive paradigm of the noun *nom* ‘book’:

	Khalkha	Buryat		
d.	GEN	<i>nom-iin-xoo</i>	<i>nom-oi-ngoo</i>	‘of one’s own book’
	COM	<i>nom-toi-goo</i>	<i>nom-toi-goo / nom-toj-oo</i>	‘with one’s own book’
	ACC	<i>nom-Ø-oo</i>	<i>nom-Ø-oo</i>	‘one’s own book’
			(cf. non-reflexive ACC <i>nom-iig-Ø/nom-iije-Ø</i> ‘a/the book’)	
	DAT	<i>nom-d-oo</i>	<i>nom-d-oo</i>	‘to/in one’s own book’
	ABL	<i>nom-oo-s-oo</i>	<i>nom-hoo-n</i>	‘from one’s own book’
	INST	<i>nom-oor-oo</i>	<i>nom-oor-oo</i>	‘with one’s own book’.

Note that in Buryat all possessive forms are actively used, whereas in Khalkha the personal possessive paradigm is in the process of dissolving: the plural forms are practically out of

use; the 1SG and 2SG forms are used mostly with body part terms and terms of relationship; as for the 3SG/PL marker, it has acquired new functions as a pragmatic particle, and acts on the complex sentence level as a marker opposed to the reflexive marker in a new opposition ‘same-subject – different-subject’.

The plural markers in Khalkha are *-nar*, *-čuud*, *-čuul* (collectives, on personal nouns), and *-s*, *-d* (used without restrictions). In Buryat, they are *-nar/-ner/-nor* (collectives, on personal nouns and pronouns). The marker *-(n)uud/- (n)üüd* (*-d* after nouns ending in the so-called “fleeting” *n*) is used without lexical restrictions. All these markers are optional.

2.4 Tense/aspect system. Participles and converbs

The relevant markers coincide in Khalkha and Buryat to a considerable degree. In the examples cited in this paper, the following tense markers occur: for the present tense, the suffix *-na/...* in both languages (see (1), (2)); for the past, *-w* (18e) in Khalkha and *-ba/...* in Buryat (2b); for the recent past, *-laa/...* in both languages (note that this suffix is used in a different meaning in (86)) and for remote past *-džee/-cee/...* in Khalkha (34). The difference between the three past tenses is hard to define (see Sanzheev 1960:70), and they are all glossed as PAST. The remaining tense forms are comprised of a participle or a converb with or without an auxiliary: iterative participles are marked with *-dag* in both languages (see (5) and (84b, d)), past participles with *-san/...* in Khalkha and *-han/...* in Buryat (also functioning as perfect forms (49)), present imperfect participles with *-aa/...* (32), and future participles with *-x* in Khalkha and *-xa/...* in Buryat (4). As mentioned, participles may function as predicates.

There are about 10 converbs in Khalkha and about 20 in Buryat, of which the most common are converbs marked with *-dža/...* in Khalkha and *-ža/...* in Buryat (with an auxiliary they form the progressive; see (1)), *-n* (28a) and *-aad/...* in both languages (28a). They denote actions either simultaneous with the main action or preceding it, depending on the context.

2.5 Voice system. Means of valency change. Reflexive pronoun

The voice markers have the following valency-related properties: (a) three markers can decrease valency; they are passive (13), reciprocal (1b), and causative (16a, b); in the case of the causative markers the underlying transitive construction becomes intransitive, the subject being either deleted (16a) or lowered in status if used in the dative case form (16b); (b) two markers can increase valency, viz. causative (15) and comitative-assistive (6); and (c) two markers may retain valency, viz. sociative (3a, b; 5b) and reciprocal (see 3.1.3). It should be stressed that practically each of these markers is valency-multifunctional, i.e. it may increase, decrease and retain the valency properties of the base verbs.

Characteristically, there is no affix with a reflexive meaning in Khalkha and Buryat, this meaning being rendered by the reflexive pronoun *biye* and *beye* (lit. ‘body’, ‘person’) respectively which always takes a reflexive-possessive marker;³ cf.:

- | | | |
|------|---------------------|-------------------------------------|
| (12) | <i>biy-ee uгаа-</i> | ‘to wash oneself’ |
| | <i>biy-ee нуу-</i> | ‘to hide oneself’ |
| | <i>biy-ee бари-</i> | ‘to restrain oneself.’ ⁴ |

Another reflexive pronoun is formed from the base *өөр* ‘one’s own, oneself, each’; cf.: *өөр-төө* ‘for/to oneself’, *өөр хоорондоо* ‘between oneself’.

1. The passive suffix is *-gd/-d/-t*; it may also encode a number of related meanings (e.g. anticausative (14)), also encoded by passive markers in many other languages. Passives are derived mostly from transitives (13), though passives from intransitives are also possible.

- | | | | |
|------|-----------------------------|---|--|
| (13) | <i>al-</i> ‘to kill’ | → | <i>ala-gd-</i> ‘to be killed’ |
| | <i>ol-</i> ‘to find’ | → | <i>ol-d-</i> ‘to be found’ |
| | <i>aw-</i> ‘to take’ | → | <i>aw-t-</i> ‘to be taken.’ |
| (14) | <i>nee-</i> ‘to open’ (vt) | → | <i>nee-gd-</i> i. ‘to open’ (vi), ii. ‘to be opened’ |
| | <i>tüle-</i> ‘to burn’ (vt) | → | <i>tüle-gd-</i> ‘to burn’ (vi), ‘to be burnt’ |
| | <i>xaa-</i> ‘to close’ (vt) | → | <i>xaa-gd-</i> ‘to close’ (vi), ‘to be closed.’ |

2. The reciprocal suffix is *-lda/-lde/-ldo/-ldö/-ld* in both languages. As mentioned, when used in the reciprocal sense, it decreases valency (see (1b)). When it has the sociative sense, the valency is preserved (see (3a, b)). And when used comitatively, it increases the valency (cf. (4a)). There are also innovative derivatives with the historically complex reciprocal suffix *-ca-lda/-ce-lde/-co-ldo/-cö-ldö* which is used very seldom (for details see Section 5).

3. The comitative/sociative suffix is *-lca/-lce/-lco/-lcö/-lc* in Khalkha and *-lsa/lse-lso/-lsö/-ls* in Buryat. When used as a comitative and assistive marker it increases the valency (cf. (4b) and (6)). When it has the sociative meaning the valency is preserved (cf. (5c)). When used reciprocally it decreases the valency (cf. *tani-* ‘to recognize sb’ and *tani-lsa-* ‘to get acquainted’ in (7)).

4. Sometimes, the pluritative voice with the marker *-cgaa* (Buryat *-sagaa*) is distinguished (see Section 6). As well as the suffix *-lda* used in the sociative sense, this marker expresses an “action performed by many actors” (Sechenbaatar 2003:122). As Sechenbaatar claims, “(t)he functional difference with regard to the cooperative voice is rather vague ...” (ibid.).

3. The Mongolic languages are similar to the neighbouring Tungusic languages in that they possess a reflexive pronoun and lack a reflexive affix (another similarity is the existence of two suffixes, reciprocal and sociative) and they differ from the neighbouring Turkic languages which have both a reflexive pronoun and a reflexive suffix.

4. The following example is probably an isolated case of the use of the reflexive pronoun in the reciprocal sense: ... *xoyuulaa bey-ee xolb-ood yaba-yaa* (Bur2. 68) lit. ‘[Once you are so scared] let us two bind ourselves to each other.’

5. The causative suffixes are *-uul/-üül*, *-lga/-lge/...* (used on both transitive and intransitive bases), less frequently used *-ge/-xe/-go/...*, *-ee/-oo/...*, and *-ga/-aa* (mostly on intransitive bases) in both languages. Their main syntactic property is valency increase.

- | | | |
|--|---|--|
| (15) <i>yaba-</i> ‘to go/walk’ | → | <i>yab-uul-</i> ‘to send/make go’ (Č. 794–5) |
| <i>buuda-</i> ‘to shoot’ | → | <i>buud-uul-</i> ‘to order to shoot’ (Č. 112). |
| <i>huu-</i> ‘to sit (down)’ | → | <i>huu-lga-</i> ‘to cause sb to sit (down)’ (Č. 693) |
| <i>negede-</i> ‘to join together’ (vi) | → | <i>neged-xe-</i> ‘to join, combine sth’ (Č. 337) |
| <i>gomdo-</i> ‘to feel hurt, resent’ | → | <i>gomd-oo-</i> ‘to hurt, offend sb’ (L. 121) |
| <i>gara-</i> ‘to go out’ | → | <i>gar-ga-</i> ‘to take sb out’ (L. 114) |
| <i>xata-</i> ‘to dry’ (vi) | → | <i>xat-aa-</i> ‘to dry sth’ (L. 512). |

They may also have a passive function, i.e. they decrease valency in certain cases; cf.:

- (16) a. *Tede buud-uul-ba.* (Č. 112)
 ‘They were shot.’
- b. *Ceren boroon-d coxy-uul-aw.*
 C. rain-DAT beat-CAUS-PAST
 ‘Ceren was beaten on by the rain’, lit. ‘Ceren let the rain beat on him.’

6. There is a special inchoative anticausative valency-decreasing suffix *-r* in both languages which forms mostly denominal verbs and, unproductively, a group of anticausatives.

- | | | |
|---|---|--|
| (17) <i>adxa-</i> ‘to pour/pour out’ (vt) | → | <i>adxa-r-</i> ‘to pour’ (vi) (D. 129) |
| <i>ebde-</i> ‘to break, destroy’ (vt) | → | <i>ebde-r-</i> ‘to break, get wrecked’ (vi) (Č. 752) |
| <i>delge-</i> ‘to spread out, unfold’ (vt) | → | <i>delge-r-</i> ‘to spread, expand’ (vi) (Č. 216, 215) |
| <i>ilga-</i> ‘to distinguish/separate’ (vt) | → | <i>ilga-r-</i> ‘to differ/be separate’ (vi) (D. 129) |
| <i>mata-</i> ‘to bend’ (vt) | → | <i>mata-r-</i> ‘to be bent/concave’ (vi) (D. 129) |
| <i>mušxa-</i> ‘to twist/wind round’ (vt) | → | <i>mušxa-r-</i> ‘to wind round’ (vi) (D. 129) |
| <i>zaha-</i> ‘to correct/improve’ (vt) | → | <i>zaha-r-</i> ‘to improve’ (vi) (D. 129). |

2.6 Combinability of voice markers

The following is relevant. Causative derivation from reciprocals and sociatives is always possible (see 3.2.2). Reciprocal derivation from causatives in *-uul* and *-lga* is as a rule impossible. Combination of reciprocal and comitative/sociative markers is forbidden, as a rule; for exceptions see (26d). Also forbidden is the combination of the reciprocal marker (but not of the sociative one) with the passive marker. In any case, Amogolonov (1958:198–9) and Sanzheev (1962:161) mention combinations with causative markers (*-ld-uul*, *-ls-uul*, and *-uula-lsa*) and also with the passive marker (*-gda-lsa*, *-lsa-gda*). Forms in *-lda* do not derive, as a rule, from causatives with the suffix *-uul*. An interesting fact is that derivations containing a combination of *-uul*, *-gda* and also *-lsa* can be synonymous with the different sequence of these suffixes; cf. (a) *oro-* ‘to enter’ → *or-uul-* ‘to bring sb in’ → *or-uula-gda-* ‘to be brought in’ → *or-uula-gda-lsa-* ‘to be brought in together with sb’, (b) *oro-* ‘to enter’ → *oro-lso-* ‘to enter together with sb’ → *oro-ls-uul-* ‘to bring sb in together with sb’ → *oro-ls-uula-gda-* ‘to be brought in together with sb’. When a passive marker is absent the meaning depends on the order of sequence of the

suffixes *-lsa* and *-uul*; cf. *or-uula-lsa-* ‘to bring sb in together with sb’ (= ‘someone together with someone else brings sb in’; subject-oriented) and *oro-ls-uul-* ‘to bring in sb and sb together’ (object-oriented).

3. Reciprocals with the suffix *-lda*

3.1 Subject-oriented constructions

3.1.1 “Canonical” reciprocals

Reciprocals of this type are always intransitive. The underlying verbs can be both two-place transitives and two-place intransitives (and even, in isolated instances, one-place intransitives; cf. *cuwa-* and *güj-* in (20)).

3.1.1.1 Derived from two-place transitives. This seems to be the main type of reciprocals. Here are a few examples of the (1b, c) type:

- (18) a. *Xügšen zaluu böömeile-lde-že bai-na.* (Č. 108)
 old young caress-REC-CONV AUX-PRES
 ‘The old (granny) and the young (granddaughter) caress each other.’
- b. *Xerelde-hen xün-iüüd urda urda-haa xašxara-lda-ba.* (Ld. 113)
 quarrel-PAST.PART man-PL face face-ABL shout-REC-PAST
 ‘The quarrelling people shouted at each other.’
- c. *Xoyor moryo tiire-lde-dže bai-na.*
 two horse kick-REC-CONV AUX-PRES
 ‘Two horses are kicking each other.’
- d. *Eedže xüü-tei-gee tewre-lde-ne.*
 mother son-COM-REFL embrace-REC-PRES
 lit. ‘Mother with her son are embracing each other.’
- e. *Bid daisan-tai buuda-lda-w.*
 we enemy-COM shoot-REC-PAST
 ‘We exchanged fire with the enemy.’

A list of reciprocals of this type, most of them denoting hostile actions:

- (19) *ala-* ‘to kill sb’ → *ala-lda-* ‘to kill each other, fight’ (L. 28)
alxya- ‘to beat sb’ → *alxya-lda-* ‘to beat each other’ (L. 32)
barxira- ‘to shout at sb’ → *barxira-lda-* ‘to shout at each other’ (L. 65)
buuda- ‘to shoot at sb’ → *buuda-lda-* ‘to exchange fire’ (Č. 117)
coxyo- ‘to beat sb’ → *coxyo-ldo-* ‘to beat each other’ (B. 67)
čixe- ‘to shove sth in’ → *čixe-lde-* ‘to jostle (in a crowd)’ (L. 634)
dasa- ‘to get used to sb’ → *dasa-lda-* ‘to get used to each other’ (B. 66)
duuda- ‘to call sb’ → *duuda-lda-* ‘to call to each other’ (Č. 205)
duuryasga- ‘to glorify sb’ → *duuryasga-lda-* ‘to glorify each other’ (B. 66)
dzodo- ‘to beat sb’ → *dzodo-ldo-* ‘to beat each other’ (L. 197)
dzuura- ‘to clutch at sb’ → *dzuura-lda-* ‘to clutch at each other’ (L. 207)
gete- ‘to stare at sb’ → *gete-lde-* ‘to stare at each other’ (Č. 173)

<i>mörgö-</i> ‘to butt sb’	→	<i>mörgö-ldö-</i> ‘to butt each other’ (L. 245)
<i>mörgö-</i> ‘to butt sb’	→	<i>mörgö-cöldö-</i> ‘to butt each other’ (B. 68)
<i>muuda-</i> ‘to be offended’	→	<i>muuda-lda-</i> ‘be offended with each other’ (L. 331)
<i>noco-</i> ‘to pounce on sb’	→	<i>noco-ldo-</i> ‘to pounce on each other’ (L. 237)
<i>noolo-</i> ‘to pester sb’	→	<i>noolo-ldo-</i> ‘to pester each other’ (L. 271)
<i>ozo-</i> ‘to kiss sb’	→	<i>ozo-ldo-</i> ‘to kiss each other’ (Č. 350)
<i>ögüülē-</i> ‘to speak to sb’	→	<i>ögüüle-lde-</i> ‘to speak to each other’ (B. 68)
<i>sabša-</i> ‘to chop/slash sb’	→	<i>sabša-lda-</i> ‘to slash each other’ (Č. 380)
<i>soxi-</i> ‘to beat’	→	<i>soxi-ldo-</i> ‘to beat each other’ (Č. 393)
<i>tansagla-</i> ‘to love sb’	→	<i>tansagla-lda-</i> ‘to love each other’ (B. 66)
<i>tewre-</i> ‘to embrace sb’	→	<i>tewre-lde-</i> ‘to embrace each other’ (L. 436)
<i>tiire-</i> ‘to kick sb’	→	<i>tiire-lde-</i> ‘to kick each other’
<i>tula-</i> ‘to lean on sth/sb’	→	<i>tula-lda-</i> ‘to lean on each other’ (L. 422)
<i>tülxe-</i> ‘to push sb’	→	<i>tülxe-lde-</i> ‘to jostle each other (in a crowd)’ (L. 431)
<i>unxida-</i> ‘to sniff at sb’	→	<i>unxida-lda-</i> ‘to sniff at each other’ (Č. 471)
<i>üxöörxe-</i> ‘to hate sb’	→	<i>üxöörxe-lde-</i> ‘to be enemies’ (Č. 519)
<i>xadxa-</i> ‘to stab’	→	<i>xadxa-lda-</i> ‘to stab each other’ (Č. 531)
<i>xašgara-</i> ‘to shout at sb’	→	<i>xašgara-lda-</i> ‘to exchange shouts’ (B. 66)
<i>xočolo-</i> ‘to nickname sb’	→	<i>xočolo-ldo-</i> ‘to nickname each other’ (B. 67)
<i>xuryaca-</i> ‘to desire sb’	→	<i>xuryaca-lda-</i> ‘to desire each other’ (L. 568)
<i>xyada-</i> ‘to exterminate sb’	→	<i>xyada-lda-</i> ‘to exterminate each other.’ (B. 66).

The following four verbs, related to intransitive and transitive bases, denote chaining relations (the verb *xelxe-lde-* displaying a degree of lexicalization is tentatively entered in this group):

- | | | |
|---|---|--|
| (20) <i>cuwa-</i> ‘to walk single file’ | → | <i>cuwa-lda-</i> ‘to walk one after another, single file’ (L. 614) |
| <i>daga-</i> ‘to follow’ | → | <i>daga-lda-</i> ‘to follow each other’ (L. 139) |
| <i>güi-</i> ‘to run’ | → | <i>güi-lde-</i> ‘to chase each other’ (Č. 164) |
| <i>xelxe-</i> ‘to string (e.g. beads)’ | → | <i>xelxe-lde-</i> ‘to trudge one after another.’ (B. 69). |

3.1.1.2 *Derived from two-place intransitives.* The reciprocals listed in (22) are formed from two-place verbs taking a non-direct object (verbs of speech may take a direct object expressed by an indefinite pronoun with the meaning ‘something’; cf. (23)). (21) illustrates the use of *ge-lde-* from (22) and also of *xööre-lde* from (25):

- (21) *Tüxede xoyor yexe hamga-d xööre-lde-ne xa: “Bide zangir-xa-mnai geeše”, –*
 then two big wife-PL talk-REC-PRES PRTL WE lost-FUT-1PL PRTL
ge-lde-že xööre-lde-ne-d. (Bur1. 88)
 say-REC-CONV talk-REC-PRES-3PL
 lit. ‘Then the two elder wives talked between themselves: “We are lost!” – [they] said to each other talking.’

- | | | |
|------------------------------------|---|---|
| (22) <i>ge-</i> ‘to speak to sb’ | → | <i>ge-lde-</i> ‘to converse’ (Č. 169) |
| <i>inyee-</i> ‘to laugh at sb’ | → | <i>inyee-lde-</i> ‘to laugh at each other’ (B. 69) |
| <i>naada-</i> ‘to play (with sb)’ | → | <i>naada-lda-</i> ‘to play together with sb’ (B. 66) |
| <i>oirto-</i> ‘to approach sb/sth’ | → | <i>oirto-ldo-</i> ‘to approach each other’ (Č. 352) |
| <i>šiwne-</i> ‘to whisper to sb’ | → | <i>šiwne-lde-</i> ‘to whisper to each other’ (B. 68). |

3.1.2 “Indirect” reciprocals

In this case the base subject and non-direct object (in the dative or ablative case) referents are construed as acting reciprocally, the direct object being retained. There seems to be a tendency, at least with some three-place transitive verbs of speech, to delete the direct object in a reciprocal construction. Thus, in (23b) the direct object *yüm* ‘something’ is likely to be deleted (though its retention does not make the construction ungrammatical). In this case this verb should be placed in 3.1.1.2, though semantically it is “indirect”. We remind the reader that the term “indirect” is used here as a cover term for constructions with reciprocalization of the subject and non-direct object of a three-place transitive base verb.

- (23) a. *Nege büsgüi nögöö büsgüi-d yüm xašgara-dža bai-na.*
 one girl.NOM other girl-DAT something shout-CONV AUX-PRES
 ‘One girl is shouting something to another girl.’
- b. *Büsgüi-čüüd bayarla-san-d-aa [yüm] xašgara-lda-na.*
 girl-PL rejoice-PART-DAT-their something shout-REC-PRES
 ‘The girls shout [something] to each other joyfully.’

Here are reliable examples of “indirect” reciprocal constructions at our disposal:

- (24) a. *Ta xoyor čixr-ee bitgii bulaa-ld-Ø!* (K. 72)
 you two sweets-REFL NEG take.away-REC-IMP.2
 ‘You two, do not snatch sweets from each other!’
- b. *Bidener deden-tei tus tus-taa xede xeden üge-nüüd-ee yari-lda-ža ...*
 we they-COM each separately several several word-PL-REFL say-REC-CONV
bai-gaa-bdi. (Cd. 111)
 AUX-PAST-1PL
 ‘We and they (lit. ‘with them’), each separately, exchanged words with each other.’
- c. *Xööre-lde-xe yüüme olon bai-xa.* (Č. 594)
 say-REC-PART something much be-PART
 ‘There is much to talk about with each other.’
- d. *Xoyor hamga-d-ai xoorondo zööri xubaa-lda-an,*
 two wife-PL-GEN between.themselves belongings distribute-REC-CONV
arsa-lda-an bolo-bo. (Bur2. 190)
 argue-REC-NS become-PAST
 ‘Both wives began arguing while dividing the property between themselves.’ (lit. between two wives, while dividing the property, began a quarrel).

This group comprises verbs denoting passing sth to sb, or receiving (or taking sth away) of some things or information.

- (25) *awa-* ‘to take, receive sth’ → *awa-lda-* ‘to take sth away from each other’ (B. 66)
bulaa- ‘to snatch sth’ → *bulaa-lda-* ‘to snatch sth from each other’ (B. 66)
čangaa- ‘to draw sth’ → *čangaa-lda-* ‘to draw/pull sth from each other’ (B. 66)
yari- ‘to say sth’ → *yari-lda-* ‘to talk, converse’ (Č. 802)
šede- ‘to throw (stones, etc.)’ → *šede-lde-* ‘to throw (stones) at each other’ (Č. 743)
xašgara- ‘to shout sth’ → *xašgara-lda-* ‘to shout sth to each other’ (B. 66)
xööre- ‘to say sth’ → *xööre-lde-* ‘to talk, converse’ (Č. 594)
xubaa- ‘to distribute’ → *xubaa-lda-* ‘to distribute between oneself.’

Similar to this type is the Buryat *-lda* form of the object-oriented lexical reciprocal *xubaa-* ‘to distribute/divide sth (among sb)’. Its derivative in *-lsa* appears as a synonym of the form in *-lda*. Existence of a derivative with both suffixes (such derivatives are not common; so far, it is the only instance we have found in the *Buryat-Russian Dictionary*) may be accounted for by lexicalization of the reciprocal with the suffix *-lda*. Compare:

- (26) a. *xubaa-* ‘to divide/distribute sth among sb, share’ (Č. 595)
 b. *xubaa-lda-* ‘to divide among oneself’, ‘to take part in sharing sth’ (Č. 595)
 c. *xubaa-lsa-* (same meaning) (Č. 595)
 d. *xubaa-lda-lsa-* ‘to divide together’ (Č. 595).
- (27) *Xügšen müngeŋ-iye xüršen-ner-t-öö xubaa-lda-lsa-ba.* (S2. 246)
 old.woman money-ACC neighbour-PL-LOC-REFL share-REC-SOC-PAST
 ‘The old woman shared the money with her neighbours.’

3.1.3 “Possessive” reciprocals

As well as in the case of “indirect” reciprocals, the underlying direct object is retained. The base subject is reciprocalized with the possessive attribute of the direct object of the base construction, therefore the valency of the underlying verb is retained, in contrast to “indirect” reciprocal constructions. We wonder whether it is accidental that there are only two examples of “possessive” reciprocals in *-lda* and about 10 in *-lsa* attested so far (cf. 8.2.3). As in many other languages, the direct object is usually the name of a body part or inalienable feature. Examples:

- (28) a. *xütel-* ‘to lead sb by the hand’ → *xütere-lde-* ‘to walk holding each other’s hands’
 b. *gar gar-aa xütere-lde-n bari-lc-aad, gal toir-ood*
 hand hand-ACC.REFL lead-REC-CONV hold-SOC-CONV fire walk.round-CONV
xataran naada-. (Č. 633)
 dance participate
 ‘to dance round a fire holding each other’s hands.’
- (29) a. *zulгаа-* ‘to pluck/pick (at)”; *ühen-höö* (ABL) *zulгаа-* ‘to pull sb’s hair’
 b. *ühe züh-öö zulгаа-lda-* (Č. 261)
 hair appearance-ACC.REFL pluck-REC
 ‘to pull each other’s hair.’ (‘to pull each other by the hair’).

3.1.4 Expression of reciprocal arguments

It has been mentioned that, as in other languages, the subject of a subject-oriented reciprocal construction must be semantically plural. In simple reciprocal constructions subject

expression is no different from that in non-reciprocal constructions. In particular, if there is a numeral in the subject group, the latter may have no plural marker. In simple constructions, the subject may be expressed by a plural noun phrase or a juxtaposition of two noun phrases followed by the conjunction *xoyor* ‘and’, lit. ‘two’ (30a). In Khalkha, there seem to be no restrictions on transformation of the second noun phrase into comitative (30b). Joint use of a comitative noun phrase and *xoyor* is ungrammatical (30c).

- (30) a. *Eedže xüü xoyor tewre-lde-ne.*
 mother son two embrace-REC-PRES
 ‘Mother and son are embracing.’
 b. *Eedže xüü-tei-gee tewre-lde-ne.*
 mother son-COM-REFL embrace-REC-PRES
 lit. ‘Mother with her son is/are embracing.’
 c. **Eedže xüü-tei-gee xoyor tewre-lde-ne.*

The comitative noun phrase (cf. *xüü-tei-gee* in (30b)) displays another property of a non-direct object (Poppe (1954:171) employs the term ‘indirect object’), which is related to the co-occurrence with the reciprocal pronoun. The latter can be used with conjoined noun phrases serving as subject (30d). But if the second argument is comitative the use of the reciprocal pronoun, which necessarily agrees with the subject, is forbidden. Thus a sentence in this case shows the features of a discontinuous reciprocal construction (30e).

- d. *Eedže xüü xoyor biye biy-ee tewre-[lde-]ne.*
 mother son two each other-ACC embrace-REC-PRES
 ‘Mother and son are embracing each other.’
 e. **Eedže xüü-tei-gee biye biy-ee tewre-[lde-]ne.*
 mother son-COM-REFL each other-ACC embrace-REC-PRES
 lit. ‘Mother with her son is/are embracing each other.’

(30e) displays the property which rules out interpretation of the comitative noun phrase as part of the subject group. It should be noted that the comitative phrase may be followed by the postposition *xamt*, as in (31), which unambiguously indicates that the comitative noun phrase denotes the second participant (see translation (i) in (31)). If *xamt* is absent the comitative noun phrase together with the subject, in the opinion of an informant (Tuvshintogs), may also be interpreted in some contexts as a collective first participant with an implied second participant (see translation (ii) in (31)). Another informant (Kurebito) claims that even if *xamt* is used interpretation (ii) is possible.

- (31) *Xuca uxna-tai [xamt] mörgö-ldö-džö bai-na.*
 ram goat-COM together butt-REC-CONV AUX-PRES
 i. ‘A ram is butting with a goat’ (if *xamt* is used).
 ii. ‘A ram and a goat together are butting with sb’ (with *xamt* omitted).

In Buryat, where the predicate agrees with the subject, the comitative noun phrase does not affect the agreement. This is one more sign of a discontinuous construction. The second participant may be covert, being indicated by the reciprocal marker.

- (32) *Uulz-aa, uulz-aa, бага зerge [eden-tei] yari-ld-aa-b.* (Bur2. 168)
 meet-PAST meet-PAST a.little they-COM talk-REC-PAST-1SG
 '[We] met, [we] met, I talked a little [with them].'

A similar problem, i.e. expression of the second participant, concerns constructions with the predicate in *-lca/-lsa* (see 7.3), which are interpreted as sociative if all the participants are expressed by the subject only (71a, b) and they are regarded as comitative if the subject names only one of the participants (71c–l). In our material, in constructions with *-lca/-lsa* the second participant is expressed by more varied means than in constructions with *-lda*.

3.1.5 Productivity and restrictions on reciprocal derivation

Suffixed reciprocals are of limited productivity. A large number of examples are cited in dictionaries, special literature and texts (see, for instance, (18)–(22), (24)–(28), (32)). They derive from many two-place transitive and two-place intransitive verbs (on condition that the underlying object is human), including morphological causatives, except those in *-uul* (cf. *duud-uul* 'to order sb to call sb' → **duud-uula-ldo* 'intended meaning 'to order each other to call sb else'). As shown in 3.1.2, they may also be derived from three-place transitives.

At the same time, quite a number of informants reject derivation of morphological reciprocals from many two-place verbs and prefer pronominal reciprocals as the only possibility. Thus, Gerelma accepted only pronominal reciprocals for the following Khalkha transitives: *naida-* 'to rely on sb', *uguisge-* 'to refute, disprove', *xalamžil-* 'to court sb', *magta-* 'to praise', *marta-* 'to forget sb', *ugaa-* 'to wash sb/sth', *inyeelge-* 'to make sb laugh', *ile-* 'to stroke sb', *muula-* 'to slander sb', *uzuule-* 'to cause trouble to sb', *xairla-* 'to love sb'. She accepted only a few morphological reciprocals out of a long list offered to her: *muuda-lda-* 'to have a grudge against each other', *noolo-ldo-* 'to pester each other', *örsö-ldö-* 'to rival with each other', etc. The Buryat informant Darima accepted only three out of seven morphological reciprocals offered to her: *enyeexi-ldo-* 'to smile at each other' (in combination with a reciprocal pronoun), *dolyoo-ldo-* 'to lick each other', *naada bari-lda-* 'to jeer at each other'. In her opinion, only pronominal reciprocals are possible with the following Buryat verbs: *abar-* 'to save sb' (however, in the dictionary (Č.) the form *abara-lda-* is registered), *šagna-* 'to listen to', *marta-* 'to forget', *etige-* 'to believe' (in the dictionary (Č.) the reciprocal meaning for this verb is expressed by the form *etige-lse-* with or without the reciprocal pronoun). In another test, the same native speaker accepted only three suffixed reciprocals out of ten: *xaraa-lda-* 'to abuse each other', *teberi-ldo-* 'to embrace each other' and *tülxi-ldo-* 'to push each other'. Only pronominal reciprocals, in Darima's opinion, are possible from the following seven verbs: *mexel-* 'to deceive', *magta-* 'to praise', *mürde-* 'to chase', *zoboo-* 'to torment' (however, the dictionary (Č.) registers the form *zobo-ldo-*), *naadal-* 'to jeer at sb', *xamgaal-* 'to defend', *zemel-* 'to accuse'.

The informants sometimes disagree between themselves and with the dictionary data with respect to the possibility of the use of *-lda-* on some verbs (and most of these suffixed reciprocals are entered in the dictionaries). For instance, Tuvshintogs prefers the form

buuda-lca- in the meaning ‘to fire at each other, exchange fire’ instead of the dictionary form *buuda-lda-*. He rejects the form *xairla-lda-* in the meaning ‘to love, pity each other’ and suggests a pronominal reciprocal *biye biy-ee xairla-* instead (but Kurebito allows the form *xairla-lda-* in the meaning ‘to love, pity each other’). Similarly, he suggests a pronominal reciprocal *biye biy-ee zala-* instead of the morphological reciprocal *zala-lda-* for the expression of the meaning ‘to invite each other’.

In general, establishing the list of restrictions on reciprocal derivation and possible causes requires additional study. It may even turn out that morphological reciprocals in *-lda* constitute a closed set and they are being ousted by pronominal reciprocals.

3.2 Object-oriented constructions

The participants of the reciprocal relation are expressed by a direct object (cf. *šüd-öö* in (33), *ter xoyor-iig* in (34) and *xül-nüü-gee* in (37))

3.2.1 Without causativization

Since it is the object referents that are in a reciprocal relation, the subject in an object-oriented construction may be singular.

The following two Buryat forms are spatial object-oriented reciprocals; the first underlying verb is a three-place lexical reciprocal with the meaning ‘to rub sth against sth’ (the noun phrase *šüd-öö* ‘tooth’, though singular, refers to the teeth in both jaws rubbing against each other); in the second form the reciprocal suffix stresses reciprocity (the meaning of joining together) without changing the overall meaning.

- (33) a. *šüd-öö xabir-* (vt) ‘to grit one’s teeth’ (-*öö* =REFL.ACC)
 = b. *šüd-öö xabira-lda-* (vt) ‘to grit one’s teeth against each other’ (Č. 526).

There is also a number of unmarked spatial object-oriented reciprocals, e.g. *xolo-* ‘to mix sth with sth’, *naa-* ‘to glue sth to sth’, whose forms in *-lda* are in fact anticausatives rather than object-oriented reciprocals of the (33b) type (see 4.6.1 and 14.2).

3.2.2 Causatives of subject-oriented reciprocals

As a matter of fact, any subject-oriented reciprocal can be turned into object-oriented by way of causativization (given a pragmatically natural situation). Thus, (1b) can be causativized into an object-oriented construction (34). Causatives derived from reciprocals are frequently entered in the dictionaries.

- (34) *Dordžo ter xoyor-iig xoorondo-ny dzodo-ld-uul-džee.*
 D. those two-ACC between.them beat-REC-CAUS-PAST
 ‘Dorji provoked a fight between those two.’

Here are two more three-member chains of this type (the forms in *-lda* with the question mark are not accepted by all of our informants though they are registered in the dictionaries and occurred in the texts):

- (35) a. *tani-* 'to recognize' (Č. 414)
 b. *tani-lsa-/²tani-lda-* 'to get acquainted' (Č. 414) ("canonical")
 c. *tani-ls-uul-/²tani-ld-uul-* 'to acquaint sb with sb' (Č. 414) (object-oriented)
- (36) a. *neše-* 'to push' (Č. 341)
 b. *neše-lde-* 'to push each other' (Č. 341)
 c. *neše-ld-üül-* 'to cause to push each other' (Č. 341).

A sentential example for (36c):

- (37) a. *Axa düü-ner xül-nüü-gee neše-ld-üül-en ...* (T. 75)
 elder.brother younger.brother-PL foot-PL-REFL push-REC-CAUS-CONV
 'The brothers, pushing their feet one against another ...'

The verbs listed in (33a, b) may be marked according to the reciprocal-causative pattern.

- b. *Žada-nuud-aa xabira-ld-uul-an...* (T. 118)
 bayonet-PL-ACC rub-REC-CAUS-CONV
 'Rubbing their bayonets one against another.'

3.3 *Nomina actionis*

The principal suffixes of action nominalization are *-aa/-oo/...* and *-lga/-lgo/...* Numerous reciprocals can take on these suffixes, the derivatives being registered in the dictionaries; cf. Buryat:

- (38) a. *ürdi-* 'to outstrip/leave behind' → *ürdi-lde-* 'to try to outstrip each other, rival'
 → *ürdi-ld-öö* 'rivalry' (Č. 512)
 b. *ozo-* 'to kiss' → *ozo-ldo-* 'to kiss each other' → *ozo-ld-oo* 'a kiss' (Č. 350)
 c. *ühöörxe-* 'to hate' → *ühöörxe-lde-* 'to hate each other' → *ühöörxe-lde-lge*
 'mutual hatred' (Č. 519)
 d. *zodo-* 'to beat' → *zodo-ldo-* 'to fight' → *zodo-ld-oo(n)* 'a fight'.

Nomina actoris can also be formed from reciprocals; cf.:

- e. *zodo-* 'to beat' → *zodo-ld-ooč* 'a pugnacious fellow' (L. 197).

4. Non-reciprocal meanings of the suffix *-lda*

This section concerns two main non-reciprocal groups of verbs with the suffix *-lda*: those with the sociative meaning (see 4.1–4.5) and seven meanings either unproductive or of low productivity (see 4.6).

4.1 Some similarities and differences between sociatives in *-lda* and *-lca/-lsa*

A sociative construction corresponds *semantically* to two non-sociative constructions in the sense that if *A and B are running together* this means that *A is running* and *B is running*. However, in the latter two clauses the component 'together' and other related nuances of

meaning are absent. In this respect the state of things is analogous to that with reciprocal constructions and their non-reciprocal correspondences. The sentence *A and B kissed each other* means that *A kissed B* and *B kissed A*. And again, in the latter two clauses indication of both acts being parts of the same situation is also absent.

As a rule, sociativity presupposes spatial and temporal proximity or a kind of concerted interaction between the subject referents, a kind of relatedness or common reason for their actions, etc. In the *Buryat-Russian Dictionary* (Č.), the sociative meaning is, as mentioned, roughly interpreted mostly as ‘together’ or ‘of many’. These two interpretations actually distinguish two varieties of the sociative meaning in Mongolic languages: although, probably, the meaning ‘of many’, e.g. the plural meaning in the literal sense, cannot be regarded as sociative proper it is so closely related to it (needless to say, ‘together’ requires a plural subject) that we may nevertheless regard it as a variety of sociative. These two senses, i.e. ‘together’ and ‘of many’, are distributed between sociatives in *-lca/-lsa* and those in *-lda* accordingly, though not entirely consistently.

Sanzheev (1963:60) states that *-lca/-lsa* forms and especially those in *-lda* “... often denote actions performed by many, and, so to say, collectively... We find similar usages in all Mongolic languages.” Sanzheev’s attempt to explain the differences between intransitive forms in *-lsa* and *-lda* is provoking though his description is not as complete as might be expected from a native speaker (1962:198): “... *šuuya-* ‘to make noise’, *šuuya-lsa-* ‘to make noise with sb’, *šuuya-lda-* ‘to make noise – of many (so to say, to make noise at each other).”⁵

1. Similar explanations, i.e. definitions of derivatives in *-lda* with the component ‘of many’, and parallel forms in *-lca/-lsa* with ‘together (with sb)’, occur in dictionaries:

- (39) a. *xašgara-* ‘to shout’ (L. 522)
xašgara-lda- ‘to shout (of many)’ (L. 522)
xašgara-lca- ‘to shout (together)’ (L. 522)

5. A subtle though brief characteristic of a *-lda* sociative extracted from a text in comparison with the base verb was suggested by the informants Ja.M. Sondueva and N.D. Rinchinova. Here is the sentence:

- (i) *Ger-te-ny huu-han barlag-uud-iny xašxara-lda-ba* (Bur2. 176)
house-DAT-his sit-PART hired.man-PL-his shout-REC-PAST
‘The hired men sitting in his (owner’s) house started shouting.’
- (ii) *Ger-te-ny huu-han barlag-uud-iny xašxar-ba-d.* (-d = 3PL)
(same translation).

In (i) the labourers shout together in unison, the cause of the shout being some action of the employer. As for (ii), they shout each separately, each in his own manner, and for any reason, e.g. out of joy, pleasure, etc. Besides, in (ii) the 3PL marker *-d* is required, while in (i) plurality is implied by the suffix *-lda*. Although the suffix *-lda* presupposes a plurality of participants, the optional 3PL marker *-d* may be used simultaneously with it; cf.:

- (iii) ... *düliir-ter šaxuu xašxara-lda-ba-d.* (Č. 208)
become.deaf-CONV almost shout-REC-PAST-3PL
‘... [they] shouted so that he almost got deaf.’

- b. *enyee-* 'to laugh' (Č. 767)
enyee-lda- 'to laugh (of many)' (Č. 767)
enyee-lse- 'to laugh (together with sb)' (Č. 767)
- c. *yere-* 'to come, arrive' (Č. 222)
yere-lda- 'to come, arrive (of many)' (Č. 222)
yere-lse- 'to come, arrive together with sb' (Č. 222).

2. Sometimes, derivatives both in *-lda* and *-lca/-lsa* are defined in the same way by means of 'together':

- (40) a. *ošo-* 'to set out somewhere' (Č. 366)
ošo-ldo-žo yere-xe 'will have gone together' (A. 198)
ošo-lso-žo yere-xe 'will have gone together' (A. 198)
- b. *oro-* 'to enter' (Č. 361)
oro-ldo- i. 'to enter together', ii. (usu.) 'to try (to do sth)' (Č. 361)
oro-lso- i. 'to enter together', ii. 'to take part, etc.' (Č. 361).

3. As (41a–b) shows, same-stem derivatives may have other additional meanings and differ in this respect:

- (41) a. *xara-* 'to see' (Č. 551)
xara-lda- i. 'to see (of many)', ii. 'to see' (dial.) (Č. 551)
xara-lsa- i. 'to see together', ii. 'to see each other' (Č. 551)
iii. 'to meet (each other)' (Č. 551).
- b. *yüüle-* 'to pour sth from one vessel/sack into another' (Č. 783)
yüüle-lda- 'to pour sth from one vessel/sack into another (of many)' (Č. 783)
yüüle-lse- i. 'to pour sth together', ii. 'to help sb pour sth' (Č. 783).

4.2 Plural subject and sociative *-lda* forms

As noted above, the meaning 'of many [subjects]' which is often used in the *Buryat-Russian Dictionary* (Č.) to interpret verbs in *-lda* should not be understood literally because it often refers to no more than two or four participants, as illustrated by the following examples. Therefore, the component 'many' should be understood as 'two or more', and, moreover, this characterization stresses the collective nature of the group of participants. Not infrequently, there occur sequences of two or more sociative derivatives in *-lda*.

- (42) a. *Xoyor xulgana tereen-iie toir-ood güi-lda-ne.* (Bur2. 86)
two mouse this-ACC go.around-CONV run-REC-PRES
'These two mice are skittering around it.'
- b. *...tere dürben xüxi-lda-n enyee-ld-ee gexe gü...* (Bur2. 54)
these four make.merry-REC-CONV laugh-REC-PART AUX PRTL
'...those four began making merry and laughing.'

Needless to say, if the predicate is sociative the subject must be (semantically) plural (see (3a)). However, subject plurality is a necessary but insufficient condition, because only in a relatively limited number of cases when the subject is plural we find in the texts the sociative form with the suffix *-lda* (note that the use of the sociative suffix *-lca/-lsa* is more

predictable). The use of sociative forms in *-lda* may be conditioned by both the lexical meaning of the base verb and the context, and, besides, the subjective speaker's choice which is hard to foresee. To repeat, *-lda* is not always used on the predicate if there are several or many participants; moreover, as mentioned, it is normally absent, and its usage is to a certain degree mysterious. Its function is to stress the sociativity, not to express plurality. For instance, the verb *gaixa-* is used with *-lda* in (43a), while it occurs without *-lda*, despite the plural subject, in (43b), though *-lda* is used on the verb *güi-* that follows it:

- (43) a. *Toir-ood bai-han zon exe gaixa-lda-ža, yexe*
 around-CONV be-PART people very be.surprized-REC-CONV very
honir-xo-žo... (Bur2. 254)
 be.interested-PART-CONV
 'The people gathered around are very surprised and very interested.'
- b. *...xaruulša übge-d gaix-aad, gazašaа güi-lde-n*
 watchman old.man-PL be.surprized-CONV outside go-REC-CONV
gara-na-d xa. (Bur2. 82)
 go.OUT-PRES-3PL PRTL
 'The old watchmen were surprised and went outside.'

4.3 Sociatives of transitives

Cross-linguistically, sociatives more commonly derive from intransitives than from transitives. Judging by the dictionary data, this is also typical of the Mongolic languages. Thus, for instance, in the *Buryat-Russian Dictionary* (Č.), there are no more than 10 sociatives in *-lda* with transitive bases and at least 220 sociatives with the suffix *-lda* derived from intransitives. This ratio is certainly indicative of the state of things in the language, though it may not be quite precise (for the quantitative characteristics of the verb classes in *-lda* see 4.5 below). Another indication is the fact that (44) is the only instance of a transitive sociative in *-lda* encountered in the Buryat fairytales (Bur2.).

- (44) *Taanar yüü xara-ža, amaa angai-lda-ža bai-na-b-ta* (Bur2. 176)
 you what look-CONV mouth open-REC-CONV AUX-PRES-INTS-2PL
 'What are you looking at with your mouths open?'

Here is a list of Buryat transitive sociatives (cf. 7.4.2):

- (45) *asara-lda-* 'to bring sth together with sb' (Č. 63)
elgee-lde- '(of many) to send sth' (Č. 764)
gar tabi-lda- 'to sign sth together with sb else' (Č. 408)
yüüle-lde- '(of many) to pour sth from one vessel into another' (Č. 783)
xara-lda- '(of many) to see sth/sb' (Č. 551)
xüdelge-lde- '(of many) to move sth' (Č. 612)
xürte-lde- '(of many) to receive sth' (Č. 627)
xüxe-lde- '(of many) to suck sth' (Č. 636).

There is a restriction on the formation of sociatives in *-lda* from a number of transitives. Thus, in Khalkha, there are no sociatives in *-lda* from the verbs *örgö-* 'to lift sth', *xara-*

‘to look at sth’ and *xiy-* ‘to produce sth’ (informant Gerelma). But there are sociatives in *-lca/-lsa* of these verbs.

4.4 Comitatives and sociatives of one-place intransitives

A. *Comitatives*. As mentioned, among derivatives in *-lca/-lsa* comitatives are prevalent over sociatives, while among *-lda* forms sociatives are prevalent. In (46a), as well as in (4a), the second participant is expressed by a comitative phrase, and in (46b) by a postpositional noun phrase. In (46c) and (46d) it is not expressed syntactically. (Compare 7.3). Not infrequently, the comitative noun phrase also contains the postposition *xamta* ‘together’ (this comitative noun phrase is naturally possible with unsuffixed verbs; cf. *Dordžo Bata-tai xamta tedeem-de yere-be* ‘Dorji together with Bat approached them.’). In general, the comitative meaning seems to be more salient than sociative, all the more so that it may have a distinct lexical expression, including a comitative object (it seems that derivations involving valency increase, including comitatives and assistives, are characterized by a more distinct change of meaning than those involving valency decrease).

- (46) a. *Tere baron ... Praskuxin Neferdov xoyor-toi xamta ... gešxele-lde-n*
 this baron P. N. two-COM together march-REC-CONV
gara-ba (T. 35)
 go.out-PAST
 ‘Baron Praskuxin together with Neferdov went out marching ... (the reciprocal verb is used to translate the Russian original phrase ‘with vigorous strides’).
- b. *Seržüüini Žalm-in xoino-hoo duula-lda-na.* (Cd. 114)
 S. J.-GEN after-ABL sing-REC-PRES
 ‘Serjuni joins Jalm (lit. after Jalm) in singing.’
- c. *Ene manai Sagaadai daamal ošo-ldo-xo.* (A. 198)
 this our S. supervisor leave-REC-PART
 ‘This Sagadai of ours will go [with them] as a supervisor.’
- d. *Hain mory-oo una-ža, xuluuša üilde-xe-m ge-že bayan*
 good horse-REFL mount-CONV thief persecute-FUT-1SG AUX-CONV rich
xüin xoinohoo-ny yaba-lda-na. (Bur2. 196)
 man back-POSS3SG go-REC-PRES
 ‘The rich man mounted his good horse and set out to persecute the thief.’ (lit. ...saying, I’ll persecute the thief, went after him).

B. *Sociatives*. Above, all the textual comitative examples with the suffix *-lda* are entered that we have found; three out of four examples contain verbs of motion. As for the sociative examples, they are very frequent in texts. The sociative examples cited above (see (3a, b), (42a, b), (43a)) can be amplified by the following:

- (47) a. *Dzandalča-d ordon tiiš dawxya-lda-laa.*
 hangman-PL palace to run-REC-PAST
 ‘The hangmen were running to the palace (all of them together, jointly).’
- b. *Ene xed maany tun ixе šuugi-lda-dž bai-na.* (O. 122)
 this several POSS very a.lot make.a.noise-REC-CONV AUX-PRES
 ‘These are making a lot of noise.’

- c. *Cöm inee-lda-n ...* (O. 122)
all laugh-REC-CONV
'All [of them] began laughing..'
- d. *Oro-ldo-n gara-lda-n bai-ba.* (Č. 361)
enter-REC-CONV leave-REC-CONV AUX-PAST
'[From time to time] They would enter and then go out again together.'
- e. *Udabašyegüi ende tende xün-üüd xurxira-lda-ba.* (Cd. 113)
soon here there man-PL snore-REC-PAST
'Soon here and there (many) people snored (loudly).'
- f. *Manai zarasa-nuud šešere-lda-že bai-dag xayam.* (Cd. 113)
our servant-PL shake-REC-CONV AUX-PART MOD
'Our servants are shaking (with fear).'
- g. *Seber haixan ünder baišan-uud tebxi-lda-ne.* (Cd. 113)
beautiful beautiful tall house-PL be.square/even-REC-PRES
'Beautiful tall buildings look like even rectangles.'

4.5 Lexical groups of intransitives taking *-lda* '(of) many'

This group of derivatives is the most numerous among all derivations in *-lda*, numbering, as pointed out above, about 470 in the *Buryat-Russian Dictionary*. They are distributed as follows:

- 220 items are derived from intransitives and acquire the meaning 'of many'.
- Only 10 analogous forms are derived from transitives.
- 85 derivatives are reciprocal in meaning.
- About 60 items are lexicalized derivations.
- About 35 are anticausatives or belong to some very small semantic groups (see 4.6).
- About 30 are unclear due to the lack of explanations in the dictionary.

Verbs in *-sa-lda* (about 20) are not taken into account here (see Section 5).

The derivatives named in the heading are sometimes translated by means of 'together' instead of 'many', which shows their proximity to derivations in *-lsa*. It should be stressed that the number of intransitives taking the suffix *-lsa* is much smaller (25 at the most in the same dictionary) than that of respective derivations in *-lda*. This may be partially related to the fact that sociatives in *-lsa* are always used with a human subject, while sociatives in *-lda* are also used with non-human subjects (animals and things). It follows that most of the intransitives registered with *-lda* that are listed below are not registered with *-lsa*, and many, especially with the comitative meaning, are not possible with *-lsa* at all, e.g. the verbs of lexical group 2 denoting manifestation of existence. Transformation of many sociative sentences into comitative would sound funny, e.g. of a sentence meaning 'A number of the masts of sunken ships stuck up in the bay' into 'One mast together with another stuck up in the bay'.

There are some restrictions on the derivation of these forms. For instance, in Khalkha, according to informant Gerelma, there are no sociatives in *-lda* with the bases *ire-* 'to come, arrive' (she suggests the form *ire-lce-*), *suu-* 'to sit' (suggested form *suu-lca-*), *adžilla-* 'to work', *unta-* 'to sleep', but there are *-lda* forms of the verbs *xurxira-* 'to snore

(in sleep), *nise-* ‘to fly’, *töörö-* ‘to wander’; no *-lda* form for the verb *mordo-* ‘to mount (a horse), leave’; there is a *-lda* form of *inyee-* ‘to laugh’ but not of *mardzai-* ‘to smile’; there is a *-lda* form of *maila-* ‘to bleat’ and not of *naitaa-* ‘to sneeze’. Our informant Darima rejects the sociative forms in *-lda* of the verbs *yere-* ‘to come, arrive’ and *ažilla-* ‘to work’. There seem to be no rigid rules of choice, and the informants sometimes contradict one another and the dictionary data.

What follows is a brief survey of the thematic groups of intransitive verbs that combine with *-lda* in the meaning of ‘many’. The list is compiled on the basis of the *Buryat-Russian dictionary* (Č.). A subdivision into groups is approximate, aiming at giving a general idea of their lexical range. Not all of the verbs listed here when combined with *-lda* are supplied with explanations in the dictionary, but they are entered in these lists because they cannot be ascribed a reciprocal meaning, and their closer examination may reveal meanings deviating from ‘many’.

1. Verbs of emitting sounds: *uuxila-* ‘to breath heavily’, *šali-* ‘to chatter’, *šuuya-* ‘to make noise’, *haršagana-* ‘to rustle’, *yoolo-* ‘to moan’, *žengine-* ‘to ring’, *babana-* ‘to bleat shaking the tuft (of goats)’, *pipagana-* ‘to twitter’, *xusa-* ‘to bark (of dogs)’, *xurxira-* ‘to snore’, *güngene-* ‘to buzz/drone’, *xüšegene-* ‘to rattle (of motor)’, etc. (about 75 verbs).

2. Verbs of manifestation of existence (like emitting light), or perception: *ulagaša-* ‘to flicker (of sth red)’, *selse-* ‘to sparkle (of dew on grass)’, *zuragaša-* ‘to glimmer (of lights at night)’, *yalagaša-* ‘to twinkle (of stars)’, *yodoi-* ‘to jut out’, *derxe-* ‘to protrude/bulge out’, *harai-* ‘to be spread wide’, *toboi-* ‘to rise above sth (about a haystack, woman’s breasts, etc.)’, *gonoi-* ‘to show a long neck (e.g. about a camel)’, *üle-* ‘to stretch out one’s neck/raise one’s head’, *beltegeše-* ‘to goggle’, *belse-* ‘to be protruding (of eyes)’, *harxai-* ‘to be cumbersome, spread wide’, *yoroi-* ‘to rise above, overhang’, *yomboi-* ‘to be protuberant’, *šodoi-* ‘to stick out (of a short tail)’, *šomboi-* ‘to protrude (of lips)’, *herb-* ‘to bristle’, *danxai-* ‘to be unwieldy/clumsy’, *orboi-* ‘to be bristling/dishevelled’, *pampai-* ‘to be fluffy/crumblly’, *arži-* ‘to be raised/embossed’, *arbai-* ‘to stand on end’, *barxai-* ‘to be piled up/look uneven’, *laglai-* ‘to be tousled/stick out (e.g. trees at a hilltop)’, *šoboi-* ‘to be pointed, jut out/stick out’, *zuri-* ‘to look indistinct, as a shape’, *barai-* ‘to be seen as a dark mass’, *burzai-* ‘to be seen as white spots’, *barži-* ‘to be seen as a solid mass’, etc. (over 35 items).

3. Verbs expressing position or change of physical state: *tiire-* ‘to stand (of cattle, whipping away insects)’, *burži-* ‘to curl/coil’, *godir-* ‘to wind (of a river, road)’, *atir-* ‘to writhe, wind, wrinkle’, *ümeri-* ‘to curl/roll up’, *borsoi-* ‘to shrivel/shrink’, *xumiyi-* ‘to be/become wrinkled/warped’, *teži-* ‘to grow fat (of cattle)’, etc. (about 10 items).

4. Verbs expressing emotional, physiological and psychological states and their manifestations: *xeriülxe-* ‘to be angry’, *gaixa-* ‘to be surprised’, *ürge-* ‘to get frightened’, *šugši-* ‘to be depressed’, *enyeebxile-* ‘to smile’, *žarbai-* ‘to bare one’s teeth’, *xüxi-* ‘to make merry/rejoice’, *unta-* ‘to sleep’, *uxaa-* ‘to faint’, *šešer-* ‘to shiver’, *güregeše-* ‘to pulsate’, etc.; *xumxaar-* ‘to be down with a fever’, *šiizga-* ‘to have flux (of animals)’, *edege-* ‘to recover’, *xemšeerxe-* ‘to be shy’, *xürme-* ‘to be alert’, etc. (more than 55 items).

5. Verbs of rhythmic or chaotic motion: *bultagaša-* ‘to appear briefly (repeatedly)’, *darša-* ‘to crowd, jostle’, *tugšara-* ‘to bustle (during preparations)’, *boxino-* ‘to bustle/fuss’, *böögner-* ‘to pile up, swirl, gather/crowd’, *harxagana-* ‘to bustle (of sb large or sth spread

wide), *eti-* ‘to crowd (into a place to capacity)’, *iralta-* ‘to swarm (of water fowl)’, etc. (about 10 items).

6. Verbs denoting purposeful motion or change of position/posture, etc.: *sobxor-* ‘to jump’, *sogsogošo-* ‘to walk skipping’, *maryaa-* ‘to slink’, *alxa-* ‘to step, tread’, *oodor-* ‘to gallop’, *gešxel-* ‘to march’, *hüde-* ‘to work, move’, *übgegle-* ‘to kneel’, *huu-* ‘to sit down’, *matara-* ‘to bend/curve’, *düxi-* ‘to bend/stoop’, *dux-* ‘to bend, lower one’s head’, *begzi-* ‘to be stooping, to bend’, *büx-* ‘to be hunched/bent’, *hexere-* ‘to squat’, *muxari-* ‘to roll’, *xülyber-* ‘to flounder, overturn’, *yadai-* ‘to be turned up (of horns), lean/fold back’, etc. (about 45 items).

7. Verbs denoting other kinds of human activities: *šagaa-* ‘to look/peep’, *haamai-* ‘to gape (about)’, *xaza-* ‘to be given to biting; also to bite sb/sth’, *hoodoi-* ‘to swagger’, *samna-* ‘to dance’, *xaarata-* ‘to play cards’, etc. (about 10 verbs).

4.6 Other meanings

In contrast to the sociative and the comitative meanings, derivatives with the meanings discussed here are, as a rule, natural with a singular as well as with a plural subject. Unlike comitatives, they do not presuppose a second animate participant. They fall into a number of groups that differ semantically and syntactically. A derivative may enter into two groups depending on the nature of the derivational opposition. Some of the derivatives may be either anticausative or autocausative depending on the inanimacy/animacy of the subject referent.

The meanings of these derivatives can be subdivided as follows: (a) some of the meanings are similar to those of reflexive markers in other languages, e.g. in Russian, such as anticausative, autocausative, reflexive and “pleonastic use”; (b) some meanings coincide with those characteristic of *-lca/-lsa* derivatives in the Mongolic languages, viz. assistive and that of “attendant action”. There is one derivative with the converse meaning (often enough expressed by reflexive markers across languages) which has semantic parallels in Yakut.

The valency characteristics of these groups of derivatives can be summed up as follows: anticausatives, autocausatives and reflexives are intransitivized; “pleonastic” derivatives retain their intransitivity; the converse derivative retains transitivity and, lastly, the assistive meaning and that of “attendant action” entail valency increase, which is at least semantic in the latter case.

4.6.1 Anticausative

As anticausatives are derived from object-oriented lexical reciprocals and they are also lexical reciprocals, they are considered below in 14.2 where about 30 anticausatives are cited. Here is a list of anticausatives:

- | | | |
|---------------------------------------|---|--|
| (48) <i>büre-</i> ‘to make sth sour’ | → | <i>büre-lde-</i> ‘to become sour’ (L. 96) |
| <i>ünge-</i> ‘to rumple, crumple sth’ | → | <i>ünge-lde-</i> ‘to become crumpled’ (B.66) |
| <i>xoli-</i> ‘to mix sth’ | → | <i>xoli-ldo-</i> ‘to get mixed’ (L. 534) |

<i>xürme-</i> ‘to weave, interlace sth’	→	<i>xürme-lda-</i> ‘to become entangled’ (Bur2. 88)
<i>zalga-</i> ‘to join, add sth to sth’	→	<i>zalga-lda-</i> ‘to join, become coupled’ (Č. 247)
<i>zuura-</i> ‘to knead, mix sth’	→	<i>zaura-lda-</i> ‘to become sticky, viscid’ (L. 207).

- (49) a. *Bata toson-d čixer-iig muu xolyo-son.*
 B. butter-DAT sugar-ACC bad mix-PERF
 ‘Bat has mixed sugar and butter badly.’ (lit. ‘... sugar into butter.’)
 b. *Čixer toson muu xolyo-ldo-son.*
 sugar butter bad mix-REC-PERF
 ‘Sugar and butter got badly mixed.’

4.6.2 Autocausative

The following derivatives seem to be autocausative in meaning as they denote body moves:

- (50) *šaxa-* ‘to press sth’ → *šaxa-lda-* ‘to squeeze oneself (into sth)’ (Č. 724)
 ‘to jostle, be pressed in a crowd’
xabša- ‘to press/squeeze sth’ → *xabša-lda-* ‘to squeeze oneself (into sth)’ (Č. 528).
nyaa- ‘to glue sth to sth’ → *nyaa-lda-* ‘to press oneself to sb/sth’ (Č. 346)
oryoo- ‘to wrap sth up’ → *oryoo-ldo-* ‘to get wrapped/entangled’ (L. 307)
xürme- ‘to weave, interlace sth’ → *xürme-lda-* ‘to get entangled’ (Bur2. 88).
- (51) a. *Uran ... tende bai-han nege ala-han üxer-ei arxan coo*
 U. there be-PAST.PART one kill-PAST.PART bull-GEN skin in
oryoo-ld-ood lo xebt-ee (Bur2. 202)
 wrap.up-REC-CONV PRTL lie.DOWN-PAST
 ‘Uran got into the skin of the bull killed before and lay down.’
 b. *Arbalza arbalza-haar goloo taxa xürme-lda-š-oo bšii daa.* (Bur2. 88)
 flutter flutter-CONV quite weave-REC-INTS-PAST PRTL PRTL
 ‘[The spider] kept fluttering and got finally entangled [in the web].’

4.6.3 “Pleonastic” use of *-lda*

This is observed when the suffix *-lda* is used on intransitive base verbs, with a minimal change of meaning and retention of the single participant (with the exception of *zöörö-ldö-* which presupposes at least two participants). These are the following verbs (in the third derivative a non-standard change of the final root vowel takes place) which mostly denote motion without a noticeable change of place (the existence of a verb in *-ldo* which has no base verb is probably not accidental: *tereg onxo-ldo-w* ‘the cart overturned’ (L. 302)):

- (52) *arbai-* ‘to get spread out’ → *arbai-lda-* ‘to be spread out’ (Č. 56)
atir- ‘to writhe, twist’ → *atira-lda-* ‘to writhe, twist’ (Č. 64; Bur2. 14)
burši- ‘to be wrinkled’ → *burša-lda-* ‘to crumple’ (Č. 115)
eryye- ‘to turn round, spin’ → *eryye-lda-* ‘to turn’ (Č. 775; T.8)
toro- ‘to stumble’ → *toro-[so]-ldo-* ‘to stumble’ (Č. 431; T. 93)
urba- ‘to turn’ → *urba-lda-* ‘to turn, turn over’ (Č. 473)
zöörö- ‘to move near each other’ → *zöörö-ldö-* ‘to move near each other’ (L. 203, 202)
zuura- ‘to get smeared, soiled’ → *zuura-lda-* ‘to get smeared, soiled’ (Č. 265; T. 16).
 (vt ‘to mix, knead’)

4.6.4 Reflexive

The following derivative seems to have a reflexive meaning. An analogous lexical opposition with a reciprocal suffix is also attested in Tuvan (see Kuular, Ch. 27, §5.5.4); cf.:

- (53) *xööde-* ‘to smear/dirty sth/sb with soot/coal’
 → *xööde-lde-* ‘to smear oneself with soot/coal’ (Č. 593).

4.6.5 Converse

The following type of opposition also occurs in some other languages (cf. Yakut *atəla-* ‘to sell’ → *atəla-s-* ‘to buy’):

- (54) *zeelil-* ‘to lend sth to sb’ → *zeeli-lde-* (< **zeelil-lde-*) ‘to borrow sth from sb’ (Č. 275).

Derivations with the above five meanings have no correlates with the suffix *-lca/-lsa*, whereas the following two meanings are especially characteristic of *-lca/-lsa*.

4.6.6 Assistive

This meaning is characteristic of the suffix *-lca/-lsa* (see 8.3). The following example is the only one at our disposal:

- (55) *Bi esege-tei-ee tülyee asara-ld-aa-b.* (Cd. 114)
 I father-COM-REFL firewood bring-REC-PAST-1SG
 ‘I helped my father to bring the firewood.’

4.6.7 “Attendant” action

(56) is the only example at our disposal with a derivative in *-lda* that is assistive in meaning. As a rule, the assistive meaning is expressed by the suffix *-lca/-lsa* (see 8.3 below).

- (56) *Xün-ei mori asara-lda-ža yer-ee-b.* (S2. 241)
 someone-GEN horse bring-REC-CONV come-PAST-1SG
 ‘I also brought [for someone] someone else’s horse.’ (together with all other horses).

If we take into account the fact that two meanings comprise the polysemy of the comitative-sociative marker *-lca/-lsa* – assistive and that of ‘attendant action’, both very close to the comitative meaning, – we may draw a conclusion that its polysemy differs significantly from that of *-lda*.

The derivatives discussed in Section 4.6 can be supplemented by the following verbs with the meaning of competition which is mostly determined by the lexical meaning of the base verbs (the meaning ‘A overtakes B’ does not mean that A and B are competing: B may be simply running regardless of A): *ürdi-* ‘to outstrip, leave behind’ → *ürdi-lde-* ‘to compete, rival’ (Č. 512), *üdze-* ‘to see, look, try, put to the test’ → *üdze-lde-* ‘to compete in strength’ (also ‘to see each other’) (L. 475). The lexicalisation *ura-* ‘to tear; tear into parts’ → *ura-lda-* ‘to compete’, where it is hard to discern a semantic relation between the base verb and derivative, may also be entered here. This type of semantic change is typologically predictable, as it occurs in some other languages as well. The meaning of competition (= ‘to try to overcome each other’) can be expressed by *-lda* derivatives if the base verbs denote typically competitive actions; cf.: *güi-* ‘to run’ → *güi-lde-* ‘to race with

each other' (B. 67), *dawxi-* 'to gallop' → *dawxa-lda-* 'to compete in galloping', also 'to gallop together' (B. 67), *duula-* 'to sing' → *duula-lda-* 'to compete in singing', also 'to sing together' (B. 66).

4.7 Object-oriented constructions

A number of the derivatives listed in 4.4–4.6 may be used with causative suffixes to produce object-oriented constructions. A two-place anticausative may produce a three-place object-oriented reciprocal of joining which can be roughly synonymous to the base transitive; cf. (57a) and (57c). Such causative verbs of joining seem to be less productive in Mongolic than in some Turkic languages (see Nedjalkov, Ch. 28, §13; Kuular, Ch. 27, §8.4).

- (57) a. *xolbo-* 'to tie/join sth together' (Č. 579)
 b. *xolbo-ldo-* 'to be tied/joined' (Č. 579)
 c. *xolbo-ld-uul-* 'to tie/join sth together' (Č. 579).
- (58) a. *naa-* 'to paste (sth to sth)' (L. 256)
 b. *naa-lda-* 'to get pasted to sth (or together), stick to sth' (L. 255)
 c. *naa-ld-uul-* 'to paste sth to sth, or together' (L. 255).

Causatives derived from *-lda* forms are numerous in the dictionaries and they are rather frequent in both original texts and translations (see also Section 3.2.2). An example:

- (59) "Ene-l xübüün-tnai bult-iyye-tnai nyaa-ld-uul-ža bai-na." (Bur2. 214)
 this-PRTL guy-your all-ACC-your glue-REC-CAUS-CONV AUX-PRES
 'It is this guy here who glues together all your people [with a magic word].'

Sometimes, this results in interesting synonymy between a causative and a respective non-causative derivative. Thus, the causative form in (37b) does not differ significantly in meaning from (33b). Compare (60c) (in (60a, b) *-ee/-öö* is ACC.REFL; in (60b) *-üüd-* is PL):

- (60) a. *šüd-öö xabir-sa-lda-dža bai-na* (vi) 'his teeth are gritting' ("canonical")
 b. *šüden-üüd-ee xabir-sa-ld-uul-* (vt) 'to grit one's teeth' (Č. 526) (object-oriented);

thus:

- c. *xabir-* (vt) 'to grit ...' (=33a) = *xabira-lda-* (=33b) = *xabir-sa-ld-uul-* (60b).

(On the suffix *-sa-lda* see Section 5.)

4.8 *Nomina actionis*

Derivatives with other than reciprocal meanings can also be subject to nominalization; cf.:

- (61) *uila-* 'to sob' → *uila-lda-* 'to sob (of many)' → *uila-ld-aan* 'sobs (of many)' (L. 449)

Deverbal nouns derived from *-lda* forms are not uncommon in the dictionaries and texts. A sentential example:

- (62) ... *nüx-ed-ei-ny* *xüxyüün šuuya-ld-aan* *ba enyee-ld-een*. (T. 82)
 comrade-PL-GEN-POSS merry make.noise-REC-NR and laugh-REC-NR
 ‘[He heard] merry voices and laughter of his comrades.’

5. Reciprocals with the suffix *-ca-lda/-sa-lda*

In this section, we will consider the meanings of derivatives with the Khalkha suffix *-ca-lda* and Buryat *-sa-lda* (there are no analogous suffixes with the component *-lca/-lsa*, namely *-sa-lca/-sa-lsa*).⁶ They have the same meanings as derivatives in *-lda*, with the only difference that sociatives are less numerous among them. (They are cited above alongside *-lda* derivatives; see (60)).

1. *The reciprocal meaning.* Most of the registered reciprocals with this suffix denote violent or confrontational actions. Here are examples of (a) “canonical” and (b) “indirect” reciprocals:

- (63) a. *boho-so-ldo-* ‘to bark at each other, quarrel/squabble’ (Č. 107)
čix-ce-lde- ‘to push each other, jostle’ (L. 634)
daxa-sa-lda ‘to go together’ (Č. 189)
eryüü-se-lde- ‘to chase each other’ (Č. 775)
yobor-so-ldo- ‘to hit each other’ (Č. 226)
mörgö-cö-ldö- ‘to butt each other’ (B. 68)
namna-sa-lda- ‘to chase each other’ (Č. 321)
türi-se-lde- ‘to jostle each other, crowd’ (Č. 446)
xatxa-sa-lda- ‘to stab each other’ (Č. 531)
- b. *bulaa-ca-lda-* ‘to snatch sth from each other’ (L. 85)
čanga-ca-lda- ‘to draw/pull sth from each other’ (B. 66).

2. *The sociative meaning:*

- (64) *aba-sa-lda-* i. ‘to take/receive sth together with sb’, ii. ‘to squabble’ (Č. 21)
nölbo-so-ldo- ‘to spit (of many)’ (Č. 326).

3. *The anticausative meaning:*

- (65) *bari-* ‘to hold sth’ → *bari-sa-lda-* ‘to be connected/related’ (Č. 89)
oroo- ‘to wrap, wind round’ → *oroo-co-ldo-* ‘to entwine, get tangled’ (L. 307)
solbi-/solbi-co- ‘to cross (e.g. legs)’ → *solbi-co-ldo-* ‘to cross’ (vi) (L. 355)
ülxe- ‘to string sth, join’ → *ülxe-se-lde-* ‘to be tangled/joined’ (Č. 501)
xabir- ‘to rub sth against sth’ → *xabir-sa-lda-* ‘rub against each other’ (Č. 526)
xaša- ‘to press sth’ → *xaša-sa-lda-* ‘to cluster/be squeezed’ (Č. 556)
xoli- ‘to mix sth’ → *xoli-so-ldo-* ‘to get mixed’ (Č. 580).

6. This suffix existed in the language of the 14th century registered in the *Mukaddimat al-Adab dictionary* (published in Poppe 1938); cf. *mörgü-* ‘to butt sb’ → *mörgü-če-ldü-* ‘to butt each other’ (P. 240).

4. Lexicalized meanings

- (66) a. *aw-* 'to take, receive' → *aw-ca-lda-* 'to correspond to each other' (L. 20)
bulaa- 'to take away by force' → *bulaa-ca-lda-* 'to argue' (L. 85)
naimaa- 'to sell, trade' → *naimaa-sa-lda-* 'to bargain' (Č. 318)
oro- 'to enter' → *oro-so-ldo-* 'to interfere' (Č. 362)
tula- 'to resist, fight' → *tula-sa-lda-* 'to come to blows' (Č. 435)
tata- 'to pull, tear' → *tata-sa-lda-* 'to squabble' (Č. 412).

The lexicalized derivative in (66b) has a competitive meaning (and denotes a sports game).

- b. *Xoyor xīimūū-s deese čangaa-ca-lda-dža bai-na.*
 two man-PL rope.NOM pull-REC-CONV AUX-PRES
 'Two men are competing in pulling a rope.' (= 'pulling each to himself').

All the verbs in *-ca-lda* seem to have parallel synonymous forms in *-lda*; some have parallel forms in *-ca*; at least one verb has four parallel forms. In one case, the dictionary registers only derivatives in *-ca* and *-ca-lda*, derivatives in *-lda* being absent (probably by accident; see (67b)). The overall view in this respect is varied. Compare:

- (67) a. *bulaa-ca-lda-* 'snatch sth from each other' = *bulaa-lda-* (L. 85)
yobor-so-ldo- 'to fight, hit each other' = *yoboro-ldo-* (Č. 226)
oroo-co-ldo- 'to entwine, get tangled' = *oroo-ldo-* (L. 307)
xatxa-sa-lda- 'to stab each other' = *xatxa-lda-* (Č. 531)
xarga-ca-lda- 'to collide, be in conflict' = *xarga-/xarga-lda-/xarga-ca-* (L. 515)
xoly-co-ldo- 'to get mixed' = *xoly-co-/xoli-ldo-* (L. 534)
 b. *sörgö-cö-ldö-* 'to act against each other' = *sörgö-cö-* (L. 360).

Deverbal nouns are derived from verbs in *-ca-lda* as well as from verbs in *-lda* (cf. (38)):

- c. *aw-* 'to take' → *aw-ca-lda-* 'to correspond to each other' → *aw-ca-ld-aa* 'coordination' (L. 20).

6. The suffix of subject plurality, iterativity and imitativity *-cгаа/-сagaa*

In connection with the meaning of subject plurality encoded by *-lda* it is expedient to discuss the synonymous suffix *-cгаа*. This marker related to the suffix *-čaya/-čege* of Written Mongolian (see Poppe 1954:63) denotes actions performed by many actors. Vladimir-cov (1929:233) asserts that the latter suffix expresses simultaneity of actions, joint action and iterativity. In a paper concerned with this suffix specifically, the author (Shevernina 1985:142) argues that its meaning can best be expressed by words like 'all together', 'all', 'all simultaneously' (she draws special attention to the use of this suffix in 1PL and 2PL imperative forms). Shevernina (1985:141) claims that in Modern Khalkha Mongol this suffix is used only if the subject is animate. In this respect it is similar with the suffix *-lca*. Exceptions may be instances when the subject is presented as animate; cf. (69c).

Here are examples from Modern Khalkha for the suffix *-cгаа/-cгее/-cгөө/-cгөө* (and Buryat *-sагаа/-seгее/-sоgоо*) which, as Sanzheev (1960:66) claims, combines the meanings of weakened iterativity and subject plurality and imitativity:

- (68) a. *bič-* ‘to write’ → *bič-cгее-* i. ‘to write from time to time’
 ii. ‘to write (of many agents)’
 b. *бууд-* ‘to shoot’ → *бууд-cгаа-* i. ‘to shoot from time to time’
 ii. ‘to shoot (of many)’ (S1. 66)
 c. *xарaa-* ‘to scold’ → *xарaa-sагаа-* i. ‘to scold mildly from time to time’
 ii. ‘to pretend to be scolding’ (Cd. 123)
 d. *yаwа-* ‘to walk, drive’ → *yаw-cгаа-* ‘to walk, drive’ (of many)’ (L. 689).

This suffix may co-occur with *-lda* in the sense ‘(of) many’ on the same verb; cf.:

- (69) a. *enyeе-seгее-lde-* ‘to laugh softly from time to time (of many)’ (Č. 767)
 b. *doxi-sоgоо-lдо-* ‘to bow repeatedly (of many)’ (Č. 198)
 c. *emni-seгее-lde-* ‘to twinkle repeatedly (of many stars)’ (Č. 765).

Derivatives in *-cгаа* can be formed from any verbal stem and they are quite widely used. Sanzheev (1963:66) argues that these derivatives are in the process of losing their aspectual meaning and beginning to be used to indicate an action of many participants thus evolving into a plural form.

7. Sociatives and comitatives with the suffix *-lca/-lsa*

7.1 Introductory

The preliminary quantitative characteristics that follow are approximate; they are meant to give a general idea of the number of reciprocals and sociatives among *-lsa* derivations. We are aware that the differences in their number may be to a certain degree accidental.

In the *Buryat-Russian Dictionary* (Č.), about 215 derivatives with the suffix *-lsa* are registered. Of this number, 10 are derived from lexical comitatives and sociatives; the meaning of 15 more derivatives is not quite clear. As mentioned above, this suffix may mark both the sociative and the reciprocal meaning. With regard to the meanings expressed, three sets of derivatives may be distinguished.

- Group A: derivatives that are only sociative in meaning. They derive mostly from transitive verbs taking an inanimate object (cf. *hürile-lse-* ‘to stack (hay) together’, *üsxеberilse-* ‘to grow sth together’) and from one-place intransitives (cf. *sayla-lsa-* ‘to drink tea together with sb’).
- Group B: derivatives that are, as a rule, reciprocal in meaning, and their sociative interpretation is probably possible but pragmatically unlikely; cf. *durla-lsa-* ‘to love each other’ (the interpretation ‘to love someone together’ is possible but pragmatically the situation is not common); *mendešele-lse-* ‘to greet each other’ also belongs here. The base verbs take a human object.

- Group C: derivatives that allow both interpretations, though one of the meanings may be prevalent (the native speakers' choice may differ in these cases); cf. *uri-lsa-* i. 'to invite sb together', ii. 'to invite each other'. Sometimes, the dictionaries give both meanings (in Č., there are approximately 10 such verbs; cf. (77)). Their reciprocal or sociative interpretation is determined by the syntactic structure of the construction; if there is an object the reading is sociative and the absence of an object determines the reciprocal reading; cf. *Ted Bat-iig ala-lsa-w* 'They together killed Bat' – *Ted ala-lsa-w* 'They killed each other'.

Among the 215 derivatives in *-lsa*, the verbs with the sociative meaning in groups A and C number about 120 of which 25 are derived from one-place intransitives (see (72)); at least 25 derivatives among them are also ascribed the assistive meaning in the dictionary (see (82)–(83)).

In groups B and C, there are 70 derivatives with the reciprocal interpretation (see 8.2).

7.2 Sociative derivation from causatives

As mentioned, the suffix *-lda* does not combine with causatives with the most productive suffix *-uul*, whereas the suffix *-lca/-lsa* may be used on causatives in *-uul*.

- (70) a. *oirto-* 'to approach sb/sth' → *oirto-uul-* 'to draw sb/sth nearer' → *oirto-uula-lsa-* 'to draw sb/sth nearer together' (Č. 352)
 b. *ološor-* 'to increase' (vi) → *ološor-uul-* 'increase sth' → *ološor-uula-lsa-* 'to increase sth together' (Č. 355).

Less frequently than with derivatives in *-uul*, *-lca/-lsa* combines with causatives in *-lga/-lge* (see (87) below).

7.3 Expression of the participants in sociative constructions

Judging by the explanations of derivatives with the suffix *-lca/-lsa* in the literature, they seem to be less frequent in the sociative meaning, with all the participants named by the subject (71a, b), than in the comitative meaning, when the second participant is not expressed by the subject. Since both types of constructions easily transform into one another, the suffix *-lca/-lsa* may be termed sociative-comitative and the term 'sociative' may be used as a cover term for both meanings. In the latter case we observe a broad variety in the expression of this participant (it may also remain implicit):

- 1) by the comitative case form (71c, d); a comitative noun phrase may be distanced from the noun phrase denoting the first participant (71f);
- 2) by the instrumental case form (71e),
- 3) by various lexical means in the same clause (71h, i, j),
- 4) by the broader context (71k, l, m, n) (see Sanzheev 1960:65, 1962:239).

According to Sanzheev (1960:65), this suffix indicates that the subject referent is a co-participant of an action whose main agent or initiator is another person named by a noun

phrase in the comitative case form. Moreover, this main participant may remain without explication, but even then it is unambiguously implied by the sociative form. Not infrequently, the subject referent does not perform an action simultaneously with the co-agent but repeats the action already performed by the latter (cf. ‘also’ and ‘too’ in the translation of (71j, l, m) and ‘after him’ in the translation of (71h)); thus the meaning ‘together’ subsumes successive actions as well. Generally, as mentioned, the sociative meaning is expressed more distinctly by *-lca/-lsa* than by *-lda*.

- (71) a. *Axa-nar-iny gaixa-lsa-ba.* (Bur3. 340)
 older.brother-PL-his be.surprised-SOC-PAST
 ‘His older brothers were surprised.’
- b. *“Bide tani xara-ls-aad bai-xa-bdi.”* (Bur2. 110)
 we you.PL take.care.of-SOC-CONV AUX-PART-1PL
 ‘We shall take care of you.’
- c. *Dorži esege-tei gazaa gara-lsa-ba.* (S2. 239)
 D. father-COM outside go.out-SOC-PAST
 ‘Dorji together with his father went out into the street.’
- d. *“Ši nam-tai yaba-lsa.”* (Bur2. 102)
 you.SG I-COM go-SOC-IMP
 ‘Go with me.’
- e. *Ši bidener-eer ošo-lso.* (S2. 239)
 you.SG we-INST set.out-SOC
 ‘You, set out with us.’
- f. ... *tan-tai xamta yaba-lsa-han exener xelexe.* (T. 13)
 2PL-COM together walk-SOC-PART woman tell-FUT
 ‘... the woman who had walked together with you will tell [you].’
- g. *Yaba-han teeše-š yaba-lsa-xa-b.* (Č. 793)
 go-PART direction-2SG go-SOC-FUT-1SG
 ‘I will go in the same direction as you went.’
- h. *Parxai ... xoino-hoo-ny gara-lsa-ba.* (Cd. 109)
 P. behind-ABL-his go.out-SOC-PAST
 ‘Parxai went out *after him*.’
- i. ... *ünegen šono xoyor-oo xažuu-da yaba-lsa-na.* (Bur2. 36)
 fox wolf two-REFL side- go-SOC-PRES
 ‘...[the hare] goes side by side *with the fox and wolf*.’
- j. *Dorži oiro-ny zogso-n xara-lsa-ba.* (S2. 239)
 D. near-his stop-CONV read-SOC-PAST
 ‘Dorji stopped *next to him* and *also* began reading.’
- k. *Bi ošo-žo huu-lsa-xa-m.* (Bur2. 100)
 I go-CONV sit-SOC-FUT-1SG
 ‘I’ll go and sit (together with them).’
- l. *“Xara-lsa-d geerei!”* (Č. 551)
 see-SOC-PL IMP
 ‘You *too*, look [at it]!’
- m. ... *hamg-iye-ny una-gaa-ža, ööröö Možogor una-lsa-ba.* (Bur3. 222)
 wife-ACC-his fall-CAUS-CONV himself M. fall-SOC-PAST
 ‘(The camel) having thrown off his wife, Mozhogor himself *also* fell down.’

- n. *Xuraḡša-d-Ø... xüdelmeriše-d-öör žel büri übhe-Ø xuryaa-lsa-dag.* (Cd. 109)
 pupil-PL-NOM worker-PL-INST year every hay-NOM make-SOC-ITER
 ‘Every year the pupils take part in making hay together with the workers.’

Sentence (71n) contains the plural subject and can be interpreted as sociative, like (71a) and (71b). But the author of the paper from which this example is borrowed, being a native speaker, interprets it as comitative, i.e. the plural subject figures as a single collective participant. This implies that such derivatives are comitative rather than sociative.

The sociative meaning can also be expressed by the adverb *xamta* ‘together’; e.g. *xamta xüdel-* ‘to work together’. The homonymous postposition *xamta* marks a comitative group (see (46) above).

7.4 Subject-oriented constructions

Object-oriented constructions are briefly considered in Section 9.

7.4.1 Derived from intransitives

As mentioned above, the lexical range of sociatives in *-lca/-lsa* is different from that of sociatives in *-lda* (cf. 4.5). In the dictionaries these *-lca/-lsa* sociatives are usually translated with the help of phrases ‘together with sb’, ‘with sb’, very seldom ‘of many’. Thus, the sociative meaning is more distinct in *-lca/-lsa* forms than in those with *-lda*.

(72) <i>bazarla-</i> ‘go to the market’	→	<i>bazarla-lsa-</i> ‘to go to the market together’ (Č. 77)
<i>bai-</i> ‘to be/be present’	→	<i>bai-lca-</i> ‘to be present/be together’ (L. 57)
<i>buuda-</i> ‘to shoot’	→	<i>buuda-lsa-</i> ‘to take part in shooting’ (Č. 117)
<i>enyee-</i> ‘to laugh’	→	<i>enyee-lse-</i> ‘to laugh together with sb’ (Č. 767).
<i>ire-</i> ‘to arrive’	→	<i>ire-lce-</i> ‘to arrive together’ (L. 222)
<i>yaw-</i> ‘to go/walk’	→	<i>yawa-lca-</i> ‘to go/walk together’ (L. 688)
<i>oro-</i> ‘to enter’	→	<i>oro-lso-</i> i. ‘to enter together’ ii. ‘to take part in sth with sb’ (Č.361)
<i>ošo-</i> ‘to walk/go’	→	<i>ošo-lso-</i> ‘to walk/go together with sb’ (Č. 366)
<i>saila-</i> ‘to drink tea’	→	<i>saila-lsa-</i> ‘to drink tea together with sb’ (Č. 383)
<i>suu-</i> ‘to sit’	→	<i>suu-lco-</i> i. ‘to sit together’ ii. ‘to be present at a meeting’ (L. 366)
<i>xiy-</i> ‘to work’	→	<i>xiy-lce-</i> ‘to work together’ (L. 524).

7.4.2 Derived from transitives

In the *Buryat-Russian Dictionary* (Č.), intransitive *-lda* sociatives are 22 times more numerous than transitive sociatives (220 and 10 derivatives respectively; see 4.5), while among derivatives in *-lsa* intransitive sociatives are about 5 times less numerous than transitive sociatives (25 and 120 respectively). We may discern a tendency towards the complementary distribution of both suffixes relative to the transitivity/intransitivity when used in the sociative meaning. This may be due to variation within the sociative meaning.

Here is a list of Buryat transitives in *-lsa* and Khalkha transitives in *-lca* translated in dictionaries by means of the words ‘together’ and ‘participate (in the main action)’.

(73) <i>ala-</i> ‘to kill sb’	→	<i>ala-lsa-</i> ‘to kill sb together’ (Č. 39)
<i>amtala-</i> ‘to try/taste sth’	→	<i>amtala-lsa-</i> ‘to try/taste sth together’ (Č. 50)
<i>asara-</i> ‘to bring sth’	→	<i>asara-lsa-</i> ‘to bring sth together with sb’ (Č. 63)
<i>baiguula-</i> ‘to build sth’	→	<i>baiguula-lsa-</i> ‘to participate in building sth’ (Č. 77)
<i>ceverle-</i> ‘to clean sth’	→	<i>ceverle-lce-</i> ‘to clean together sth’ (L.619)
<i>cutga-</i> ‘to pour sth’	→	<i>cutga-lca-</i> ‘to pour sth together’ (L.616)
<i>dara-</i> ‘to press/squeeze sth’	→	<i>dara-lsa-</i> ‘to participate in pressing sth’ (Č. 187)
<i>haišaa-</i> ‘to approve of sth’	→	<i>haišaa-lsa-</i> ‘approve (of many/together)’ (Č. 667)
<i>hunga-</i> ‘to elect sb’	→	<i>hunga-lsa-</i> ‘to participate in elections’ (Č. 689)
<i>yari-</i> ‘to speak to/tell sb’	→	<i>yari-lsa-</i> ‘to speak with sb’ (Č. 802)
<i>nexe-</i> ‘to chase sb’	→	<i>nexe-lse-</i> ‘to chase sb together’ (Č. 341)
<i>oruula-</i> ‘to bring/let sb in-side’	→	<i>oruula-lsa-</i> ‘to do one’s bit (= participate)’ (Č. 363)
<i>örgö-</i> ‘to lift sth’	→	<i>örgö-lcö-</i> ‘to lift sth together’ (L. 328)
<i>saxi-</i> ‘to keep/take care of’	→	<i>saxi-lsa-</i> ‘to keep/take care of sth together’ (Č. 387)
<i>šara-</i> ‘to fry/bake sth’	→	<i>šara-lsa-</i> ‘(of many) to fry/bake sth’ (Č. 721)
<i>ugaa-</i> ‘to wash sth’	→	<i>ugaa-lca-</i> ‘to wash sth together’ (L. 446)
<i>ugta-</i> ‘to meet/expect’	→	<i>ugta-lsa-</i> ‘meet sb together/take part in a meeting’ (Č. 462)
<i>uya-</i> ‘to tie sth’	→	<i>uya-lca-</i> ‘to tie sth together’ (L. 472)
<i>zaabaril-</i> ‘to teach sb’	→	<i>zaabari-lsa-</i> ‘to teach sb together’ (Č.239)
<i>xai-</i> ‘to clip/trim/square sth’	→	<i>xai-lsa-</i> ‘(of many) to square/plane’ (Č. 534)
<i>xaya-</i> ‘to throw sth’	→	<i>xaya-lca-</i> ‘to throw sth together’ (L. 523)
<i>xalxala-</i> ‘to bar/block sth up’	→	<i>xalxala-lsa-</i> ‘participate in protecting sb/sth’ (Č. 540)
<i>xaraa-</i> ‘to scold sb’	→	<i>xaraa-lca-</i> ‘to scold sb together’ (L.513)
<i>xasa-</i> ‘to cut sth down’	→	<i>xasa-lca-</i> ‘to cut sth down together’ (L. 519)
<i>xöö-</i> ‘to pursue/drive away’	→	<i>xöö-lcö-</i> ‘to pursue/drive sb away together’ (L. 553)
<i>xüre-</i> ‘to reach/achieve sth’	→	<i>xüre-lse-</i> ‘to reach/achieve sth together’ (Č. 628)
<i>xürge-</i> ‘to supply sth’	→	<i>xürge-lse-</i> ‘supply together, take part in supplying’ (Č. 625)
<i>xüdüülüül-</i> ‘to bury sb’	→	<i>xüdüülüüle-lse-</i> ‘to participate in a funeral’ (Č. 612).

8. Non-sociative meanings of the suffix *-lca/-lsa*

8.1 Overlap of meanings of the suffixes *-lda* and *-lca/-lsa*

The interchangeable use of *-lda* and *-lca/-lsa* on some verbs in various Mongolic languages has been repeatedly pointed out (Bobrovnikov 1849:127; Amogolonov 1958:198; Sanzheev 1963:59–61; Dondukov 1964:148–50; Cydendambaev 1979:111–5; Doraeva 1983:202–4; Sechenbaatar 2003:121). It has also been pointed out that *-lda* has the sociative meaning (though seldom on transitive stems, see 4.3) alongside the reciprocal one. On the other hand, the suffix *-lca/-lsa* may encode the reciprocal meaning alongside the comitative/sociative. Not infrequently, the same verb stem may take on both suffixes, the derivatives being synonymous, judging by the dictionary explanations.

It has been claimed that this overlap of the meanings of the two suffixes is increasing in the modern Mongolic languages, though it occurred as early as in the texts of the 13th century (Sanzheev 1963:61). It is significant in this respect that Monguor has retained the suffix *-lde* as the only marker of both reciprocal and sociative meanings, while Dagur, on the contrary, has retained the suffix *-lči* for both of these functions (see Todaeva 1973: 102–3, 1986:60; Sanzheev 1963:63).

Bobrovnikov (1849: 127) explains an overlap of meanings of both markers as follows (our terminology is used in the translation): “a sociative verb may replace a reciprocal one. It depends on the choice of the speaker when he disregards the fact that the action of two items is directed at one another and notes only that they perform the same action. This is the reason why these two voices are often used indiscriminately”.

There is an opinion concerning the suffixes *-lda* and *-lca* that “[in] most of the relevant examples the two suffixes are interchangeable” (Sechenbaatar 2003:121). It seems to us that this assertion is too rigid. Sechenbaatar says that there are verbs that combine with *-lca* only and exemplifies it with the verb *tani-lca-* ‘to get acquainted’ in which *-lca* is not replaceable with *-lda* (2003:121–2; see also example (7) above). Above, we mentioned a verb on which *-lda* is not replaceable with *-lca* (see 4.5). Moreover, some verbs have preferences for one or the other suffix for the expression of one or another meaning. For instance, in Buryat, there are synonymous verbs *xööre-* and *duugara-* ‘to speak’ (Č. 594, 205). Notably, in the translation from Russian (T.) the reciprocal derivative of the former verb *xööre-lde-* occurs 54 times and the form *xööre-lce-* is not used a single time. As to the second verb, its reciprocal derivative occurs as *duugara-lca-* 7 times and never as *duugara-lda-*. There are also other instances of similar mysterious selectivity.

8.2 Reciprocal

When used in the reciprocal sense, derivatives in *-lca* decrease valency similarly to derivatives in *-lda*:

- (74) a. *Cecegmaa namaig tan-aad xeden džil bol-loo.*
 C. I.ACC recognize-CONV several year become-PAST
 ‘Several years have passed since C. got acquainted with me.’
 b. *Cecegmaa bid xoyor tani-lc-aad xeden džil bol-loo.* (O. 122)
 C. I two recognize-SOC-CONV several year become-PAST
 ‘Several years have passed since C. and I got acquainted.’

One more example with two reciprocals in *-lca*:

- c. *Ši bide xoyor üze-lse-ye, ala-lca-ya!* (Bur1. 196)
 you we two try-SOC-IMP kill-SOC-IMP
 ‘You and me, the two of us, let’s [test each other] try and kill together!’

In the *Buryat-Russian Dictionary*, among 70 derivatives with the reciprocal meaning there are 20 with the reciprocal pronoun *beye beye-*; see (95), (98), (101), (102b), (103b, c).

8.2.1 “Canonical” reciprocals

(75) is a list of some Buryat and Khalkha derivatives in *-Isa/-Ica* of two-place transitives and two-place intransitives registered in the dictionaries as semantically reciprocal (the meaning of the underlying verbs is included in that of the derivatives).

(75) <i>ala-Ica-</i>	‘to kill each other’ (ČR. 15)
<i>cusla-Ica-</i>	‘to hit each other until blood appears’ (L. 616)
<i>durla-Isa-</i>	‘to love each other’ (Č. 203)
<i>emni-Ise-</i>	‘to wink at each other’ (Č. 765)
<i>erxelüü-Ise-</i>	‘to caress each other’ (Č. 773)
<i>etige-Ise-</i>	‘to trust each other’ (Č. 777)
<i>gete-Ise-</i>	‘to stare at each other’ (Č. 173)
<i>guugala-Ica-</i>	‘to call to one another’ (L. 128)
<i>yari-Ica-</i>	‘to speak with each other, converse’ (L. 696)
<i>nenge-Ise-</i>	‘to lean against each other’ (Č. 339)
<i>mendešele-Ise-</i>	‘to greet each other’ (Č. 312)
<i>nyudara-Isa-</i>	‘to push each other’ (Č. 342)
<i>süüdle-Ise-</i>	‘to be at law with sb’ (Č. 399)
<i>šalga-Isa-</i>	‘to check each other’ (Č. 716)
<i>tiberi-Ice-</i>	‘to embrace each other’ (ČR. 363)
<i>uyalgal-Ica-</i>	‘to oblige each other’ (Č. 486)
<i>ünerde-Ise-</i>	‘to sniff at each other’ (Č. 509)
<i>xaira-Isa-</i>	‘to kick each other’ (Č. 534)
<i>xaraa-Isa-</i>	‘to curse each other’ (Č. 588)
<i>xele-Ice-</i>	‘to speak with each other, converse’ (L. 587)
<i>xorgodo-Iso-</i>	‘to hide from each other’ (Č. 588)
<i>xyuda-Isa-</i>	‘to exterminate each other’ (Č. 655–6)
<i>xüindele-Ise-</i>	‘to respect each other’ (Č. 623)
<i>zala-Isa-</i>	‘to invite each other’ (Č. 246)
<i>zulgaa-Isa-</i>	‘to tug at each other’ (Č. 261).

This list of reciprocals in *-Ica/-Isa* can be augmented by a number of similar derivatives for which we find, occasionally, parallel synonymous same-stem counterparts in *-Ilda* with the reciprocal meaning (as their only meaning or one of the meanings) in dictionaries.

(76) a.	<i>asuu-</i>	‘to ask sb’
	<i>asuu-Isa-</i>	‘to ask each other’ (Č. 63).
	<i>assu-Ilda-</i>	‘to ask each other’ (Č. 63)
b.	<i>bari-</i>	i. ‘to grasp/take’, ii. ‘to hold’
	<i>bari-Isa-</i>	i. ‘to hold/grasp/catch each other’
	<i>bari-Ilda-</i>	ii. ‘to hold on to each other, grapple’ (Č. 88).
		i. ‘to grasp each other, wrestle/compete in wrestling’
		ii. ‘to be joined/draw together’ (Č. 88)
c.	<i>buuda-</i>	‘to shoot’
	<i>buuda-Ica-</i>	i. ‘to exchange fire’, ii. ‘to shoot together’ (L. 90).
	<i>buuda-Ilda-</i>	i. ‘to exchange fire’ (L. 90), ii. ‘to shoot (of many)’ (Č. 117)

- d. *nyudara-* 'to beat/push'
nyudara-lsa- 'to push each other' (Č. 342).
nyudara-lda- 'to fight/beat each other' (Č. 342)
- e. *tani-* 'to recognize'
tani-lsa- 'to get acquainted' (Č. 414).
tani-lda- 'to get acquainted' (Č. 414)
- f. *tülx-* 'to push'
tülx-lce- i. 'to push/jostle each other', ii. 'to push sb together' (L. 431).
tülx-lde- 'to push/jostle each other' (L. 431)
- g. *üdze-* i. 'to look', ii. 'to taste/try'
üdze-lce- i. 'to look over each other' (L. 478)
ii. 'to see/meet each other' (L. 478).
üdze-lde- i. 'to wrestle/compete/compete in strength'
ii. 'to see/meet each other'
- h. *ünse-* 'to kiss (only relatives)'
ünse-lce- 'to kiss each other' (Cdn. 69).
ünse-lde- 'to kiss each other' (Cdn. 69).

The dictionaries register a number of derivatives in *-lca/-lsa* (including those from two-place intransitives, like (77b)) with both sociative and reciprocal meanings (this applies to some derivatives in *-lca/-lsa* in (75) and (76); see, for instance, (76f)):

- (77) a. *biči-* 'to write'
biči-lce- i. 'to write together', ii. 'to write to each other' (L. 71)
- b. *yaba-* 'to go to sb, etc.'
yaba-lsa- i. 'to go together', ii. 'to go to each other' (Č. 793)
- c. *mede-* 'to know, learn'
mede-lse- i. 'to learn sth together', ii. 'to exchange information' (Č. 310)
- d. *tuhala-* 'to help'
tuhala-lsa- i. 'to help together', ii. 'to help each other' (Č. 439)
- e. *uri-* 'to invite'
uri-lsa- i. 'to invite sb together', ii. 'to invite each other' (Č. 476)
- f. *xarwa-* 'to shoot arrows'
xarwa-lca- i. 'to shoot arrows together', ii. 'to shoot arrows at each other' (L. 515).

Note that in Mongolic languages there are set phrases comprised of two synonymous verbs. Below are two such sets derived from synonyms, with different suffixes in (78a) and with the same suffix in (78b):

- (78) a. *ugta-lsa-n zolgo-lde-* i. 'to meet each other'
ii. 'to greet each other with both hands' (Č. 255)
- b. *xari-lca-n ala-lca-* lit. 'to kill each other exterminating each other' (ČR. 349).

8.2.2 "Indirect" reciprocals

We have encountered only four verbs which can be regarded as "indirect", on condition that they are used with a direct object; the verb *xubaa-* 'to divide/distribute' is a lexical reciprocal and is entered in this type with reservations.

- (79) a. *xaya-* ‘to throw sth to sb/somewhere’
xaya-lsa- ‘to throw sth to each other’ (Č. 567)
 b. *aba-* ‘to get/take sth (e.g. *bešeg* ‘letter’) from sb’
aba-lsa- ‘get/take sth from each other’; cf. *bešeg aba-lsa-* ‘correspond’ (Č. 20)
 c. *hugala-* ‘to snatch sth from sb’
hugala-lsa- ‘to snatch sth from each other’ (Č. 687)
 d. *xubaa-* ‘to divide/distribute’
xubaa-lsa- ‘to divide sth among themselves’ (Č. 595; see also (26) above).

8.2.3 “Possessive” reciprocals

In contrast to “indirect” reciprocals, this type is represented by a significant number of examples; they are peculiar in that the direct object has reflexive-possessive marking and denotes inalienable possession. Object doubling is characteristic of these reciprocals: it occurs in almost all the examples at our disposal; cf.:

- (80) a. *dosoo dosoo-xy-öö taa-lsa-* (Č. 197, 406)
 inside inside-ADJ-ACC.REFL guess-SOC
 i. ‘to guess each other’s thoughts’, ii. ‘to understand each other.’
 b. ... *xün-üüd nyuur nyuur-aa xara-lsa-ža* ... (Cd. 111)
 man-PL face face-ACC.REFL look-SOC-CONV
 ‘... they looked at (each other’s) face.’
 c. ... *mend mend-ee mede-lce-ž* ... (S3. 60)
 health health-ACC.REFL learn-SOC-CONV
 ‘... exchanging greetings.’ (lit. ‘learning of each other’s health.’)
 d. *dzang dzang-aa aba-lca-* (L. 191)
 character character-ACC.REFL take-SOC
 fig. ‘to get used to the character of each other.’
 e. *gar gar-aa bari-lsa-ža boosoldo-bo* (Bur2. 186)
 hand hand-ACC.REFL hold-SOC-CONV argue-PAST
 ‘[they] shook (each other’s) hands, and made a bet.’
 f. *šexe-yee, ühe-yee zulгаа-lsa-* (Č. 261)
 ear-ACC.REFL hair-ACC.REFL tug-SOC
 ‘to pull each other’s ears and hair.’
 g. *Tere xün ede xoyor xügšed-tei aldar nere-ee*
 that man these two old.man-COM name name-ACC.REFL
asuu-ls-aad. (Cd. 111)
 ask-SOC-CONV
 ‘That man and (lit. ‘with’) these two old men asked each other’s names.’
 h. *amar mend-ee xe-lse-* (Č. 642)
 well-being health-ACC.REFL speak-SOC
 ‘to inquire after each other’s health.’
 i. [*Tede*]... *xoyor mürge-lde-že, eber hüül-ee xuxa xyaa*
 they two butt-REC-CONV horn tip-ACC.REFL INTS smithereens
tata-lsa-ža bai-ba. (Cd. 111)
 chop-SOC-CONV AUX-PAST
 ‘[They]... butting each other, broke each other’s horns into smithereens.’

8.3 Assistive

This meaning is a natural extension of the comitative meaning: if a person performs an action (especially a transitive one) with someone else s/he often assists the latter. This meaning is mostly realized if the subject is singular. The person who receives assistance is expressed (a) by the dative-locative case (81a), or (b) by the genitive denoting the possessor of the object referent (81b, c) or by the possessive suffix (see (6)). In case (b) the comitative interpretation is also possible (see (81c)). The person receiving help may remain unnamed (81d), though it may be implied unambiguously (81e).

- (81) a. *Nad awaači-lca-dž ög-ööč!* (L. 17)
I.DAT carry-SOC-CONV O.BEN-IMP.2SG/PL
'Help me to carry this, please!'
- b. *Düü miny, či ax-iin-xaa adžl-aas xiy-lc-eeč.*
younger.brother my you elder.brother-GEN-REFL work-ABL do-SOC-IMP.2SG
'My younger brother, help the eldest brother to do work.'
- c. *Bat Dordži-in ger-iig bari-lca-na.*
B. D.-GEN jur-t-ACC rig.up-SOC-PRES
i. 'Bat will help to rig up Dorji's jur-t.'
ii. 'Bat will rig up Dorji's jur-t with someone else (possibly with Dorji himself).'
- d. *Bidener tülee xaxa-lsa-xa-bdi.* (S2. 243)
we firewood.ACC chop-SOC-FUT-1PL
'We shall help [sb else] to chop the firewood.'
- e. ... *eseg-ei-ny boro moryn-iiny teden-ee yexe*
father-GEN-their grey horse-his they-ACC.REFL big
bol-go-ls-oo. (Bur1. 142)
get-CAUS-SOC-PAST
'... their father's grey horse helped them to grow up.'

The following is a list of verbs in *-lsa* which are ascribed only the assistive meaning in the *Buryat-Russian Dictionary*; nevertheless, all of them could be entered in (83), though the sociative meaning is not indicated in the dictionary.

- (82) *bulaa-lsa* 'to help sb take sth away from sb' (Č. 112)
duuha-lsa 'to help finish sth' (Č. 206)
orxi-lso 'to help throw sth out' (Č. 364)
tee-lse 'to help load sth' (Č. 460)
xaxa-lsa 'to help chop (e.g. firewood)' (Č. 563)
zühel-se 'to help cut sth' (Č. 234).

Many of these Buryat verbs are ascribed a second, sociative or comitative meaning (because, as mentioned, joint action often implies help pragmatically). Restrictions seem to be of pragmatic nature.

- (83) part in hunting' (Cd. 110)
- | | | |
|----------------------|-------------------------------|---|
| <i>agna-lca-</i> | i. 'to help hunt sb' | ii. 'to take' |
| <i>aršala-lsa-</i> | i. 'to help save sb' | ii. 'to take part in saving sb' (Č. 61) |
| <i>ašaala-lsa-</i> | i. 'to help load sth' | ii. 'to take part in loading sth' (Č. 67) |
| <i>bodxoo-lso-</i> | i. 'to help lift/pick sth up' | ii. 'to build together' (Č. 98) |
| <i>elirüüle-lse-</i> | i. 'to help find sth out' | ii. 'to find out together' (Č. 762) |
| <i>yabuula-lsa-</i> | i. 'to help send sth' | ii. 'to take part in sending' (Č. 794) |
| <i>yuule-lse-</i> | i. 'to help pour sth' | ii. 'to pour sth together' (Č. 383) |
| <i>malta-lsa-</i> | i. 'to help dig sth' | ii. fig. 'to pick at each other' (Č. 291) |
| <i>namna-lsa-</i> | i. 'to help pursue/chase sb' | ii. 'take part in pursuing/chasing' (Č. 321) |
| <i>soxi-lso-</i> | i. 'to help beat sb' | ii. 'to beat sb/raid sth together' (Č. 393) |
| <i>šenžele-lse-</i> | i. 'to help investigate sth' | ii. 'to take part in an investigation' (Č. 747) |
| <i>šiidxe-lse-</i> | i. 'to help solve sth' | ii. 'to take part in solving' (Č. 726) |
| <i>tata-lsa-</i> | i. 'to help pull sth' | ii. 'to pull together' (Č. 412) |
| <i>xama-lsa-</i> | i. 'to help sweep sth' | ii. 'to sweep together' (Č. 542) |
| <i>zöö-lse-</i> | i. 'to help carry sth' | ii. 'to carry together' (Č. 259). |

8.4 “Attendant” action

This meaning is an extension of the comitative meaning: in the case of the comitative meaning A acts together with B, and in the case of the “attendant” action (a) the agent performs action A alongside (“together”) with action B (84a, b), or (b) the agent performs the same action on object B as well as (“together”) on object A (84 c, d, e). In other words, the suffix *-lsa* denotes that (a) the action itself is attendant upon another, i.e. performed along with another action, or (b) the object is “attendant”, which means that the subject referent took the boots along with other things which were the main object of his action (Sanzheev 1960:65). The subject referent in sentences (84) “himself is the initiator and only performer of the action” (Sanzheev 1962:239), and the object referent is inactive.

- (84) a. *Gol tiíše yawa-x-d-aa mory-oo xara-lc-aarai.* (S1. 65)
 river towards walk-PART-DAT-REFL horse-ACC.REFL see-SOC-IMP.2SG
 ‘When you walk (A) to the river, see (B) also if the horse is there.’
- b. *Endex ard-uud xariul-ž yawa-x-d-aa tarwaga*
 local shepherd-PL graze-CONV go-PART-DAT-REFL marmot
agna-lca-dag. (S3. 58)
 hunt-SOC-ITER
 ‘The local shepherds while tending (A) their cattle also hunt (B) marmots.’
- c. *Bat ter gutl-aa awa-lca-w.*
 B. those boots-ABL take-SOC-PAST
 ‘Bat also took those boots’, or: ‘Bat took (bought) boots (B) together with other boots (A).’
- d. *[Tede] ... gansaxan ... ataman-haa ai-gaad xizaarla-dag-güi, xarin Dorži*
 they only ataman-REFL fear-CONV limit-PART-NEG but.also D.
ai-lsa-dag. (S2. 240)
 fear-SOC-ITER
 ‘[They] fear not only their ataman (A) but also Dorji (B).’

- e. *Eji tan-da yüme aba-lsa-nxai* (Ld. 109)
 mother YOU.PL-DAT thing get-SOC-PAST
 ‘Mother has bought things (B) for you too [together with things (A) for someone else].’

In the actions described in (85a, b), an affinity to the meaning of “attendant action” and/or to the comitative meaning can be discerned in that the subject referent involves the object referent in being with him, or in an action he is going to perform:

- (85) a. *Ene exe-yee aba-ls-aad ošo-bo.* (Č. 20)
 this mother-ACC.REFL take-SOC-CONV go.away-PAST.3SG
 ‘He went away taking his mother with him.’
 b. *Namay-aa yüünd abaaša-lsa-n-güi ošo-bo geeše-b?*
 I-ACC why take.with.oneself-SOC-CONV-NEG go.away-PAST PRTL-PRTL
 ‘Why did he go away without taking me with him?’ (Č. 19).

The derivatives listed may have other meanings as well; cf., for instance *xara-lca-* in (80b) and *aba-lsa-* in (79b) and (80d).

9. Object-oriented constructions

Derivatives with the sociative meaning can be causativized, in principle. The following is an example of a causative derivation (with an assistive meaning) from a sociative form which in turn is derived from a causative verb. Not all the meanings of the suffixes on the last derivative can be translated adequately.

- (86) *Darga manai ger-iig nüü-lge-lc-üül-ex-eer xoyor xün*
 chief our jur-t-ACC move-CAUS-SOC-CAUS-PART-INST both man
ir-üül-dž bi-lee. (K. 77)
 come-CAUS-CONV AUX-PAST
 ‘The chief sent two men for them together to help us move with our jur.’

Here is a derivational chain of this complex causative predicate:

- (87) *nüü-* ‘to move over (of nomads)’
 → *nüü-lge-* i. ‘to make sb move over’, ii. ‘to help sb to move over’ (L. 281)
 → *nüü-lge-lce-* ‘together to help sb move over’
 → *nüü-lge-lc-üül-* ‘to cause sb together to help sb move over’.

Derivatives in *-lca/-lsa* with non-sociative meanings can also undergo causativization; this is shown (88) where a reciprocal is causativized:

- (88) *oirto-* ‘to approach’
oirto-lso- ‘to approach each other’
oirto-ls-uul- ‘to cause sb/sth to approach each other’ (Č.352).

10. Reciprocals with the pronoun *biye biye-/beye beye-* ‘each other’

In the constructions considered below, the reciprocal pronoun functions as the only marker of reciprocity (see (93), (96), (99), (100), (102a, c), (103a)) or co-occurs with reciprocals in *-lda* (see (94), (97), (103b)) and *-lca/-lsa* (see (95), (98), (101), (103c)). In the latter cases the pronoun stresses reciprocity or resolves possible ambiguity. The reciprocal pronoun is as a rule monosemous unless we count the adjacent distributive meaning (see (90a, b)).

10.1 Introductory. Distributive meaning of the reciprocal pronoun

The pronoun *biye biye-* ‘each other’ (Buryat *beye beye-*) is a reduplication of the reflexive pronoun *biye* i. ‘one oneself, he himself...’, ii. ‘oneself, himself...’ (cf. (12)). Thus, the literal meaning of *biye biye-/beye beye-* is ‘self self’, but it is glossed as ‘each other’ to reflect its functional meaning. It may assume any case form like common nouns, except for the nominative. As mentioned, it is commonly used with the reflexive-possessive markers.

(89)	GEN	<i>biye biy-iin-xee</i>	INST	<i>biye biy-eer-ee</i>
	DAT	<i>biye biye-d-ee</i>	COM	<i>biye biye-t-ee</i>
	ACC	<i>biye-biy-Ø-ee</i>	ABL	<i>biye biy-ees-ee.</i>

When used with a 3rd p. personal-possessive suffix (*-ny/-iiny/-iny/...*), this pronoun acquires a distributive meaning ‘each one separately’ (cf. Tuvan: Kuular, Ch. 27, §4.1.1):

- (90) a. *beye beye-de-ny üge-xe yüm.* (Č. 129)
 self self-their give-PART AUX
 ‘It is necessary to give (sth) to each separately.’
- b. *Tiigeed beye beye-hee-ny hura-lsa-ža ab-aad...* (Bur2. 146)
 then self self-ABL-their ask-SOC-CONV AUX-CONV
 ‘Then they asked each other questions’, lit. ‘... each asked the other separately.’

10.2 Subject-oriented constructions

Our goal here is to introduce the available material on the syntactic types of reciprocal constructions. Some of our informants allow considerable variation in the use of synonymous means of expressing reciprocity. For instance, Tuvshintogs finds acceptable the following reciprocal forms of the transitive verb *ala-* ‘to kill’: *ala-lca-*, *ala-lda-* (less acceptable), *biye biy-ee ala-*, *biye biy-ee ala-lca-*, and (less willingly) *biye biy-ee ala-lda-*. For the verb *durla-* ‘to love’, he allows the forms *biye biye-d-ee durla-*, *biye biye-d-ee durla-lca-*, and *biye biye-d-ee durla-lda-* (less acceptable). Darima accepts some of the parallel Buryat forms with reluctance or not at all: *ala-lsa-* (acceptable), *ala-lda-* (unacceptable), *beye bey-ee ala-* (acceptable), *beye-bey-ee ala-lsa-* (more or less acceptable), *beye bey-ee ala-lda-* (unacceptable); *durla-lsa-* (possible), *durla-lda-* (unacceptable), *beye bey-d-ee durla-* (acceptable), *beye bey-ee durla-lsa-* (unacceptable), *beye bey-ee durla-lda-* (unacceptable). The reciprocal pronoun is most likely pleonastic. Despite the limited and sometimes ac-

cidental nature of the data in the *Buryat-Russian Dictionary*, we shall risk a few tentative generalizations concerning the frequency of different uses of reciprocal pronouns (the numbers are accidental and therefore indicative):

1. The reciprocal pronoun is more widely used with derivatives in *-lca/-lsa* than with those in *-lda* (among “canonical” reciprocals of transitive bases their number amounts to 14 and 9 respectively; among reciprocals of two-place intransitives they number 4 and 2 respectively). As to “possessive” reciprocals and constructions with postpositions, there occurred only one case in *-lsa* for each type, and none in *-lda*; thus the general ratio is 20 to 11. As it happens, suffixed *-lda* reciprocals are much more frequent in texts than those in *-lca/-lsa*, which indicates the non-accidental character of these numbers. This is probably due to the fact that reciprocals in *-lca/-lsa* need support of the reciprocal pronoun to a greater degree because the suffix *-lca/-lsa* is more often sociative on transitive bases than *-lda* (cf. 4.3 and 7.4.2 above).

2. In constructions with a non-accusative reciprocal pronoun, the number of unsuffixed verbs is prevalent over that of suffixed reciprocals. Among “canonical” reciprocals of two-place intransitives they number 10 and 6 respectively (note that among “canonical” reciprocals of transitive bases the ratio is 5 to 22). The overall ratio of non-accusative reciprocal pronouns with unsuffixed verbs and suffixed reciprocals is 17 to 8. An analogous tendency is observed in other languages as well. Reciprocalization of non-direct objects tends to prefer reciprocal pronouns.⁷

It may be assumed, therefore, that though the reciprocal pronoun can be used independently, with unsuffixed verbs, it occurs predominantly with *-lda* and *-lca/-lsa* forms depending on certain conditions (the latter use is probably accounted for by a desire to underscore their reciprocal meaning, as their main meaning is sociative). In the subsequent discussion we shall list all the instances registered in the dictionaries and specialist literature, but first we shall give a few sentential examples.

(91) *Tede biye biy-ee olo-x-güi tööröldö-nö.*
 they each other.REFL find-PART-NEG wander-PRES
 ‘They both wander around not finding each other.’

(92) *Beye bey-ee bažuu-lda-na, beye bey-ee oroi-ldo-no.* (Bur1. 204)
 each other-REFL squeeze-REC-PRES each other-REFL coil-REC-PRES
 ‘(The two snakes) squeeze each other, intertwine with each other.’

7. This tendency may be illustrated by the data of the 14th century Mongolian registered in the Mongolian dictionary (published in Poppe 1938): the reciprocal pronoun in the accusative case *nim niken-i* occurs 15 times, while its dative case *nim niken-dü* occurs 39 times.

10.2.1 “Canonical” reciprocals

10.2.1.1 With two-place transitives. The following three cases can be distinguished.

1. The reciprocal pronoun is used as the only means of expressing reciprocity.

- | | | |
|------|-------------------------------|--|
| (93) | <i>beye bey-ee ala-</i> | ‘to kill each other’ (Bur2. 42) |
| | <i>beye bey-ee daldal-</i> | ‘to patronize each other’ (Č. 129) |
| | <i>beye bey-ee hažaa-</i> | ‘to mimic each other.’ (Č. 663). |
| | <i>biye biy-ee olo-</i> | ‘to find each other’(?) |
| | <i>beye bey-ee ehe torgo-</i> | ‘to give each other adequate answers’ (Bur2. 184). |

2. The reciprocal pronoun occurs with derivatives in *-lda*:

- | | | |
|------|----------------------------------|---|
| (94) | <i>beye bey-ee axi-lda-</i> | ‘to overtake each other’ (Č. 66) |
| | <i>beye bey-ee bažuu-lda-</i> | ‘to squeeze each other’ (Bur1. 204) |
| | <i>beye bey-ee daxa-lda-</i> | ‘to follow each other’ (T. 53) |
| | <i>beye bey-ee nyudala-lda-</i> | ‘to punch each other’ (Č. 342) |
| | <i>beye bey-ee nyudara-lda-</i> | ‘to push/beat each other’ (Č. 420) |
| | <i>beye bey-ee oroi-ldo-</i> | ‘to coil[around] each other’ (Bur1. 204) |
| | <i>beye beye-d-ee oroso-ldo-</i> | ‘to squabble, bicker’ (Č. 362) |
| | <i>beye bey-ee tašuurda-lda-</i> | ‘to whip each other’ (Č. 420) |
| | <i>beye bey-ee ürđi-ldo-</i> | ‘to (do sth trying to) overtake each other’ (Č. 512). |

3. The reciprocal pronoun occurs with derivatives in *-lca/-lsa*:

- | | | |
|------|--|--|
| (95) | <i>beye bey-ee ala-lca-</i> | ‘to kill each other’ (ČR. 15) |
| | <i>beye bey-ee bari-lsa-</i> | ‘to catch, grasp each other’ (T. 38) |
| | <i>beye bey-ee bodxoo-lso-</i> | ‘to lift each other’ (D. 150) |
| | <i>beye bey-ee दौरа-lsa-xa-güi-</i> | ‘to not touch (brush against) each other’ (Č. 182) |
| | <i>beye bey-ee erxelüü-lse-</i> | ‘to caress each other’ (Č. 773) |
| | <i>beye bey-ee hura-lsa-</i> | ‘to ask each other’ (Bur2. 184) |
| | <i>beye bey-ee muudxa-lsa-</i> | ‘to accuse each other’ (Č. 303) |
| | <i>beye-bey-ee ooglo-lso-</i> | ‘to exchange shouts/shout to each other’ (Č. 358) |
| | <i>beye bey-ee šoglo-lso-</i> | ‘to laugh at each other’ (Č. 728) |
| | <i>beye bey-ee unxida-lsa-</i> | ‘to sniff at each other’ (Č. 471) |
| | <i>beye bey-ee xadxa-lsa-</i> | ‘to push each other slightly’ (Č. 531) |
| | <i>beye bey-ee xündele-lse-</i> | ‘to respect each other’ (Č. 623) |
| | <i>beye bey-ee xara-lsa-n-güi-göör</i> | ‘not seeing each other’ (Č. 551) |
| | <i>beye bey-ee šogtoi xursaxan</i> | ‘to exchange merry glances’ |
| | <i>nüdüör šerbe-lse-</i> | lit. ‘to lash each other with ... eyes’ (Č. 749). |

10.2.1.2 With two-place intransitives.

1. The reciprocal pronoun is used as the only means of expressing reciprocity:

- | | | |
|------|--------------------------------------|--|
| (96) | <i>beye beye-d-ee bardamla-</i> | ‘to boast to each other’ (Bur2. 192) |
| | <i>beye beye-d-ee duratai (bai-)</i> | ‘to love each other’ (T. 74) |
| | <i>beye beye-d-ee dütel-</i> | ‘to approach each other, draw together’ (Č. 211) |
| | <i>beye beye-d-ee emni-</i> | ‘to wink at each other’ (Bur2. 94) |
| | <i>biye biye-d-ee gomdo-</i> | ‘to resent each other’ |
| | <i>biye biy-ees-ee iči-</i> | ‘to be ashamed of each other’ (L. 69) |

<i>beye beye-hee gee-gde-n-güi yaba-</i>	‘to walk not lagging behind each other’ (Č. 179)
<i>beye beye-d-ee mihelze-</i>	‘to smile at each other’ (T. 61)
<i>beye beye-d-ee tegüül-</i>	‘to crave for each other’ (T. 58)
<i>beye beye-d-ee xanda-</i>	‘to address each other’ (T. 6).

2. The reciprocal pronoun is used with reciprocals in *-lda*:

- (97) *beye beye-d-ee xašxara-lda-* ‘to shout at each other’ (T. 108)
beye beye-d-ee žütöörxe-ld- ‘to be jealous of each other’ (Bur2. 248).

3. The reciprocal pronoun is used with reciprocals in *-lca/-lsa*:

- (98) *beye beye-d-ee durla-lsa-* ‘to love each other’ (Č. 203)
beye beye-d-ee etige-lse- ‘to trust each other’ (Č. 777)
beye beye-hee-ny hura-lsa- ‘to ask each other’ (Bur2. 146)
beye beye-d-ee tuhala-lsa- ‘to help each other’ (Č. 439).

10.2.2 “Indirect” reciprocals

In this type (cf. 3.1.2), suffixed reciprocals in combination with a reciprocal pronoun have not occurred.

- (99) *zem-ee beye beye-d-ee xaya-* ‘to put/place the blame on each other’ (Č. 568).
šadal erdemee beye beye-d-ee xaruul- ‘to show his power and knowledge to each other’ (Bur2. 192).

10.2.3 “Possessive” reciprocals

In the examples registered the reciprocal pronoun in the genitive case is an attribute of a direct object.

1. The reciprocal pronoun is used as the only means of expressing reciprocity:

- (100) a. *Xoyor xeree biye biy-iin-xee xar-iig gaixa-na.* (L. 593)
two raven each other-GEN-REFL black-ACC amaze-PRES
‘Two ravens are amazed at each other’s blackness’ (proverb).
b. *biye biye-iin-xee cusu-yi ursga-* (ČR. 237)
each other-GEN-REFL blood-ACC spill-
‘to spill each other’s blood.’

2. The reciprocal pronoun is used with reciprocals in *-lca/-lsa*:

- (101) *Edeš beye beye-iin-gee xubsah-iye zaha-lsa-b.* (Č. 253)
they each other-GEN-REFL clothes-ACC adjust-SOC-PAST
‘They adjusted each other’s clothes.’

10.2.4 Constructions with postpositions

Semantically, these constructions are similar to the syntactic types considered above: (102a) is close to “canonical” reciprocals and (102b, c) to “indirect” reciprocals. The postpositions *tuxai* ‘about’, *deeree* ‘on(to)’, and *rüü* ‘into, onto, towards’ in (102) have a function analogous to case markers (although they themselves may be marked for case). The reciprocal pronoun precedes a postposition and takes no case marking in (102), thus figuring as a kind of the nominative case form.

- (102) a. *beye beye tuxai-gaa bodomžol-* (T. 75)
 each other about-COM.REFL think
 ‘to think about each other.’
- b. *zem-ee beye beye deeree xaya-lsa-* (Č. 567)
 guilt-ACC.REFL each other onto throw-SOC
 ‘to shift the blame on each other.’
- c. *ažl-aa biye biye rüü-gee čixe-* (L. 69).
 work-ACC.REFL each other onto-COM.REFL push.into
 ‘to shift one’s own work on each other.’

10.3 *Nomina actionis*

Nominalization of a reciprocal construction does not change the case form of the reciprocal pronoun:

- (103) a. *beye bey-ee daldal-dag yabadal* (Č. 129)
 each other-REFL patronize-PART behaviour
 ‘relations of nepotism.’
- b. *beye beye-d-ee oroso-ldo-on* (Č. 362)
 each other-DAT-REFL meddle-REC-NR
 ‘squabble/bickering’
- c. *beye bey-ee xündele-lse-lgen oršon baidal-da.* (Č. 623)
 each other-REFL respect-SOC-NR situation state-DAT
 ‘in a state of mutual respect.’

10.4 Object-oriented constructions

We have no data on this type of constructions with the reciprocal pronoun. But collocations like (104) seem to be possible.⁸

- (104) *beye beye-d-ee düitel-üül-* ‘to make sb. approach each other, to draw sth and sth together.’

11. Other pronominal and adverbial means of expressing reciprocity

Both in Khalkha and Buryat, reciprocity can be expressed by non-verbal lexical devices which can be used on their own or support the reciprocal predicate (morphological or lexical) and thus stress a reciprocal relation between the participants. The main grammatical pattern among these devices is reduplication, both of non-spatial components of the *beye bey-ee/biye biye-ee* type (see *nege nege-*, *ööhed ööhed-*, and *dam dam-* in 11.1)

8. The reciprocal pronoun is not registered in object-oriented constructions in the *Buryat-Russian dictionary* (Č.) at all, while in the 14th century dictionary (*Mukaddimat al-Adab* published in Poppe 1938) such usage does occur; cf. *qoyar öbüdüg-i kürge-be nim niken-dü* <two knee-ACC put-PAST each other-DAT> ‘he pressed his knees together’ (P. 305).

and of spatial postpositions expressing converse relations (see *deer deer-*, *xoino xoino-*, *urda urda-*, and *dosoo dosoo-* in 11.2). Alongside the reciprocal meaning (111), these formations may have

(a) the distributive meaning proper, like ‘each (separately)’ (106b, 107b), of the type illustrated by (90) with the pronoun *beye beye-ee*;

(b) the spatial distributive meaning (see (109); also figuratively used in the temporal distributive meaning).

In case (a) the performers of the action are in symmetrical relation, and in case (b) they are in converse relation; in other words, the relations here are the same as among derivatives of converse verbs like ‘to follow’ (*A and B follow each other* = *A follows B* + *B precedes A*). This kind of relations is often termed chaining relations (see Lichtenberk 1985: 24–26).

There is also a case of lexicalization of a converbal form (see *xari-lca-n* in 11.3). This converb, as well as the adverb/postposition *xoorond-oo*, seems to occur mostly with lexical or suffixed reciprocals.

Note that the lexical means of expressing reciprocity are quite numerous, their number reaching at least 10, if we include *biye biye-/beye beye-*.

11.1 Reduplication of non-spatial components

This pattern used to refer to the participants themselves is represented by numerous items, some of which are very close in meaning to *beye beye-* and compete with it, like the phrase *nege neg-iig-ee*, and others are less commonly used and differ from the reciprocal pronoun in meaning to a greater or lesser degree.

1. *Nege nege-*. The pronoun *nege neg-iig-ee* (derived from *nege* ‘one’) seems to be entirely synonymous to *biye biy-ee* (cf. the use of *each other* and *one another* in English). As a rule, the accusative marker *-iig* is omitted on *biye biy-ee* before a possessive-reflexive marker, and for unclear reasons it is not omitted on *nege neg-iig-ee* (and *ööhed ööhed-*, see (106a)). In most cases, the two pronouns are interchangeable. The choice of one or the other is sometimes dependent on style. One or the other pronoun is preferable with individual verbs, *bije bij-ee* being generally more common. In (105a, b) the pronoun in question is in the accusative and dative case forms; it also occurs in other case forms (105c); cf.:

- (105) a. *Bide nege neg-iig-ee xamgaala-xa üüreg-tee yüm.*
 we one one-ACC-REFL defend-PART duty-ADJ AUX
 ‘We must defend each other.’
- b. *Xoyor büsgüi nege negen-d-ee yüm xaşgira-dža bai-na.*
 two girl one another-DAT-REFL something shout-CONV AUX-PRES
 ‘Two girls are shouting something to each other.’⁹
- c. *neg neg-eer* (INST) ‘one after another’.

9. It seems that in Kalmyk the pronoun *neg-negən* is used instead of *biye biyee*. At least in the works on Kalmyk grammar we find examples with *neg-negən* only (see Ilishkin 1973: 115; Doraeva 1983: 203).

2. *Ööhed ööhed-*. The reflexive-demonstrative pronoun *ööhen* ‘I myself, you yourself, he himself ...’ for the singular and *ööhed* ‘we ourselves, you yourselves, they themselves’ for the plural is always used with a reflexive-possessive suffix. When reduplicated, the latter has either the reciprocal meaning ‘each other’ or the distributive meaning ‘each’; e.g.:

- (106) a. *ööhed ööhed-iig-öö amaršal-* (Č. 369)
 self self-ACC-REFL greet-
 ‘to greet each other.’
- b. *ööhed ööhed-in-göö xüdelmer-iin huuri-nuud-ee ezele-nxei.* (Č. 369)
 self self-GEN-REFL work-GEN place-PL-ACC.REFL take-RES.PAST
 ‘Each took his own working place.’

3. *Dam dam-*. This phrase is a reduplication of the adverb *dam* which means ‘yet, even more’ when used with adverbs of direction (cf. *dam saša yaba-* ‘to go even further’ and repetition when used with verbs (cf. *dam hura-* ‘to ask again’). The reduplicated form has a meaning ‘each’ (distributive meaning) or ‘all’ when used with adverbials of direction, and a reciprocal meaning when used with verbs (Č. 185):

- (107) a. *dam dam-aa duulga-lsa-* ‘to inform each other’ (Č. 205);
dam dam-aa ög- ‘to pass sth on to each other’ (L. 143).
- b. *dam dam saša bolo-od huu-g le.* (Č. 185)
 each each further get-CONV sit.DOWN-IMP.3SG PRTL
 ‘Let each move on and take a seat.’

11.2 Reduplication of spatial components

These expressions may be used with both suffixed reciprocals in *-lca/-lsa* and unsuffixed verbs. Some of them can also have a distributive meaning. Such phrases are formed by partial reduplication of postpositions, most of which belong to a special class of nominals with predominantly locative semantics (we mean pairs of nouns with converse meanings, like ‘above’ – ‘under’, ‘behind’ – ‘in front of’, ‘inside’ – ‘outside’) and function both as adverbs when used with possessive marking and as postpositions when preceded by a noun (e.g. Buryat *ger-ei xoino-hoo* ‘from behind the house’ vs. *xoino-hoo-mni* ‘behind me’). Often enough, some of their case forms (ablative or dative) get grammaticalized as postpositions. For expressing chaining relations and reciprocal meaning the stem alone is reduplicated, the case affix being used only once, on the last stem. In this respect they resemble reduplicated nouns in the direct object position of “possessive” reciprocal constructions (cf. *nyuur nyuur-* lit. ‘face face’ and the like in (80a, b, c, d, e)).

In our material, these formations may have the following meanings: (a) the distributive meaning proper (cf. *doro* ‘below’ – *doro dor-oo* ‘each separately’ (Č. 196); reduplication is important here); (b) the reciprocal meaning only (cf. (110a, b), (111)); (c) the spatial distributive meaning (cf. (108a, b), (109)). This distribution of meanings in the dictionary data may be accidental and it probably does not reflect the real distribution of meanings adequately; some formations may have other meanings as well.

1. *Deer deer-*. The stem is the postposition *deer* with the principal meaning ‘above, upon’ (cf. *nogoon deer xewte-* ‘to lie on grass’). It has the following typologically interest-

ing set of meanings: i. ‘one above another/the other’, ii. ‘one after another’, ‘in succession’, iii. ‘frequently’, iv. ‘continually, incessantly’, of which the first two signify chaining relations (they may form object-oriented constructions). The ablative form Khalkha *deer-ees* / Buryat *deere-hee* is also grammaticalized as a postposition ‘(from) above’, cf.:

- (108) a. *deer deer-ees-eny xuraa-* (L. 171)
 above above-ABL-their pile-
 ‘to pile (things) one upon another.’
 b. ... *deere deere-hee güi-lde-že yer-eed* ... (T. 38)
 above above-ABL run-REC-CONV go-CONV
 ‘... [attacking soldiers] rush upon one another in a heap ...’

2. *Xoino xoino-*. Reduplication of the postposition *xoino-hoo* (ablative of *xoino* ‘behind, after’; cf. *ger-iin xoino* ‘behind the jur’t’) may express reciprocal chaining relations:

- (109) a. *xoino xoino-hoo* ‘one after another, one behind another, (in) single file’
 b. *xoino xoino-hoo zogso-* ‘to stand one behind another’ (Č. 578).

3. *Urda urda-*. The partially reduplicated postposition *urda urda-haa* means ‘opposite each other’ (*urda* ‘front’, ‘front part’, ‘face (of people)’; cf. *minii urda* ‘in front of me’; *urda-haa* ‘from the position in front; before’):

- (110) a. *urda urda-haa xara-/xara-lsa-* ‘to look each other in the face’ (Č. 474).
 b. *Noxoi-nuud xeriүүлxe-lde-eeđ, urda urda-haa ard ge-lde-be.* (Č. 58)
 dog-PL be.angry-REC-CONV front front-ABL bow-wow AUX-REC-PAST
 ‘Angry with each other, the dogs barked at each other.’

4. *Dosoo dosoo-*. This form is derived from a postposition with the meaning ‘inside, in’ (cf. *ger dosoo* ‘in(side) the jur’t’). An example:

- (111) *dosoo dosoo-xy-oo taa-lsa-* (Č. 197) ‘to understand each other.’

11.3 Adverbs *xarilcan* ‘mutually’ and *xoorond-oo* ‘among themselves’

Both adverbs are rarely used as the only markers of reciprocity.

The adverb *xarilcan* ‘mutually, between oneself, with each other’ originates from the verb *xari-lca-* ‘to be connected / linked, to relate’ (lexicalized sociative of *xari-* ‘to return’). It may appear as the only marker of reciprocity or, much more frequently, it co-occurs with derivatives in *-lca/-lsa*. There are also instances of its co-occurrence with reciprocal pronouns.

- (112) a. *xari-lca-n xyana-* ‘to check each other’ (L. 517)
 b. *xari-lsa-n tuhala-lsa-* ‘to mutually help each other’ (Č. 439)
 c. *xari-lca-n yari-lca-* ‘to mutually exchange words’ (ČR. 173)
 d. *xari-lca-n kele-lce-* ‘to mutually come to an agreement’ (ČR. 173)
 e. *xari-lca-n kina-lca-* ‘to mutually check each other’ (ČR. 173)
 f. *xari-lca-n biye biy-ee xündetge-x ünsen deer.* (L. 517)
 mutually each other-ACC respect-PART basis on
 ‘on the basis of mutual respect for each other.’

Xoorond-oo ‘among/between themselves’ is a reflexive-possessive form of the postposition *xoorondo* ‘between’ (<DAT of *xoor/xoyor* ‘two’) combining characteristics of the type considered in 11.2. On the one hand, it may be used alone, as an adverbial, since as a lexical item it renders the meaning ‘between oneself’ or ‘with each other’ (other postpositions must be reduplicated in order to acquire this meaning). On the other hand, it can also be used as a postposition preceded by *öör* ‘oneself’ and *ööhed* ‘oneselves’: *ööhed xoorondoo ximara-lda-* ‘to squabble between/among themselves’ (Č. 571). It also occurs in a reduplicated form.

In these meanings this phrase can be combined (judging by the dictionaries) either with lexical or suffixed reciprocals, or with verbs whose meaning implies a converse meaning (cf. *to contradict* vs. *to confirm*, as in (113b)). Thus it is not so much an independent expression of reciprocity as a means of pointing out the range of participants (analogues are attested in other languages as well) (see also (24d) and (34)).

- (113) a. *Tedener xoorond-oo ebtei-nüüd.* (Č. 587)
 they between-REFL friendly-PL
 ‘They are friends between themselves.’
- b. *Medüülge-nüüd xoorond-oo zör-džö bai-na.* (L.203)
 statement-PL between-REFL contradict-CONV AUX-PRES
 ‘The statements contradict one another.’
- c. *(ööhed) xoorond-oo mürise-* ‘to compete with each other’ (Č. 587)
- d. *xooro-xoorond-oo nanša-lda-* ‘to fight with each other’ (Č. 587)
- e. *xooro-xoorond-oo duugara-lsa-* ‘to talk between oneself’ (Č. 587)
- f. *xoorond-oo yari-lca-* ‘to talk between oneself’ (L. 538).

12. Lexicalization

The term “lexicalization” is applied here to verbs with the suffix *-lda* which enter into a non-standard reciprocal opposition with the underlying verb, which is generally a result of semantic evolution of the standard reciprocal opposition shown in example (1). The following two main semantic cases can be distinguished: lexicalization of derivatives that are reciprocal in meaning and that of non-reciprocal derivatives. Let us illustrate these two cases.

Lexicalized derivatives in *-lca/-lsa* seem to be possible but if they are they must be much less numerous than those in *-lda* (this is probably an indication of relatively late development of *-lca/-lsa*).

12.1 Lexicalized derivatives with the reciprocal meaning

These derivatives typically denote fighting, competing, quarrelling, meeting, coming into contact, etc. Some of the shifts in meaning are in fact typologically predictable, i.e. they occur in other languages as well; cf. the derivatives of *barya-* and *üdze-* below. Some derivatives may retain standard meanings alongside the non-standard ones (see *bulaa-* below):

(114) <i>adzragala-</i> ‘to be in command’	→	<i>adzragala-lda-</i> ‘to compete for power’ (B. 66)
<i>ala-</i> ‘to kill/torture/beat’	→	<i>ala-lda-</i> ‘fight/kill each other, squabble’ (Č. 39)
<i>anda-</i> ‘to make mistakes’	→	<i>anda-lda-</i> ‘to exchange’ (L. 38)
<i>bai-</i> ‘to be/exist’	→	<i>bai-lda-</i> ‘to fight’ (L. 57)
<i>barya-</i> ‘to hold’	→	<i>barya-lda-</i> ‘to wrestle’ (L. 63)
<i>bulaa-</i> ‘to take sth away from sb’	→	<i>bulaa-lda-</i> i. ‘to argue’, ii. ‘to take sth away from each other’ (L.85)
<i>čixe-</i> ‘to shove sth in sth’	→	<i>čixe-lde-</i> ‘to jostle (in a crowd)’ (L. 634)
<i>daira-</i> ‘to push’	→	<i>daira-lda-</i> ‘to meet’ (Č. 182)
<i>dzaa-</i> ‘to show/teach’	→	<i>dzaa-lda-</i> ‘to sue sb/be at law’ (L. 184)
<i>ewle-</i> ‘to make up with sb’	→	<i>ewle-lde-</i> ‘to unite’ (L. 664)
<i>ewse-</i> ‘to agree/come to an agreement’	→	<i>ewse-lde-</i> ‘to enter into an alliance’ (L. 664)
<i>garda-</i> ‘to take into one’s hands’	→	<i>garda-lda-</i> ‘to romp/wrestle’ (Č. 150)
<i>ge-</i> ‘to speak’	→	<i>ge-lde-</i> ‘to come to an agreement’ (Č. 169)
<i>yawa-</i> ‘to walk/go’	→	<i>yawa-lda-</i> ‘to copulate’ (L. 688)
<i>ono-</i> ‘to hit the target’	→	<i>ono-coldo-</i> ‘to meet’ (L. 301)
<i>öwcö-</i> ‘to mix (blood)’	→	<i>öwcö-ldö-</i> ‘to copulate’ (L. 314)
<i>sülbe-</i> i. ‘to stab/prick’, ii. ‘fasten with a pin’	→	<i>sülbe-lde-</i> i. ‘to join’ (vi), ii. ‘to conspire’, iii. ‘to be in intimate relations’ (L. 380)
<i>taarxa-</i> ‘to imitate’	→	<i>taarxa-lda-</i> ‘to use a polite address with each other’ (Č. 407)
<i>tušaa-</i> ‘to hand in/turn over’	→	<i>tušaa-lda-</i> ‘to meet/come across each other’ (Č. 440)
<i>ura-</i> ‘to tear’	→	<i>ura-lda-</i> ‘to compete’ (L. 459, 458)
<i>üdze-</i> ‘to see/look’	→	<i>üdze-lde-</i> i. ‘compete in strength’, ii. ‘see each other’ (L. 478)
<i>xaxa-</i> ‘to choke with sth’	→	<i>xaxa-lda-</i> ‘to crowd/jostle each other’ (B. 66)
<i>xere-</i> ‘to tie sth crosswise’	→	<i>xere-lde-</i> ‘to quarrel/squabble’ (Č. 652)
<i>xönöö-</i> ‘to harm sb’	→	<i>xönöö-ldö-</i> ‘to be enemies’ (B. 68)
<i>xyamra-</i> ‘to fall into decay’	→	<i>xyamra-lda-</i> ‘to come into a collision’ (L. 596)
<i>züdxe-</i> ‘to pull/drag’	→	<i>züdxe-lde-</i> ‘to wrangle/squabble’ (Č. 267).

12.2 Lexicalized derivatives with non-reciprocal meanings

Note that the last two reciprocals in (115) have semantic parallels in some other languages among lexicalized reciprocals. Compare, for instance, the verbs denoting “an intention to obtain or achieve” in Yakut (see Nedjalkov & Nedjalkov, Ch. 26, group 4 in Section 11.3).

(115) <i>burgya-</i> ‘to roll (of dust)’	→	<i>burgya-lda-</i> ‘to be in disorder’ (B. 67)
<i>oro-</i> ‘to come in’	→	<i>oro-ldo-</i> ‘to try’ (L. 306, Č. 361)
<i>üxe-</i> ‘to die’	→	<i>üxe-lde-</i> ‘to strive for sth with all one’s might’ (B. 69).

It is in principle possible to derive sociatives from lexicalized reciprocals; cf.:

(116) <i>bari-</i> ‘to hold’	→	<i>bari-lda-</i> ‘to fight’	→	<i>bari-lda-lca-</i> ‘to fight (of many)’ (Bm. 280)
<i>oro-</i> ‘to enter’	→	<i>oro-ldo-</i> ‘to try’	→	<i>oro-ldo-lco-</i> ‘to try (of many)’ (Bm. 280).

13. *Reciproca tantum*

These are suffixed reciprocals which do not have a related underlying verb. This is mostly due to the loss of the latter, which might have a meaning close to that of the derivative. Their typical meanings are competing, quarrelling, meeting, colliding, gathering together, etc. Special cases are (a) two verbs which have converse counterparts (these verbs imply another action, in particular, as a cause or consequence, cf. ‘to resist’ vs. ‘to attack’), and (b) the verb *xunda-lda-* with a kind of sociative meaning. *Reciproca tantum* in *-lca/-lsa* seem to be possible but if there are any they must be much less numerous than *-lda* verbs.

(117) <i>araa-lda-</i>	‘to stand in a row, crowd’ (L. 40)
<i>mungaa-lda-</i>	‘to compete (in singing or verbally)’ (Č. 302)
<i>šergüü-lde-</i>	‘to jib, resist’ (Č. 749)
<i>šii-lde-</i>	‘to tighten/become tight’ (Č. 726)
<i>tušaa-lda-</i>	‘to collide, meet’ (L. 428)
<i>xaxana-lda-</i>	‘to cluster’ (B. 66)
<i>xoibo-ldo-</i>	‘to hobnob’ (Č. 577)
<i>xöndö-ldö-</i>	‘to stand/be situated across a road’ (L. 552)
<i>xuda-lda-</i>	‘to trade’, ‘to sell’ (L. 561) (cf. Manchu <i>xuda</i> ‘trade’)
<i>xuiwa-lda-</i>	‘to conspire/plot’ (L. 562)
<i>xunda-lda-</i>	‘to mount a horse (of two persons)’ (Č. 690).

The following two non-verbal derivatives (an adjective/adverb and a noun) have meanings related to the reciprocal:

(118) <i>džerge-ld-ee</i>	i. ‘neighbouring’, ii. ‘in the neighbourhood’ (L. 213)
<i>nolo-ldo</i>	‘mating season (of birds)’ (B. 67).

For unclear reasons, the following verb contains the suffix *-lda* despite its non-reciprocal meanings; it is synonymous with the verb *urva-gana* (L. 459) with the same base.

(119) <i>urwa-lda-</i>	i. ‘to be sad/doleful’, ii. ‘to complain/lament’ (L. 459).
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14. Lexical reciprocals proper

Among lexical reciprocals, we include formations with the reciprocal meaning which do not enter into standard derivational relations of the type illustrated by (1). Therefore, in the broad sense, the term “lexical reciprocals” covers both lexicalized reciprocals and *reciproca tantum*, and their derivatives (in this section, we are concerned with their anticausative derivatives; see 14.2). Lexical reciprocals proper differ from these groups in that they have no reciprocal marker, but in Khalkha and Buryat many of them may be used with a pleonastic reciprocal marker, and this is a typological peculiarity of these languages. First, we shall consider lexical reciprocals proper that allow both the suffixes *-lda* and *-lca/-lsa* (14.1) and, next, anticausatives derived from them by means of *-lda* only (14.2).

14.1 Suffixes *-lda* and *-lca/-lsa* on lexical reciprocals proper

In this case the meanings of a verb both with and without the suffix coincide entirely or partially, the suffix emphasizing the reciprocal sense and/or changing the verbal case frame. Both forms are given the same or similar definitions in the dictionaries (cf. *toxyoo- / toxyoo-ldo* ‘to meet’, ‘to coincide’ (L. 413); *xarga- / xarga-lda* ‘to collide, enter into a conflict’ (L. 515)) or a reference to the definition of the unmarked verb is given (cf. *xumira-lda* ‘to see’ → *xumira* ‘to curl up, shrivel’ (L. 564)). They may be:

- (a) two-place intransitives or transitives (120a) or, less commonly,
- (b) one-place verbs with a plural subject or a subject consisting of parts pressed together (120b), and
- (c) three-place transitives (120c).

The lists in (120) include some meanings which can hardly be counted as reciprocal semantically, mostly because of the different roles of the referents in the situation, as in *aha-/aha-lda* ‘to clutch at, cling to, seize and hold sth’: here the object referent acts as a participant of the situation of joining (cf. 14.2). In other words, though it is passive, this object referent “behaves” in a different way than, for instance, in a situation like ‘The book fell on the floor’ where the second participant (‘the floor’) is entirely static and no joining of the participants is involved. Therefore it is not accidental that the language marks this situation as reciprocal. Thus a classification of language material is, as a rule, less rigid and more complicated and flexible than a purely logical classification – this is why such marginal cases are also included here. In case of polysemy, the semantic proximity of the unsuffixed and suffixed variants may involve only one of their meanings. Despite the obvious semantic proximity of the verbs in a pair, one can hardly expect their interchangeability in all contexts.

- | | | |
|----------|---|--|
| (120) a. | <i>ada-/ada-lda</i>
<i>aha-/aha-lda</i>
<i>amarxa-/amarxa-lda</i>
<i>arca-/arca-lda</i>
<i>awca-/awca-lda</i>
<i>cuugya-/cuugya-lda</i>
<i>daila-/daila-lda</i>
<i>daga-/daga-lda</i>
<i>daxa-/daxa-lda</i>
<i>dzoxyo-/dzoxyo-ldo</i>
<i>dzöwlö-/dzöwlö-ldö</i>
<i>dzöwši-/dzöwši-ldö</i>
<i>ewse-/ewse-ldē</i>
<i>gasa-/gasa-lda</i>
<i>hažaa-/hažaa-lda</i>
<i>hubari-/hubari-lda</i>
<i>marga-/marga-lda</i>
<i>naira-/naira-lda</i>
<i>niile-/niile-ldē</i> | ‘to bicker/squabble’ (Č. 30, 31)
‘to clutch at, cling to, seize’ (Č. 66, 67)
‘to contradict, squabble/argue’ (Č. 48)
‘to argue/squabble’ (L. 44)
‘to correspond, coincide’ (L. 20)
‘to squabble’ (L. 616)
‘to be at war [with each other]’ (Č. 182)
‘to follow sb/on sb’s heels’ (L. 139; Č. 180)
‘to follow sb/accompany sb’ (Č. 189)
‘to correspond (mutually)’ (L. 199, 200)
‘to counsel with each other’ (B. 68)
i. ‘to come to an agreement’, ii. ‘to discuss’ (L. 201)
‘to mate/copulate’ (L. 665)
‘to do sth in defiance to sb’ (Č. 151)
‘to imitate’ (Č. 662, 663)
‘to follow one after another/walk single file’ (Č. 687)
‘to argue’ (L. 237)
‘to combine/join/mix’ (vi) (L. 259, 260)
‘to join/merge/blend’ (L. 267) |
|----------|---|--|

<i>nöxcö-/nöxcö-ldö-</i>	'to be lovers' (B. 68)
<i>nyurgal-/nyurga-lda-</i>	'to turn one's back on sb/to sth' (Č. 343)
<i>sörgölcö-/sörgölcö-ldö-</i>	'to act against each other' (L. 360)
<i>šüüre-/šüüre-ldē-</i>	'to grasp/clutch at sth' (Č. 740)
<i>taara-/taara-lda-</i>	i. 'to coincide', ii. 'to meet' (L. 380)
<i>tebxe-/tebxe-ldē-</i>	'to be equal' (Č. 450)
<i>teegle-/teegle-ldē-</i>	'to catch on sth' (L. 445)
<i>temce-/temce-ldē-</i>	'to struggle/fight, argue' (Cdn. 69, L. 439)
<i>toxyoo-/toxyoo-ldo-</i>	'to meet', 'to coincide' (L. 413)
<i>tul-/tula-lda-</i>	'to fight/struggle' (Č. 434)
<i>tuusa-/tuusa-lda-</i>	'to argue/dispute' (Č. 438)
<i>uuldza-/uuldza-lda-</i>	'to meet' (L. 467)
<i>üheri-/üheri-ldē-</i>	'to do sth in defiance/behave counter to sb' (Č. 520)
<i>üsere-/üsere-ldē-</i>	'to persist/be obstinate' (Č. 515)
<i>xadara-/xadara-lda-</i>	'fight with fangs (of wild-boars, when mating)' (Č. 530)
<i>xagaca-/xagaca-lda-</i>	'to part' (vi) (B. 67)
<i>xayaca-/xayaca-lda-</i>	'to shift sth upon each other' (B. 67)
<i>xayara-/xayara-lda-</i>	'to squabble/quarrel' (Č. 657)
<i>xamra-/xamra-lda-</i>	'to not correspond, collide (of opinions, etc.)' (B. 66)
<i>xarga-/xarga-lda-</i>	'to argue/quarrel' (L. 515)
<i>ximara-/ximara-lda-</i>	'to squabble/quarrel' (Č. 571)
<i>xolyoco-/xolyoco-ldo-</i>	'to get mixed' (L. 535)
<i>xoršo-/xoršo-ldo-</i>	'to keep company' (B. 67)
<i>xudxar-/xudxara-lda-</i>	'to get/become mixed' (Č. 598)
<i>zergeše-/zergeše-ldē-</i>	'to stand/walk next to sb, be of a pair' (Č. 274)
<i>zöwši-/zöwši-ldö-</i>	'to negotiate' (L. 201)
<i>züble-/züble-ldē-</i>	'to take counsel with each other' (Č. 266)
<i>zübše-/zübše-ldē-</i>	'to take counsel with each other/negotiate' (Č. 266)
b. <i>begze-/begze-ldē-</i>	'to huddle, stoop' (Č. 129)
<i>böögnö-/böögnö-ldö-</i>	'to gather (of a crowd)' (L. 81)
<i>böömnö-/böömnö-ldö-</i>	'to gather (of a crowd)' (L. 81)
<i>coxro-/coxro-ldo-</i>	'to swarm (of insects)' (B. 67)
<i>čixce-/čixce-ldē-</i>	'to crowd/jostle each other' (L. 634)
<i>irai-/irai-lda-</i>	'to stand in rows or ranks' (Č. 279)
<i>yadzgana-/yadzgana-lda-</i>	'to swarm' (B. 66)
<i>šawaara-/šawaara-lda-</i>	'to crowd together' (B. 67)
<i>šaxca-/šaxca-lda-</i>	'to be herded/squeezed' (L. 648)
<i>xumyara-/xumyara-lda-</i>	'to curl up (of leaves)/shrivel' (L. 564)
<i>xura-/xura-lda-</i> (vi)	'to gather' (L. 566)
<i>žerbe-/žerbe-ldē-</i>	'to stand in even rows' (Č. 237)
c. <i>aša-/aša-lda-</i>	'to pile on/load' (Č. 68)
<i>bolgo-/bolgo-ldo-</i>	'to make/consider sb as sth/sb' (Č. 99)
<i>dabxasa-/dabxasa-lda-</i>	'to put one upon another' (Č. 180)
<i>xabira-/xabira-lda-</i>	'to rub one against another/grit (teeth)' (Č. 526).

Part of the Khalkha data in Section 14.1 was checked by two informants. The examples in (121) and (122) illustrating the simple reciprocal construction were checked by Kurebito

Tugus (Inner Mongolia) and Galsanjamts Ulziinemekh (Mongolian Republic). In their opinion, the variants of sentence (121a) with *temce-lee* and *temce-ldē-lee* are synonymous; and so are the variants with and without *-lda* in (121b) and (121c):

- (121) a. *Xoyor dzaluu-s goyo oxyon aw-x-aar temce-[ldē]-lee.*
 two youth-PL beautiful girl.NOM take-PART-INST struggle-REC-PAST
 ‘Two young men struggled [with each other] for the beautiful girl.’
- b. *Dordžo Bata xoyor marga[-lda]-dža bai-na.*
 D. B. two argue-REC-CONV AUX-PRES
 ‘Dorji and Bat are arguing [with each other].’
- c. *Dordžo Bata xoyor xoršo[-ldo]-w.*
 D. B. two associate-REC-PAST
 ‘Dorji and Bat associated with each other.’

One of our informants (Kurebito) considers the marked variant of the predicate preferable when the subject refers to many persons or entities (on this meaning see 4.1–4.1.2.1):

- (122) a. *Dordžo Bata xoyor uuldža[-lda]-w.*
 D. B. two meet-REC-PAST
 ‘Dorji and Bat met.’
- b. *Dordžo Bata-nar xoyor uuldža-lda-w.*
 D. B.-PL two meet-REC-PAST
 ‘Dorji and Bat and his family met.’
- (123) *Nawč naxia gadžar deer xumyara[-lda]-w.*
 leaves sprout earth on curl-REC-PAST
 ‘The leaves on the earth curled up.’

In the discontinuous reciprocal construction, one of the informants (Galsanjamts) perceives a slight difference between the synonymous forms with and without the reciprocal suffix. In the variant without the reciprocal suffix the first participant is presented as slightly more active, while in the case of the suffixed variant, both participants are equally active.

- (124) a’. *Dordžo Bataa-tai marga-dža bai-na.*
 D. B.-COM argue-CONV AUX-PRES
 ‘Dorji is arguing with Bat.’
- a’’. *Bata Dordž-toi marga-dža bai-na.*
 B. D.-COM argue-CONV AUX-PRES
 ‘Bat is arguing with Dorji.’
- b’. *Dordžo Bataa-tai marga-lda-dža bai-na.*
 D. B.-COM argue-REC-CONV AUX-PRES
 ‘Dorji and Bat are arguing with each other.’
- b’’. *Bata Dordž-toi marga-lda-dža bai-na.*
 B. D.-COM argue-REC-CONV AUX-PRES
 ‘Bat and Dorji are arguing with each other.’

The reciprocals seem to vary with respect to the possible use in discontinuous constructions. Thus, for unclear reasons, Kurebito accepts sentences (124a’-b’’) but he does not

accept sentences of the (b) type with some other reciprocals, e.g. (124c”), though Galsanjamts finds it acceptable:

- c’ *Dordžo Bataa-tai uulda-w.*
 D. B.-COM meet-PAST
 ‘Dorji met with Bat.’
- c” [?]*Dordžo Bataa-tai uulda-lda-w.*
 D. B.-COM meet-REC-PAST
 ‘Dorji met with Bat.’

Synonymy is also observed between the base verbs and their derivatives in *-lca/-lsa* (though the latter are much less numerous than those in *-lda*; cf. (120)) and in one case (125b) all the three forms are synonymous. The following list contains both reciprocals (cf. ‘to be at war’) and lexical comitatives (cf. ‘to accompany’, ‘to take part in sth’):

- | | | |
|----------|-------------------------------------|---|
| (125) a. | <i>daila-/daila-lsa-</i> | ‘to be at war’ (Č. 182) |
| | <i>naada-/naada-lsa-</i> | ‘to take part in a game, etc.’ (Č. 315) |
| | <i>sala-/sala-lca-</i> | ‘to part’ (L. 344) |
| | <i>tula-/tula-lsa-</i> | ‘to fight/struggle’ (Č. 435) |
| | <i>üdeše-/üdeše-lse-</i> | ‘to accompany’ (Č. 495) |
| | <i>xabaada-/xabaada-lsa-</i> | ‘to take part in sth’ (Č. 758) |
| | <i>xamaara-/xamaara-lsa-</i> | ‘to interfere in sth’ (Č. 541) |
| | <i>xanil-/xanil-lsa-</i> | ‘to be friends’ (Č. 546) |
| b. | <i>dzörö-/dzörö-ldö-/dzörö-lcö-</i> | ‘to move next to each other’ (L. 203). |

Note that this section is based mostly on dictionary data, therefore the synonymy of same-stem pairs with and without the reciprocal marker requires further checking.

14.2 Anticausatives (with *-lda* only); verbs of joining

As a rule, anticausatives derive from three-place lexical reciprocals denoting joining, mixing, entangling, etc., and also from a small group of two-place verbs with a plural object or with an object divisible into moveable parts. Similar to these are verbs that are not lexical reciprocals proper, but they may be termed lexical semi-reciprocals (cf. 14.1) because they denote contact between two “unequal” entities (e.g. ‘to hang sth on sth’, ‘to pile sth up’) or closer contact between parts of the same entity (e.g. ‘to rumple sth’, ‘to wind’), or “curdling” that involves hardening of the whole or its parts (e.g. ‘to turn sour’ of milk). Intransitive derivatives of semi-reciprocals contain a reciprocal suffix in some other languages as well. Naturally enough, if the base verb is polysemous, an anticausative may be derived from one of its meanings only. For instance (see also (49) above):

- (126) a. *Bat nüd ani-dž bai-na.*
 B. eye close-CONV AUX-PRES
 ‘Bat has his eyes closed.’
- b. *Nüd ani-lda-dž bai-na.*
 eye close-REC-CONV AUX-PRES
 ‘The eyes are (kept) closed.’

- (127) *Niidxe xürme-ld-öö*. (Č. 627)
thread entangle-REC-PAST
'The threads got entangled.'
- (128) *ani-* 'to close (eyes)' → *ani-lda-* 'to close (of eyes)' (L. 39)
büre- 'to make sour (milk)' → *büre-ld-* 'to become sour (of milk)' (L. 96)
burša-gail- 'to crumple sth' → *burša-lda-* 'to get crumpled' (Č. 115)
damna- 'to put sth across' → *damna-lda-* 'to be/lie across' (L. 144)
džalga- 'to join/joint sth with sth' → *džalga-lda-* 'to become joined/jointed' (Č. 246)
džuura- 'to knead (dough)' → *džuura-lda-* 'to become glutinous/sticky' (L. 207)
güre- 'to plait/entwine sth' → *güre-ld-* 'to get entwined' (Č. 166)
oroo- 'to wrap, wind round' → *oroo-ldo-* 'to entwine, get tangled' (L. 307)
owoolo- 'to pile sth in a heap' → *owoolo-ldo-* 'to be piled up' (L. 291)
solyboco- 'to cross sth with sth' → *solyboco-ldo-* 'to be crossed' (L. 355)
soli- 'to change, mix up' → *soli-ldo-* 'to get mixed up' (L. 356)
tata- 'to tighten (with a rope)' → *tata-lda-* 'to get tightened' (Č. 417)
tuša- 'to hobble (a horse)' → *tuša-lda-* 'get one's feet entangled' (Č. 440)
ülge- 'to hang sth (on sth)' → *ülge-ld-* i. 'be hanging', ii. 'catch on sth' (Č. 499)
ünge- 'to rumple/crumple sth' → *ünge-ld-* 'to crumple (of sth)' (B. 68)
xolbo- 'to join sth together' → *xolbo-ldo-* 'to join together (of sth)' (L. 533)
xolyo- 'to mix sth with sth' → *xolyo-ldo-* 'to mix/be mixed' (L. 534)
xudxa- 'to mix sth with sth' → *xudxa-lda-* 'to get mixed' (Č. 598)
xürme- 'to twine sth' → *xürme-ld-* 'to get entwined' (Č. 626)
xüše- 'prop (a gate, etc. with a stick)' → *xüše-ld-* 'get stuck (of a stick, etc.)' (Č. 637)
zalga- 'to join sth with sth' → *zalga-lda-* 'to become joined' (Č. 246)
naa- 'to glue sth to sth' → *naa-lda-* i. 'to get stuck/glued to sth' ii. 'to press oneself' (Č. 346); see also (37), (38), (61), (64).

The following Khalkha suffixed verbs with a shift in the standard semantic relation can be added here with reservations, their anticausative status being not quite obvious:

- (129) *nyala-* 'to smear sth/sb with sth' → *nyala-lda-* 'to get stuck to each other' (L.288)
šawa- 'to smear sth' → *šawa-lda-* i. 'get stuck/glued', ii. 'pile up' (L. 638)
šire- 'to quilt sth' → *šire-ld-* 'get entangled (of hair, mane)' (L. 655)
xögnö- 'to tie (lambs) to sth' → *xögnö-ldö-* 'to grow entangled' (L. 547).

Note that the suffix *-lda* functions as an anticausative marker on non-reciprocal verbs as well, though only in two or three cases; cf.:

- (130) *güice-* 'to complete sth' → *güice-ld-* 'to be completed' (L. 129).

15. Denominal verbs with the suffix *-lda*

The suffix *-lda* in this function corresponds to the Turkic *-laš* which is segmentable into a verb-forming suffix *-la* and reciprocal *-š* (cf. Kirghiz: Ch. 26, §12). They are similar in that the derived verbs are mostly reciprocal in meaning, and not infrequently the underlying nouns are also (lexical) reciprocals.

1. Denominal verbs with a reciprocal meaning:

- | | | |
|---|---|--|
| (131) <i>booco</i> ‘argument/wager/bet’ | → | <i>booco-ldo-</i> ‘to bet/wager’ (L. 77) |
| <i>nuruu</i> ‘stack/rick’ | → | <i>nuruu-lda-</i> ‘to stack hay’ (L. 278) |
| <i>nüür</i> ‘face’ | → | <i>nüüre-ldē-</i> ‘to meet at confrontation’ (L. 288) |
| <i>sülbee</i> ‘connections’ | → | <i>sülbee-ldē-</i> ‘to be connected’ (L. 368) |
| <i>zarga</i> ‘complaint/(law)suit’ | → | <i>zarga-lda-</i> ‘to sue sb/take sb to court’ (L. 193). |

In this connection the following derivatives from an adjective and an adverb-postposition should be mentioned:

- | | | |
|--------------------------------|---|--|
| (132) <i>xeder</i> ‘obstinate’ | → | <i>xedere-ldē-</i> ‘to be obstinate’ (Č. 641) |
| <i>urid</i> ‘before’ | → | <i>uri-lda-</i> ‘compete in running/overtake each other’ (Č. 476). |

2. Denominal verbs with non-reciprocal meanings:

- | | | |
|-------------------------------------|---|---|
| (133) <i>boimo</i> ‘loop, noose’ | → | <i>boimo-ldo-</i> ‘to hang oneself’ (D. 149) |
| <i>erxe</i> ‘thumb’ | → | <i>erxe-ldē</i> ‘to hook/press with a thumb’ (Č. 773) |
| <i>hüyee</i> ‘heel’ | → | <i>hüyee-ldē-</i> ‘to step with (one’s) heels’ (Č. 695) |
| <i>hüüže</i> ‘hip(bone)’ | → | <i>hüüže-ldē-</i> ‘to sit sideways’ (Č. 699) |
| <i>seeže</i> ‘breast’, fig. ‘heart’ | → | <i>seeže-ldē-</i> ‘to memorize’ (Č. 405). |
| <i>toxoi</i> ‘elbow’ | → | <i>toxoi-ldo-</i> ‘to lean on one’s elbow’ (L. 414). |

16. Suffixes partially coincident in form with *-lda* and *-lca/-lsa*

We are not in a position to resolve the issue of the proper etymology of these suffixes, but it may be useful to list the suffixes which either entirely or partially are contained in the suffixes *-lda* and *-lca* (Buryat *-lsa* and Written Mongolian *-lča*), since their meanings are similar to a greater or lesser degree to that of the latter suffixes. Their common component is iterativity. Therefore it is quite likely that this material similarity is not accidental (see also Ramstedt 1952:162–7).

1. The suffix *-l* is used to derive verbs denoting frequently repeated or fast actions; they are rather few in number (Sanzheev 1963:65; see also Poppe 1954:64); examples:

- | | | |
|---|---|---|
| (134) <i>coxy-</i> ‘to hit/beat’ | → | <i>coxi-l-</i> ‘to hit repeatedly’ (L. 611) |
| <i>caxy-</i> ‘to flash once (of lightning)’ | → | <i>caxi-l-</i> i. ‘to flash repeatedly (of lightning)’
ii. ‘to walk very fast’ (L. 607, 606) |
| <i>maaži-</i> ‘to scratch’ | → | <i>maaž-l-</i> ‘to scratch lightly, from time to time’ (L. 231) |
| <i>manda-</i> ‘to rise (e.g. of sun)’ | → | <i>mand-l-</i> ‘to rise repeatedly’ (L. 235, 236) |
| <i>mörgö-</i> ‘to butt sb/each other’ | → | <i>mörgö-l-</i> ‘to butt sb/each other often’ (L. 246, 245) |
| <i>mušgi-</i> ‘to twist, roll up’ | → | <i>mušgi-l-</i> ‘to twist, roll up repeatedly’ (L. 250) |
| <i>šunga-</i> ‘to dive’ | → | <i>šunga-l-</i> ‘to dive repeatedly’ (L. 660). |

2. The suffix *-ldz* forms verbs denoting rhythmical actions performed at given intervals; it operates on a limited number of stems (Sanzheev 1963:65–6); cf.:

- (135) *ganx-* ‘to swing/flutter/sway’ → *ganxa-ldz-* ‘swing/flutter/sway repeatedly’ (L. 111)
sew- ‘to wave sth’ → *sewe-ldz-* ‘to flutter/fly repeatedly’ (vi) (L. 372).

3. The suffix *-c-gaa* (Buryat *-sa-gaa*) has the meanings of plurality, iterativity, and imitativity (see Section 6 above). Its first component is materially similar to the second component of the sociative suffix *-l-ca* (Buryat *-l-sa*).

4. The suffix *-ca* (Buryat *-sa*) appears as a second component of the sociative suffix *-l-ca* (Buryat *-l-sa*) and the first component of the complex reciprocal suffix *-ca-lda* (Buryat *-sa-lda*; see Section 5). This unproductive suffix does not have a clear-cut meaning, but the following may be indicative of its primary meaning: it is not accidental that out of 13 Buryat verbs listed in Sanzheev (1962: 180) seven are formed from lexical (semi-)reciprocal non-verbs (to which at least two more forms can be added). And, if we take into account the tendency to form reciprocal verbs from (semi-)reciprocal verbs and other word classes (see Section 14 above and Nedjalkov & Nedjalkov, Ch. 26 on Yakut, §12; and also Nedjalkov, Ch. 28 on Kirghiz, §12.2), we may claim that *-ca/-sa* was once used to derive reciprocal verbs (and this probably accounts for its merging with the suffix *-lda* in *-ca-lda/-sa-lda*). Note in this connection that Poppe (1937: 142) calls verbs with the suffix *-sa/-se* in Written Mongolian as verbs of cooperation and describes their meaning as “an action performed with each other mutually”.

- (136) *alga* ‘past sth, by’ → *alga-sa-* ‘to pass by, separate’ (Č. 41)
dabxar ‘double’ → *dabxa-sa-* ‘to put one upon another, double’ (D. 138)
esergüü ‘against’ → *esergüü-se-* ‘to resist’ (Č. 777)
mürüi ‘competition (arch.)’ → *mürüi-se-* ‘to compete’ (Č. 309)
mürge- ‘to collide’ → *mürge-se-* ‘to collide’ (Č. 308)
nüxer ‘friend’ → *nüxe-se-* ‘to become friends’ (D. 138)
ten ‘evenly, correspondence’ → *ten-se-* ‘to correspond’ (Č. 455)
xaryuu ‘answer’ → *xaryu-sa-* ‘to answer’ (Č. 559)
xaxa- ‘by half’ → *xaxa-sa-* ‘to part’ (Č. 563)
zerge ‘row, rows’ → *zerge-se-* ‘to line up in a row’ (D. 138)
zoxi- ‘to coincide’ → *zoxi-co-* ‘to coincide’ (L. 200)¹⁰
jör- ‘to differ, make way for each other’ → *jör-c-* ‘to disobey’
xäry- ‘to return’ → *xäry-c-* ‘to contact, keep in touch’
 (the latter/last two examples are borrowed from Sechenbaatar 2003: 140).

10. As a curiosity, we would like to mention that Khalkha has a number of nouns, mostly names of small birds, on which the suffix *-lda* is part of the suffix *-ldai*. The latter suffix and its last component are not registered as such in the literature (note that the component *-i* is present in three same-stem words: *abaaxai*, *jobxoi-*, *xiiüxei*). We cannot find any direct semantic relation to the reciprocal suffix *-lda*, but the material coincidence may be not accidental: probably *-lda* first referred to a multitude of small birds. In Khalkha, nouns without plural marking may have a plural meaning; the meaning of implicit plurality is also contained in the noun *nolo-ldo* ‘breeding period (of birds)’ (B.; it has no underlying word) – as is known, during this period birds flock together. The connection between the meanings of nominal plurality, verbal iterativity and reciprocity has been proposed for a

In conclusion, we would like to point out that the material coincidence of the Mongolic reciprocal suffix *-lda* and the sociative suffix *-ldə* (with the original reciprocal meaning) in the areally similar Tungusic languages is hardly accidental. The reciprocal suffix in most Tungusic languages is *-maat* and its variants, but Manchu has retained the suffix *-ndu* (< *-ldu*) with the reciprocal meaning (see Nedjalkov & Nedjalkov, Ch. 26, §14.2).

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The misinterpretations and errors are our responsibility.

number of languages, e.g. for the Turkic languages (see, for instance, Ch. 26 on Yakut, §14.2). Here is a list of all nouns with this suffix registered in the *Buryat-Russian Dictionary*:

- | | | | |
|-------|----|---------------------|---|
| (132) | a. | <i>boro-ldoi</i> | dimin. 'lark' (cf. <i>bor</i> 'grey'; L. 78) |
| | | <i>gurga-ldai</i> | 'marsh sparrow' (cf. <i>gurga-</i> 'to chirp'; Č. 161) |
| | | <i>piišča-ldai</i> | 'birdie' (cf. <i>piiščana-lda-</i> 'to cheep (of nestlings)'; Č. 371) |
| | | <i>šiišxa-ldai</i> | 'birdie' (<i>šiišxa</i> ?; Č. 726) |
| | | <i>xügsege-ldei</i> | 'wagtail' (<i>xügsege</i> ?; Č. 611) |
| | | <i>xüxe-ldei</i> | 'blue titmouse' (cf. <i>xüxi-</i> 'to make merry'; Č. 636) |
| | b. | <i>abaaxa-ldai</i> | 'spider' (= <i>abaaxaj</i> ; Č. 19) |
| | | <i>abga-ldai</i> | 'mask' (shaman's idol) (cf. <i>abga-</i> 'to treat elders with respect'; Č. 23–4) |
| | | <i>booxo-ldoi</i> | 'brownie', 'ghost' (cf. ? <i>boo-xo</i> 'to bar/block up'; Č. 105) |
| | | <i>jobxo-ldoi</i> | 'man with a cone-shaped head' (cf. <i>jobxoj-</i> 'to be cone-shaped'; Č. 226) |
| | | <i>xüüxe-ldei</i> | 'doll' (cf. <i>xüüxej</i> 'baby, child'; Č. 634). |

Another instance of unexpected, at first glance, use of the suffix *-lda* with a long final vowel, i.e. *-ldaa*, is its use in Khalkha imperative mood forms along with a number of other suffixes for rendering a honorific sense. This usage is most likely related to the meaning 'many' of this suffix. Compare:

- (133) *Suu!* 'Sit down!' → *Suu-ldaa!* 'Sit down, please!'

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B. Verbal reciprocal marker only

CHAPTER 30

Reciprocal and sociative in Tariana

Their genetic and areal properties

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Acknowledgments

References

1. General remarks

1.1 Tariana

Tariana is the only North Arawak language spoken in the Vaupés linguistic area by about 100 people. This area is characterized by an obligatory polylingualism due to marriage patterns based on linguistic exogamy (see Sorensen 1967/1972; Aikhenvald 1996). Other languages spoken in the area belong to the East-Tucanoan family, genetically not related to Tariana. East-Tucanoan languages and Tariana display a striking number of structural similarities due to areal diffusion of patterns, mostly unilateral, from East-Tucanoan to Tariana. There are no lexical borrowings, due to the inhibition on “language mixing” viewed in terms of lexical interference and the borrowing of phonological shape of morphemes. Thus, Tariana is, in many ways, very divergent from other North-Arawak languages, including those with which it is closely related, as far as its grammatical structure is concerned, since it displays a queer combination of genetically inherited morphemes, areally diffused structural patterns and independent innovations, along with symptoms of language obsolescence (see Aikhenvald 1996). As will be shown below, the treatment of reciprocals also reflects this.

Tariana is an endangered language. It is not spoken by children, and younger speakers use this language only when they address older people. The local lingua franca is Tucano, and so the younger Tarianas speak Tucano between themselves and with their spouses and children, though they state that their language of identity is Tariana. This results in a number of grammatical differences between the younger and the older people who speak Tariana. This also concerns the use of morphological reciprocals.

Grammatical characteristics of Tariana are described in Section 2. This section also discusses classification of verbs, verb structure and reflexives. Reciprocals are discussed in Section 3, and sociative serial verb constructions in Section 4. In Section 5 I consider reciprocals and reflexives in Tucano, a representative of East-Tucanoan language family.

1.2 Overview

Tariana has three mechanisms of expressing reciprocal meanings. There is a morphological reciprocal marked on the verb with a suffix (*-kaka*), e.g. (1b). This mechanism is more frequent in old people’s speech. Ambitransitive (labile) verbs can have a reciprocal meaning, when used intransitively, cf. (1c). Sociative serial verb constructions can also acquire

a reciprocal meaning, e.g. (1d). These two mechanisms are frequently used in the younger people's language. In (1a) the verb *-kwisa* 'to hate' is used transitively. Tariana has only subject-oriented "canonical" reciprocals.

- (1) a. *naha na-kwisa wa-na.*
 they 3PL-hate 1PL-OBJ
 'They hate us.'
- b. *naha na-kwisa-kaka.*
 they 3PL-hate-REC
 'They hate each other.'
- c. *naha na-kwisa.*
 they 3PL-hate
 'They hate each other.'
- d. *naha na-siwa na-kwisa.*
 they 3PL-be.together 3PL-hate
 'They hate each other' (or 'They hate (someone else) together.')

Sociative is used to express reciprocal meaning in other languages of the world. It is a typical polysemy found in Austronesian languages (e.g., Lichtenberk, Ch. 36 on To'aba'ita; Moyses-Faurie, Ch. 35 on East Futunan; Bril, Ch. 34 on Nêlêmwa). A comparison with East-Tucanoan languages shows that sociative serial verb constructions with reciprocal meaning evolved in Tariana as a result of areal diffusion from East-Tucanoan languages. East-Tucanoan languages use verb compounding, or verb root serialization, to mark reciprocals and sociatives. The obsolescence of morphological reciprocal found in other North Arawak languages of the region (see Aikhenvald, Ch. 20) but absent from East-Tucanoan is also a recent development in Tariana.

2. Grammatical notes on Tariana

2.1 Typological characteristics

Typologically, Tariana¹ is predominantly head-marking with a few elements of dependent-marking. Constituent order is free, with a strong tendency towards verb-final order.

For all constituent types, Tariana uses case-marking which depends on the discourse structure (Aikhenvald 1994b). For personal pronouns with an animate referent, there is an obligatory object case suffix *-na* which combines with person cross-referencing prefixes; it is used for marking any non-subject constituent. Case-marking clitic *-nuku* is used on any non-subject constituent if it is referential and is going to be a future topic of the narrative, or a conversation. Suffix *-ne* 'agentive', which historically developed from instrumental

1. Materials on Tariana used in this paper were collected during three fieldtrips in 1991, 1994 and 1995. They contain word lists, conversations and around 700 pp. of texts told by the older speaker (Cândido) and younger speakers – his children Graciliano, Jovino, José and Olivia.

Table 1. Cross-referencing (A/S_a) prefixes in Tariana

	SG	PL
1	<i>nu-</i>	<i>wa-</i>
2	<i>pi-</i>	<i>i-</i>
3.NF	<i>di-</i>	
3.F	<i>du-</i>	<i>na-</i>

-ne, is used to mark the subject (A/S) when it is either in contrastive focus or its actions are consequential for the narrative.

2.2 Classification of verbs

Tariana ‘inherited’ a morphological distinction between active and stative intransitive verbs from Proto-Arawak. In Tariana both active intransitive and transitive verbs obligatorily take cross-referencing prefixes, distinguishing three persons and impersonal in singular and three persons in plural. Stative verbs do not take any cross-referencing markers. Active intransitive and transitive verbs have one obligatory prefixal position, so that when prefixed negation *ma-* is used, personal cross-referencing prefixes are omitted, and person/gender/number distinctions are neutralized. Cross-referencing prefixes are given in Table 1.

An important property of Tariana verbs is their transitivity value. In some languages every, or almost every verb is strictly transitive or intransitive; in other languages at least some verbs can have either transitivity value. These verbs are called ambitransitive, or labile (Dixon 1994: 18, 54). All transitive verbs in Tariana are A=S ambitransitive. This means the object NP can always be optionally omitted, as in English ‘to eat’ (‘he eats dinner’ or ‘he eats’), or ‘to knit’. Example (2) illustrates an ambitransitive verb, and (3) an active (S_a-type) intransitive.

- (2) *(a:si) nu-hñā-ka.*
 (pepper) 1SG.A-eat-DECL
 ‘I eat/am eating (pepper).’
- (3) *nu-ruku.*
 1SG.S_a-go.down
 ‘I go downstream.’

Stative (or S_o-type) intransitive verbs do not take any cross-referencing markers:

- (4) *nuha keru-mha.*
 I angry-PRES.NVIS
 ‘I am angry.’

Ditransitive verbs form a subclass of S=A ambitransitives. Their second argument can be either O or dative, e.g., *-a* ‘to give’, *-phyā* ‘to sell’, *-walita* ‘to offer’ (ritual offering); *-wāya* ‘to buy’.

S=O ambitransitives, i.e. verbs similar to English *break* (*I broke the glass* vs *The glass broke*) are rare. The only consistent S=O ambitransitive is *-bueta* ‘to teach; to learn.’² Another verb in the corpus which is sometimes used as an S=O ambitransitive is *-thuka* ‘to break completely (in two parts)’. It is more frequently used as transitive, as in (5), or A=S ambitransitive, as in (6).

- (5) *di-waliki di-thuka-pidana di-sua di-a-pidana.*
 3SG.NF-spine 3SG.NF-break-RMPAST.REP 3SG.NF-stay 3SG.NF-go-RMPASTREP
 ‘He broke his spine.’
- (6) *di-thuka dhimaita, di-hña di-ña-nhi-pidana diha ñaki.*
 3SG.NF-break 3SG.NF.burn 3SG.NF-eat 3SG.NF-stay-IPFV-RMPAST.REP he spirit
 ‘The spirit was breaking, burning, eating (everything he could find).’

The use of it as an S=O ambitransitive is encountered in a text told by a younger speaker (7). In this example the verb *-thuka* is used ambitransitively after it has been used transitively. This may reflect a recent development.

- (7) *di-thuka-kha di-ruku di-a diha-na-ne.*
 3SG.NF-break-away 3SG.NF-fall 3SG.NF-go he-CLF:VERTICAL-AG
 ‘(After the widow broke a branch and managed to hit (the evil spirit) on his penis), it (the penis) was breaking and falling off.’

2.3 Valency changing derivations

Tariana has one valency-increasing derivation, marked with the suffix *-ita*. It is a morphological causative when used with intransitive verbs, e.g., *-musu* ‘to go out’ → *-musu-ita* ‘to make go out’. When used with transitive verbs, it often expresses promotion of an oblique constituent (instrumental, comitative, purpose or locative) into core, e.g., *-wapa* ‘to wait (for sb)’ → *wape-ta* (from *-wapa-ita*) ‘to wait for sb with a ritual offering’; *-wana* ‘to call’ → *-wane-ta* ‘to invite/call to do something’. Another regular way of forming causatives of transitive verbs is via syntactic causatives, or causative serial verb constructions. On the syntax and semantics of morphological and syntactic causatives in Tariana, see Aikhenvald (2000: 145–72).

There is also a passive, and a topic advancing voice (see Dixon & Aikhenvald 1997: 71–113).

2.4 Verb structure

Tariana has a very complicated verb structure compared to neighbouring North Arawak languages (Baniwa of Içana, Warekena, Bare; see Aikhenvald, Ch. 20). There are two types of predicates – simple predicates and serial verb constructions.

2. This verb is one of the few loan words from *Lingua Geral*, or *Nheêngatú*, a creolized version of Tupinambá which used to be spoken in the whole Amazon. This language was gradually replaced by Tucano as a *lingua franca* of the Vaupés region. This unusual property of the verb *-bueta* may be due to its foreign origin.

2.4.1 *Simple predicate structure*

Simple predicates have the following structure:

- Cross-referencing A/S_a prefix or negative prefix *ma-* + verbal ROOT + thematic syllable + the following suffixes:
- Valency-increasing *-ita* ‘causative, applicative’.
- Negative *-kade*.
- Resultative *-karu* (plus purposive mood *-hyu*); or *-ni* ‘topic advancement’, or *-kana* ‘passive’.
- Verb-incorporated classifier.
- Benefactive *-pena*.
- Reciprocal *-kaka*.
- Relativizing and nominalizing affixes (relative and converb *-ri*, past relative *-kari*, nominalizers *-mi*, *-nipe* or a classifier in a derivational function; see Aikhenvald 1994a).

Suffixes are followed by enclitics. Unlike suffixes, (a) enclitics can often be omitted; (b) they preferably go on the verb, but can also go on any focussed constituent; (c) all enclitics (except those marking mood) allow variable ordering; (d) enclitics longer than one syllable have a secondary stress. Tense-aspect-mood and evidentiality markers are not obligatory. Verbal forms without these are understood as past tense non-eyewitness.

The most frequent and functionally unmarked order of enclitics is:

- mood (imperative, frustrative, conditional);
- evidentiality fused with tense;
- Aktionsart;
- aspect;
- degree (augmentative, diminutive, approximative: ‘a little bit’);
- markers of clause sequencing some of which also mark switch reference.

There is no productive verb compounding (unlike East-Tucanoan languages; see Section 5). (8) is an example of a simple predicate with three suffixes and two enclitics.

- (8) *na-matfi-ka-ita-kaka-sita-pidana*.
 3PL-be.bad-TH-CAUS-REC-ANT-RMPAST.REP
 ‘They have apparently transformed each other into something bad.’
 (lit. ‘made each other be something bad.’)

2.4.2 *Serial verb constructions*

Tariana also has productive verb serialization (Aikhenvald 1999: 479–508). Serial verb constructions (SVC) are known to include up to seven verbs. They are strictly contiguous (i.e. no other constituent can intervene between their components). Each component of a SVC is an independent phonological word, and they all receive the same inflection for person, number and gender of A/S_a. All the components of a SVC have the same tense, aspect, mood, evidentiality and polarity value. The order of the components may be fixed or not depending on the construction type. SVC cannot consist of stative verbs only. (9) is an example of a serial verb construction.

- (9) *phe pi-nu.*
 2SG.enter 2SG-come
 ‘Come in!’

2.5 Intransitives and reflexives in Tariana

All the North-Arawak languages of the Upper Rio Negro use the same verbal suffix for reciprocals and reflexives (see Aikhenvald, Ch. 20). The reciprocal suffix, *-kaka*, can be occasionally used to mark reflexives, as shown in (10). This pattern, common for the Arawak languages of the region, but unusual for East-Tucanoan languages, is being lost from Tariana.

- (10) *nuha nu-pisa-kaka-mha.*
 I 1SG-CUT-REFL-PRES.NVIS
 ‘I have just cut myself.’

Examples of this sort are extremely rare. Usually, A=S ambitransitives can acquire a reflexive meaning when used intransitively.

(11) illustrates a transitive use of *-pisa* ‘to cut’. An intransitive use of *-pisa* with a reflexive reading is illustrated with (12). This is a usual way of expressing a reflexive meaning.

- (11) *diwhida na-pisa na-pala-pidana.*
 3SG.NF.head 3PL-cut 3PL-put-RMPAST.REP
 ‘(They fished the snake, took him into a clay basket,) put him, cut his head and put it (there).’
- (12) *maliye-ne nu-pisa-makha-niki.*
 knife-INST 1SG-cut-RCPAST.NVIS-COMPL
 ‘I cut myself with a knife.’

3. Reciprocals in Tariana

3.1 Morphological reciprocals with the suffix *-kaka*

3.1.1 General properties

Morphological reciprocal is marked on the verb, with the suffix *-kaka*. The reciprocal *-kaka* is used on transitive, or ambitransitive verbs, if they have a plural A identical with the O, and the action is symmetrical. (13) illustrates the reciprocal *-kaka* on the verb *-inu* ‘to kill, fight, hunt’. The same verb is used transitively in (14).

- (13) *patfi nawiki desano alia-pidana, diha talia-seri-sini*
 other person Desano be-RMPAST.REP he Tariana-every-also
pa-ita-sina, na-inu-kaka-pidana.
 one-CLF:GNR-RMPAST.ASSUMED 3PL-kill-REC-RMPAST.REP
 ‘One (group of) people was Desano, the other was Tariana, they fought each other.’

- (14) *yawi na-inu-sina.*
 jaguar 3PL-kill-RMPAST.ASSUMED
 ‘They killed a jaguar.’

In (15) *-inu* is used intransitively, being an A=S ambitransitive, as any transitive verb in Tariana (see Section 2.2).

- (15) *na-inu-sina.*
 3PL-kill-RMPAST.ASSUMED
 ‘They were fighting.’

Reciprocal form of *-nalita* ‘to quarrel, scold’ is illustrated in (16). The same verb is used intransitively in (17).

- (16) *di-pumina na-lita-kaka.*
 3SG.NF-because.of 3PL-quarrel-REC
 ‘They quarreled with each other.’
- (17) *kiaku di-nalita.*
 strong 3SG.NF-quarrel
 ‘He scolded (his son) a lot.’

3.1.2 *Expression of reciprocal arguments*

In Tariana, the instrumental case marker *-ne* is used to mark the comitative argument of a reciprocal. This is illustrated in (18), with a reciprocal of *-kolota* ‘to meet’. Instrumental *-ne* appears on *di-we-ri-ne* ‘with his younger brother’. Similar constructions are found in Baniwa of Içana, a closely related North Arawak language (see Aikhenvald, Ch. 20). More than one participant is involved, and this explains plural cross-referencing on the verb.

- (18) *di-we-ri-ne na-kolota-kaka-sina.*
 3SG.NF-younger.sibling-M-INST 3PL-meet-REC-RMPAST.ASSUMED
 ‘A mythical hero met his younger brother.’
 (lit. ‘They met each other with his younger brother.’)

3.1.3 *Morphological reciprocals and language attrition*

Younger speakers of Tariana tend to avoid using morphological reciprocals in *-kaka*. Ambitransitive verbs, used intransitively, tend to acquire reciprocal reading if they have a plural subject. For instance, the older speaker consistently used morphological reciprocal *-kaka* on such verbs as *-nalita* ‘to quarrel, scold’ in (16) and *-kwisa* ‘to hate, scold’ in (19). These verbs have a reciprocal reading in examples from young people’s speech: see (20) and (21).

- (19) *nha nhamépa na-kwisa-kaka na-wa na:-pidana te halite.*
 they two.CLF:AN 3PL-scold-REC 3PL-try 3PL.go-RMPAST.REP until white.CLF:AN
 ‘Thus they did, they scolded each other until it was dawn.’
- (20) *naha na-kwisa.*
 they 3PL-hate
 ‘They hate each other.’

- (21) *ne-se nemhani-ni-se, naha n̄amepa na-nalita-pidana.*
 then-LOC 3PL.walk-REL-LOC they two.CLF:AN 3PL-quarrel-RMPAST.REP
 ‘Then while they were walking, the two of them (tapir and turtle) quarreled with each other’ (there are no other characters in the story to quarrel with).

One of the reasons for this may be that the existence of a morphological reciprocal is not characteristic of other languages of the area – East-Tucanoan languages (see Sections 1.2; 5). Thus, the loss of morphological reciprocal in Tariana is due to language attrition together with areal pressure of East-Tucanoan languages.

3.2 Symmetrical predicates

Some predicates usually acquire a reciprocal interpretation without taking any special marker. In Tariana, this is the case with A=S ambitransitive verbs which permit the interpretation of the participants as having identical, or symmetric relations to each other. This happens only if the A of these verbs is plural, and the O is omitted. Among symmetrical predicates which behave this way are *-naku* ‘to swive, make love’, *-sape* ‘to speak’, *-keta* ‘to meet’.

The verb *-naku*, when used transitively means ‘to swive, make love to sb’, or ‘to put into one’s lap’, as in (22):

- (22) *nuhua-de nu-ri-nuku nu-naku nu-kwa.*
 I-IMMFUT 1SG-SON-TOP.O 1SG-put.on.the.lap 1SG-hang
 ‘(Bring me my son,) I shall put him in my lap (hanging in the hammock)’ (said the ghost to the widow).

When used without a direct object with plural subject it is always understood as a symmetrical predicate ‘to swive each other’; cf. (23):

- (23) *nha n̄hamepa na-ya-dawa-se na-sua-ri-se na-naku na:-ka*
 they two.CLF:AN 3PL-POSS-CLF:ROOM-LOC 3PL-lie-REL-LOC 3PL-swive 3PL.GO-DECL
na-swa-pidana.
 3PL-stay-RMPAST.REP
 ‘They two were swiving in their room in their bed.’

4. Sociative serial verb constructions

4.1 General properties

Serial verb constructions which contain a prefixed verb *-siwa* ‘to be together’ are used to express sociative meaning ‘together with somebody’. In agreement with the properties of serial verb constructions (see Aikhenvald 1999: 479–508), serial constructions with *-siwa* show the same subject constraint; no other constituent can intervene between *-siwa* and the other component, and there is one tense-aspect-evidentiality marker per construction,

as in (27) or (28). The order of the components in serial verb constructions with *-siwa* is free; *-siwa* is most often the first component in serial constructions.

-Siwa tends to occur mostly in serial verb constructions, but it sometimes can be used as an independent predicate ‘to be together’, as in (24). This sentence does not contain a serial verb construction because *thuya* ‘all’ comes in between *na-sape-pidana* ‘they talked’ and *na-siwa* ‘they were together’.

- (24) *naha itfida-ne na-sape-pidana thuya, na-siwa.*
 they turtle-AG 3PL-speak-RMPAST.REP all 3PL-be.together
 ‘All the turtles spoke, they were all together.’

Prefixless stative verbs cannot form a sociative construction with the verb *-siwa*. This may be due to a more general restriction on the use of stative verbs in serial constructions (see Section 2.4.2).

4.2 Reciprocal meaning

Serial verb constructions with the verb *-siwa* are often used in reciprocal meaning with transitive verbs, especially in younger people’s speech, e.g. (25).

- (25) *São Gabriel-se wa-siwa wa-keta.*
 São Gabriel-LOC 1PL-be.together 1PL-meet
 ‘We all shall meet (each other) in São Gabriel.’

In elicitation at earlier stages of fieldwork, younger speakers often gave constructions with *-siwa* to translate reciprocal constructions from Portuguese, and used Portuguese reciprocal-reflexive *se* to translate *-siwa* constructions, e.g.:

- (26) *tfinu na-siwa na-hwā-ka-nihka.*
 dog 3PL-be.together 3PL-bite-DECL-RCPAST.INFR
 ‘Dogs are biting each other.’

4.3 Other meanings

4.3.1 Sociative meaning

The verb *-siwa* can have a sociative meaning with intransitive verbs, as in (27). This example comes from a traditional story told by the older speaker.

- (27) *nha-nāna-pe alia-pidana na-siwa neka-pidana.*
 they-PEJ-PL existential-RMPAST.REP 3PL-be.together 3PL.laugh-RMPAST.REP
 ‘They were there, the naughty ones (Tariana’s forefathers), they laughed together.’

They can also have a sociative meaning with some transitive verbs, as illustrated in (28) (from an older man’s story), and (29) (from a story told by a younger man). However, the sociative meaning seems to be restricted to verbs which do not occupy a high position on

the transitivity hierarchy (Hopper and Thompson 1980). The verb *-ira* ‘to drink, consume without chewing’ is a typical example.³

- (28) *payaru na-ira-pidana na-siwa.*
 whisky 3PL-drink-RMPAST.REP 3PL-be.together
 ‘They drank whisky together.’

This usage is also found in younger people’s speech; cf. (29) and (30):

- (29) *waha wa-sape-naka wa-siwa talia yarupe.*
 we 1PL-speak-PRES.EYEW 1PL-be.together Tariana thing
 ‘We are speaking Tariana all together.’
- (30) *waha ehkwapi-pe hīda-pada ma-nu-kade-ka wa-siwa.*
 we day-PL every-SUFF NEG-COME-NEG-DECL 1PL-be.together
 ‘We do not come together (lit. come-be together) every day.’

4.3.2 Reflexive-benefactive meaning

Serial verb constructions with *-siwa* may have a benefactive interpretation. (31) is a rather rare example.

- (31) *nuha pa-ita malie nu-wayā-ka nu-siwa.*
 I one-CLF:OBJ knife 1SG-buy-DECL 1SG-be.together
 ‘I bought a knife for myself.’

A serial verb construction with *-siwa* can be understood as having a reflexive meaning. This is very rare. (32) comes from a story about the magic power of evil spirit’s shirt told by a younger speaker. However, this example is ambiguous, because *-siwa* can also be understood as emphasizing the identity of the subject (see 4.3.3), and transitive verb *di-sole* ‘to take off’ as unmarked reflexive. I have mentioned in Section 2.5 that any transitive verb in Tariana can acquire a reflexive reading if used intransitively.

- (32) *di-siwa-pidana di-sole diha-maka.*
 3SG.NF-be.together-RMPAST.REP 3SG.NF-take.off he-CLF:CLOTH
 ‘It (the shirt) took itself off (from the man).’

4.3.3 Emphatic meaning

Serial verb constructions with the verb *-siwa* are widely used by all the speakers to emphasize the identity of the subject, similarly to English ‘self’ in *you yourself do it*. This is illustrated with (33). Note that third person singular non-feminine cross-referencing prefix is used independently of the number of the subject if it has an inanimate referent.

3. Verbs of eating and drinking form a separate class of transitive verbs in all North Arawak languages. They share some morphological properties with intransitive verbs. For instance, unlike transitive verbs, they can have morphological causatives, e.g. Tariana *-ira* ‘to drink’, *-ireta* ‘to make drink’. See Section 2.3.

- (33) *tiya-pe kwe-peri-tupe di-siwa-pidana di-kolo-ka*
 plate-PL what-PL-PL.DIM 3SG.NF-be.together-RMPAST.REP 3SG.NF-roll-SEQ
di-ruku di-a uī-se.
 3SG.NF-go.down 3SG.NF-go port-LOC
 ‘All the little plates (lit. ‘whatever little plates’) went down to the port by themselves.’ (lit. ‘be together-roll.’)

(34) is an idiomatic expression; the hearer is supposed to take all the responsibility for the undesired action, i.e. ‘to know for themselves’.

- (34) *i-siwa i-yeka.*
 2PL-be.together 2PL-know
 ‘You know for yourselves’ (but I have told you that you should not be doing this).

4.4 Morphological reciprocals and sociative serial verb constructions

The reciprocal marker *-kaka* can be used in a sociative serial construction marked with *-siwa* ‘to be together’. The reciprocal suffix *-kaka* goes on the verb *-siwa*, since it is most frequently the first component of the serial verb construction.

The meaning of a serial construction consisting of *-siwa-kaka* + another predicate(s) is ‘do something all together to one another’. Sociative and reciprocal meanings are combined. These constructions are used to emphasize that every one of the participants is, or was involved in a reciprocal action. This use is restricted to serial constructions with transitive verbs. The subject is always plural.

This construction type is found in the speech of both old and young people. (35) comes from a narrative told by a younger speaker.

- (35) *pa:piu-pidana itfiri na-siwa-kaka na-ni.*
 one-CLF:TIME-RMPAST.REP animal 3PL-be.together-REC 3PL-do
 ‘Once the animals did (like this) together to one another.’

Simple morphological reciprocal which involves just two people doing something to each other cannot be marked with *-siwa*. This is illustrated with (36), from a traditional story told by an older speaker. This example describes a tobacco-smoking ritual where everybody participates in talking to each other, and so both sociative serial verb construction and morphological reciprocal are employed (*na-sape-kaka na-siwa*). However, only two people are involved in exchanging cigars – literally, ‘making each other smoke tobacco’. This is why *na-siteta-kaka* (and not *na-siwa-kaka na-siteta*) is used.

- (36) *hiku-nhina na na-sape-kaka na-siwa yema*
 thus-RMPAST.RPRT 3PL.go 3PL-talk-REC 3PL-be.together tobacco
na-siteta-kaka.
 3PL-smoke.CAUS-REC
 ‘So they talked to each other all together, they made each other smoke.’

4.5 ‘Doubling’ of reciprocal *-kaka* in sociative serial verb constructions

The reciprocal suffix *-kaka* can be used twice on both components of a serial verb construction with *-siwa*, to emphasize the reciprocal character of the action and the participation of everybody in it. (37) summarizes a story about Tariana’s wars with a neighbouring tribe.

- (37) *na-siwa-kaka na-inu-kaka.*
 3PL-be.together-REC 3PL-kill-REC
 ‘All (Tariana and Desano) fought all together.’

5. Reflexives and reciprocals in Tucano (East-Tucanoan)

5.1 Typological characteristics

East-Tucanoan languages in close contact with Tariana are Tucano, Guanano-Piratapuya and Desano. Tucano is the main language of communication, a kind of lingua franca of the region, with approximately 6000 speakers (Aikhenvald 1996). When not marked otherwise, Tucano examples come from my field work materials. All East-Tucanoan languages are structurally very similar, though not mutually intelligible. This structural similarity is due both to genetic affinity and to the patterns of indirect structural diffusion in the predominantly East-Tucanoan linguistic area of the Vaupés river basin.

All East-Tucanoan languages are suffixing, predominantly head-marking with a few characteristics of dependent marking. Most transitive verbs in Tucanoan languages are A=S ambitransitives and intransitives (see West 1980:81–83; Ramirez 1997). Transitive verbs can be derived from intransitives by the addition of a causative suffix *-o*. According to West (1980:83), some intransitive verbs can have a reflexive-like meaning, e.g., *ʔa* ‘to bathe (oneself)’, cf. causative *ʔo* ‘to make sb bathe themselves’. The only transitivity reducing operation is passivization (Ramirez 1997).

In Tucano reflexive meaning is mainly conveyed with the help of a reflexive pronoun, also used to emphasize the identity of the agent, or a patient. Reciprocal and sociative meanings are expressed with the help of verb compounding. Typologically, the use of verb compounding to mark reciprocals is an extremely rare phenomenon.

5.2 Reflexives

Tucano, like all the East-Tucanoan languages, has no special reflexive or reciprocal verbal derivations. Reflexive meanings are conveyed with the help of special pronominal forms. Reflexive pronominal *ba(h)sɨ, basi, basu* ‘self’⁴ is used in reflexive meaning; see (38) and (39).

4. Here I preserve different orthographies used by West (1980), Brüzzi (1967), and Ramirez (1997).

- (38) *yɨ bahsu koe.*
 I self wash
 ‘I wash myself.’ (Brüzzi 1967:166)
- (39) *sɛbɛ basi pikô-do ba’â-bi.*
 pacca self tail-SUFF eat-PRES.EYEW.M.3SG
 ‘Pacca eats its own tail.’ (Ramirez 1997:116)

Bahsi ‘self’ can also have emphatic meaning, as in (40).⁵

- (40) *ko bahsu-pe-le wehêa-mo.*
 she self-EMPH-TOP kill-3SG.F
 ‘She killed herself.’ (Brüzzi 1967:166)

5.3 Reciprocals and verb compounding

Reciprocal constructions in Tucano are formed with verb root compounding. Verb compounding is used to express a large variety of meanings, including valency increase. (See Gomez-Imbert 1988). Verb compounding, or verb root serialization, is a subtype of serial verb constructions (see Durie 1997).

5.3.1 Verbal compounds with the postposed verb *poteõ* ‘equalize’

Tucano uses compounded constructions with either of the two verbs, *poteõ* ‘to equalize, retribute, counter-balance’ and *amê* ‘to do to each other, retribute’. According to the explanations given by my consultant, Alfredo Fontes, compounds with *poteõ* mean ‘the equal amount of action on both sides’; cf. (41).

- (41) *mali iyã-poteõ-lã we.*
 we look-equalize-PL do
 ‘We are looking at one another’ (i.e., you are looking at me and I am looking back an equal number of times).

Poteõ can be used in compounding with transitive and intransitive verbs, and its meaning is ‘to do something equally’. *Poteõ* can be with intransitive verbs, e.g. *wihya* ‘to go out’ → *wihya-poteõ* ‘to go out from both sides’ (Brüzzi 1967:317); *õma* ‘to run’ → *õma-poteõ* ‘to run parallelly’; or with transitive verbs, e.g. *wehe* ‘to pull’ → *wehe-poteõ* ‘to pull from both sides’ (Brüzzi 1967:317), cf. (42):

- (42) *yɨ mi-le mahsi-poteõ.*
 I you-TOP know-equalize
 ‘I know as much as you do.’

Poteõ is often used in comparatives of equality:

5. Reflexive and emphatic meanings can be ambiguous. The following example comes from Ramirez (1997:116):

- (1) *kɨ basi wehêa-bi*
 he self kill-RCPAST.EYEW.M.3SG
 ‘He killed himself’, or ‘He himself killed someone else.’

- (43) *yɨ̃ miĩ-ḷe ʔm̃ia poteō.*
 I you-TOP high equalize
 ‘I am equal to you in height.’ (lit. ‘I am as tall as you are.’)

5.3.2 Verbal compounds with the preposed verb *-amē* ‘to do to each other, retribute’

Verbal compounds with *amē(-ni)* ‘to do to each other, retribute, reward’ mean ‘to do to each other, do back’, without necessary equality:

- (44) *ate amē-kē-ḷa we-ma.*
 this.one.PL do.to.each.other-hit-PL do-PL
 ‘These ones hit each other.’

If the identity of the subject has to be emphasized, *amē(-ni)* can co-occur with *bahsi* ‘self’, as in (45).

- (45) *na bahsɨ amēni koea-ma.*
 they self REC wash-PL
 ‘They wash each other themselves.’

According to Brüzzi (1967:279), *amē* can also be used to show that A=O and to emphasize the identity of the subject, and in this case it co-occurs with *bahsɨ*, *ba(h)su* with a non-plural subject, e.g.:

- (46) *kā bahsu amē-wehēa-pɨ.*
 he self REFL-kill-EMPH
 ‘He (himself) killed himself.’

Amē and *poteō* can co-occur, e.g.:

- (47) *amē-kē-poteō-ma.*
 do.to.each.other-hit-equalize-PL
 ‘They hit each other (equally)’ (i.e., one hit the other twice, and the other did so twice).

Verb compounding with *poteō* and *amē* creates intransitive verbs; thus, the two reciprocals in Tucano can be considered as valency reducing operations.

5.3.3 Sociative verbal compounds

Verb compounding is also used to express sociative meaning (see Gomez-Imbert (1988) for Tatuyo and Barasana); cf. Tucano (Brüzzi 1967:314):

- | | |
|------------------------|------------------------|
| (48) <i>dara-peti.</i> | (49) <i>buhi-peti.</i> |
| work-do.all | laugh-do.all |
| ‘All (people) work.’ | ‘All (people) laugh.’ |

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Reciprocal constructions in Bolivian Quechua

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1. Introduction

1.1 The Quechua languages

The Quechua languages are spoken in the central Andes in South-America.¹ Today Quechua is under strong pressure from Spanish in all of the three Andean countries in which we find a considerable part of the population which has command of these languages: Ecuador, Peru, and Bolivia. Among historical linguists studying the Andes region (Adelaar 1979; Cerrón Palomino 1987; Torero 1964) it is generally assumed that the origin of this language has to be found in the coastal area of central Peru, where the greatest dialect variation is found. There we find a number of dialects (Quechua I) which differ considerably from the dialects spoken to the north, from northern Peru (Quechua IIa) up to Ecuador and southern Colombia (Quechua IIb), and to the south, from southern Peru to northern Argentina (Quechua IIc). The entry on Quechua in the *International Encyclopedia of Linguistics* (IEL 1992, Vol. 2) mentions a total of 46 different dialects. All of these dialects share much of their vocabulary and are structurally comparable, at least from a linguistic point of view. However, superficially many of them differ to such an extent that they are not mutually intelligible.

It is assumed that the Quechua language spread into other parts of Peru when Quechua speaking groups began to expand from their original habitat around the year 500. In the 15th century the expansion of the Cuzco variant began, since it was adopted by the Incas as the lingua franca for the territories they conquered. Most historical linguists agree that the expansion of Quechua to the south went hand in hand with the expansion of the Inca Empire, but the situation in the north is less clear. It may well have been the case that some variant of Quechua was already spoken there as a lingua franca long before the actual Inca conquest.²

1. This article is an elaboration of ideas presented in my thesis (van de Kerke 1996) on the order and interpretation of verbal derivational suffixes in Bolivian Quechua, based on fieldwork in Tarata, a small town near Cochabamba, Bolivia. That research project was financed by the Netherlands Foundation for the Advancement of Tropical Research (WOTRO), a subdivision of the Netherlands Foundation for Scientific Research (NWO). I thank Pieter Muysken, Willem Adelaar, and Leonid Kulikov, for their comments and suggestions. I would like to express my gratitude to Vladimir Nedjalkov. Without his suggestions for improvement of both the content and the presentation, this article would not have been the same.

2. The dispersion of Quechua by the Incas was a short-lived and probably superficial affair. It was only in the second half of the fifteenth century that the Inca expansion was in full swing and around 1530 the Inca Empire collapsed when the invading Spaniards under Pizarro took Cuzco. A hundred years to implant a language is a relatively short period, which is clearly shown by the fact that Quechua itself was able to withstand the pressure of Spanish for over 400 years. Apart from that we have to realize that the language only served as a lingua franca, which in the southern part of the Inca empire was in competition with other languages: Puquina, Uru-Chipaya and Aymara, a language which also originates from the Peruvian coastal area and with which Quechua has been in close contact for such a long time that both languages show a remarkable morphological and syntactic similarity (Cerrón Palomino 1994). This overlap is ascribed by some linguistic researchers to genetic relatedness, while others ascribe it to convergence as the outcome of Sprachbund phenomena (Adelaar 1986; Cerrón Palomino 1987; Hardman

In far too many cases data from Quechua are presented in the linguistic literature as if it were one language, instead of a continuum of dialects with at least as much internal variation as the Romance languages (Muysken 1988). I am mainly concerned with the characteristics of the reciprocal construction in the southern Quechua (IIc) dialects, and especially with Bolivian Quechua. Unless explicitly mentioned, the term Quechua refers to these southern Quechua (IIc) dialects: Cuzco and Bolivian Quechua. Another main southern Quechua (IIc) dialect, Ayacucho Quechua, differs in at least one relevant aspect from these dialects, which will be treated in Section 9.

1.2 Overview

Quechua is an agglutinative language. Among others, the concepts of reflexivity, reciprocity, benefactive, causative and assistive-comitative are marked by means of suffixes on the verb, all of them productively used. There is no nominal reflexive or reciprocal marker of the type ‘oneself’ or ‘each other’.³ Reciprocal marking only applies to verbal bases.

The basic reciprocal construction is subject-oriented. Like reflexive marking, it applies to verbs that express an action in which two animate entities are involved. Both construc-

1985). Mannheim (1991) sketches a picture in which to the south of the Inca capital Cuzco these four southern Andean languages were interspersed in small isolated pockets. At the end of the sixteenth century this was still the prevailing pattern in the Charcas province (today’s Bolivia), as we may conclude from Francisco Toledo’s report to the Spanish king (Bouysson-Bassade 1975). In the southern Andes region Quechua, together with Aymara and Puquina, was accorded the status of *lengua general* ‘official language’, and served as a language for conversion. This has helped enormously to diffuse the Quechua language in the centuries after the conquest. On the basis of the census of 1992 Albó (1995) reports 1,8 million Quechua speakers for Bolivia (400,000 mono-linguals) and 1,2 million Aymara speakers (160,000 mono-linguals). Although all countries with a Quechua speaking minority have accorded Quechua the status of an official state language (Bolivia only quite recently), the mono-lingual Quechua speaker becomes ever more rare and can only be found in the remote parts of the countryside.

3. Quechua has a noun *kiki*, obligatorily marked for person, that is often translated as ‘self’, but which mainly serves as a subject modifier with the meaning ‘in person’:

- (i) *Pedru kiki-n maylla-wa-rqa.*
 P. self-3SG wash-1OBJ-3SG.PAST
 ‘Peter in person/himself washed me.’

The nominal suffixes *-pura* and *-kamalla* indicate that the set to which one refers is homogeneous. All members of the set have the same relevant characteristic, cf. (ii), and for that reason they can be easily used in reciprocal contexts, cf. (iii):

- (ii) *warmi-pura-lla taki-sa-nku.*
 woman-COLL-DEL sing-DUR-3PL
 ‘It is only among women that they are singing.’
- (iii) *warmi-pura-lla much’a-na-ku-sa-nku.*
 woman-COLL-DEL kiss-REC-REFL-DUR-3PL
 ‘Only among women they are kissing each other.’

tions express that an action, which in the underlying form is directed at another person, is directed at the subject itself. Reflexives are formed by means of suffixation with *-ku*, reciprocals by means of suffixation with *-na-ku* (an affix combination containing reflexive *-ku*):

- (1) a. *wawa-kuna alqu-ta maylla-sa-nku.*
 child-PL dog-ACC wash-DUR-3PL
 ‘The children are washing the dog.’
 b. *wawa-kuna maylla-ku-sa-nku.*
 child-PL wash-REFL-DUR-3PL
 ‘The children are washing themselves.’
 c. *wawa-kuna maylla-na-ku-sa-nku.*
 child-PL wash-REC-REFL-DUR-3PL
 ‘The children are washing each other.’

Apart from transitive verbs that select a direct object as in (1), subject-oriented reciprocals can be formed on the basis of intransitive and transitive verbs that select an oblique object. Both reflexive and reciprocal marking lead to a decrease in valency of the derived verb, with the exception of the possessive construction, to be treated in 4.1.1.2 and 4.2.1.2. Like reflexives, reciprocals are strictly subject-oriented in underived constructions. For a reciprocal relation to hold, the set over which the subject of a reciprocal verb predicates must be plural, by definition. If the subject refers to a homogeneous set, it is marked by means of a plural marker as in (1c), which can be modified by a numeral or a quantifier. If the subject refers to a heterogeneous set, it is expressed by means of a coordinative construction where all or only the latter of the constituents is marked with the case marker *-wan*. This latter construction type can lead to reciprocal constructions with a singular subject, to be treated in 3.2.

Reciprocal formation interacts in a number of ways with the valency increasing suffixes causative *-chi*, assistive *-ysi*, and benefactive *-pu*, and with the valency decreasing suffix reflexive *-ku*. With the exception of reciprocal causatives formed by means of *-na-chi* (cf. (2) below) object-oriented reciprocals are impossible to construe in Quechua since reflexive *-ku*, which is a constituent part of the reciprocal marker, is strictly subject-oriented.

In Bolivian Quechua, the suffix *-na-ku* is not merely used for the expression of a reciprocal relation between the subject and a direct, indirect, or oblique object. In different sections its use in sociative, anticausative, and “chain” interpretations will be addressed.

2. The grammatical system of southern Quechua

As has been said, Quechua is morphologically agglutinative. Consider a complex nominalized verb in which individual, clearly defined, morphemes add particular meanings to the verb:

- (2) [*qan*] [*wawa-kuna-ta*] *maylla-ki-pa-na-rpari-chi-na-yki.*
 you child-PL-ACC wash-ITER-REC-INNT-CAUS-NR-2SG
 ‘You should definitely make them (children) wash each other again.’

The root *maylla-* ‘wash’ is modified by the repetitive marker *-kipa* and the reciprocal marker *-na*. The valency of the resulting predicate ‘wash each other again’ can be expanded by means of the causative marker *-chi*, which is modified by the intentional marker *-rpari*. Finally the nominalizing suffix *-na*, which is used to form an obligational construction, and the second person subject marker *-yki* are attached. As such, this derived verb form can be used as a complete sentence, without the expression of one single nominal constituent (‘you’ and ‘the children’) as in (2).

2.1 Sentence structure, word order. General characteristics

Quechua is head final. In principle all complements precede the verb. This is obligatory in subordinated clauses, but in main clauses the order of the constituents is relatively free since Quechua relies on case marking for the interpretation of nominal constituents:

- (3) *Tarata-manta apa-mu-rqa-ni sara-ta.*
 T.-ABL carry-BIL-PAST-1SG corn-ACC
 ‘I brought the corn from Tarata.’

Subordinated clauses are formed in Quechua by means of a nominalized clause (Lefebvre & Muysken 1988) as in (4a), or by means of a switch reference construction, as in (4b):

- (4) a. *qan-wan Cliza-man ri-saq aycha-ta ranti-na-paq.*
 you-COM C.-ALL go-1SG.FUT meat-ACC buy-NR-BEN
 ‘I will go with you to Cliza to buy meat.’
 b. *chakra-pi llank’a-qtí-yki puñu-sa-rqa.*
 field-LOC work-DS-2SG sleep-DUR-3SG.PAST
 ‘While you were working in the field, he was sleeping.’

The switch reference construction is adverbial and does not have a clear tense interpretation. It indicates whether the subject of the main clause and the subordinated clause are identical (Same Subject: *-spa*) or not (Different Subject: *-qti*). Nominalized clauses are typically used as verbal complements and the nominalizing elements, that are also used to form relative clauses, have their own tense specification which is interpreted relative to the tense in the matrix clause: *-q* for “subject-oriented”, *-sqa* for “realized”, *-na* for “unrealized”, and *-y* for “infinitive”. To the left of the nominalizing element we are in a verbal, to the right of it we are in a nominal domain: person markers take the form of the nominal person paradigm and the whole nominalized clause can be marked with case.

2.2 Case relations. Possessivity

I distinguish structural case and semantic case. Structural case is assigned to a nominal constituent in a certain structural position, such as *-ta* in (3), and there is no direct link with the underlying thematic role of an argument, while semantic case is the expression of an underlying thematic role, such as *-man*, *-wan*, and *-pi* in (4).

- (5) Structural case:
- | | | |
|--------|------------|---|
| -Ø | nominative | agent, experiencer, patient, goal (cf. (1)) |
| -ta | accusative | patient, path, experiencer, agent (cf. (1a), (3)) |
| -q/-pa | genitive | possessor, agent, experiencer (cf. (6)) |
- Semantic case:
- | | | |
|--------|-------------|--|
| -man | allative | goal, direction, experiencer (cf. (4a)) |
| -manta | ablative | source, subject matter (cf. (3)) |
| -wan | comitative | comitative, instrument, agent (cf. (4a)) |
| -pi | locative | location (cf. (4b)) |
| -paq | benefactive | benefactive, purpose (cf. (4a)). |

In possessive phrases, which include certain types of nominalized clauses, the possessor is marked with genitive case. The possessed agrees with the possessor in person and in number (optional):

- (6) *Mamani-kuna-q wasi-nku.*
 M.-PL-GEN house-3PL
 ‘The house of the family Mamani.’

2.3 Verb classes

Quechua has the standard verb class types: intransitive verbs that do not, and transitive verbs that do select a direct object marked with accusative case. Both intransitives and transitives may select an oblique object which is expressed by means of a subcategorized case marker. The ditransitive verbs form a sub-group of the latter class. They select a complement with the case marker *-man* ‘allative’, which is the unmarked target for reflexive, object, and reciprocal marking, since it refers to an animate entity.

- | | | | |
|-----|--------------------------|------------------|------------|
| (a) | one-place intransitives: | <i>llank’a-</i> | ‘to work’ |
| (b) | two-place intransitives: | <i>qhapa-ku-</i> | ‘to stay’ |
| (c) | two-place transitives: | <i>maylla-</i> | ‘to wash’ |
| (d) | three-place transitives: | <i>apa-</i> | ‘to carry’ |
| (e) | ditransitives: | <i>haywa-</i> | ‘to give’. |

2.4 Subject and object agreement

Quechua has a fully articulated agreement system for subject and object marking and, as often is the case in such languages, we find extensive pro-drop. Person marking is based on the standard six person system plus a form referring to first (speaker) and second person (person addressed): the first person plural inclusive. Subject marking in most of these paradigms is quite regular and highly comparable on main tense verbs and on nouns, nominalizations, and nominalized and adverbial clauses:

(7) Main Tense Subject Agreement	non-Main Tense Subject Agreement
<i>-ni</i> 'I' [+1,-2/SG]	<i>-y</i>
<i>-nki</i> 'you' [-1,+2/SG]	<i>-yki</i>
<i>-n</i> 'he' [-1,-2/SG]	<i>-n</i>
<i>-nchis</i> 'we' (incl.) [+1,+2]	<i>-nchis</i>
<i>-yku</i> 'we' (excl.) [+1,-2/PL]	<i>-yku</i>
<i>-nkichis</i> 'you' [-1,+2/PL]	<i>-ykichis</i>
<i>-nku</i> 'they' [-1,-2/PL]	<i>-nku</i>

Reference to first and second person objects can be expressed by means of an object marker on the verb.⁴ First person object marking is quite regular and is realized by means of the suffix *-wa*. The expression of the interaction between a first or third person subject and a second person object is realized by means of one indivisible morpheme: the subject-object transitions (subject → object) *-yki* 1SG → 2SG 'I to you', and *-sunki* 3SG → 2SG 'he to you'.

2.5 Tense

Quechua has four simple tense paradigms and a number of compound tenses. The simple are Present, Past, and Sudden Discovery (which has among others the function of narrative past) and Future. Present is not overtly marked, while Past and Sudden Discovery are formed by addition of an affix, respectively *-rqa* and *-sqa*. The expression of Future tense is irregular. The compound tenses are a potential, a habitual, and an obligational construction. Quechua can form imperatives both for second and for third person. Durative aspect is expressed by means of the suffix *-sa*. The basic order of the durative, the inflectional, the object and subject markers is strict and follows the following format:

(8) durative – object marker – tense – subject marker.

2.6 Verbal derivation

The order of derivational suffixes is, to some extent, variable. Roughly speaking we may distinguish a number of affix clusters from left to right: verbal modifiers (local distribution, iterativity), adverbial modifiers (representing the way in which the action is performed), higher verbs, and suffixes interacting with argument expression:

- (9) a. Verbal modifiers
-kipa iteration, diminutive (cf. (2))
-paya frequency

4. The theoretical question whether third person objects have to be presented by a zero-morpheme has not yet been settled, but it is not obligatory to express third person objects by means of a noun or a pronoun, when their reference can be retrieved from the context. The non-appearance of a grammatical object is quite common and such cases are not interpreted as reflexive or reciprocal as we find in English, where the non-appearance of a direct object is ungrammatical with the exception of a small class of verbs which allow such object deletion with a reflexive or reciprocal interpretation: *John shaves, John and Mary kissed*. In Quechua such sentences are interpreted with a third person object, disjoint in reference from the subject.

- raya* resultative (Section 2.6.2.3)
- ykacha* dispersion, distributive of place.
- b. Adverbial modifiers
 - yku* intensifying, inward motion (Section 2.6.1.4)
 - rpari* intended action, rapidly (cf. (2))
 - rqu* incentive (with respect) (cf. (30))
 - ra* distributive, one by one
 - ri* implorative, inceptive, minimizer (cf. (11)).
- c. Higher verbs
 - chi* causative (cf. 2.6.1.1)
 - ysi* assistive (cf. 2.6.1.2)
 - naya* desiderative: ‘feel like’, ‘be at the point of’.
- d. Argument expression
 - na* reciprocal (cf. 2.6.2.2)
 - ku* reflexive (cf. 2.6.2.1)
 - mu* movement towards or away from speaker, bi-location (cf. (3))
 - pu* benefactive, regressive, stative result (cf. 2.6.1.5).

The verbal modifiers have to be realized in immediate post-root position and are rarely combined. The suffixes *-ku*, *-mu* and *-pu* are often combined, they must be realized in this order, and always occur in final position. Some of the elements of the intermediate groups, and the reciprocal marker *-na* in particular, can be realized in either order, sometimes with a concomitant difference in interpretation. It is here that we find considerable variation, even between the closely related southern Quechua dialects (van de Kerke 1996).

2.6.1 Valency increasing means

Quechua has four affixes which increase the valency of the verb they are attached to. Two of them, the higher verbs causative *-chi* and assistive *-ysi*, add an external argument to the arguments that are conceptually associated with the base verb. Although there are semantic restrictions, they can be added to all verb classes mentioned in Section 2.3, with a fully predictable interpretation. The other two, inward motion *-yku* and benefactive *-pu*, raise the status of an adjunct to that of an internal argument, and interact with the conceptual structure of the base verb to which they are attached.

2.6.1.1 Causative. When *-chi* is combined with intransitive base verbs, the Causee (the embedded subject) shows up with accusative case. However, the Causee in causatives based on transitive verbs shows up with semantic case, *-wan* when it is an agent, *-man* when it is an experiencer. Both the Causee and the underlying object may be the target for object marking. When a transitive base verb has been intransitivized as a result of reciprocal or reflexive formation, the Causee is marked with accusative, cf. (2)).

2.6.1.2 Assistive/comitative. Case marking in assistive constructions differs from that in causative constructions treated in the preceding section: the subject of the embedded clause, the person assisted, shows up with accusative case, both in combination with intransitive and transitive bases. With the latter verbs we thus end up with two arguments

marked with *-ta*. In the assistive construction only the embedded subject can be the target for object marking.

The basic meaning of *-ysi* ‘assist’ can easily be broadened to a comitative interpretation, since the person assisting and the person assisted together perform the action expressed by the underlying verb. With verbs like *riy* ‘to go’ and *puriy* ‘to walk’, the interpretation of *-ysi* is then not ‘assist’ but ‘accompany’:

- (10) a. *Pedru noqa-wan Tarata-man ri-n.*
 P. I-COM T.-ALL go-3SG
 ‘Peter goes with me to Tarata.’
 b. *Pedru [noqa-ta] Tarata-man ri-ysi-wa-n.*
 P. I-ACC T.-ALL go-ASST-1OBJ-3SG
 ‘Peter accompanies me to Tarata.’

With verbs that express desirable actions like ‘eating’ and ‘drinking’, *-ysi* expresses the sharing of goods:

- (11) *Maria, qowi-s-ta mikhu-ysi-ri-wa-y.*
 M. guinea.pig-PL-ACC eat-ASST-IMPL-1OBJ-IMP
 ‘Maria, please share (help to eat) the guinea pigs with me.’

2.6.1.3 *Combining causative and assistive/comitative.* The valency increasing higher verbs can be combined in either order with a difference in interpretation and case marking. Compare (12a) and (12b):

- (12) a. *[noqa-wan] Pedru mama-y-ta ñaña-y-ta*
 I-COM P. mother-1SG-ACC sister-1SG-ACC
maylla-ysi-chi-wa-rqa.
 wash-ASST-CAUS-1OBJ-3SG.PAST
 ‘Peter made me help my mother to wash my sister.’
 b. *[noqa-ta] Pedru mama-y-wan ñaña-y-ta maylla-chi-ysi-wa-rqa.*
 I-ACC P. mother-1SG-COM sister-1SG-ACC wash-CAUS-ASST-1OBJ-3SG.PAST
 ‘Peter helped me to make my mother wash my sister.’

2.6.1.4 *Inward motion.* In its directional interpretation *-yku* indicates motion into a place. It can be combined with motion verbs that subcategorize for a directional argument to change the meaning from ‘to’ to ‘into’, but also with verbs that do not specify a directional argument in their conceptual structure:

- (13) *simi-lla-y-man sup'i-yku-wa-sqa.*
 mouth-DEL-1SG-ALL fart-INW-1OBJ-3SG.SD
 ‘He/she farted into my mouth.’

In its underived form *sup'iy* ‘to fart’ does not allow a complement marked with *-man*. However, ‘farts’ may enter somewhere and the attachment of *-yku* not only licenses the expression of the directional argument, but raises it to the status of an internal argument that can be referred to by means of an object marker.

2.6.1.5 Benefactive. Benefactive arguments are marked by means of the case marker *-paq*. When reference is made to a third person beneficiary, affixation of the verbal suffix *-pu* is optional, cf. (14a). In the case of first and second person beneficiaries, affixation of *-pu* is compulsory, which in turn leads to obligatory object marking as in (14b), where the second person beneficiary must be referred to by means of an object marker:

- (14) a. [noqa] Ana-paq kancha-man q'ipi-ta apa(-pu)-saq.
 I A.-BEN square-ALL burden-ACC carry-(BEN)-1SG.FUT
 'I will carry the burden to the square for Ana.'
- b. [qan-paq] Ana kancha-man q'ipi-ta apa-pu-sunki.
 you-BEN A. square-ALL burden-ACC carry-BEN-3SG→2SG
 'Ana carries the burden to the square for you.'

2.6.2 Valency decreasing means

When the valency of a verb is decreased, one of its arguments cannot be syntactically expressed. This holds for reflexives and reciprocals, with the exception of their "possessive" variants to be treated in 4.1.1.2 and 4.2.1.2, since their syntactic subject is associated with two arguments. It also holds for a number of constructions in which the syntactic realization of the external argument is blocked.⁵ Such agentless constructions will be treated in 4.1.2. With the exception of the suffix *-raya*, which is used to derive resultative intransitives from transitive verbs, the valency decreasing processes involve the suffix *-ku*.

2.6.2.1 Reflexive. Two- and three-place intransitive and transitive action verbs, with two animates involved, form the prototypical base for reflexive formation; cf. (1b) and Section 4.1.1.

2.6.2.2 Reciprocal. Two- and three-place intransitive and transitive verbs, which specify an action that holds between two animates, form the proto-typical base for reciprocal formation; cf. (1c) and Section 4.2.

2.6.2.3 Resultative. The suffix *-raya* derives intransitive resultatives⁶ from transitive bases:

- (15) a. tayta kura inlesha punku-ta wisq'a-n.
 father priest church door-ACC close-3SG
 'The priest closes the church door.'

5. Other Quechua dialects also allow *-ku* to block an internal argument, which forces a habitual interpretation. In Cajamarca Quechua (Coombs 1982) (i) may have both the interpretation 'action for one's own benefit' and 'habitual action':

- (i) awa-ku-ni.
 weave-REFL-1SG
 i. 'I weave for my own benefit.'
 ii. 'I am a weaver by profession.'

6. Other Quechua dialects (p.c. W. Adelaar) allow *-raya* as a resultative in transitive structures. With verbs like *wisq'ay* 'close' the ensuing interpretation is 'he closes the door in such a way that it remains closed.'

- b. *inlesha punku wisq'a-**raya**-sa-n.*
 church door close-RES-DUR-3SG
 'The church door remains closed.'

2.6.3 Valency preserving means: Aspectuals

The verbal suffixes which have been presented in Section 2.6 as belonging to the verbal and adverbial modifiers, with the exception of *-raya* and in some cases *-yku*, do not change the valency of the verb to which they are attached.

2.6.4 Status and position of the reciprocal marker

I follow Muysken's (1981, 1988) analysis that *-na* is the reciprocal marker and not, as is stated in many grammars of Quechua, the suffix *-naku*. The fact that *-na* almost always has to be combined with *-ku* is due to grammatical factors, not to the fact that they form one suffix. In Muysken (1981, 1988) two arguments are given for an independent status of the suffix *-na*, adjectival constructions in Bolivian Quechua add a third:

1. *-na* and *-ku* can be separated by another suffix, which would be impossible if they formed one fixed combination (there exists little evidence for discontinuous suffixes in Quechua):

- (16) [*noqayku*] *much'a-**na**-ri-**ku**-rqa-yku.*
 we kiss-REC-IMPL-REFL-PAST-1PL
 'We kissed each other a bit, for a short time.'

2. When combined with the causative suffix *-chi*, *-na* marks the reciprocal relation between the embedded arguments on its own. This is an issue to which we will return in Section 5:

- (17) [*noqa*] *wawa-s-ni-y-ta maylla-**na**-chi-ni.*
 I child-PL-EUPH-1SG-ACC wash-REC-CAUS-1SG
 'I made my children wash each other.'

3. The fact that, at least in Bolivian Quechua, *-na* on its own may mark the reciprocal relation in a small number of adjectival derivations, forms a third argument: As I have argued in van de Kerke (1991), *-ku* is used to mark a non-standard mapping of argument structure onto syntax, since it links an internal argument to the syntactic subject position. As we will see in Section 4.1.2.1, a verb root like *phiña* 'to be in anger with' requires *-ku* to be attached to form a well-formed surface structure. However, in a copula construction in which the verb *kay* 'to be' takes over the function of the reflexive marker, the past participle form of the verb, *phiña-sqa* and for that matter its reciprocal derivation *phiña-na-sqa*, may be realized as such.

- (18) *haku Ana-q wasi-n-man mana phiña-**na**-sqa ka-yku.*
 come A.-GEN house-3SG-ALL not anger-REC-NR be-1PL
 'Let's go to Ana's house. No, we are angry with each other.' (H. & S. 306)

In Section 2.6, I have argued that the reciprocal marker *-na* is relatively free in its position. While the suffix *-ku* has a very strict position immediately after the causative suffix *-chi*,

-na may be realized at either side of it with a clear difference in interpretation, cf. Section 4 and 5. When *-na* is combined with the adverbial modifiers *-yku*, *-rpari*, *-rqu* and *-ri*, the order of these suffixes appears to be free. The affix combination *-na-ri-ku* in (16) may as well be realized as *-ri-na-ku*, without a change in interpretation.

3. Means of expressing reciprocal arguments

The subject of a reciprocally marked verb must refer to a plural set. If the subject phrase is lexically homogeneous, plurality of the referents is marked by the plural marker which matches with plural marking on the verb. After vowels, the plural marker *-kuna* in many cases is replaced by the Spanish loan plural marker *-s*.

If the subject phrase is heterogeneous, it is expressed by means of a coordinated constituent using the comitative case marker *-wan*. There are two options: mark all of the coordinated constituents with *-wan* or only the last. Agreement on the verb may be with the plural character of the set or with one of the entities in the set. In the latter case we find singular subject marking on the verb, cf. Section 3.2.

3.1 The meanings of the suffix *-wan*

An elusive characteristic of the suffix *-wan* is the fact that it can be used as a case marker for quite a coherent class of arguments expressing agent, cause, comitative, and instrument and at the same time as a marker of coordination.

3.1.1 *The suffix -wan as case marker*

Its use as an agent marker in morphological causative constructions has been shown in (12). Clearly related is its use in instrumental and comitative (secondary agent) constructions. It can also be used to express the cause of a certain state of affairs:

instrumental:	<i>ruthuna-wan</i>	‘knife-with’	‘cut, hit’, etc.
comitative:	<i>wawqe-wan</i>	‘friend-with’	‘speak, play, go’, etc.
causal:	<i>onqoy-wan</i>	‘sickness-with’	‘be sick’, etc.

3.1.2 *The suffix -wan as coordination marker*

The fact that we find *-wan* as a coordination marker in combination with other case markers as in (19), shows that it cannot be analyzed merely as a case marker:

- (19) [noqa] *Maria-paq-wan Ana-paq-wan aqha-ta ranti-saq.*
 I M.-BEN-COM A.-BEN-COM chicha-ACC buy-1SG.FUT
 ‘I will buy chicha for Maria and for Ana.’

3.2 Discontinuous reciprocal constructions (comitatives only)

The subject of a reciprocal verb must refer, by definition, to a plural set. If this set is heterogeneous, the different entities contained in the set are coordinated by means of the comitative case marker *-wan*. The verb may then agree with the plural character of that set, or with one of the entities contained in the set. On the basis of (20a), both (20b) and (20c) may be derived:

- (20) a. [noqa] *Pedru-wan puqlla-sa-ni*.
 I P.-COM play-DUR-1SG
 'I am playing with Peter.'
- b. [noqa] *Pedru-wan puqlla-na-ku-sa-ni*.
 I P.-COM play-REC-REFL-DUR-1SG
 'Peter and I are playing with each other (together).'
- c. [noqa] *Pedru-wan puqlla-na-ku-sa-yku*.
 I P.-COM play-REC-REFL-DUR-1PL
 'Peter and I are playing with each other (together).'

The semantic difference between (20b) with a singular subject and the reciprocal sentence with a plural subject in (20c) is the fact that the person speaking is presenting himself as the source of the action of 'playing with each other'. The construction is not merely a regional Bolivian variant, since I also found it described in Guardia Mayor (1973:297) for the Ayacucho dialect, cf. (21):

- (21) *ñoqa qam-wan yanapa-na-ku-ni*. (G.M. 297)
 I you-COM help-REC-REFL-1SG
 'I with you, we help each other' (translation and glosses mine).

4. Reciprocals with the suffix *-na-ku*: Subject-oriented reciprocals only

In subject oriented interpretations the reciprocal marker *-na* has to be combined with the reflexive suffix *-ku*, cf. the contrast between (1c) and (2). Since reciprocal and reflexive formation in Quechua are so intimately tied together and in many cases show identical behaviour, it is expedient to have a clear picture of reflexive formation first.

4.1 Polysemy of the suffix *-ku*

As has been argued above, *-ku* is used in constructions in which one of the underlying arguments is not syntactically expressed. If this holds for an internal argument the reflexive interpretation is obtained, if this holds for the external argument we obtain non-reflexive meanings: agentless passive and anticausative constructions.

4.1.1 Reflexive meanings

Reflexives in the southern Quechua dialects are strictly subject-oriented and mark co-referentiality between the external and one of the internal arguments.

4.1.1.1 *Reflexive proper*. In (1b) we have seen that *-ku* marks co-referentiality between the subject and the direct object, in (22b) *-ku* marks co-referentiality between the subject and the indirect object of a ditransitive verb:

- (22) a. *Pedru Maria-man chompa-ta qu-n.*
 P. M.-ALL sweater-ACC give-3SG
 ‘Peter gives Maria a sweater.’
 b. *Pedru chompa-ta qu-ku-n.*
 P. sweater-ACC give-REFL-3SG
 ‘Peter gives himself a sweater.’

4.1.1.2 *Reflexive possessive*. An analysis based on the idea that the reflexive suffix absorbs the case assigning property of the verb is impossible, since we find NPs marked with accusative in reflexive constructions, the reflexive possessive construction. Especially when making reference to body parts, Quechua allows a marked double object construction besides a genitive construction, the contrast between (23a) and (23b). In the same way a reflexive possessive variant of (1b) can be formed as in (23c).

- (23) a. *wawa-kuna alqu-q uya-n-ta maylla-nku.*
 child-PL dog-GEN face-3SG-ACC wash-3PL
 ‘The children wash the dog’s snout.’
 b. *wawa-kuna alqu-ta uya-n-ta maylla-nku.*
 child-PL dog-ACC face-3SG-ACC wash-3PL
 ‘The children wash the dog (with respect to) his snout.’
 c. *wawa-kuna uya-nku-ta maylla-ku-nku.*
 child-PL face-PL-ACC wash-REFL-3PL
 ‘The children wash themselves (with respect to) their (own) face.’

4.1.1.3 *Reflexive benefactive*. Unlike reciprocal benefactives which require the benefactive marker *-pu* to be attached (cf. Section 4.2.1.3), reflexive *-ku* may refer to a beneficiary argument by itself:

- (24) a. *Maria wawa-n-paq chompa-ta ranti-rqa.*
 M. child-3SG-BEN sweater-ACC buy-3SG.PAST
 ‘Maria bought a sweater for her child.’
 b. *Maria chompa-ta ranti-ku-rqa.*
 M. sweater-ACC buy-REFL-3SG.PAST
 ‘Maria bought herself a sweater.’

4.1.1.4 *Distant reflexive*. If one forms a reflexive of a causative verb, an interpretation in which the subject is coreferential with the embedded subject is marginally possible (‘X causes himself to’), but in most cases the subject is co-referential with the embedded object:

- (25) *mama-y Ana-wan maylla-chi-ku-n.*
 mother-1SG A.-COM wash-CAUS-REFL-3SG
 ‘My mother_i makes Ana wash her_i.’

4.1.1.5 *Permissive-reflexive passive*. Apart from a coercive interpretation as in (25), “distant reflexives” allow permissive and even passive-like interpretations, depending on the degree of control the subject has over the Causee that performs the action. In (26a) the subject has enough control ‘to not allow an action to be performed’, but in (26b) we obtain a passive-like interpretation, since a ‘bee’ is not supposed to be under human control:

- (26) a. *wawa-qa mana Ana-wan maylla-chi-ku-n-chu.*
 child-TOP not A.-COM wash-CAUS-REFL-3SG-Q
 ‘The child does not allow Ana to wash him.’
 b. *uq kuti-lla-ta putina-wan wach’i-chi-ku-rqa-ni.*
 one time-DEL-ACC bee-COM sting-CAUS-REFL-PAST-1SG
 ‘I have been stung only once by a bee.’ (H. & S. 298)

4.1.2 *Non-reflexive meanings*

Apart from the reflexive and reciprocal construction in which two arguments are associated with one syntactic position, all the other realizations of *-ku* share the characteristic that there is no Agent argument projected into syntax. In this sense *-ku* has all the characteristics of a lexical passive.

4.1.2.1 *Reflexiva tantum*. Locative verbs and verbs of emotion, which share the property that they predicate only over one or more internal arguments, require *-ku* to be attached to produce well-formed surface structures:

- (27) *tachi-ku-* ‘to sit’ *kusi-ku-* ‘to be happy’
qhepa-ku- ‘to stay’ *llaki-ku-* ‘to be sad’
ka-ku- ‘to be located’ *phiña-ku-* ‘to be in anger’
tiya-ku- ‘to live’ *phuti-ku-* ‘to be very sad.’
- (28) *Tarata-pi qhepa-ku-sqa-yki-manta kusi-ku-ni.*
 T.-LOC stay-REFL-NR-2SG-ABL happy-REFL-1SG
 ‘I feel happy because of the fact that you have stayed in Tarata.’

4.1.2.2 *Agentless passives*. In van de Kerke (1991) I have argued that, at least in Quechua, nominal constituents without a referential index cannot be realized syntactically. This allowed me to analyze constructions that are often labelled as “middles” as constructions in which the Agent argument has a generic interpretation. Since Quechua requires a syntactic subject, the derivation has to be saved by means of *-ku* attachment, licensing the realization of an internal argument in subject position:

- (29) a. *[noqa] aqha-ta sara-manta ruwa-ni.*
 I chicha-ACC corn-ABL make-1SG
 ‘I make chicha from corn.’
 b. *aqha-qa sara-manta ruwa-ku-n.*
 chicha-TOP corn-ABL make-REFL-3SG
 ‘Chicha is made from corn.’

4.1.2.3 *Anticausatives*. Many change of state or motion verbs have two possible realizations. One, which presents the change in state as being brought about by an external force:

the transitive lexical causatives. Another, which presents the change in state as being self induced, the intransitive anticausative. At least in many Indo-European languages, the transitive and the intransitive realization are not distinguished by overt morphological marking. English examples are ‘to sink’, ‘to grow’, and ‘to break’. The alternation is pervasive in Quechua, where the contrast between lexical causative and anticausative is marked by the absence or presence of *-ku*.

4.1.2.3.1 *Derived from two-place lexical causatives.* The anticausative of a two-place lexical causative verb as *p’akiy* ‘to break’ in (30a) presents the logical object as a surface subject, cf. (30b):

- (30) a. *Pedru sillu-y-ta-mi p’aki-rqu-rqa.*
 P. finger-1SG-ACC-AFFRM break-INCT-3SG.PAST
 ‘Intentionally Peter has broken my finger.’
 b. *sillu-y-mi p’aki-ku-rqa.*
 finger-1SG-AFFRM break-REFL-3SG.PAST
 ‘My finger broke.’

4.1.2.3.2 *Derived from three-place lexical causative reciprocals.* A typical instance from the class of three-place lexical causatives is the verb *t’aqay* ‘to separate, split’, which selects an accusative and a source (*-manta*) complement. The verb contains an agentive argument bringing about a separation in a set of elements. When the direct object refers to a set that is homogeneous, we find cases with a simple accusative as in (31a): ‘we must separate the children’. When reference is made to two or more heterogeneous subsets, one of the subsets is realized as the object with accusative case, while the other is realized as a source argument with *-manta*, as in (31b) where reference is made to ‘boys’ and ‘girls’. The anticausative variant in (31c), with the form *t’aqakuy* ‘to put oneself out of contact from, separate’, presents the logical object of the lexical causative verb as separating off from the source set:

- (31) a. *wawa-s-ta t’aq-na-yki.*
 child-PL-ACC split-NR-2SG
 ‘You should separate the children.’
 b. *qhari wawa-s-ta warmi wawa-s-manta t’aq-na-yki.*
 man child-PL-ACC woman child-PL-ABL split-NR-2SG
 ‘You should separate the boys from the girls.’
 c. *qhari wawa-s warmi wawa-s-manta t’aq-ku-nku.*
 man child-PL woman child-PL-ABL split-REFL-3PL
 ‘The boys have separated from the girls.’

Completely parallel cases can be found with lexical causative verbs which select an accusative and a goal (*-man*) complement like *k’askay* ‘to glue to’ and *taqhay* ‘to hit’ (for a reciprocal derivation cf. (39)), or an accusative and a comitative complement like *chaqruiy* ‘to mix’:

- (32) a. *tata-y rigu-wan sara-ta chaqru-rqa.*
 father-1SG wheat-COM corn-ACC mix-3SG.PAST
 ‘My father mixed corn with wheat.’
 b. *sara rigu-wan chaqru-ku-sqa.*
 corn wheat-COM mix-REFL-3SG.SD
 ‘It results that the corn has mixed with the wheat.’

4.2 Polysemy of the reciprocal suffix *-na-ku*

Above I have shown that *-ku*, labeled as reflexive marker, may have a number of other functions. In the same way, *-na-ku* cannot only be used as a reciprocal marker, but can have a number of related functions.

4.2.1 *Strict reciprocity*

A strict reciprocal relation is said to hold if all members from a set of entities, realized as the subject of the reciprocal verb, perform the action expressed by the verb on all the other members of the same set.

4.2.1.1 *Reciprocal proper.* As we have seen in (1), transitive verbs with two animate arguments form the typical base for reciprocal constructions. This also holds for ditransitive verbs as in (33), the parallel of the reflexive construction in (22):

- (33) *Pedru Ana-wan chompa-ta qu-na-ku-nku.*
 P. A.-COM sweater-ACC give-REC-REFL-3PL
 ‘Peter and Ana give each other a sweater.’

4.2.1.2 *Reciprocal possessive.* In analogy with the reflexive possessive construction in (23c), we find possessive reciprocals:

- (34) *Pedru Juan-wan uya-nku-ta maylla-na-ku-nku.*
 P. J.-COM face-3PL-ACC wash-REC-REFL-3PL
 ‘Peter and John wash each other (with respect to) their face.’

4.2.1.3 *Reciprocal benefactive.* Unlike reflexive benefactives (Section 4.1.1.3), reciprocal benefactives require that the benefactive marker *-pu* is attached:

- (35) *runa-s aqha-ta ranti-na-ka-pu-nku. (-ka-pu < *-ku-pu)*
 man-PL chicha-ACC buy-REC-REFL-BEN-3PL
 ‘The men buy chicha for each other.’

4.2.1.4 *Distant reciprocal.* In Section 4.1.1.4, I have shown that the preferred interpretation for reflexive causatives is the distant one in which the embedded object is co-referential with the subject of the causative verb (Causer). Reciprocal causatives allow both options. Interactions between Causer and Causee are presented in (43c) and (51b), the distant interaction between Causer and embedded object in (48b).

4.2.2 Sociative

With verbs that express ‘perform an action with’ and which, by consequence, select a secondary agent marked with the comitative case marker *-wan*, the reciprocal marker may be interpreted as a sociative ‘perform an action together’:

- (36) a. *Pedru tata-n-wan Cliza-man puri-n.*
 P. father-3SG-COM C.-ALL walk-3SG
 ‘Peter walks with his father to Cliza.’
 b. *Pedru tata-n-wan Cliza-man puri-na-ku-nku.*
 P. father-3SG-COM C.-ALL walk-REC-REFL-3PL
 ‘Peter and his father walk together to Cliza.’

4.2.3 Partial reciprocity

If the subject of a reciprocal verb refers to a set with two members, they perform the action expressed by the verb with regard to each other, a strict reciprocal relation. However, if there are three or more members in the set, the reciprocal relation may be strict in the sense that all members perform the action with regard to all the others, but weak reciprocal relations are quite common, with different interpretational possibilities.

4.2.3.1 ‘Weak’ reciprocity. If the subject of a reciprocal verb refers to a set of more than two members, a sentence like (1c) may be used to describe a collective event in which not every member of the set of children performs the action of washing to all other members of the set.

4.2.3.2 ‘Chain’ interpretations. The reciprocal marker may also be used to describe situations in which an action takes place ‘consecutively’ or in a ‘chain’. Of the set of entities in subject position it is predicated that one entity performs an action with regard to a second, who performs that same action with regard to a third, and so on:

- (37) *q’ipi-s-ta maki-manta maki haywa-na-ku-spa ...*
 load-PL-ACC hand-ABL hand give-REC-REFL-SS
 ‘Giving from hand to hand the loads, ...’ (H. & S. 107)

4.2.3.3 Action ‘in turn’ or ‘in a series’. The ultimate cases of weak reciprocity, and in a sense the logical outcome of the ‘chain’ interpretation, would be those in which there is not even a partial coreferentiality between the subject and the direct or indirect object. Such cases are rejected by most speakers, but the following examples are both taken from natural speech. If the subject refers to a plural set of elements, the ensuing interpretation is ‘in turn’, as in (38), taken from a story collected in Bolivia (van de Kerke 1996: 149):

- (38) *pay-kuna runa-ta maqa-na-ku-nku.*
 he-PL man-ACC hit-REC-REFL-3PL
 ‘They hit the man one after the other, in turn.’ (Mateo I, Iban)

If the object refers to a plural set, the ensuing interpretation is ‘in a series’ as in (39), taken from a compilation of stories from southern Bolivia (Aguiló 1980):

- (39) *pay turril-is-man taqha-na-ku-sqa.*
 he vessel-PL-ALL hit-REC-REFL-3SG.SD
 'He bumped into the vessels the one after the other.'

The latter example may be analyzed as the outcome of anticausative formation, which will be the subject of the next section.

4.2.4 Reciprocal anticausatives

Conceptually it is conceivable that the reciprocal marker would have scope over the two internal arguments of a three-place lexical causative predicate of the type 'mix' or 'separate', but when *-na-ku* is combined with these lexical causatives it always refers back to the syntactic subject, since *-ku* strictly binds a direct or indirect object to the subject in Quechua. However, these verbs present the anticausative pattern as has been shown in Section 4.1.2.3, and as such they present the right structure for reciprocal formation. I encountered one example from Cuzco Quechua in Calvo Pérez (1993: 169):

- (40) *rigu sara-wan chaqru-na-ku-nku.*
 wheat corn-COM mix-REC-REFL-3PL
 'The wheat and the corn have mixed.'

Especially when the subject refers to a set of entities for which a weak reciprocal relation holds, such derivations are correct:

- (41) *animales-ni-nchis mayu-man chaya-qti-nku kurrala-nku-man kurrala-nku-man*
 animal-EUP-1PL.INC river-ALL arrive-DS-3PL corral-3PL-ALL corral-3PL-ALL
t'aqa-na-ku-nqanku.
 split-REC-REFL-3PL.FUT
 'When our animals have arrived at the river they will split, each of them searching his own corral.' (H. & S. 471)

The sentence describes a set of cows, from which at intervals (the passing of the corrals while entering the village) individuals or small groups are separating. It is impossible to obtain a similar interpretation with the lexical causative verb: 'he mixes the corn and the wheat with each other', 'he separates the cows from each other', but the reciprocal derivation from the causative anticausative derivation has this interpretation, cf. Section 5.2.

4.3 Diathesis types of reciprocal constructions: Subject-oriented reciprocals only

The following sections will be devoted to an enumeration of the different diathesis types of the reciprocal construction. Information that has already been provided in the discussion on reflexive and reciprocal formation above will only be repeated as far as necessary. From the two basic diathesis types of reciprocals, subject-oriented and object-oriented, the latter is marginal since it is restricted to the interaction with the causative, which will be the subject of Section 5.

4.3.1 “Canonical” reciprocals

The output of “canonical” reciprocal formation is defined as a reciprocal construction without an accusative constituent. The following types may be distinguished.

4.3.1.1 Derived from two-place transitives. Verbs that select an argument marked with accusative may be either underived transitives or causatives or assistives derived from an intransitive verb.

4.3.1.1.1 From underived transitives. Any transitive verb that expresses an action in which two animates are involved, like *maylla-* ‘wash’ in (1), can be the input for reciprocal formation:

- (42) *much'a-* ‘to kiss’ → *mucha-na-ku-* ‘to kiss each other’
chiqni- ‘to hate’ → *chiqni-na-ku-* ‘to hate each other’
qunqa- ‘to forget’ → *qunqa-na-ku-* ‘to forget each other’
yanapa- ‘to help’ → *yanapa-na-ku-* ‘to help each other’
mask'a- ‘to search’ → *mask'a-na-ku-* ‘to search each other.’

4.3.1.1.2 From two-place causatives and assistives. Any intransitive verb with an animate subject, which forms the input for causative formation produces a two-place derived predicate in which two animates are involved. This is the right format for reciprocal formation:

- (43) a. *wawa-s asi-sa-nku.*
 child-PL laugh-DUR-3PL
 ‘The children are laughing.’
 b. *wawa-s Maria-ta asi-chi-sa-nku.*
 child-PL M.-ACC laugh-CAUS-DUR-3PL
 ‘The children are making Maria laugh.’
 c. *wawa-s asi-chi-na-ku-nku.*
 child-PL laugh-CAUS-REC-REFL-3PL
 ‘The children are making each other laugh.’

One would expect that, what holds for the causative derivation would hold for assistive formation, since it also introduces an animate subject. However, the notion of ‘assist’ implies the conjoined action of ‘person assisting’ and ‘person assisted’, which with many verbs is not easily accepted. A derivation like *asi-ysi-* ‘to help laugh’ is felt to be strange, while *llank'a-ysi-* ‘to help work’ is fine. The latter can be the input for reciprocal formation:

- (44) a. *Pedru Carlos-ta llank'a-ysi-n.*
 P. C.-ACC work-ASST-3SG
 ‘Peter helps Carlos work.’
 b. *Pedru Carlos-wan llank'a-ysi-na-ku-nku.*
 P. C.-COM work-ASST-REC-REFL-3PL
 ‘Peter and Carlos help each other work.’

4.3.1.2 Derived from two-place intransitives. In principle, any two-place intransitive verb that expresses an action in which two animates are involved can be the input for recip-

rocal formation. Apart from that benefactive formation on the basis of intransitive verbs produces two-place predicates which may be the input for reciprocal formation.

4.3.1.2.1 *From underived two-place intransitives.* Apart from verbs that select a secondary agent with *-wan*, like *puqllay* ‘to play with’ presented in (20c) and *puriy* ‘to walk with’ in (36b), two-place intransitives of which the oblique object refers to an animate entity are rare, but the number of verbs that select a secondary agent is considerable:

- (45) *mosqho*- ‘to dream about’ → *mosqho-na-ku*- ‘to dream about each other’
phiña-ku- ‘to be angry with’ → *phiña-na-ku*- ‘to be mutually in anger’
rima- ‘to quarrel’ → *rima-na-ku*- ‘to quarrel with each other’
parla- ‘to speak’ → *parla-na-ku*- ‘to speak with each other.’

4.3.1.2.2 *From two-place benefactives.* Any action that one can perform for the benefit of another, can be repaid by the other to one. Again, the restrictions on reciprocal formation are mainly semantic. As has already been shown in (35) with a transitive base verb in Section 4.2.1.3, the verbal derivational suffix *-pu* is obligatory in the reciprocal benefactive constructions:

- (46) a. *Pedru Carlos-paq llank’a(-pu)-n.*
 P. C.-BEN WORK-BEN-3SG
 ‘Peter works for Carlos.’
 b. *Pedru Carlos-wan llank’a-na-ka-pu-nku. (-ka-pu < *-ku-pu)*
 P. C.-COM WORK-REC-REFL-BEN-3PL
 ‘Peter and Carlos work for each other.’

4.3.1.3 *Two-place “canonical” reciprocals derived from three-place transitives.* In this subsection we are concerned with the small group of three-place underived verbs the direct object of which may refer to an animate entity, and with causative and assistive derivations.

4.3.1.3.1 *From underived three-place transitives.* Three-place transitives which select a direct object that can refer to an animate entity like *kachay* ‘to send sb to’, *apay* ‘to carry sb to’, and *pusay* ‘to guide sb to’, are as good a target for reciprocal formation as plain transitives:

- (47) *Lusia-wan Dumingo-wan aqha wasi-man pusa-na-ku-nku.*
 L.-COM D.-COM chicha house-ALL guide-REC-REFL-3PL
 ‘Lucia and Domingo guide each other (animate each other to go) to the chicheria.’ (H. & S. 278)

The ditransitive verbs, which form a sub-class of the three-place transitives, only marginally allow “canonical” reciprocals to be derived. The animate entity, necessary for the reciprocal interpretation, is proto-typically the ‘goal’ argument marked with *-man*. These verbs produce the “indirect” reciprocals, to be treated in 4.3.2.1, which hardly can be formed with the three place base verbs treated in this section.

4.3.1.3.2 *From three-place causatives and assistives.* The causative of a transitive verb is a three-place verb. The direct object of the base verb is realized as the direct object of the

derived verb, the former subject (the Causee) as an oblique object with *-wan* or *-man*. As has been mentioned in 2.6.1.1, both the Causee and the direct object of the derived predicate have full argument status, since they can be the target for object marking, and more important here, they can be the target for reciprocal formation. In (48b) the reciprocal relation holds between the Causer and the underlying direct object,⁷ which is an instance of what has been called “distant reciprocal” in 4.2.1.4 (the reciprocal relation between Causer and Causee will be subject of 4.3.2.2):

- (48) a. *mama-y warmi-wan wawa-s-ta maylla-chi-n.*
 mother-1SG woman-COM child-PL-ACC wash-CAUS-3SG
 ‘My mother has the children washed by the woman.’
 b. *wawa-s warmi-wan maylla-chi-na-ku-nku.*
 child-PL woman-COM wash-CAUS-REC-REFL-3PL
 ‘The children let/allow each other to be washed by the woman.’

Three-place assistive-comitatives may be derived from a two-place intransitive base verb as in (49a), and they can be the input for reciprocal formation; cf. (49b):

- (49) a. [*noqayku-ta*] *Tarata-man ri-ysi-wayku.*
 we-ACC T.-ALL go-ASST-3SG → 1OBJ.PL
 ‘He accompanied us to Tarata.’
 b. [*noqayku*] *Tarata-man ri-ysi-na-ku-rqa-yku.*
 we T.-ALL go-ASST-REC-REFL-PAST-1PL
 ‘We went in company (together) to Tarata.’

4.3.1.4 Distant “canonical” reciprocals. The distant “canonical” reflexive in (25), that marked co-referentiality between the Causer and the direct object of the embedded verb, has its reciprocal counterpart in (48b) above.

4.3.2 “Indirect” reciprocals

The output of “indirect” reciprocal formation is defined as a reciprocal construction with an accusative marked constituent. The following types may be distinguished.

4.3.2.1 Derived from underived three-place verbs. As has been mentioned in Section 4.3.1.3.1, “indirect” reciprocals can be easily formed on the basis of ditransitive verbs since the ‘allative’ argument, and not the ‘patient’ argument with *-ta* refers, to an animate entity:

7. In Muysken (1988), following Muysken (1981), it is claimed that both in the Quechua I and II dialects this interpretation is expressed by realizing *-na* before and *-ku* after causative *-chi*:

- (i) *riku-na-chi-ku-n-ku.*
 see-REC-CAUS-REFL-3-PL
 i. ‘They cause X to see each other.’
 ii. ‘They let each other be seen by X.’

At least in Bolivian Quechua this is not the case, since the verb form in (i) is used to express a reflexive of an object-oriented reciprocal that will be treated in Section 5.3.

- (50) a. *Maria wawa-s-man misk'i-ta qu-rqa.*
 M. child-PL-ALL sweet-ACC give-3SG.PAST
 'Maria gave the children a sweet.'
 b. *wawa-s misk'i-ta qu-na-ku-nku.*
 child-PL sweet-ACC give-REC-REFL-3PL
 'The children give each other a sweet.'

4.3.2.2 *Derived from three-place causatives, assistives, and benefactives.* The causative of a transitive verb is a three-place verb. The direct object of the base verb is realized as the direct object of the derived verb, the former subject, the Causee, as an oblique object. It is marked with *-wan* when the base verb is an agentive verb as in (48b), with *-man* when the base verb is an experiencer verb, as in (51a). The Causee argument may be the target for reciprocal formation, cf. (51b):

- (51) a. *Maria wawa-s-man t'anta-ta riku-chi-n.*
 M. child-PL-ALL bread-ACC see-CAUS-3SG
 'Maria shows (makes see) the bread to the children.'
 b. *wawa-s t'anta-ta riku-chi-na-ku-nku.*
 child-PL bread-ACC see-CAUS-REC-REFL-3PL
 'The children show (make see) each other the bread.'

In Section 4.3.1.1.2 we have seen that reciprocal assistive derivations can be formed on the basis of an intransitive base verb, and this also possible on the basis of a transitive verb:

- (52) *[noqayku] p'acha-ta t'aqsa-ysi-na-ku-sqayku.*
 we cloth-ACC wash-ASST-REC-REFL-1PL.FUT
 'We will help each other to wash the clothes.'

The same holds for reciprocal benefactives; what is possible with intransitive is also possible with transitive base verbs, as has already been shown in (35).

4.3.2.3 *Distant "indirect" reciprocals.* Three-place reciprocals can easily be formed by means of a causative of a two-place reciprocal: a causative derivation of the two-place benefactive in (35) leads to (53), a causative derivation of the ditransitive verb in (50b) leads to (54):

- (53) *runa-s Ana-wan aqha-ta ranti-chi-na-ka-pu-nku.*
 man-PL A.-COM chicha-ACC buy-CAUS-REC-REFL-BEN-3PL
 'The men make Anna buy chicha for each other.'
 (54) *wawa-s Ana-wan misk'i-ta qu-chi-na-ku-nku.*
 child-PL A.-COM sweet-ACC give-CAUS-REC-REFL-3PL
 'The children make Anna give each other a sweet.'

4.3.3 "Possessive" reciprocals

"Possessive" reciprocals, based on transitive verbs, were illustrated in 4.2.1.2. In (55b) a similar case is presented based on the causative derivation *nana-chi-y* 'to cause to hurt':

- (55) a. *Pedru Ana-ta chaki-n-ta nana-chi-n.*
 P. A.-ACC foot-3SG-ACC hurt-CAUS-3SG
 ‘Peter makes Ana hurt (with respect to) her foot.’
 b. *Pedru Ana-wan chaki-nku-ta nana-chi-na-ku-nku.*
 P. A.-COM foot-3PL-ACC hurt-CAUS-REC-REFL-3PL
 ‘Peter and Ana make each other hurt (with respect to) their foot.’

4.3.4 *Two-diathesis reciprocals*

In the preceding sections we have encountered a small number of diathesis types with the same formal expression:

(a) “Canonical” and “possessive”: ‘to wash each other’ versus ‘to wash each other’s face’. In this case the secondary object is an adjunct to the argument bound by the reciprocal marker.

(b) “Canonical” and “indirect”: ‘to send each other to sb’ versus ‘to send sb to each other’. I have argued that the three-place transitives choose typically the first pattern, while the ditransitives choose the second.

(c) Reciprocals derived from causatives with the form *-chi-na-ku-* may have two interpretations: ‘A, B cause A, B to perform an action on Y’ and ‘A, B cause Y to perform an action on A, B’. When needed, these two diathesis types may be disambiguated by case marking of the different constituents.

5. Reciprocals with the suffix *-na-chi*: Object-oriented reciprocals only

5.1 Causatives derived from subject-oriented reciprocals

In Section 2.6.4 I have argued that *-na* marks a reciprocal relation between two arguments which are subsequently linked to the syntactic subject position by means of *-ku* affixation. This is exactly what underlies the object oriented reciprocal construction in the southern Quechua dialects: Cuzco and Bolivian. In causative constructions based on two and three place underived verbs, *-chi* ‘Cause’ introduces an external argument (the Causer), that is realized as the syntactic subject, and *-na*, on its own, marks a reciprocal relation between two internal, non-subject, arguments. The relevant example, based on a simple causative derivation as in (48a), is (56):

- (56) *mama-y wawa-s-ta maylla-na-chi-n.*
 mother-1SG child-PL-ACC wash-REC-CAUS-3SG
 ‘My mother makes the children wash each other.’

The derivational chain for such cases is as in (57):

- (57) *maylla* Agent wash Patient
maylla-na Agent_{i...n} wash Patient_{i,n}
maylla-na-chi Causer make Agent_{i,n} wash Patient_{i,n}

The reciprocal relation does not involve the surface subject and for that reason *-ku* does not have to be realized. If the Causer in (57) would be involved in the reciprocal relation, we obtain reflexives from object-oriented reciprocals that will be treated in Section 5.3.

5.2 Causatives derived from two-place anticausative lexical reciprocals

As I have argued in Sections 4.1.2.3 and 4.2.4, verbs that present the anti-causative pattern may be either realized as three-place Agentive lexical causatives or as two-place Process anti-causatives: X splits Y from Z and Y splits from Z, respectively. Mapping of the underlying argument structure of the lexical causatives onto syntax is straightforward, but the anticausatives need reflexive *-ku* to be attached in order to create a well-formed syntactic surface structure.

Since reciprocal marking always involves the external argument of the verb to which it is attached, Quechua cannot mark a reciprocal relation between the internal arguments of a lexical causative verb. However, although the causative of an anticausative creates an argument structure which is isomorphic to that of the lexical causative verb, at the moment that the reciprocal marker is attached it only has scope over the arguments that will end up as the internal arguments after the affixation of the causative suffix:

- (58) *raki-na-chi-ra-nki-chis-chu chay taka-na-ku-q-kuna-ta*
 split-REC-CAUS-PAST-2SG-PL-Q that punch-REC-REFL-NR-PL-ACC
 ‘Did you separate those who were punching each other?’ (Ayacucho Quechua; P. 70)

The derivational chain for the causative of a reciprocal anticausative is essentially the same as that for the causative of a reciprocal transitive verb, presented in (57):

- (59) *raki* Theme split from Source
raki-na Theme_{i,n} split from Source_{i,n}
raki-na-chi Causer make Theme_{i,n} split from Source_{i,n}

5.3 Reflexives derived from object-oriented reciprocals

If the two arguments of a transitive verb embedded under a causative verb are co-referential as in (56), they may be co-referential with the subject as well. This leads to an exceptional, but possible interpretation in which all arguments of the derived verb refer to same set of individuals: ‘X makes that Y washes X and Y makes that X washes Y’. Dealing with such interpretations one has to be careful since they may be logical possibilities but it can be questioned whether they really present a pattern in the language. I have at least one interesting and clear case of *-na-chi-ku* order with this reading, although in a construed example, cf. (60):⁸

8. Another instance of this pattern is found in the case of ‘walk together/accompany’ which can be either expressed by *puri-ysi-na-ku-y* ‘assist each other to walk’ or by *puri-na-ku-y* ‘walk one another’, (cf. (36)). The first form is completely transparent and has enough argument positions to allow for a straightforward interpretation of the reciprocal marker: [X,Y assist Y,X to PRO walk]. However, the second form is problematic if we assume that only

- (60) *pay-kuna-pura qonqa-na-chi-ku-nku.*
 he-PL-COLL forget-REC-CAUS-REFL-3PL
 ‘Among them, they cause each other to forget the one the other.’

Parker (1969:70) gives another instance of this pattern of reciprocal interpretation:

- (61) *miku-na-chi-ku-chka-n-ku-m kiki-n-ku-pura.*
 eat-REC-CAUS-REFL-DUR-3-PL-AFFRM they-3-PL-COLL
 ‘Among themselves, they are serving each other themselves.’

The source of this example is not given, but it probably has been taken from some legendary story, since human beings are not supposed to offer parts of themselves to one another. The derivational chain for the latter example is as in (62), which obviously shows

one argument is projected from the lexicon: [Agent walk]. Assistive/comitative interpretation of *-na* apparently gives rise to an interpretation ‘performing an action together’, in which the Comitative adjunct is raised to argument status. This derivation then can be the base for the following cases of causative formation:

- (i) *puri-na-chi-wayku.*
 walk-REC-CAUS-3SG→1PL
 ‘He makes that we go together.’
- (ii) *puri-na-chi-ku-nku.*
 walk-REC-CAUS-REFL-3PL
 ‘They make that they go together.’
- (iii) *wawa-s-ni-y-wan puri-na-chi-ku-ni.*
 child-PL-EUP-1SG-COM walk-REC-CAUS-REFL-1SG
 ‘I had myself be accompanied by my children.’
- (iv) *puri-na-chi-ku-wa-n.*
 walk-REC-CAUS-REFL-1OBJ-3SG
 ‘He had himself be accompanied by me/He makes me accompany him.’

In (i) the internal arguments are not co-indexed with the Causer argument, but are referred to by means of an object marker. In (ii-iv) we find constructions in which one or all of the internal arguments are co-indexed with the Causer by means of reflexive marking. In (ii) the set of elements in the Causer argument is equal to the internal set, in (iii) and (iv) only one of the elements of the internal set is co-indexed with the Causer and this leads to the exceptional case in (iv). From the set of elements over which *-na* has scope: ‘he’ and ‘I’, one is realized as the external argument via *-ku* externalization while the other is spelled out via object marking. In a lexical operation type analysis this may be represented as:

- (v) *puri-* Ag (Com) walk
puri-na- [(Ag_{i,k}) (Com_{i,k})] walk
puri-na-chi- Causer Cause walk [Ag_{i,k} Com_{i,k}]
puri-na-chi-ku- Causer^l Cause walk [(Ag_{i,k})^l (Com_{i,k})]
puri-na-chi-ku-wa- Causer^l Cause walk [(Ag_{i,k})^l (Com_{1Ob})]
puri-na-chi-ku-wa-n Causer^{l3Sb} Cause walk [(Ag_{3sg})^l (Com_{1Ob})]

Assuming that reciprocal marking in Bolivian Quechua is the marking that two sets in argument positions are reciprocally distributed and the special assumption that one individual member of the set can be realized in the external position in the syntax by means of *-ku* indexation, the derivation can be accounted for.

that all three arguments associated with the complex verb *miku-chi-y* ‘to make eat, serve’, refer to the same set of individuals:

- | | | |
|------|-----------------------|--|
| (62) | <i>miku</i> | Agent eat Patient |
| | <i>miku-na</i> | Agent _{i,n} eat Patient _{i,n} |
| | <i>miku-na-chi</i> | Causer make Agent _{i,n} eat Patient _{i,n} |
| | <i>miku-na-chi-ku</i> | Causer _{i,n} make Agent _{i,n} eat Patient _{i,n} |

6. Productivity

Although the use of *-na* to create reciprocal expressions in combination with *-chi* or *-ku* is fully productive, reciprocal marking as such is not a very frequent phenomenon. In the well-known autobiography of Condori Mamani (1981), a speaker of Cuzco Quechua, only 36 of the total of 18045 tokens contained the reciprocal suffix *-na*: one out of every 500 words. These 36 tokens contained 21 different types based on 17 different roots. In the text 11 verb roots are represented with one type/token:

- | | | | | |
|------|--------------------|-------------------|--------------------------|-------------------------------|
| (63) | <i>apa-chi</i> | ‘to make carry’ | <i>apa-chi-na-ku-</i> | ‘to make carry to each other’ |
| | <i>compromete-</i> | ‘to engage’ | <i>compromete-na-ku-</i> | ‘to engage with each other’ |
| | <i>miku-chi-</i> | ‘cause sb to eat’ | <i>miku-chi-na-ku-</i> | ‘to cause each other to eat’ |
| | <i>qechu-</i> | ‘take away from’ | <i>qechu-na-ku-</i> | ‘take away from each other’ |
| | <i>qhawa-</i> | ‘to look at’ | <i>qhawa-na-ku-</i> | ‘to look at each other’ |
| | <i>saru-cha-</i> | ‘to step on’ | <i>saru-cha-na-ku-</i> | ‘to step on each other’ |
| | <i>rima-</i> | ‘to speak with’ | <i>rima-na-ku-</i> | ‘to speak with each other’ |
| | <i>turi-ya-</i> | ‘become brothers’ | <i>turi-ya-na-ku-</i> | ‘become each other’s brother’ |
| | <i>wakha-</i> | ‘to call’ | <i>wakha-na-ku-</i> | ‘to call each other’ |
| | <i>wark’a-</i> | ‘to sling’ | <i>wark’a-na-ku-</i> | ‘to sling each other’ |
| | <i>yanapa-</i> | ‘to help’ | <i>yanapa-na-ku-</i> | ‘to help each other.’ |

Five verb roots are represented with two or more types and/or tokens:

- | | | | | | |
|------|---------------|-----------------|---|-----------------------------|-----------------------------------|
| (64) | <i>huñu-</i> | ‘to unite’ | → | <i>huñu-na-ku-</i> | ‘to assemble’ |
| | <i>riqsi-</i> | ‘to know’ | → | <i>riqsi-na-ku-</i> | ‘to know each other’ |
| | <i>willa-</i> | ‘to tell’ | → | <i>willa-na-ku-</i> | ‘to tell each other’ |
| | <i>k’ami-</i> | ‘to offend’ | → | a. <i>k’ami-na-ku-</i> | ‘to offend each other’ |
| | | | | b. <i>k’ami-na-yu-ku-</i> | ‘to offend each other’ |
| | <i>raki-</i> | ‘to distribute’ | → | a. <i>raki-na-ku-</i> | ‘to distribute among each other’ |
| | | | | b. <i>raki-na-ra-ka-pu-</i> | ‘to distribute among each other.’ |

At last, the root *maqa-* ‘to hit’ yields 12 tokens based on the types *maqa-na-ku-* and *maqa-na-yu-ku-* with the semi-lexicalized interpretation ‘to fight’. In fact it may be better to speak of semantic specialization, since a clear correspondence with the original reciprocal interpretation can be observed. Other verbs that show this type of alternation between a regular reciprocal and a specialized meaning are:

- | | | | | | |
|------|---------------|--------------|---|---------------------|-------------------------------------|
| (65) | <i>qhawa-</i> | ‘to look at’ | → | <i>qhawa-na-ku-</i> | ‘to look at each other’/‘criticize’ |
| | <i>suwa-</i> | ‘to steal’ | → | <i>suwa-na-ku-</i> | ‘to steal from each other’/‘elope’ |

pusa- ‘to guide’ → *pusa-na-ku-* ‘to guide each other’/‘elope’
hap’i- ‘to grasp’ → *hap’i-na-ku-* ‘to grasp each other/grasp each other’s hand’/‘quarrel.’

7. Referential situations

This article has treated reciprocal formation in Bolivian Quechua. In the generative tradition reciprocal formation is normally treated as a special kind of reflexive formation: a binding relation between an anaphor and its antecedent that leads to referential identity of two arguments associated with a verb. I have shown in this article that the reflexive interpretation of the verbal suffix *-ku* is but one of its interpretational possibilities, which follows from its mediating function between underlying semantic and syntactic surface structure. In this way I could account for the fact that the suffix *-ku* has to be combined with the reciprocal marker *-na* in subject-oriented reciprocals, while it is absent in object-oriented causative reciprocals. I have also shown that in Bolivian Quechua reciprocal marking with the suffix *-na* cannot be characterized as a strict coreferential relation between an anaphor and an antecedent. A more promising analysis is to assume that *-na* has to be read as an instruction on how referential values have to be assigned to sets in argument positions associated with a verb, i.e. that a distributive relation holds between two sets. In this way we may account for the different referential situations in which the reciprocal marker may be used:

1. Strict reciprocal interpretation:
 ‘kiss’ [A,B,C,D] [A,B,C,D] → ‘kiss’ [A,B], [A,C], [A,D], [B,C], [B,D], [C,D]
2. Weak reciprocal interpretation:
 ‘kiss’ [A,B,C,D] [A,B,C,D] → ‘kiss’ [A,B], [A,D], [B,C], [C,D]
3. Chain interpretation:
 ‘kiss’ [A,B,C,D] [A,B,C,D] → ‘kiss’ [A,B], [B,C], [C,D]
4. Action in turn or in a series:
 ‘kiss’ [A] [B,C,D] → ‘kiss’ [A,B], [A,C], [A,D] or
 ‘kiss’ [A,B,C] [D] → ‘kiss’ [A,D], [B,D], [C,D].

8. Polysemy of the reciprocal marker in different Quechua dialects

As I have stated in the introduction, I have treated reciprocal formation in the southern Quechua (IIC) dialects. On the basis of my fieldwork data from Bolivia and the literature on Bolivian, Ayacucho, and Cuzco Quechua, which is by far the best studied Quechua dialect, I have shown that these dialects show similar patterns for reciprocal formation and interpretational possibilities, with the exception of one construction in Ayacucho Quechua to be treated in the following section. The derivational suffix *-na*, either in combination with *-chi* or *-ku* may be used in the following contexts:

- (a) reciprocal (see Section 4.2.1)
- (b) sociative (see Section 4.2.2)

(c) anticausative (see Section 4.2.4)

(d) successive: action in ‘turn’ or in ‘a series’ (see Section 4.2.3.3).

To my knowledge, an in-depth study of reciprocal formation in the Peruvian Quechua I and IIa and the Ecuadorian Quechua IIb dialects has not yet been undertaken. However, the data that are presented in the literature on the Peruvian Quechua I and IIa dialects suggest that the reciprocal marker in these dialects shows the same kind of semantic extension that we have encountered in the southern Quechua IIc dialects. Weber (1989: 168–70) mentions for the Huallaga Quechua I dialect, apart from the reciprocal proper, a reciprocal of distributed mutual activity, a reciprocal as a distributed reflexive, and extended meanings. The ‘reciprocal of distributed mutual activity’ coincides with ‘weak reciprocity’ since “the action indicated by the verb to which *-naku* is suffixed is performed by some members of the group on other members of the group; that is, the activity is distributed among members of the group, and not necessarily performed by each member on all others” (Weber 1969: 169). The status of the ‘reciprocal as a distributed reflexive’ is not entirely clear, but it looks as if the reciprocal marker functions primordially as an indication of a distributed action, comparable to what has been presented in 4.3.3.3 as ‘action in turn or in a series’: “In some cases, the reciprocal refers to a group to suggest that each does something to himself; e.g.:

- (66) ... *mayu-pita punta-yaq chura-naku-yku-n* ...
 river-ABL peak-LIM place-REC-INW-3
 ‘... they place themselves from the river to the peak ...’ (actually, each frog puts himself in a hole)” (W. 170; glosses mine).

The “extended meanings” present the same pattern of semantic specialization that has been presented in Section 6.

The picture for the Ecuadorian Quechua IIa dialects is much more confused. Quechua I and IIc medial-reflexive *-ku*, in the Ecuadorian dialects mainly used to express progressive aspect, is replaced by *-ri*, which is used as the inceptive marker in the Quechua I and IIc dialects. According to Cole (1982:91–2, 134–5, 142) *-ri* may have a reflexive, a reciprocal, and an anticausative interpretation:

- (67) a. *ispiju-pi riku-ri-rka-ni*.
 mirror-LOC see-REFL-PAST-1SG
 ‘I saw my self in the mirror.’
 b. *wambra-kuna riku-ri-rka*.
 child-PL see-REFL-3SG.PAST
 ‘The children saw each other.’
 c. *pungu-kuna-ka paska-ri-rka*.
 door-PL-TOP open-REFL-3SG.PAST
 ‘The doors opened.’

However, many Ecuadorian dialects have retained *-naku* (or an allomorphic form). It can be used as a reciprocal marker, but *-naku* may also have a sociative interpretation: ‘together’. It can even be used as a verbal plural marker (Muysken 1977: 54; Cerrón Palomino 1987: 283):

- (68) *miku-naku-n*.
 eat-REC-3
 ‘They eat together’, or ‘They eat.’

The list of meanings of *-naku* may thus be extended with:

- (e) distributive (Huallaga Quechua)
 (f) verbal pluralizer (Ecuadorian dialects).

9. Synopsis of reciprocal and reflexive constructions

I assume that there are two arguments associated with a transitive verb root like *maylla* ‘to wash’. These arguments make reference to sets of elements, which are filled in by person and number markers:

- (69) *maylla-* [Agent] [Patient]
maylla-nku ‘They wash sb (ACC).’

Both reflexive and reciprocal formation mark that the referential index of two arguments is identical, with a special instruction that the action expressed by the verb is performed by every member of the set on itself in the case of reflexives, and on the other members of the set in the case of reciprocals:

- (70) *maylla-* [Agent]_{i,n} [Patient]_{i,n}
maylla-ku-nku ‘They wash *themselves*.’
maylla-na-ku-nku ‘They wash *each other*.’

Causative formation may be characterized as addition of an extra argument:

- (71) *maylla-chi-* [Causer] [Agent] [Patient]
maylla-chi-nku ‘They cause sb (COM) to wash sb (ACC).’

The causative of a two-place verb is a derived verb with three arguments and the interaction with reflexive and reciprocal formation leads to a number of different surface realizations. It is here that we find a major difference between Ayacucho Quechua and the other southern Quechua dialects. In Ayacucho, as well as in the Quechua I dialects, the reflexive marker *-ku* may occur before the causative suffix. That allows these dialects to express embedded reflexive relations as in (72a) (impossible in Cuzco and Bolivian Quechua) and, by consequence, the form of embedded reciprocals is also different, cf. (72b) (as contrasted with (56)):

- (72) a. *warmi-qa wawa-s-ta maylla-ku-chi-n*.
 woman-TOP child-PL-ACC wash-REFL-CAUS-3SG
 ‘The woman makes the children wash themselves.’
 b. *warmi-qa wawa-s-ta maylla-na-ku-chi-n*.
 woman-TOP child-PL-ACC wash-REC-REFL-CAUS-3SG
 ‘The woman makes the children wash each other.’

Interaction between causative, reflexive and reciprocal formation may then be schematically represented as in (73-76) (Q stands for Quechua here):

- | | | |
|------|--|--|
| (73) | <i>maylla-chi-</i>
<i>maylla-ku-chi-n</i>
<i>maylla-na-ku-chi-n</i>
<i>maylla-na-chi-n</i> | [Causer] [Agent] _{i,n} [Patient] _{i,n}
'He makes sb (ACC) wash <i>themselves</i> ' (QI, impossible in QII)
'He makes sb (ACC) wash <i>each other</i> ' (QI, impossible in QII)
'He makes sb (ACC) wash <i>each other</i> ' (QII); |
| (74) | <i>maylla-chi-</i>
<i>maylla-chi-ku-nku</i>
<i>maylla-chi-na-ku-nku</i> | [Causer] _{i,n} [Agent] _{i,n} [Patient]
'They make <i>themselves</i> wash sb (ACC)' (QI, QII)
'They make <i>each other</i> wash sb (ACC)' (QI, QII) |
| (75) | <i>maylla-chi-</i>
<i>maylla-chi-ku-nku</i>
<i>maylla-na-chi-ku-nku</i>
<i>maylla-chi-na-ku-nku</i> | [Causer] _{i,n} [Agent] [Patient] _{i,n}
'They make sb (COM) wash <i>themselves</i> ' (QI, QII)
'They make sb (COM) wash <i>each other</i> ' (QI, possibly QII)
'They make sb (COM) wash <i>each other</i> ' (Bolivian Q.) |
| (76) | <i>maylla-chi-</i>
<i>maylla-chi-ku-nku</i>
<i>maylla-na-chi-ku-nku</i> | [Causer] _{i,n} [Agent] _{i,n} [Patient] _{i,n}
'They make <i>themselves</i> wash <i>themselves</i> ' (not attested)
'They make <i>each other</i> wash <i>each other</i> ' (Bolivian Q.) |

10. Etymology

The fact that Quechua is a linguistic isolate (except the possible genetic relatedness with Aymara) and the fact that written sources only date back to the beginning of the sixteenth century make any etymological claim very tentative, at best. Probably, *-na-ku* may be linked to Aymara *-naka* and Quechua *-kuna* which function as pluralizers on nouns, but it is not clear what is the direction of this link.

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PART IV

Reflexive-reciprocal-sociative polysemy of reciprocal markers

Verbal reciprocal marker only

Reciprocal constructions in Warrungu

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1. Introductory notes

1.1 Warrungu and other Australian languages

Warrungu (also spelt Warungu) used to be spoken in the upper Herbert River region, west of Ingham, North Queensland, Australia. Its closest relative is Gugu-Badhun (see Sutton 1973). Neither language has a fluent speaker left.

I conducted fieldwork on Warrungu three times from 1971 to 1974, when there were only two fluent speakers: the late Mr. Alf Palmer (Warrungu name: Jinpilngkay) and the late Mr. Alick Collins. (Hereafter, I shall omit “the late Mr.”) Most of the data on Warrungu was collected by me from Alf Palmer. My corpus includes approximately six hours’ running texts. Prior to my work on Warrungu, a small amount of data had been collected by R.M.W. Dixon from Alf Palmer and by Peter Sutton from Alick Collins.

I dedicate this paper to Alf Palmer, who used to say to me, “When I die, this language will die. I teach you everything I know, so put it down properly”.

The Warrungu phoneme inventory, written in a practical orthography, is the following: /*p, t, j, k, m, n, ny, ng, l, rr, r, w, y, a, i, u, aa*/.

1.2 Overview

Warrungu has the verbal derivational suffix *-wa-Y* ‘reciprocal’. This suffix is generally added to transitive roots, and turns them into intransitive verbs. That is to say, reciprocal verbs are intransitive, and the subject is changed from the ergative into the nominative. Thus, corresponding to a transitive clause such as (1a), we can have a reciprocal version such as (1b):

- (1) a. *kantu-ngku pama-Ø paja-n.*
 dog-ERG man-ACC bite-NFUT
 ‘The dog bit a man.’
- b. *kantu-Ø paja-wa-n.*
 dog-NOM bite-REC-NFUT
 ‘The dogs bit each other/one another.’

(Henceforth, when a reciprocal verb allows both ‘each other’ and ‘one another’ readings, it will be simply glossed ‘each other’.)

The central meaning of *-wa-Y* ‘REC’ is “reciprocal”, but it also has a few other non-productive meanings, such as “sociative”. *-wa-Y* ‘REC’ is the only way to express reciprocity.

Warrungu reciprocal constructions are subject-oriented, and not object-oriented. They can be classified as follows:

1. “Canonical” reciprocals:
 - (a) derived from two-place transitives: subject-direct object diathesis type, and
 - (b) derived from two-place intransitives: subject-oblique object diathesis.
2. “Indirect” reciprocals: subject-receiver diathesis.
3. “Possessive” reciprocals: subject-possessor diathesis type.¹

The subject of “indirect” and “possessive” reciprocals is not ergative but nominative, despite the fact that a direct object can be retained in them.

2. Grammatical notes

Those aspects of Warrungu grammar which are pertinent to the ensuing discussions are given below. Further details are in Tsunoda (1974).

2.1 Morphology

Warrungu is entirely suffixing. Also, it is largely agglutinating, although there are elements of fusion as well. Morpheme boundaries are indicated by equation signs (“=”) for enclitics and by hyphens elsewhere. In instances of fusion and in those in which morpheme boundaries are difficult to recognize, glosses are given as, for instance, *ngaya* ‘1SG.NOM’, without indicating morpheme boundaries.

2.2 Parts of speech

The following parts of speech can be set up for Warrungu: pronouns, nouns (including “adjectives” and “demonstratives”), adverbs, verbs, and interjections. In addition, there are enclitics, which are largely modal.

1. Warrungu syntax is strongly ergative, revolving around the S/O pivot (Tsunoda 1988), and there is no decisive syntactic evidence to set up the subject (S/A). Nor is there any evidence to recognize the direct object. Nonetheless, I shall continue to use terms such as “subject” and “direct object”, in order to facilitate comparison with other papers in this volume.

Table 1. Case system

	pronouns	nouns
	'1sg'	'man'
ergative	<i>ngaya</i>	<i>pama-ngku</i>
nominative	<i>ngaya</i>	<i>pama-Ø</i>
accusative	<i>nganya</i>	<i>pama-Ø</i>

2.3 Nouns and pronouns

Nouns generally lack number distinction (but there are just a few non-productive plural or dual suffixes; see 9.2 for one of these suffixes), while (personal) pronouns distinguish three numbers: singular, dual, and plural. A dual pronoun is sometimes accompanied by a singular pronoun or by a noun with a singular referent. Thus:

- (2) *ngali-Ø yinta yani-yal.*
 1DU-NOM 2SG.NOM go-PURP (TT)²
 'We, including you, will go', i.e. 'you and I will go.'

As the translation indicates, such a combination does not mean 'A and B', but rather has a "subset" reading, i.e. 'A, including B'; the accompanying pronoun or noun specifies a member of the group. Other examples include (8), (62), (65), (66). The same applies to combinations involving a plural pronoun, e.g. (42), (53b). Warrungu lacks a conjunction corresponding to the English *and*.

Warrungu has the following cases: ergative (for the transitive subject), nominative (for the intransitive subject), accusative (for the direct object), dative, genitive, locative, ablative, (nominal) comitative, and instrumental. (The ergative and the instrumental have almost identical allomorphs.) The case system exhibits a type of split ergativity. See Table 1. Roughly speaking, in the pronouns the ergative and the nominative case forms are identical, as opposed to the accusative, while in the nouns, etc. the nominative and the accusative are identical, and distinct from the ergative. (There are, in fact, a few deviations from this generalization. For instance, the pronouns '3DU' and '3PL' each can have an ergative form (with an ergative suffix) distinct from the nominative form (with a zero suffix), e.g. *pula-ngku* '3DU-ERG' in (11)).

2.4 Verbs

Verbs inflect for tense and mood, but not for person or number. Verbal derivational suffixes, some of which express aspect and/or voice, are discussed in 2.6.1 to 2.7. There are three conjugational classes: *L*-class, *Y*-class, and *Ø*-class. The difference between the three classes can be seen, for instance, in certain nonfuture forms, e.g. *palka-l* 'hit-NFUT', *nyina-y* 'sit-NFUT' and *watali-Ø* 'run-NFUT'.

2. "TT" means that this example was made up for this paper and was not checked with a Warrungu speaker. Examples not marked with "TT" were either provided by Alf Palmer, or composed by me and approved by him.

I shall indicate – by means of *-L*, *-Y*, and *-Ø* respectively – the conjugational class membership of verb roots and verbal derivational suffixes wherever relevant information is available.

2.5 Clause types

Roughly speaking, clauses in Warrungu can be divided as follows:

- Non-derived clauses, whose predicate verb does not contain a derivational suffix.
- Derived clauses, whose predicate verb contains a derivational suffix.

Non-derived clauses can be classified as follows:

- | | | | |
|-----|-------------|---------------|---------------------------------------|
| (a) | three-place | transitive: | ERG-ACC-DAT, e.g. ‘give’ in (9) |
| | | | ERG-ACC-GEN, e.g. ‘give’ in (9) |
| | | | ERG-ACC-INST, e.g. ‘give’ in (11) |
| (b) | two-place | transitive: | ERG-ACC, e.g. ‘bite’ in (1a) |
| | | intransitive: | NOM-DAT, e.g. ‘get angry with’ in (6) |
| | | | NOM-LOC, e.g. ‘be afraid of’ |
| (c) | one-place | intransitive: | NOM, e.g. ‘go’ in (2). |

(The valency of verbs is determined somewhat arbitrarily; it is not easy to determine which NPs are arguments and which NPs are not.)

Among derived clauses, reciprocal, reflexive and antipassive clauses, for instance, are intransitive; their subject is nominative, and not ergative.

Word order is not rigid (Tsunoda 1990), and the case frames listed above do not imply any rigid ordering of the NPs. Also, Warrungu discourse is highly elliptical.

2.6 Valency-changing markers

Verbal derivational suffixes can be classified into three types: valency-increasing, valency-decreasing, and valency-preserving. Certain of the valency-preserving suffixes appear to have a sociative meaning. These three types of verbal derivational suffixes will be dealt with very briefly.

2.6.1 Valency-increasing markers

[1] *-nga-L* ‘transitivizing, causative’ is added to nouns, pronouns, verb roots, etc. and yields transitive verbs, often with a causative meaning; e.g.: *walwa* ‘bad, sick’ → *walwa-nga-L* ‘to make bad/sick’; *wanpa-L* ‘to be afraid’ → *wanpa-l-nga-L* ‘to frighten’. Apparently *-wa-Y* ‘REC’ cannot be added to a derivational suffix (see Section 3 below), and consequently we cannot have a reciprocal verb based on a verb formed with *-nga-L*, such as **wanpa-l-nga-wa-Y* ‘to frighten each other’. It also seems impossible to have a *-nga-L* verb based on a reciprocal verb, such as **wanpa-wa-nga-L* ‘to make sb afraid of each other’.

[2] *-pa-L/-mpa-L* ‘transitivizing, causative’ is added to nouns, verb roots, etc., and forms transitive verbs, sometimes with a causative meaning; e.g.: *ngurrmpun* ‘noise’ → *ngurrmpun-pa-L* ‘to make noise’; *waka-L* ‘to get up’ → *waka-mpa-L* ‘to lift up’.

[3] *-ri-L* ‘causative’ is added to two intransitive roots and produces transitive verbs with a causative meaning: *jana-Y* ‘stand’ → *jana-ri-L* ‘to stand (sth) up’; *wanpa-L* ‘to be afraid’ → *wanpa-ri-L* ‘to frighten’.

[4] *-ri-L* ‘verbal comitative’ is added to intransitive roots and produces transitive verbs, whose meaning is comitative. Thus: *wuna-Y* ‘to lie, sleep’ → *wuna-ri-L* ‘to sleep with (sb)/on (sth)/in (a camp)’, cf. (70) and (71).

[5] *-ri-L* ‘verbal instrumental’ is added to transitive roots and forms transitive verbs which mean ‘to do with sth’; e.g.: *kunpa-L* ‘to cut sth’ → *kunpa-ri-L* ‘to cut sth with sth’.

2.6.2 Valency-decreasing markers

[1] *-ra-* and *-ri-* ‘anticausative’ have been attested with just one and the same transitive root: *wuta-L* ‘to take out, pull sth out’ → *wuta-ra-* ‘to come out’ and *wuta-ri-* ‘to come out’.

[2] *-li-Ø* ‘reflexive, anticausative’ is added to transitive roots, and produces intransitive verbs which are reflexive or anticausative: *pangka-L* ‘to paint’ → *pangka-li-Ø* ‘to paint oneself’ (reflexive); *waju-L* ‘to burn, cook’ → *waju-li-Ø* ‘to burn, get/be cooked’ (anticausative), cf. (51).

[3] *-kali-Ø* ‘reflexive, anticausative, antipassive’ is added to transitive roots and certain transitive stems, and produces intransitive verbs which are reflexive, anticausative or antipassive; e.g.: *pampu-L* ‘to shoot’ → *pampu-kali-Ø* ‘to shoot oneself’ (reflexive); *waju-L* ‘to burn, cook’ → *waju-kali-Ø* ‘to get cooked’ (anticausative), cf. (52); *pija-L* ‘to drink’ → *pija-kali-Ø* ‘to drink’ (antipassive). (For a detailed discussion of antipassives, see Tsunoda 1988. For a detailed discussion of reflexives see Tsunoda 2006.)

[4] *-wa-Y* ‘reciprocal’. See (1b).

2.7 Sociative-like suffixes

There are two reciprocal verbs which appear to have a sociative meaning (5.2.1). In addition, there are four suffixes which have a meaning close to “sociative”. They are attached to verb roots. They do not seem to affect the transitivity of the root concerned.

[1] *-karra-Y* ‘iterative, sociative (?)’ is mostly attached to intransitive roots, producing intransitive verbs which mean ‘(the same actor) does repeatedly/continuously, or, here and there’ or ‘(many actors) do here and there, or, simultaneously’. The latter meaning is similar to sociative. Thus: *wuna-Y* ‘to lie, sleep’ → *wuna-karra-Y* ‘(the same actor) lies/sleeps here and there’ and ‘(many actors) lie here and there’.

[2] *-rV-L* (?) ‘sociative (?)’ is added to transitive and intransitive verb roots, yielding verbs which mean ‘(many actors) do here and there’, ‘(many actors) do something to one’, or ‘(one actor) does something to many’; e.g.: *jana-Y* ‘to stand’ → *jana-ra-* ‘(all) stand about’; *kanyji-L* ‘to carry’ → *kanyji-ri-L* ‘to carry (many things), (many actors) carry’;

kuypa-L ‘to give’ → *kuypa-ra-L* ‘to give to many people; many actors give’, cf. (72). The vowel of this suffix copies the last vowel of the verb root.

[3] *-nta-* ‘sociative (?)’ is added to transitive and intransitive verb roots, and forms verbs which seem to mean ‘the same actor or many actors does/do repeatedly, or, here and there’ or ‘(many actors) do simultaneously’; cf.: *wula-Y* ‘to die’ → *wula-nta-* ‘(all) die’; *paja-L* ‘to bite’ → *paja-nta-* ‘to bite everything, bite about’.

[4] *-ya-* ‘sociative (?)’ is added to transitive and intransitive verb roots and two of the resultant stems have a meaning similar to sociative, e.g. *yani-L* ‘to go/walk’ → *yani-ya-* ‘(all) go’.

2.8 Expressions of possession

Possession in Warrungu is of two types: (a) alienable possession, including that of kinsmen, and (b) inalienable possession, including that of body parts, body secretions, footprints, shadows, names, languages, and parts of inanimate objects. Alienable possession is expressed by means of the genitive, e.g.:

- (3) *ngali-Ø nyaka-lku nyilamu-Ø kama-Ø yinu.*
 1DU-ERG see-PURP new-ACC Gama-ACC 2SG.GEN
 ‘We (two) will watch your new Gama dance.’

Inalienable possession is generally indicated by apposing the possessor and the possessed, e.g. (4), although it is sometimes marked by the genitive, e.g. (5):

- (4) *ngaya nyunya manu-Ø muka-n.*
 1SG.ERG 3SG.ACC neck-ACC grab-NFUT
 ‘I grabbed his neck.’
- (5) *ngaya pulu-Ø nyungu muka-n.*
 1SG.ERG belly-ACC 3SG.GEN grab-NFUT
 ‘I grabbed his belly.’

Example (4) demonstrates apposition in the direct object position, but this apposition is possible in other syntactic positions as well.

3. Reciprocal verbs

As noted in 1.2, *-wa-Y* ‘REC’ is generally added to transitive roots; this use is productive. Also, it is (probably non-productively) attached to two intransitive roots (see (8), (42) and (53a, b)), and to one noun only: *kuku* ‘speech, language’ (see 8.2).

There is a strong correlation between the three conjugational classes (see 2.4) and transitivity:

- (a) *L*-class: predominantly transitive.
- (b) *Y*-class: entirely (?) intransitive.
- (c) *Ø*-class: entirely intransitive.

All the verb roots to which *-wa-Y* is added (including the two intransitive roots) belong to the *L*-class, with one possible exception (see [4] in 4.2). Thus, roughly speaking, affixation of *-wa-Y* shifts verbs from the transitive *L*-class to the intransitive *Y*-class. That is, in terms of verb morphology, reciprocal verbs are intransitive.

The verb roots to which *-wa-Y* ‘REC’ is added can be used as verbs by themselves (but see [3] and [4] in 4.2, and also 5.3.2).

It seems that, like some other verbal derivational suffixes, *-wa-Y* cannot be added to another derivational suffix (or to an inflectional suffix). This will be further discussed in 8.1.

A full list of attested reciprocal verbs, including non-productive ones, is given below. The figures in parentheses indicate the (approximate) number of the examples in my data (including the six hours’ running texts). The gloss ‘REC’ is omitted.

[1] Derived from three-place transitive verbs:

<i>pirra-wa-Y</i>	‘to talk/tell’ (240)
<i>kuypa-wa-Y</i>	‘to give’ (28)
<i>mayka-wa-Y</i>	‘to tell’ (13)
<i>panju-wa-Y</i>	‘to ask’ (5)
<i>ngunpa-wa-Y</i>	‘to tell, show’ (4).

[2] Derived from two-place transitive verbs:

<i>palka-wa-Y</i>	‘to kill, hit’ (108)
<i>papa-wa-Y</i>	‘to stab/spear’ (57)
<i>jaynyja-wa-Y</i>	‘to copulate with’ (30)
<i>junta-wa-Y</i>	‘to kiss’ (21)
<i>muka-wa-Y</i>	‘to hold/grab’ (20)
<i>jingka-wa-Y</i>	‘to punch’ (18)
<i>julnyju-wa-Y</i>	‘to watch/stare’ (13)
<i>nyaka-wa-Y</i>	‘to see’ (8)
<i>paja-wa-Y</i>	‘to bite’ (8)
<i>pangka-wa-Y</i>	‘to paint’ (7)
<i>wania-wa-Y</i>	‘to leave’ (6)
<i>jaympa-wa-Y</i>	‘to find’ (5)
<i>payku-wa-Y</i>	‘to bash’ (3)
<i>palpa-wa-Y</i>	‘to roll’ (2)
<i>kuni-wa-Y</i>	‘to fight’ (2)
<i>pinta-wa-Y</i>	‘to put down’ (2)
<i>kampa-wa-Y</i>	‘to cover’ (1)
<i>waju-wa-Y</i>	‘to burn’ (1)
<i>pampu-wa-Y</i>	‘to shoot’ (1)
<i>muja-wa-Y</i>	‘to eat’ (1)
<i>paya-wa-Y</i>	‘to sing’ (1),

and also two variants of the compound verb meaning ‘argue/quarrel with’: *kuku-payi-wa-Y* (7), *kuku-payu-wa-Y* (4).³

3. The transitive counterpart for the reciprocal *kuku-payi-wa-Y/kuku-payu-wa-Y* is *kuku-payi-L* ‘to argue/quarrel with’. *kuku* is a noun meaning ‘speech’. There is a transitive verb *pari-L* ‘to twist, turn’, and it appears to have

[3] Derived from a two-place intransitive verb: *kuli waka-wa-Y* ‘to get angry (with sb)’ (4).

[4] Derived from a one-place intransitive verb: *jarka-wa-Y* ‘to go in’ (3).

[5] Derived from a noun: *kuku-wa-Y* ‘speech’, i.e. ‘to argue/quarrel with each other’ (1).

As can be seen, *-wa-Y* ‘REC’ is most common with those two-place transitive verbs which describe actions that affect or impinge on the patient. See Tsunoda (1985:391) in this connection.

4. Diathesis types of reciprocal constructions

As mentioned in 1.2, the diathesis types exhibited by Warrungu reciprocal constructions are subject-oriented only. The classification of reciprocal constructions is given in 1.2. It should be noted that this classification applies to the central, i.e. reciprocal, use of *-wa-Y*, but it seems inapplicable to certain other uses, such as sociative. The central use of *-wa-Y* is exemplified below. Its non-central use will be dealt with in 5.2.1 through 5.2.4.

4.1 “Canonical” reciprocals

4.1.1 *Derived from two-place transitives: Subject-direct object diathesis type*

This type involves two-place transitive clauses. The correspondence in terms of case frames between the underlying (i.e. non-REC) and respective reciprocal clauses is shown in Table 2. The subject changes from the ergative to the nominative, and the direct object is deleted. This deletion seems obligatory.

Table 2. Subject-direct object diathesis type

	subject	direct object
NON-REC	ERG	ACC
REC	NOM	...

All the relevant reciprocal verbs are listed in Section 3. For an example, see (1b). Many more examples are given below.

4.1.2 *Derived from two-place intransitives: Subject-oblique object diathesis type*

A combination of the noun *kuli-Ø* ‘angry-NOM’ and *waka-L* ‘to get up’ means ‘to get angry (with sb)’. It generally takes the NOM-DAT frame, as in (6), and exceptionally the NOM-GEN

developed into *payi-* in *kuku-payi-L* and *kuku-payi-wa-Y*, and further into *payu-* in *kuku-payu-wa-Y*. If this is the case, the transitive counterpart literally means ‘twist-speech’. In my data, *payi-* and *payu-* are not used as verbs by themselves. Their class membership is not known, but presumably they are of the *L*-class, like *pari-L* (vt) ‘to twist, turn’.

frame in one case, viz. in (7). The reciprocal version *kuli waka-wa-Y* takes the NOM frame, and the dative (or genitive) NP ‘(angry) with sb’ is absent, cf. (8).

- (6) *nyula kuli-Ø waka-n ngayku-n-ku.*
 3SG.NOM angry-NOM get.up-NFUT 1SG-LINK-DAT⁴
 ‘She got angry with me.’
- (7) (‘Why did they get angry with them?’)
jana-Ø=kuli jana-ngu kuli-Ø waka-n.
 3PL-NOM=for.no.reason 3PL-GEN angry-NOM get.up-NFUT
 ‘They (PL) got angry with them for no reason.’
- (8) *ngali-Ø yinta kuli-Ø waka-wa-n.*
 1DU-NOM 2SG.NOM angry-NOM get.up-REC-NFUT
 ‘We, including you, (i.e. you and I) got angry with each other.’

The nominal comitative form *kuli-yi* ‘angry-N.COM’ sometimes occurs in place of the nominative *kuli-Ø* in these expressions: *kuli-yi waka-L* ‘to get angry’ and *kuli-yi waka-wa-Y* ‘to get angry-REC’. But the nominal comitative suffix seems semantically empty here. The examples involving *kuli* (or *kuli-yi*) *waka-L* ‘to get angry’ and *kuli* (or *kuli-yi*) *waka-wa-Y* ‘to get angry with each other’ are the only instances of the subject-oblique object diathesis type.

4.2 “Indirect” reciprocals: Subject-receiver diathesis type

This type involves three-place transitive verbs. All the relevant reciprocal verbs are listed in Section 3. The receiver (i.e. a recipient of “give” or a hearer of “tell”) may be marked by the dative, the genitive or the accusative. But in a reciprocal version it is consistently deleted (apparently obligatorily), irrespective of its case-marking.

Table 3. *kuypa-L* ‘to give’ and *kuypa-wa-Y* ‘to give-REC’

		donor (subject)	gift	recipient (receiver)	example
1a	NON-REC	ERG	ACC	DAT	(9)
2a	NON-REC	ERG	ACC	GEN	(9)
1b, 2b	REC	NOM	ACC	....	(10)
3a	NON-REC	ERG	INST	ACC	(11)
3b	REC	NOM	INST	....	(12)

[1] *kuypa-L* ‘to give’ and the reciprocal *kuypa-wa-Y* have the case frames shown in Table 3. Among the underlying case frames, 1a and 2a are frequently used, but 3a is not. An example of 1a and 2a is:

4. Linking suffixes merely occur between two morphemes, apparently with no meaning.

- (9) *kaya-na-wu* (or *kaya-na-ngu*) *ngaya manyja-Ø kuypa-n.*
 father-KIN-DAT father-KIN-GEN 1SG.ERG food-ACC give-NFUT
 ‘I gave food to [my] father.’

An example of 1b and 2b:

- (10) *pama-Ø manyja-Ø kuypa-wa-n.*
 man-NOM food-ACC give-REC-NFUT
 ‘The men gave food to each other.’

An example of 3a:

- (11) *pula-ngku nganya kuypa-n manyja-ngku.*
 3DU-ERG 1SG.ACC give-NFUT food-INST
 ‘They (two) gave me food.’

(This case frame is reminiscent of that of English verbs such as *provide*, *supply* and *present*, as in *to present someone with something*.) There is no spontaneous example of 3b, but the following was approved by Alf Palmer:

- (12) *pama-Ø manyja-ngku kuypa-wa-n.*
 man-NOM food-INST give-REC-NFUT
 ‘The men gave food to each other.’

There is no example of the “subject-gift” type, such as ‘they gave themselves to each other’.

Table 4. *mayka-L* ‘to tell’ and *mayka-wa-Y* ‘to tell-REC’

		speaker (subject)	topic	hearer (receiver)	example
1a	NON-REC	ERG	DAT	ACC	(13)
1b	REC	NOM	DAT	....	(16)
2a	NON-REC	ERG	ACC	DAT	(14)
2b	REC	NOM	ACC	....	(15) (?)

[2] *mayka-L* ‘to tell’ and the reciprocal *mayka-wa-Y* appear to have the case frames shown in Table 4. The case frame 1a, e.g. (13), is more common than 2a, e.g. (14).

- (13) *nyula nganya mayka-lku ngani-wu?*
 3SG.ERG 1SG.ACC tell-PURP what-DAT
 ‘What will he tell me about?’
- (14) *ngaya burri-Ø yinu-n-ku mayka-n.*
 1SG.ERG name-ACC 2SG-LINK-DAT tell-NFUT
 ‘I told [their] names to you (SG).’

In all of the examples of the reciprocal *mayka-wa-Y*, the topic and the hearer are elliptical, with one exception. The only exception is:

- (15) *?ngani-Ø ngali-Ø mayka-wa-yal?*
 what-ACC 1DU-NOM tell-REC-PURP
 ‘What shall we (two) tell each other?’

Sentence (15) would be an example of 2b, which corresponds to the (uncommon) case frame 2a. However, when the tape was replayed, Alf Palmer replaced *ngani-Ø* with the dative *ngani-wu*, thus yielding:

- (16) *ngani-wu ngali-Ø mayka-wa-yal?*
 what-DAT 1DU-NOM tell-REC-PURP
 ‘What shall we (two) tell each other about?’

This version is an example of 1b, which corresponds to the (common) case frame 1a. It is not certain if (15) is fully acceptable. It is in view of this that a question mark is placed for (15).

[3] *pirra-L* ‘to tell, talk, speak’ is almost always used in the reciprocal form (about 240 examples), although it can occur in the antipassive form (9 examples) and also can be used as a transitive verb by itself (4 or possibly 6 examples).⁵ The examples are highly elliptical, and it is difficult to determine the case frames employed. Nonetheless, the data suggests that *pirra-L* ‘to tell’ and *pirra-wa-Y* ‘to tell each other’ have the case frames shown in Table 5.

Table 5. *pirra-L* ‘to tell’ and *pirra-wa-Y* ‘to tell-REC’

		speaker (subject)	speech or language	topic	hearer (receiver)	possible examples
1a	NON-REC	ERG	?	DAT	ACC	(17), (18)
1b	REC	NOM	?	DAT	....	(19)
2a	NON-REC	ERG	?	ACC	DAT	(20)
2b	REC	NOM	?	ACC	....	(21)
3a	NON-REC	ERG	ACC	DAT	?	no example
3b	REC	NOM	ACC	DAT	....	(22), (23)

If we ignore the noun denoting speech or a language, then 1a, 2a and 1b, 2b are the same as those of *mayka-L* ‘to tell’ and *mayka-wa-Y* ‘to tell each other’, respectively. However, 3a and 3b, which each contain an accusative noun referring to speech or a language, are confined to *pirra-wa-Y* ‘to tell each other’; they do not seem to occur with *mayka-wa-Y* ‘to tell each other’. It is not known if 1a or 2a can contain an NP referring to speech or a language. Nor is it known if 3a can include an NP denoting the hearer. If any of 1a, 2a and 3a could contain such an additional NP, then *pirra-L* ‘to tell, talk, speak’ would be not three-place but four-place, and it would be the only four-place verb in Warrungu. Two putative examples of 1a:

5. Gugu-Badhun, immediately south of Warrungu, has *pirra-Y* ‘talk’ (Sutton 1973: 147). This *pirra-Y* is used as a verb by itself, but its reciprocal form does not seem attested. Note that the Gugu-Badhun *pirra-Y* is of the Y-class, in contrast with the Warrungu *pirra-L* ‘tell, talk’, which is of the L-class. It is not known whether the Gugu-Badhun *pirra-Y* is transitive or intransitive.

- (17) *ngani-wu pirra-lku ?*
 what-DAT tell-PURP
 ‘What will [he] tell [her] about?’
- (18) *wanyu-lu yina pirra-n ?*
 who-ERG 2SG.ACC tell-NFUT
 ‘Who told you (SG) [about it]?’

An example of 1b is:

- (19) *warrngu-wu ngali-Ø pirra-wa-ya.*
 woman-DAT 1DU-NOM talk-REC-IMP
 ‘Let’s tell each other about women’ or ‘Let’s talk about women.’

A possible example of 2a is:

- (20) *pama-ngku warrngu-wu pirra-n.*
 man-ERG woman-DAT tell-NFUT
 ‘The man told [something] to the woman.’

An example of 2b:

- (21) *pirra-wa-yal ngali-Ø ngani-Ø pirra-wa-yal?*
 tell-REC-PURP 1DU-NOM what-ACC tell-REC-PURP
 ‘What shall we (two) tell each other?’

There is no example of 3a. Two rare non-elliptical examples of 3b follow. (22) contains the noun *kuku* ‘speech’, and (23) contains a language name (*jirrpal*).

- (22) *kuku-Ø ngali-Ø pirra-wa-yal warrngu-wu.*
 speech-ACC 1DU-NOM tell-REC-PURP woman-DAT
 lit. ‘We (two) will tell speech to each other about the woman’, i.e. ‘we two will talk about the woman.’
- (23) (‘You think I don’t understand the Dyirbal language’)
jirrpal-Ø yurra-Ø pirra-wa-n ngayku-n-ku.
 Dyirbal-ACC 2PL-NOM talk-REC-NFUT 1SG-LINK-DAT
 ‘You (PL) are speaking [in] Dyirbal to one another about me.’

[4] *ngunpa-* ‘to tell, show’ and the reciprocal *ngunpa-wa-Y*. Like *pirra-L* ‘to tell, talk’, *ngunpa-* ‘to tell, show’ is hardly ever used as a verb by itself; it generally occurs in the reciprocal *ngunpa-wa-Y* or in *ngunpa-y-nga-L* ‘to show, teach’ (*-nga-L* ‘transitivising, causative’; see 2.6.1).⁶ There is only one example of *ngunpa-* ‘to tell, show’: *ngunpa-n* ‘tell/show-NFUT’. This only example is highly elliptical, and the case frame of *ngunpa-* is not known. Similarly, in all of the examples of the reciprocal *ngunpa-wa-Y*, the topic and the hearer are elliptical, and its case frame is not known. An example:

6. The form *ngunpa-y-nga-L* ‘to show, teach’ suggests that etymologically *ngunpa-* ‘to tell, show’ belonged to the *Y*-class. (If it did, it would be the only transitive root which belonged to the *Y*-class; all the other transitive roots and also all the derived transitive stems belong to the *L*-class; see Section 3.) However, there is no data to confirm this.

- (24) ('We intended to kill our enemies')
ngana-Ø jili-ngku ngunpa-wa-n.
 1PL-NOM eye-INST tell-REC-NFUT
 'We (PL) told one another [of this intention] with [our] eyes.'

[5] *panju-L* 'to ask' ('to request/inquire') has one case frame: 'Someone (ERG) requests someone (ACC) for something (DAT)', or 'someone (ERG) asks someone (ACC) about something or someone (DAT)'. This case frame is similar to 1a of *mayka-L* 'to tell'. The case frame of the reciprocal *panju-wa-Y* is not known.

4.3 "Possessive" reciprocals: Subject-possessor diathesis type

As noted in 2.8, inalienable possession is generally indicated by the apposition of the possessor and the possessed, as in (4), and occasionally by the genitive, as in (5). Now, we have a reciprocal clause:

- (25) (The men were being silly)
 ... *pama-Ø=kuli manu-Ø muka-wa-n.*
 ... man-NOM=alone neck-ACC grab-REC-NFUT
 '... the men grabbed one another's neck for no reason.'

(The discourse enclitic =*kuli* means 'alone, by oneself, for no reason'.)

The direct object indicating the possessed/body part can be retained, as (25) illustrates. However, the direct object denoting the possessor is deleted, apparently obligatorily. This is irrespective of whether the possession in the corresponding underlying clause is marked by apposition, as in (4), or by the genitive, as in (5). Then, the correspondence is as shown in Table 6.

Table 6. Subject-possessor diathesis type

	subject	possessor	possessed
NON-REC	ERG	ACC	ACC
NON-REC	ERG	GEN	ACC
REC	NOM	...	ACC

A pair of examples:

- (26) *ngaya ... warrngu-Ø mara-Ø muka-n.*
 1SG.ERG ... woman-ACC hand-ACC hold-NFUT
 'I held [the] woman's hand.'
- (27) *ngali-Ø mara-Ø muka-wa-n.*
 1DU-NOM hand-ACC hold-REC-NFUT
 'We (two) held each other's hands', i.e. 'we shook hands.'

(The expression *mara-Ømuka-wa-Y* generally means 'to shake hands'. Alf Palmer used this sentence to describe our shaking hands on my return to Palm Island in June 1972.)

The subject-possessor diathesis type has been attested with inalienable possession only. There is no example involving alienable possession, such as ‘we took each other’s hats’. As well, this type has been attested only in the direct object position of transitive clauses. There is no example of this type involving some other syntactic position. Thus, there is no example such as ‘we put a hat on each other’s head’ or ‘we took a hat off each other’s head’.

5. The meanings of reciprocal constructions

The meanings of reciprocal constructions can be classified as follows:

1. Reciprocal proper: an action is reciprocated between/among the participants.
2. Non-reciprocal: there is no such action or the like.

The reciprocal type proper, which covers the vast majority of the instances, is fully productive, while the non-reciprocal type is not.

5.1 Reciprocal proper

Reciprocal constructions of this type can be divided into two subtypes:

1a. Completely coreferential: the participant(s) who perform(s) the action and the one/those who receive(s) it are completely coreferential.

1b. Partly coreferential: the two sets of participants are only partially coreferential.

Admittedly it is not always easy to assign a given instance to one subtype rather than to the other.

Using another parameter, reciprocal constructions of the reciprocal type proper can be classified into the following two subtypes (Takahashi 1988:52–53).

- (a) simultaneous: reciprocation of the action is done simultaneously and
- (b) alternate: reciprocation of the action is done alternately or by turns.

These two classifications are mutually compatible.

5.1.1 *Completely coreferential and partly coreferential*

If the subject has a plural (rather than dual) referent, then out of context a given reciprocal construction may be either “completely coreferential” or “partly coreferential”. For example, in (1b), the subject may have a plural referent. Now, if each of the dogs did the biting and also got bitten, then (1b) is “completely coreferential”. But if dog A bit some other dog(s) but did not get bitten, or, if dog B got bitten but did not bite any other dog, and so on, then (1b) is “partly coreferential”. It seems that the “partly coreferential” reading is more plausible when the number of the participants is fairly large than when it is just two or three.

Clear examples of “partly coreferential” include:

- (28) (They had a (inter-tribal?) fight)

jana-Ø nguni palka-wa-n muja-wa-n.
 3PL-NOM there kill/hit-REC-NFUT eat-REC-NFUT
 ‘They killed one another and ate one another there.’

Obviously, it is not the case that each participant did the killing and also was killed. Rather, some did the killing only without being killed; some others were killed, probably without doing the killing. Naturally, there may also be some who did the killing and also were killed. Similarly for the situation concerning the eating. Therefore, (28) is “partly coreferential”. Another example (see also (67)):

(29) *burun-ta jana-Ø palka-wa-n palka-wa-n palpa-wa-n*
 fighting.ground-LOC 3PL-NOM kill/hit-REC-NFUT kill/hit-REC-NFUT roll-REC-NFUT
palpa-wa-n jingka-wa-n.
 roll-REC-NFUT punch-REC-NFUT
 ‘In the fighting ground, they (PL) killed/hit one another, rolled one another [i.e. rolled dead bodies], and punched one another.’

Where the subject has a dual (rather than plural) referent, all the examples are “completely coreferential”; each of the two participants performs and receives the action; cf. (16), (19), (21), (22), (27). For a reciprocal sentence with a dual subject, a “partly coreferential” reading (e.g. ‘I painted you and me’, ‘You painted you and me’; see “extended reflexive” in my paper on Djaru in this volume) is conceivable, but there is no example.

5.1.2 *Simultaneous and alternate*

[1] *Simultaneous*. Out of context, most of the reciprocal constructions may be either “simultaneous” or “alternate”. For example, in (1b), the dogs may have bitten each other simultaneously, or alternately.

There are verbs which may be termed lexical reciprocals (or symmetrical verbs), e.g. the transitive verbs *jaynyja-L* ‘to copulate with’, *kuni-* ‘to fight’ and the compound transitive verb *kuku-payi-L* ‘to quarrel/argue with’. The reciprocal versions of such verbs naturally describe a simultaneously reciprocal situation or something similar. Examples follow.

The verb *jaynyja-L* ‘to copulate with’ generally takes a male agent/subject and a female patient/object, as in (30). In addition, the reverse is possible, and the agent/subject can be a female and the patient/object a male, as in (31); this was confirmed by Alf Palmer. (Both (30) and (31) are taken from the running texts.) The reciprocal version is (32).

- (30) (‘I said to her:’)
ngaya yina jaynyja-lku.
 1SG.ERG 2SG.ACC copulate.with-PURP
 ‘I [a man] will copulate with you [a woman].’
- (31) *nyula nganya jaynyja-n.*
 3SG.ERG 1SG.ACC copulate.with-NFUT
 ‘She copulated with me [a man].’
- (32) *ngali-Ø yarru-n-ta jaynyja-wa-ya.*
 1DU-NOM this-LINK-LOC copulate.with-REC-IMP
 ‘Let’s copulate with each other here.’

Examples involving the compound verb *kuku-payi-L/kuku-payu-L* ‘to argue/quarrel with’:

- (33) *nganya nyula kuku-payi-n.*
 1SG.ACC 3SG.ERG speech-twist-NFUT
 ‘He argued/quarrelled with me.’
- (34) *ngali-Ø kuku-payi-wa-n.*
 1DU-NOM speech-twist-REC-NFUT
 ‘We (two) argued/quarrelled with each other.’

The reciprocal version *kuku-payi-wa-Y/kuku-payu-wa-Y* is more common than the non-derived, transitive counterpart.

The transitive verbs mentioned above seem to be inherently symmetrical. However, apparently they cannot have a reciprocal meaning without the reciprocal suffix. Consider, for instance:

- (35) *ngali-Ø jaynyja-n.*
 1DU-ERG copulate.with-NFUT (TT)

Almost certainly, this sentence cannot mean ‘we (DU) copulated with each other’, and it has to be considered as an elliptical sentence with the meaning ‘we (two) copulated with [some other people]’.

Verbs such as *jaympa-L* ‘to find’ and expressions such as ‘to hold someone’s hand’ are not symmetrical, but their reciprocal versions will be normally considered symmetrical and also simultaneous. Examples:

- (36) *ngaya pama-Ø jaympa-n.*
 1SG.ERG man-ACC find-NFUT
 ‘I found the man.’ (TT)
- (37) (‘He and I decided to have a fight’)
nguna-ngumay ngali-Ø purun-ta jaympa-wa-n.
 that-after 1DU-NOM fighting.ground-LOC find-REC-NFUT
 ‘Then, we (two) met [each other] at the fighting ground.’

For an example of the meaning ‘hold each other’s hand’, see (27). A further discussion of symmetrical verbs is in 5.3.1.

[2] *Alternate*. Certain reciprocal verbs are “alternate” due to their semantics, e.g. (16), (19), (21) to (23): ‘to tell/talk with each other’. People do not normally talk simultaneously; they take turns (hence the need for turn-taking rules).

There are adverbs *paya* ‘in one’s turn’ and *paya-paya* ‘in one’s turn, in return, in turn, reciprocally’. (The reduplicated form is almost always used, and the non-reduplicated form is hardly ever used.) The use of these adverbs in reciprocal constructions is not obligatory. Nor is it common; I have found only four examples. Nonetheless, inclusion of either of them necessarily selects an alternate reading. (38), taken from the running texts, nicely illustrates the meaning ‘in turn’:

- (38) a. *kajarra-Ø nyula palka-n kuypa-lku ngayku-n-ku.*
 possum-ACC 3SG.ERG kill-NFUT give-PURP 1SG-LINK-DAT
 ‘He killed a possum and gave [it] to me.’

- b. *ngaya palka-n nyungu-n-ku kuypa-lku.*
 1SG.ERG kill-NFUT 3SG-LINK-DAT give-PURP
 ‘I killed [a possum] and gave [it] to him.’
- c. *ngali-Ø paya-paya kuypa-wa-n.*
 1DU-NOM in.turn give-REC-NFUT
 ‘We (two) gave [a possum] to each other in turn.’

(Purposive forms of verbs indicate intention, future events, etc. when used in independent clauses or in main clauses, e.g. *jaynyja-lku* in (30). When used in subordinate clauses, they describe purpose or consequences or successive events, e.g. *kuypa-lku* in (38a, b).)

5.2 Non-reciprocal

In the reciprocal type proper, an action or the like is reciprocated between/among the participants, whereas in the non-reciprocal type, there is no such reciprocation. The non-reciprocal type is not productive, and there are only a very small number of examples, which makes it difficult to determine their meanings. Nonetheless, I shall attempt to ascertain their meanings as much as possible.

5.2.1 Sociative

There are two reciprocal verbs which possibly have a sociative meaning: *paya-wa-Y* ‘to sing-REC’ and *jarka-wa-Y* ‘to go in-REC’. (There are no examples in the running texts.)

The verb *paya-L* ‘to sing’ is transitive, with the ERG-ACC case frame:

- (39) *pama-ngku kama-Ø paya-n.*
 man-ERG Gama-ACC sing-NFUT
 ‘The man/men sang the Gama song.’

My word list contains the reciprocal form *paya-wa-Y*. Alf Palmer’s glossed it as “everyone singing” and it suggests that this reciprocal verb has a sociative meaning. There are only two sentential examples of *paya-wa-Y*; cf.:

- (40) *pama-Ø paya-wa-yal.*
 man-NOM sing-REC-PURP
 (tentative translation:) ‘The men are going to sing together.’

(Alf Palmer’s translation of (40) is “i gonna sing”, i.e. ‘he is going to sing.’) Note that the subject is in the nominative, and not in the ergative. That is, this clause is intransitive, like reciprocal clauses proper.

Examples with *jarka-L* ‘to enter/go in’ and *jarka-wa-Y* ‘to enter-REC’:

- (41) *pama-Ø yampa-ngka jarka-n.*
 man-NOM camp-LOC go.in-NFUT
 ‘The man went into the camp.’ (TT)
- (42) *ngana-Ø yinta jarka-wa-yal.*
 1PL-NOM 2SG.NOM go.in-REC-PURP
 ‘We (PL), including you, will go in together.’

For (42), Alf Palmer provided the following comments/translations: “We all go in”, and “everyone go in, no matter how many, hundred or more”. They suggest that (42) has a sociative meaning.

5.2.2 Reflexive

The verbs *pangka-wa-Y* ‘to paint-REC’, *jingka-wa-Y* ‘to punch-REC’, *muka-wa-Y* ‘to hold-REC’ and *pirra-wa-Y* ‘to tell-REC’ seem to have a reflexive meaning in a few instances, although they are reciprocal proper in the other examples. For instance, consider the following example which involves *jingka-L* ‘to punch’:

- (43) *pama-ngku nganya jingka-n.*
 man-ERG 1SG.ACC punch-NFUT
 ‘The man punched me.’ (TT)

The reciprocal version *jingka-wa-Y* ‘punch-REC’ is generally reciprocal proper, cf. (29). However, it seems to have a reflexive meaning in:

- (44) *manyja-ngku nyula=kuli jingka-wa-n.*
 food-INST 3SG.NOM=by.oneself punch-REC-PP
 (tentative translation:) ‘He punched himself with food.’

Alf Palmer’s gloss for (44) is “hit himself”, and this suggests that (44) has a reflexive meaning. (Unfortunately, my field notes do not describe the context for (44).) Another pair of examples:

- (45) a. *jurpa-ngku pama-ngku nganya pangka-n.*
 white.paint-INST man-ERG 1SG.ACC paint-NFUT
 ‘The man painted me with white paint.’ (TT)
 b. *jurpa-ngku ngaya pangka-wa-n.*
 white paint-INST 1SG.NOM paint-REC-NFUT
 (tentative translation:) ‘I painted myself with white paint.’

Compare also:

- (46) a. *ngaya nyunya (or nyungu) mara-Ø muka-n.*
 1SG.ERG 3SG.ACC 3SG.GEN hand-ACC hold-NONFUT
 ‘I held his/her hand.’ (TT)
 b. *ngaya=kuli mara-Ø muka-wa-n.*
 1SG.NOM=alone/by.oneself hand-ACC hold-REC-NFUT
 ‘I held my own hand.’

(46a) and (46b) are also instances of the subject-possessor diathesis type; see 4.3.

A possible example involving *pirra-wa-Y* ‘tell-REC’ is (57).

The subject in each of these examples is singular. It is partly because of this, and partly because of their contexts and/or Alf Palmer’s gloss, that I suspect they have a reflexive meaning. Also, it is possible, though by no means certain, that the presence of the discourse clitic =*kuli* ‘alone, by oneself’ facilitates the reflexive reading; see (44) and (46b).

5.2.3 Anticausative (?)

There is only one example: *waju-wa-Y* ‘to burn-REC’. This verb might be expected to have the usual reciprocal meaning, i.e. ‘to burn each other/one another’. However, in the only example available, it seems to have an anticausative meaning:

- (47) (“Is the fire burning well?” was translated as follows:)
puri-Ø nguna-Ø waju-wa-n.
 fire(wood)-NOM that-NOM burn-REC-NFUT
 ‘That fire (or, firewood) is burning.’⁷

The verb root *waju-* is generally used transitively (with ERG-ACC), meaning ‘burn, cook’. (It is of the *L*-class in this case).

- (48) *kaya-na-ngku puri-Ø waju-n.*
 father-KIN-ERG fire(wood)-ACC burn-NFUT
 ‘[My] father burned the firewood’, or ‘... made a fire.’

However, it should be noted here there are just three examples in which *waju-* appears to be used intransitively (and presumably belongs to the *L*-class). An example:

- (49) (Alf Palmer described a bush fire on the hills as follows:)
julki-Ø nguni ngarra waju-n.
 scrub-NOM there up burn-NFUT
 ‘The scrub up there is burning.’

In one of the examples, *waju-* ‘to burn’ occurs with the iterative (‘to do repeatedly’ or ‘to do continuously’) suffix (see [1] in 2.7):

- (50) *puri-Ø waju-karra-n ngukalamali.*
 fire-NOM burn-ITER-NFUT on.other.side
 ‘The bushfire is burning on the other side [of the hill].’

Initially it looked as if these three examples of the putatively intransitive *waju-* ‘to burn’ were errors. However, it is possible that they are not errors but bona fide Warrungu sentences. There are two reasons for this.

First, although Australian Aboriginal languages generally do not use one and the same verb root both transitively and intransitively – in contrast with languages like English – such verbs do occur, perhaps in certain semantic domains only. Thus, Megumi Ise (p.c.) points out that Warlpiri of central Australia has *janka-* (vi) ‘to burn’ and (vt) ‘to burn’, and *kampa-* (vi) ‘to burn’ and (vt) ‘to burn’. (See Hale 1974:20, 29.) Warrungu itself has *jarka-L* (vi) ‘to enter/go in’ and (vt) ‘to enter/insert’, and also *ngapa-* (vi) ‘to bathe’ and *ngapa-L* (vt) ‘to soak’. This suggests the possibility that *waju-* ‘to burn’ in the three examples in question is used intransitively.

7. *huri* means both ‘firewood’ and ‘fire’. Dixon (1980:103) notes as follows: “Some – but by no means all – Australian languages take the principle of having a single term to describe some natural object, and also something that can be made from it, to the extreme of having a single lexeme covering both “tree, wood” and “fire” ...”.

Second, the iterative suffix *-karra-Y* is generally added to intransitive roots, although it is attested with transitive roots as well. This suggests the possibility that *waju-* in (50) is intransitive.

Since *waju-L* ‘to burn’ is transitive in the vast majority of examples, it would be reasonable to say that *waju-wa-Y* ‘to burn-REC’ corresponds to the transitive *waju-L* ‘to burn’, in which case *waju-wa-Y* ‘to burn-REC’ would be anticausative. However, it is also possible to say *waju-wa-Y* corresponds to the intransitive *waju-*, in which case the use of *-wa-Y* would seem redundant.⁸

There are two unequivocal anticausative verbs based on *waju-L* (vt) ‘to burn, cook’: *waju-li-Ø* and *waju-kali-Ø*. The verbal suffixes involved are *-li-Ø* ‘reflexive, anticausative’ and *-kali-Ø* ‘reflexive, anticausative, antipassive’, respectively (see 2.6.2). (These suffixes are in the main productive.) Thus:

- (51) (Alf Palmer described a big bush fire as follows:)

puri-Ø kakal-Ø waju-li-n.
 fire-NOM big-NOM burn-ACAUS-NFUT
 ‘A big fire is burning.’

- (52) *yuri-Ø waju-kali-n.*
 kangaroo-NOM burn/cook-ACAUS-NFUT
 ‘The kangaroo got cooked.’⁹

waju-wa-n in (47) is the only example of a reciprocal verb whose subject is inanimate (but fire may not be a typical instance of an inanimate object – V.P. Nedjalkov, p.c.).

5.2.4 *Participating in a group action*

The reciprocal *jarka-wa-Y* ‘to enter-REC’, based on the intransitive *jarka-L* ‘to enter’, seems to be able to have a sociative meaning, as in (42). In addition, it seems to be able to have the meaning “a singular subject participates in a group action” (henceforth, simply “group action”). There are two possible examples. Thus, in an elicitation session, Alf Palmer gave the following sentences successively:

- (53) a. *ngaya jarka-wa-yal jarka-wa-yal jarka-wa-yal.*
 1SG.NOM go.in-REC-PURP
 (tentative translation:) ‘I [and other people] will go in together.’
 b. *ngana-Ø yinta jarka-wa-yal.*
 1PL-NOM 2SG.NOM go.in-REC-PURP
 ‘We (PL), including you, will go in together.’

8. It would be possible to say that (49) and (50) are transitive clauses, with the subject (in the ergative) being elliptical. If this were the case, the use of *-wa-Y* in (48) would not be redundant; *waju-wa-Y* ‘to burn-REC’ would be anticausative. There is, however, a problem with this view; it is difficult to establish what the putative elliptical NP is.

9. Note that the suffix *-kali-Ø* (and also *-li-Ø*) can be reflexive, i.e. there is a close association between anticausative and reflexive. Now, the meaning of (52) (anticausative) is very similar to passive. Cross-linguistically, it is common for reflexive sentences to have a passive meaning when they have a non-agentive reading. See Lyons (1968:375), Shibatani (1985:840), and Tsunoda (1988:638, 2006:304, 306, 313, 315).

The subject in the first sentence is singular, despite the use of *-wa-Y* ‘REC’ on the verb, and this sentence seems to have a “group action” meaning; this is shown by the inclusion of ‘[and other people]’. The subject in the other sentences is plural, and these sentences appear to have a sociative meaning. (Example (42) is actually a part of (53).)

Obviously, the meaning of the first sentence is very similar to “sociative”, but there is one difference: the subject in this sentence is singular, while the subject with a sociative reading is plural in all the examples available (or possibly dual, although there is no example).¹⁰

jarka-wa-Y is the only reciprocal verb that possibly has a “group action” meaning, and no other reciprocal verb has yielded any example of “group action”.

5.3 Lexicalization

Certain reciprocal verbs exhibit irregularities in their formation, use and/or meaning. They will be dealt with below.

5.3.1 *Reciprocals with a singular subject*

The five reciprocal verbs listed below generally have the reciprocal meaning proper. (They are each derived from a transitive, rather than intransitive, root.) However, in a small number of examples, they occur with a singular subject, despite the use of *-wa-Y* on the verb. The number of (possible) examples are given in parentheses.

<i>jaynyja-wa-Y</i>	‘to copulate with-REC’ (2)
<i>kuni-wa-Y</i>	‘to fight-REC’ (1)
<i>pirra-wa-Y</i>	‘to tell, talk-REC’ (10)
<i>kuypa-wa-Y</i>	‘to give-REC’ (1).

We shall look at each of these reciprocal verbs.

The verb *jaynyja-L* ‘to copulate with’ is transitive (with the ERG-ACC frame), as in (30), (31). Its reciprocal version generally has a reciprocal meaning proper, e.g. (32). However, the subject is singular in:

- (54) *yarru-n-ta yinta jaynyja-wa-ya kitu-ngka.*
 this-LINK-LOC 2SG.NOM copulate.with-REC-IMP cold-LOC
 (tentative translation:) ‘You [and someone] copulate with each other here on a cold [night].’

The verb *kuni-* ‘to fight’ (also ‘to punch (?)’) seems to be transitive. Its reciprocal version appears generally to have a reciprocal meaning proper.

- (55) (One day Alf Palmer described as follows a big fight which had occurred on that morning:)

10. As noted in 5.2.3, *jarka-L* can be used both intransitively and transitively. Recall that *-wa-Y* possibly has a reflexive meaning (see 5.2.2). Therefore, it would be possible to say that all the instances of *jarka-wa-Y* in (53) are reflexive (literally, ‘enter oneself’) rather than “sociative” or “group action”.

jana-Ø kuni-wa-n.
 3PL-NOM fight-REC-NFUT
 ‘They fought (or, punched (?)) one another.’

(Alf Palmer provided the gloss ‘punch.’) Now, consider (56), in which the subject is singular.

- (56) (Alf Palmer explained how a man had been named *kuni-ra* ‘fighter’. The suffix *-ra* forms a noun indicating an agent, rather like *-er* of English.)
kanpa-mara nyula kuni-wa-n.
 before-very 3SG.NOM fight-REC-NFUT
 (tentative translation:) ‘A very long time ago he [and other people] fought with one another.’

As noted in [3] of 4.2, *pirra-L* (vt) ‘to tell, talk, speak’ is almost always used in the reciprocal form *pirra-wa-Y*. There are perhaps about ten examples of the reciprocal *pirra-wa-Y* which have a singular subject. At least two of them may be considered as reflexive. An example:

- (57) (‘He is standing there by himself’)
nyula=kuli pirra-wa-n.
 3SG.NOM=alone talk-REC-NFUT
 ‘He is talking by himself.’

(Presumably, the presence of the discourse clitic =*kuli* ‘alone, by oneself’ facilitates the reflexive reading. See also (44) and (46b).) However, in most of the examples with a singular subject, the suffix *-wa-Y* does not seem to have a reflexive meaning. Thus:

- (58) (‘I spoke yesterday’ was translated as follows:)
ngaya pirra-wa-n kunta-kunta.
 1SG.NOM talk-REC-NFUT dark-dark
 (tentative translation:) ‘I [and someone] talked [with each other] yesterday.’ (*kunta-kunta* means ‘yesterday’)
- (59) (‘I am lying here and listening to you’)
yinta=kuli pirra-wa-ya ngayku-n-ku.
 2SG.NOM=alone talk-REC-IMP 1SG-LINK-DAT
 ‘You (sg) alone talk to me.’

Note that, even with the presence of =*kuli* ‘alone, by oneself’, (59) does not have a reflexive meaning.

kuypa-L (vt) ‘give’ is three-place. Its reciprocal version generally has a reciprocal meaning proper; see (10) and (12). However, the reciprocal sentence (60) does not seem to have a reciprocal meaning proper.

- (60) (‘I found a woman. I wanted to copulate with her, so I asked her’)
yinta kuypa-wa-n ?
 2SG.NOM give-REC-NFUT
 (tentative translation:) ‘Do you (sg) [and someone else] give [love?] to each other?’

Most of these sentences seem to be semantically reciprocal proper, perhaps except those such as (60) ('to give'). But they differ from reciprocals proper in that their subject is singular. There are two ways to account for these reciprocal sentences. (I owe these two observations to V.P. Nedjalkov, p.c.)

First, verbs such as 'copulate with', 'fight' and 'talk' inherently describe situations which are reciprocal or similar to them. Due to this inherent reciprocity, these verbs have acquired a close association with *-wa-Y* 'REC' and these verbs may occur with it even when the subject is singular. The person who exchanges the action with the subject no longer needs to be expressed, cf. (54), (56) to (58). (In (59), the person who may be considered as the exchanging partner is overtly expressed, by the dative.) (Naturally, they can still express a reciprocal meaning proper as well.) This association in *pirra-wa-Y* 'to tell, talk-REC' has become so strong that *-wa-Y* has become semantically vacuous in certain instances and *pirra-wa-Y* is ousting the transitive *pirra-L* out of use.¹¹ Subsequently, the use of *-wa-Y* with a singular subject has extended to another reciprocal verb *kuypa-wa-Y* 'to give', whose base *kuypa-L* 'to give' is not inherently reciprocal.¹²

Second, these reciprocal verbs are in fact antipassive, with the indefinite or nonspecific object being elliptical. Then, (54), for instance, can be translated 'You copulate with someone'; and (56) 'He fought someone'.¹³

There is no strong evidence to prefer one account over the other.

5.3.2 Higher frequency of reciprocal verbs

[1] As noted above, *pirra-L* 'to tell, talk, speak' is almost always used in the reciprocal form, due to its inherent reciprocity.

[2] Similarly, as noted in [4] of 4.2, the root *ngunpa-* 'tell, show' is hardly ever used by itself as a verb. It generally occurs in the reciprocal *ngunpa-wa-Y* or in *ngunpa-y-nga-L* (vt) 'to show, teach' (*-nga-L* 'transitivising, causative'; see 2.6.1). It appears that the reciprocal form has almost ousted the transitive form, again due to the inherent reciprocity in this verb.

11. As mentioned in regard of (33) and (34), the reciprocal *kuku-payi-wa-Y/ kuku-payu-wa-Y* 'to quarrel, argue with-REC', which also contains an inherently reciprocal meaning of "argue, quarrel with", is more common than its transitive counterpart. It seems that this verb, too, has acquired a close association with *-wa-Y* 'REC', due to its inherent reciprocity.

12. Reciprocal verbs with a singular subject are possible, for instance, in Icelandic (Irie 1996), Norwegian (Kemmer 1993:107) and Bantu languages (Yasutoshi Yukawa, p.c.). (I am grateful to Koji Irie for drawing Kemmer's work to my attention.) Thus, in Icelandic, reciprocal verbs such as 'fight-REC' and 'marry-REC' can occur with a singular subject, with the partner being left unexpressed. Note that verbs such as "fight" and "marry" are inherently reciprocal. (Naturally, these reciprocal verbs can occur with a plural subject as well.)

13. It may be possible to consider (60) as an instance of reflexive: 'Do you give yourself?' I owe this observation to V.P. Nedjalkov.

5.3.3 *Idiom-like expressions*

There are a small number of idiom-like expressions involving a reciprocal verb. For an example of ‘shake hands’, see (27). The transitive verb *jaympa-L* means ‘to find’, e.g. (36). But its reciprocal version (always ?) means ‘to meet’, cf. (37). Other examples include (61) and (62):

- (61) *wanta-wa-ya*.
 leave-REC-IMP
 ‘Stop fighting!’ lit. ‘Leave each other (alone).’
- (62) *ngalnga yinta ngali-Ø pinta-wa-yal*.
 PROH 2SG.NOM 1DU-NOM stand.up-REC-PURP
 lit. ‘We (DU), including you, should not stand up each other.’

In this case, (62) means ‘we should not go separately’, or, ‘we should travel together.’

6. Morphosyntactic status of reciprocal constructions

As noted in Section 3, *-wa-Y* ‘REC’ is generally added to transitive verb roots only, except that it is attested with two intransitive roots and with one noun. Roughly speaking, affixation of *-wa-Y* shifts verbs from the transitive *L*-class to the intransitive *Y*-class. That is, in terms of verb morphology, reciprocal verbs are intransitive.

The subject of reciprocal verbs is nominative (as in non-derived intransitive clauses), rather than ergative (as in non-derived transitive clauses). (This is in contrast with reciprocal constructions in Djaru, in which the subject remains ergative. See my paper on Djaru in this volume.) That is, regarding the case-marking of the subject as well, reciprocal verbs are intransitive, even where *-wa-Y* is attached to transitive roots.

As mentioned in 2.3, the ergative and the instrumental cases have almost identical, and only slightly different, allomorphs (e.g. *-ngku* in *pama-ngku* and *jula-ngku* in (63a)), but they behave differently. The subject in a reciprocal clause must occur in the nominative, and not in the ergative, even when *-wa-Y* is added to a transitive root. In contrast, a noun in the instrumental case can occur in those reciprocal clauses which are derived from transitive clauses. Thus, compare:

- (63) a. *pama-ngku kantu-Ø palka-n jula-ngku*.
 man-ERG dog-ACC hit-NFUT stick-INST
 ‘The man hit a dog with a stick.’
- b. *pama-Ø palka-wa-n jula-ngku*.
 man-NOM hit-REC-NFUT stick-INST
 ‘The men hit each other with sticks.’

Another example of an instrumental NP in a reciprocal clause is ‘eye-INST’ in (24). Non-derived intransitive clauses do not allow a noun in the instrumental case. Thus, the following sentence would almost certainly be rejected:

- (64) *pama-Ø yani-Ø jula-ngku.*
 man-NOM walk-NFUT stick-INST
 (intended meaning:) ‘The man is walking with a stick.’ (TT)

The nominal comitative case has to be used in place of the instrumental case. These differences are shown in Table 7.

Table 7. Ergative and instrumental

	transitive clauses	reciprocal clauses	non-derived intransitive clauses
subject	ergative	nominative	nominative
instrumental	instrumental	instrumental	....

We turn to the valency of reciprocal clauses. First, we look at the reciprocal type proper. The direct object in the subject-direct object diathesis type (4.1.1) and the oblique object in the subject-oblique object diathesis types (4.1.2) are deleted and valency decreases by one. Similarly, in the subject-receiver diathesis type (4.2), which involves three-place verbs, the receiver is deleted, and the valency of the reciprocal verbs also decreases by one.

Instances of the subject-possessor diathesis type (4.3), which involve an expression of inalienable possession, are two-place, semantically speaking; the possessor and the possessed/body part are coreferential. (I owe this observation to V.P. Nedjalkov.) In the reciprocal versions, the body part noun (in the direct object position) can be retained but the possessor is deleted, resulting in the NOM-ACC frame, irrespective of whether the possessor is marked by the accusative or by the genitive. When the possessor is marked by the genitive, as in (5), it should probably be considered as an attribute of the direct object, and not as an argument, and its deletion does not affect the valency (two-place ERG-ACC → two-place NOM-ACC). In contrast, when the possessor is marked by the accusative, as in (4), morphosyntactically rather than semantically speaking it should perhaps be considered as an argument, and not as an attribute of the direct object (and the case frame is ERG-ACC-ACC), in which case the valency decreases by one (three-place ERG-ACC-ACC → two-place NOM-ACC). (The preceding analysis is due to Masayoshi Shibatani, p.c.)

We now look at the non-reciprocal type. Valency decreases by one in reflexive (5.2.2) and anticausative (?) (5.2.3), but remains intact in sociative (5.2.1) and group action (5.2.4).

When all of verb morphology, case-marking, valency, the intransitive Y-class membership of reciprocal verbs, the nominative case of the subject, acceptability of an instrumental NP, deletion of the direct object, receiver, possessor, etc. and retention of the body part noun, are taken into consideration, reciprocal clauses are neither fully transitive nor fully intransitive; rather they are intermediate. (This observation is largely due to Masayoshi Shibatani, p.c.) This view parallels Hopper and Thompson’s (1980:277), which assigns reflexives an intermediate status between one-place and two-place clauses.

In connection with the discussion of transitivity, I should briefly comment on the pattern of deletion in linked clauses. As alluded to in Note 1, coreferential deletion in

linked clauses in Warrungu operates largely in terms of the S/O pivot, rather the S/A pivot. (This preference for the S/O pivot is facilitated by antipassives (*-kali-Ø*; see 2.6.2).) This applies to reciprocal clauses as well. That is, their subject, which is an intransitive subject (S), is deleted under identity with the direct object (O) or with another intransitive subject (S), and not with the transitive subject (A). Thus:

- (65) *jana-nya nguna-n-ta ngaya wanta-n [jana-Ø TT] palka-wa-yal.*
 3PL-ACC(O) that-LINK-LOC 1SG.ERG(A) leave-NFUT 3PL-NOM(S) hit-REC-PURP
 ‘I(A) left them(O) there so that [they(S)] would hit one another.’ (O=[S]).

The intransitive subject (S) *jana-Ø*, which I supplied for the sake of exposition, is deleted under identity with the direct object (O) *jana-nya*.

7. Expressions of the subject

With the reciprocal type proper, the subject always has a dual or plural referent, and is expressed by a dual or plural pronoun and/or by a noun with a dual or plural referent. With the non-reciprocal types, the subject is (always?) plural and possibly dual but never singular in “sociative”; and – at least in the examples available – always singular in ‘reflexive’, ‘anticausative’ (?), and ‘group action’. There are also five reciprocal verbs whose subject can be singular (see 5.3.1)

In Warrungu in general, the subject may be of the “subset” type (see 2.3). Warrungu lacks conjunctions such as *and*, but NPs of the subset type can in effect express *and*. They can also express ‘with’. This applies to reciprocal clauses as well. Thus:

- (66) *ngali-Ø majuwarrki-Ø ngayku pirra-wa-n.*
 1DU-NOM friend-NOM 1SG.GEN talk-REC-NFUT
 ‘We two, including my friend, talked with each other’, i.e. ‘my friend and I talked with each other’, or, ‘I talked with my friend.’

In this connection, a comment on the nominal comitative ‘with, having’ is in order. Consider, for example, *pirku-yi* ‘wife-N.COM’, lit. ‘(someone) with a wife’. This word often means ‘married man’. Now, examine:

- (67) *pula-Ø yarru-n-ta pirku-yi pirra-wa-n.*
 3DU-NOM this-LINK-LOC wife-N.COM talk-REC-NFUT
 ‘They two, including the one with a wife, are talking with each other here.’

Note that, despite the presence of the comitative, (67) does NOT mean ‘They two are talking *with* the wife ...’ (In a different context, (67) will be able to have a “total set reading”: ‘They two, married men, are talking with each other ...’)¹⁴

14. It is not certain whether the comitative suffix should really be considered as a case suffix. It can be considered as a derivational suffix, in which case we will have *pirku-yi-Ø* ‘wife-N.COM-NOM’, rather than *pirku-yi* ‘wife-N.COM’, here.

We now look at the animacy of the subject. The subject is human in almost all of the examples. But it has non-human animate referents in just two or three examples, e.g. a dog in (1b), and fish in:

- (68) (The fish caught in a net were trying to get out)
jana-Ø jingka-wa-n.
 3PL-NOM punch-REC-PP
 ‘They were bumping into one another.’

This corresponds to a sentence such as the following:

- (69) *winka-tu jingka-n winkar-kuman-Ø.*
 fish-ERG punch-NFUT fish-another-ACC
 ‘The fish bumped into another fish.’ (TT)

(In *winka-tu*, the root-final *r* is deleted before the ergative suffix *-tu*.) There is only one example of an inanimate subject, viz. “firewood, fire” in (47) ‘The fire/firewood is burning’.

When the subject of a reciprocal clause has human or non-human animate referents, the action described seems to be always volitional. Thus, in all of the examples available the reciprocal *jaympa-wa-Y* seems to mean ‘meet by arrangement’ (i.e. volitionally), and not ‘meet accidentally’, although the transitive verb *jaympa-L* ‘find’ seems to describe situations that cannot be controlled at will. Compare (36) and (37).

8. More on the formation of reciprocal verbs

8.1 Morphological restriction

As seen in 5.3.1, in certain instances of *pirra-wa-Y* ‘to tell, talk-REC’, *-wa-Y* ‘REC’ is present but appears to be semantically empty. There are at least two examples which seem to show the reverse situation: the sentences in question have a reciprocal meaning and *-wa-Y* would be expected but it cannot occur. This non-occurrence is due to the morphological restriction that *-wa-Y* cannot be attached to a derivational (or inflectional) suffix (see Section 3 above). The two examples are given below.

The suffix *-ri-L* can be added to intransitive roots, producing verbal comitative verbs, which are transitive (see 2.6.1) and takes the ERG-ACC frame. Thus, compare:

- (70) *ngaya yampa-ngka wuna-yal.*
 1SG.NOM camp-LOC sleep-PURP
 ‘I will sleep in the camp.’ (TT)
- (71) *ngaya nyunya wuna-ri-lku.*
 1SG.ERG 3SG.ACC lie-V.COM-PURP
 ‘I will sleep with her.’

Now, consider the following:

- (72) *ngali-Ø wuna-ri-n pirri-pirri.*
 1DU-ERG sleep-V.COM-NFUT close-close
 ‘We two slept very close to each other.’

As the translation suggests, (72) has a reciprocal meaning, and *-wa-Y* would be expected to occur (turning the verb and the clause intransitive). The verb *wuna-ri-L* ‘sleep-V.COM’ is transitive, but it cannot be followed by *-wa-Y*, for it already has a derivational suffix (*-ri-L*). That is, in (72) *wuna-ri-L* ‘sleep-V.COM’ appears to be used in place of the unacceptable **wuna-ri-wa-Y* ‘sleep-V.COM-REC’.

The suffix *-rV* is added to verb roots, producing verbs which mean ‘many actors do something to one’ or ‘one actor does something to many’ (see 2.7). Thus: *kuypa-L* ‘to give’ and *kuypa-ra-L* ‘give out to many’ and (apparently) ‘many give to one’. (For examples of *kuypa-L* ‘give’, see [1] in 4.2.) Now, consider (73):

- (73) (‘The boys share out food’ was translated as follows):
kalpiri-ngku kuypa-ra-n manyja-Ø.
 children-ERG give-ra-NFUT food-ACC.

Since (73) is a translation of ‘share out’, its intended meaning would be reciprocal: ‘The boys gave one another food’. A reciprocal version would be expected, but it cannot occur, for *kuypa-ra-L* already has a derivational suffix (*-ra-L*).

8.2 Reciprocal verb based on a noun

There is just one example in which *-wa-Y* ‘REC’ is added to a noun, viz. *kuku* ‘language, speech’:

- (74) (‘Mother scolded/growled at the child’ was translated as follows):
yanga-na-Ø kuku-wa-n kalpiri-wu.
 mother-KIN-NOM speech-REC-NFUT children-DAT.

I am not certain whether or not this is a *bona fide* Warrungu sentence. If it is, it is unusual. First, *-wa-Y* is added to a noun, and not to a verb root. Second, consequently, there is no corresponding non-derived sentence. Third, the meaning of *-wa-Y* is not clear. On the basis of examples such as (16), (19), (22), (23), which contain a dative NP indicating the topic, the expected reading of (74) would be something like ‘The mothers argued with each other about the children’. But this is different from the English sentence for which a Warrungu translation was requested.

V.P. Nedjalkov (p.c.) points out that it is significant that the noun involved denotes a speech activity, i.e. an action which implies mutual exchange of information. As seen in 5.3.1 and 5.3.2, verbs of speech activity seem to be inherently reciprocal and have a close tie with *-wa-Y* ‘REC’. Thus, it is likely that *kuku-wa-n* was used by analogy with the reciprocal versions of those speech verbs. More specifically, it was probably used by analogy with the compound reciprocal *kuku-payi-wa-Y/kuku-payu-wa-Y* ‘to argue, quarrel with-REC’, which contains the noun *kuku* ‘speech’, e.g. (34).

9. Etymology

9.1 Verbal suffixes

The Warrungu *-wa-Y* ‘REC’ has unequivocal cognates in the neighbouring languages and also a possible doublet in Warrungu itself. The relevant verbal suffixes are listed below:

- (a) *-wa-Y* ‘REC’ in Warrungu and also in Gugu-Badhun (Sutton 1973:144–5);
- (b) *-pa* ‘REC’ in the Halifax Bay dialect of Wargamay (Dixon 1981:49, 74–5);
- (c) *-pa-Ø*, etc. ‘REC’ in Nyawaygi (Dixon 1983:489);
- (d) *-parri-Y/-nparri-Y* ‘REC’ in Dyirbal (Dixon 1972:92);
- (e) *-pa-L/-mpa-L* ‘transitivising, causative’ in Warrungu (see 2.6.1);
- (f) *-mpa-* ‘causative’ in Gugu-Badhun (Sutton 1973:142);
- (g) *-ma-L/-mpa-L* ‘verbal comitative, verbal instrumental’ in Dyirbal, Mamu and Giramay (Dixon 1972:95–9);
- (h) *-pa-L/-yma-L* ‘verbal comitative’ in Nyawaygi ((Dixon 1983:489–90);
- (i) *-ma* ‘verbal comitative, verbal instrumental, causative’ in Wargamay (Dixon 1981:77–80).

Clearly, *-wa-Y* ‘REC’ in Warrungu and that in Gugu-Badhun are cognates. No doubt, they are in turn related to the reciprocal suffixes which contain *pa*, that is, those in (b), (c) and (d). We could tentatively postulate **-pa* ‘REC’; its *p* has lenited to *w* in Warrungu and Gugu-Badhun.¹⁵

It seems possible, though by no means certain, that the Warrungu suffix *-pa-L/-mpa-L* ‘transitivizing, causative’ is related to **-pa* ‘REC’. (*-mpa-L* would be a result of prenasalization of *-pa-L*.) If this is the case, we would have a situation in which doublet suffixes indicate “reciprocal” and “causative”, respectively, in one language: *-wa-Y* ‘REC’ and *-pa-L/-mpa-L* ‘causative’. That is, a situation in which these doublets have developed in the opposite directions: valency-decreasing (i.e. reciprocal) and valency-increasing (i.e. causative). Similarly in Gugu-Badhun: *-wa-Y* ‘REC’ and *-mpa-* ‘causative’. Needless to say, this view is only tentative and further work needs to be done, taking into consideration the other suffixes listed above.

15. As in many other Australian languages, stop phonemes in Warrungu and the surrounding languages lack voice contrast. Thus, /pa/ (which can also be presented as /ba/) may be realized either by [pa] or [ba], [ba] being more common than [pa]. Now, one day I was discussing reciprocal verbs with Alf Palmer and cited forms such as *jaympa-wa-n* ‘find-REC’, *muka-wa-n* ‘hold-REC’, *jingka-wa-n* ‘punch-REC’ and *junta-wa-n* ‘kiss-REC’. Upon hearing them, Alf Palmer said, “All *ban*” (phonemically, /pan/). Note that /wan/ was pronounced [ban] rather than [wan]. (This is despite the fact that /wan/ [wan] is possible, for instance, word-initially, e.g. *wanta-n* ‘leave-NFUT’ in (65).) That is, when cited in isolation, this suffix reveals the older, non-lenited form, the form still retained in the suffixes in (b), (c) and (d).

9.2 The nominal suffix *-npa* ‘many’

Warrungu has a (non-productive) nominal suffix *-npa* ‘many’. The only examples available are the following:

<i>warrngu</i> ‘woman, women’	<i>warrngu-npa</i> ‘many women’
<i>rayi</i> ‘young girl(s)’	<i>rayi-npa</i> ‘many young girls.’

-npa, apparently with the meaning ‘many’, occurs in Dyrbal, Giramay and Mamu (Dixon 1972:405).

It is possible that *-npa* consists of *-pa* and the linking suffix *-n*. (For examples of *-n* ‘LINK’, see (59) and (65). Similarly, the Dyrbal suffix *-parri-Y/-nparri-Y* ‘REC’ (see 9.1) possibly contains the linking suffix *-n*.) If this is the case, then, since the meaning ‘many’ shares something in common with the reciprocal meaning, *-npa* may be ultimately related to the tentative **-pa* ‘REC’ discussed in 9.1.¹⁶

This would mean that the tentative **-pa* is reflected in a nominal suffix and also in verbal suffixes. Such a double use of a suffix, for both nouns and verbs, is not uncommon in Australian languages. The most famous and widespread is the suffix *-ku* (Capell 1956:77). Thus, in Warrungu *-ku* is used for the dative of nouns, e.g. *winkar-ku* ‘fish-DAT’; and for the purposive of verbs, e.g. *kuypa-lku* ‘give-PURP’. Kala Lagaw Ya of Torres Strait has as many as five suffixes which can each be used as a case marker for nouns and as a tense/aspect marker for verbs (Kennedy 1984:162).

Again, the view put forward above is only tentative and further work needs to be done.

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16. Peter Sutton (p.c.) points out that *pa* or a form containing *pa* has the meaning/function of reciprocal, causative or dual/plural in a fair number of languages further away than the immediate neighbours of Warrungu. (See also Sutton 1976.) This seems to provide indirect support for the view that **-pa* may be reflected in the reciprocal, causative and “many” suffixes of Warrungu. A suffix which contains *ma* and which has a reciprocal meaning (often in addition to some other meaning) is attested in widely scattered languages. Thus: *-mali* ‘reciprocal’ and ‘reflexive’ in Pitta-Pitta of Queensland (Blake 1979:206); *-mali* ‘reciprocal’ in Diyari of South Australia (Austin 1981:74); *-marri* and similar forms “sociative” and “reciprocal” in the Ngayarda languages of Western Australia (Dench 1987). (Dench himself does not use the term “sociative”.) In view of the homorganic nature of *m* and *p*, it is possible that these suffixes and the putative suffix **-pa* of Warrungu and its neighbouring languages are ultimately related. Alternation between a pair of homorganic nasal and stop is attested, for instance, in Djaru of Western Australia (Tsunoda 1981:31).

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PART V

Sociative-reciprocal-iterative polysemy of reciprocal markers

A. Verbal and pronominal reciprocal markers

Reciprocal constructions in Indonesian

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1. Introduction

1.1 Indonesian and Malay

Indonesian, the state language of Indonesia, belongs to the western branch of the Malayo-Polynesian subgroup of Austronesian languages. It has developed from classical Malay and inherited from it the function of interethnic communication in the Indonesian area. For the majority of speakers (probably over 80% of the population numbering more than 200,000,000 on the verge of the 21st century) it is a second language. Indonesian written texts are far from being homogeneous in respect of grammar, and the data obtained from informants and written texts may somewhat differ.

The variants of this language, usually termed Malay, are used as state language in Malaysia (and spoken by 45% of the 19,000,000 population), Singapore (15% of 2,700,000) and Brunei (90% of 250,000 population). Indonesian, Singaporean/Malaysian and Bruneian Malay differ mostly in the vocabulary.

Genetically, Malay is most closely related to Minangkabau in West Sumatra (5,800,000 speakers), Banjar (South Kalimantan, 2,500,000 speakers), Iban (Malaysia, Northern Kalimantan, 430,000 speakers) and a number of other less significant languages. Indonesian is in close contact with the languages of Java: Javanese (74,000,000 speakers) and Sundanese (20,500,000 speakers), partly via the Jakarta dialect of Malay (West Java). (Ethnic data of the early 1980s; Prentice 1987:913–6).

1.2 Overview

There are morphological and periphrastic reciprocals in Indonesian. Morphological reciprocals are formed by two principal means which are partly in complementary distribution:

1. By means of the circumfix *ber-...-an* (the root can be reduplicated; the suffix is sometimes omitted), see (1c).

2. By means of pre-reduplication of the root (the root of the underlying affixed verb is repeated in pre-position to the prefix), see (1d).

Periphrastic reciprocals are formed with the help of the auxiliary word *saling* ‘mutually’ which is always placed in contact pre-position to the verb, see (1e).

In example (1), the verb *-pandang* ‘to look’ is used; the prefix *meN-* is an active voice marker (the full form *meN-* has variants *mem-*, *men-*, *meny-*, *meng-*, and *me-*, depending on the initial phoneme of the stem, some consonants being replaced by the nasal; cf. (5a–b), (6a), (11b), (12b), (16)–(18), etc.). In (1c–d) the underlying verbs are intransitivized:

- | | | | |
|-----|----|---|---|
| (1) | a. | <i>Amir me-mandang Fatimah.</i> | ‘Amir looks at Fatima.’ |
| | b. | <i>Fatimah me-mandang Amir.</i> | ‘Fatima looks at Amir.’ |
| | c. | <i>Amir dan Fatimah ber-pandang-an.</i> | ‘Amir and Fatima look at <i>each other</i> .’ |
| | d. | <i>Amir dan Fatimah pandang-me-mandang.</i> | (same translation). |
| | e. | <i>Amir dan Fatimah saling me-mandang.</i> | (same translation). |

There are also four unproductive means of marking morphological reciprocals. All the morphological types of reciprocals can take the auxiliary *saling* ‘mutually’, therefore the overall picture is very complicated. The morphological markers of reciprocity are not specialized: they are polysemous.

In Indonesian, there are sociative-like verbs which are formed by means of the circumfix *ber-...-an*, too, but from a different set of roots. Periphrastic sociatives are formed by means of the auxiliaries *sama* and *pada* both meaning ‘together’, which are always immediately preposed to the verb.

There are also verbs of “joint class membership”, derived from nouns by means of the prefix *se-*, e.g.:

- | | | | |
|-----|----|----------------|----------------------------|
| (2) | a. | <i>ayah</i> | ‘father’ |
| | b. | <i>se-ayah</i> | ‘to have the same father.’ |

Lexical as well as certain morphological reciprocals are used in the discontinuous construction. There are no verbal comitatives.

2. Grammatical notes

The following is a brief outline of the basic grammatical information which is to help the reader to better understand the examples quoted in the chapter and to show the place of reciprocal derivation in the grammatical system of Indonesian.

2.1 General characteristics. Sentence structure

Indonesian is an agglutinating-isolating language with a single element of inflection, namely, the prefixes of the passive voice.

A prepositionless object follows the verb thus forming a stable VO group, the subject precedes it and sometimes follows it, which yields the SVO (see (1a)) and VOS order. An object with a preposition commonly follows the verb. An attribute, excepting quantitative attributes, follows the head noun. There is no subject-verb agreement.

The verb has no tense and aspect. In regard of these categories, a sentence is interpreted according to context. Aspectual and temporal meanings can be rendered (although optionally) by words like *masih* ‘yet’, *akan* ‘will be’, etc.

2.2 Nouns. Case relations. Number. Derivation

The noun has no case forms. The subject and direct object are unmarked. Some of the personal pronouns have short forms (clitics) used as attributes and objects:

- (3) a. *guru-nya* lit. ‘teacher-his/her/their’
 b. *Ali me-mandang-nya.* ‘Ali looks at him/her/them.’

Nouns have two forms, indefinite and plural. The indefinite (i.e. unreduplicated) form may have a singular or plural meaning depending on the context. The plural is marked by reduplication or, for human nouns, by the auxiliary word *para*:

- (4) a. *guru* ‘teacher’ → *guru-guru* ‘teachers’
 b. *para guru* ‘teachers.’

The use of a reciprocal verb does not require any plural marking on the subject, the sense being clear from the context.

Besides root nouns, there are nouns derived from nominal and verbal stems by affixes:

- (5) a. *me-makai* ‘to wear’ → *pakai-an* ‘clothes’
 b. *me-nulis* ‘to write’ → *pe-nulis* ‘writer’
 c. *pulau* ‘island’ → *ke-pulau-an* ‘archipelago’
 d. *ber-temu* ‘to meet’ → *per-temu-an* ‘meeting’
 e. *meng-obat-i* ‘to treat medically’ → *peng-obat-an* ‘medical treatment.’

2.3 Inflectional verbal prefixes *meN-* vs. *di-/Ø*. Voices

In Indonesian, both voices are marked: the prefix *meN-* obligatorily marks the active voice of transitive verbs (it also occurs with intransitives; see 2.4), the prefix *di-* marks the passive voice with the 3rd p. agent, and zero prefix the passive of mostly the 1st and 2nd persons. In the latter case the agent marker – a pronoun (full or cliticized form) or a noun is obligatory and it immediately precedes the verb. If the agent follows the verb the preposition *oleh* ‘by’ is optional:

- (6) a. *Ali mem-buka pintu.* ‘Ali opens the door.’
 b. *Pintu di-buka [(oleh) Ali].* ‘The door is opened [by Ali].’
 c. *Pintu saya buka.* ‘The door is opened by me.’
 d. *Pintu ku-buka.* (same translation).

The inflectional prefixes in question distinguish the class of transitive verbs by way of opposing them to intransitives.

2.4 Derivational verbal prefixes: *ber-*, *ter-*, and *meN-*. Root verbs

The prefixes named serve to mark intransitive verbs, both derived and non-derived, i.e. combined with bound roots.

The prefix *ber-*, which is the main means of deriving denominal verbs, marks dynamic and stative verbs with a broad range of meanings comparable with the range of meanings covered by the term “middle” in the Indo-European languages (see examples in 3.2.3):

- (7) *kerja* ‘work’ → *be-kerja* ‘to work’.

The prefixes *ber-*, *ter-*, *per-* have allomorphs *be-*, *te-*, *pe-*, used if the initial consonant of the root is *r* or if the root begins with the cluster “consonant + *er* + consonant” (cf. *be-runding* in (32), *be-terbang-an* in (73b), *be-pergi-an* in (74b)).

The prefix *ter-* which forms both dynamic and stative verbs is also polysemous. It may render non-volitionality and also a number of other meanings; cf. (6a) and (8):

- (8) *Pintu ter-buka*.
 i. ‘The door opened’ (non-volitional anticausative)
 ii. ‘The door is open’ (resultative).
- (9) *me-mekik* ‘to scream’ → *ter-pekik* ‘to scream involuntarily’.

The prefix *meN-* on intransitives can be viewed as a homonym of the inflectional prefix *meN-* (see 2.3), but, however, both have the meaning of activity on the part of the subject. It marks dynamic verbs derived from nouns and it also combines with bound verbal roots; cf.:

- (10) a. *-serah* (bound root) → b. *me-nyerah* ‘to surrender’
 (11) a. *dekat* ‘(to be) near’ → b. *men-dekat* ‘to come near’
 (12) a. *rumput* ‘grass’ → b. *me-rumput* ‘to cut grass’.

Root verbs have no derivational markers; cf.:

- (13) *Ali cinta kepada Isti*. ‘Ali loves Isti’ (*kepada* ‘towards’); see also (11a).

2.5 Derivational verbal circumfix *ber-...-an*

This verbal circumfix is productive, and its principal meaning is reciprocal (see (1c)); it has a number of other meanings as well (see 4.2.4 and 10.1. About the unproductive circumfixes *per-...-kan* and *per-...-i* see 2.7).

2.6 Verb classes

The main syntactic classes of verbs are as follows.

Transitive verbs (i.e. verbs under 2.3) are actional and they are subdivided into two principal subtypes:

- 1) two-place transitives (see (1a), (6a));
- 2) three-place transitives (including ditransitives), e.g.:

2.8 Reduplication

Reduplication in nouns marks plurality. Reduplication on verbs denotes:

1. An iterative action with short intervals: *ber-teriak-teriak* ‘to shout (repeatedly, several times).’
2. A careless, aimless action: *duduk-duduk* ‘to sit doing nothing’ (← *duduk* ‘to sit’).
3. A state of parts (points, pieces) of a thing: *robek-robek* ‘torn’ (in various places); etc.

2.9 Means of valency change

This section is a summary of the semantic changes marked by valency changes. The order of presentation is from meaning to form.

1. The means of valency increase are:

(a) causative *-kan* (see (17), (46)), *-per...-kan* (see (44), (47)), *-i* (see (19); cf. Ogloblin & Kholodovich 1969);

(b) benefactive *-kan* (see (18));

(c) applicative *-kan* (see (49), (50)), *-i* (see (21)), *-per...-kan* (see (48)).

2. The means of valency decrease are:

(a) passive *di-* (see 2.3);

(b) resultative *ber-*, *ter-*, *ber...-kan*, *ber...-an* (see (8)); (see Agus et al. 1988:307–26);

(c) anticausative *ber-* (see (91), (92));

(d) reflexive *ber-* (see (41));

(e) reciprocal *ber...-an*, *ber-*, *R-meN-R*, *saling* (see (1));

(f) involitional *ter-* with the passive diathesis (see (8)).

This list shows that the Indonesian affixes except *di-* are polysemous. Moreover, they can express similar meanings. If we take into consideration unmotivated restrictions on realization of certain functions, and also the optional character of the use of a number of affixes in some meanings, the overview of verbal derivation turns out to be complicated enough and intricate, despite the limited number of the affixes.

3. Lexical reciprocals

3.1 Introductory

In lexical reciprocals, reciprocity is an inherent part of their lexical meaning, i.e. they are not derived from any underlying non-reciprocal verbs although they may contain a derivational marker which in other verbs may add the reciprocal sense. As is known, the

distinctive feature of two-place lexical reciprocals is the equivalence of the sentences with reversed arguments:

- (22) a. *Amir ber-sahabat dengan Yusuf.* 'Amir is friends with Yusuf.'
 b. *Yusuf ber-sahabat dengan Amir.* 'Yusuf is friends with Amir.'

A sentence with a semantically singular subject is either ungrammatical or elliptical:

- c. **Amir ber-sahabat.* 'Amir is friends.'

Sentence (22d) which is semantically equivalent to (22a–b) has a plural subject:

- d. *Amir dan Yusuf ber-sahabat.* 'Amir and Yusuf are friends.'

With a few exceptions, reciprocal arguments may occur both in the *simple* construction (when they are conjoined by *dan* 'and', as in (22d), or expressed by a plural noun) and in the *discontinuous* construction, with the preposition *dengan* 'with' whose basic meanings are comitative and instrumental (see (22a–b)).

Most of the lexical reciprocals contain the prefix *ber-*, less commonly circumfix *ber...-an*, i.e. the same affixes that are used to derive one of the formal types of morphological reciprocals (cf. (47), (56b), (57); (23d), (33), (34)).

3.2 Lexical reciprocals not derived from verbs

Here belong root reciprocals and those with the prefix *ber-* and with the circumfix *ber...-an*.

3.2.1 Subject-oriented lexical reciprocals

All these reciprocals are intransitive: they form either one-place constructions (see (22d)) or two-place constructions with the preposition *dengan* (see (22a–b)).

3.2.1.1 Verbs derived from nouns; types *ber-R* or *ber-R-an*. These lexical reciprocals are formed with the help of the prefix *ber-* or the circumfix *ber...-an*. Two subtypes are distinguished here.

(a) *Subtype 1*: verbs derived from reciprocal nouns. Depending on the meaning of the underlying noun, they can be further subdivided into two groups:

(aa) Verbs formed from nouns denoting persons in reciprocal relationship, e.g.:

- (23) a. *Amir musuh Yusuf.* 'Amir is Yusuf's enemy.'
 = b. *Yusuf musuh Amir.* 'Yusuf is Amir's enemy.'
 → c. *Amir dan Yusuf ber-musuh-an.* 'A. and Y. are at loggerheads with each other.'
 d. *Amir ber-musuh-an dengan Yusuf.* 'Amir is at loggerheads with Yusuf.'

The following lexical reciprocals are of this type:

- | | | | |
|------|-----------------------------------|---|---|
| (24) | <i>tetangga</i> ‘neighbour’ | → | <i>ber-tetangga</i> ‘to be neighbours’ |
| | <i>saudara</i> ‘brother, sister’ | → | <i>ber-saudara</i> ‘to be in brotherly relations’ |
| | <i>tunangan</i> ‘fiance, fiancée’ | → | <i>ber-tunangan</i> ‘to be betrothed’ |
| | <i>kawan</i> ‘friend’ | → | <i>ber-kawan</i> ‘to be friends.’ |

(bb) Verbs derived from names of reciprocal situations; cf.:

- | | | | |
|------|----|---|---|
| (25) | a. | <i>Debat Amir dengan Yusuf.</i> | lit. ‘Debate of Amir with Yusuf.’ |
| | b. | <i>Amir ber-debat dengan Yusuf.</i> | ‘Amir argues /debates with Yusuf.’ |
| | c. | <i>Amir dan Yusuf ber-debat.</i> | ‘Amir and Yusuf argue.’ |
| (26) | a. | <i>Beda puisi lama dengan puisi baru.</i> | ‘Difference of old poetry from new poetry.’ |
| | b. | <i>Puisi lama ber-beda dengan puisi baru.</i> | ‘Old poetry differs from new poetry.’ |

Here also belong:

- | | | | |
|------|-------------------------------------|---|--|
| (27) | <i>dialog</i> ‘dialogue’ | → | <i>ber-dialog</i> ‘to carry on a dialogue’ |
| | <i>perang</i> ‘war’ | → | <i>ber-perang</i> ‘to be at war’ |
| | <i>padan</i> ‘correspondence’ | → | <i>ber-padan-an</i> ‘to correspond, keep in touch with each other; to fit/match/suit each other’ |
| | <i>seberang</i> ‘the opposite side’ | → | <i>ber-seberang-an</i> ‘to be opposite each other’ |
| | <i>sebelah</i> ‘side’ | → | <i>ber-sebelah-an</i> ‘be side by side/next to each other’ |
| | <i>selisih</i> ‘divergence’ | → | <i>ber-selisih</i> ‘to diverge’ |
| | <i>silat</i> ‘art of single combat’ | → | <i>ber-silat</i> ‘to fight using this art’ |
| | <i>kerja-sama</i> ‘cooperation’ | → | <i>be-kerja-sama</i> ‘to cooperate’, etc. |

(b) Subtype 2: lexical reciprocals derived from non-reciprocal nouns. Compare:

- | | | | |
|------|-------------------------------|---|---|
| (28) | <i>tali</i> ‘tether, rope’ | → | <i>ber-tali-an</i> ‘to be tied together’ |
| | <i>tegur-sapa</i> ‘greetings’ | → | <i>ber-tegur-sapa</i> ‘to exchange greetings’ |
| | <i>satu</i> ‘one’ | → | <i>ber-satu</i> ‘to unite’. |

3.2.1.2 *Lexical root reciprocals.* Here belong verbs (some of them are qualitative, i.e. adjectival in meaning) which fall into two subgroups.

1. Reciprocals used in both simple and discontinuous constructions with the preposition *dengan*:

- | | | | |
|------|----|-----------------------------------|--------------------------------|
| (29) | a. | <i>Amir kawin dengan Fatimah.</i> | ‘Amir married Fatima.’ |
| | b. | <i>Amir dan Fatimah kawin.</i> | ‘Amir and Fatima got married.’ |

Verbs of this type are:

- | | | |
|------|----------------------------------|---------------------------------------|
| (30) | <i>cekcok</i> ‘to quarrel’ | <i>bentrok</i> ‘to collide, to fight’ |
| | <i>cocok</i> ‘to correspond’ | <i>campur-baur</i> ‘to be mixed’ |
| | <i>campur-aduk</i> ‘to be mixed’ | <i>sama</i> ‘to be alike/equal.’ |

As we see, two of these verbs are a combination of two roots.

2. The following qualitative verbs occur in discontinuous constructions with an obligatory object with the preposition *dengan* ‘with’ or *dari* ‘from’. The absence of an object is perceived as ellipsis:

- (31) *dekat* ‘to be nearby, close’ *lain* ‘to be different’
jauh ‘to be far’ *mirip* ‘to be similar’ (see also 3.3.2.2).

3.2.1.3 “Deponential” reciprocals; types *ber-R* or *ber-R-an*. The roots of these reciprocals do not ever occur singly and are used as bound uninflected verbal roots. Three groups are distinguished here by the affix attached. Verbs prefixed with *ber-* are predominant.

1. Lexical reciprocals with the prefix *ber-*:

- (32) *ber-bicara* ‘to converse’ *ber-gaul* ‘to associate with’
ber-juang ‘to fight, struggle’ *ber-kelahi* ‘to fight’
ber-runding ‘to confer’ *ber-temu* ‘to meet’
ber-gurau ‘to joke (with one another)’ *ber-gulat* ‘to fight’
ber-tempur ‘to fight’ *ber-simpang-siur* ‘to cross each other,
intermingle’ (combination of roots).

2. Verbs with the circumfix *ber...-an*:

- (33) *ber-papas-an* ‘to come across each other on the road’
ber-hubung-an ‘to be connected, tied together.’

3. Verbs with either *ber-* or *ber...-an* (variably):

- (34) *ber-pisah(-an)* ‘to part’
ber-tengkar(-an) ‘to quarrel’
ber-saing(-an) ‘to compete’; cf.:
(35) *Mereka ber-saing(-an)*. ‘They compete.’

3.2.2 *Object-oriented three-place reciprocals*

Here belong transitive root verbs. The last two verbs of the list occur in constructions with conjoined objects only:

- (36) *meng-adu* ‘to bring together, make fight (rams, etc.)’
men-campur ‘to mix’
me-nyabung ‘to set (cocks) on to fight’
me-nukar ‘to exchange’
meng-ganti ‘to replace.’

The reciprocal arguments occupy the object positions; e.g.:

- (37) a. *Farid me-nyabung ayam Amir dan/dengan ayam Yusuf.*
‘Farid makes Amir’s cock and Yusuf’s cock fight.’

Three-place reciprocals form passives in the same way as other verbs:

- b. *Kedua ayam itu lalu di-sabung.* ‘Both cocks were made to fight.’

3.2.3 *Polysemy of the prefix ber-*

Most of the lexical reciprocals discussed above contain the prefix *ber-*. In order to show that it is not the only usage of the prefix, we shall survey briefly some of its other usages.

1. The prefix *ber-* is used mainly on denominal verbs:

(a) derived from concrete nouns, to denote possessivity including the meaning ‘to use object X’:

- (38) *atap* ‘roof’ → *ber-atap* ‘to have a roof’
 (39) *kuda* ‘horse’ → *ber-kuda* ‘to ride (be on) a horse.’

(b) Derived from *nomina actionis*, to denote respective actions:

- (40) *gerak* ‘movement’ → *ber-gerak* ‘to move’
cerita ‘tale, story’ → *ber-cerita* ‘to tell’.

2. This prefix also derives intransitive verbs of various meanings from transitive roots:

(a) reflexives, e.g.:

- (41) *men-cukur* ‘to shave sb’ → *ber-cukur* ‘to shave oneself’;

(b) resultatives; e.g.:

- (42) *me-nyetrika* ‘to iron’ → *ber-setrika* ‘to be ironed’;

(c) “absolutives” (verbs with a non-referential object); e.g.:

- (43) *me-nanam* ‘to plant (rice)’ → *ber-tanam* ‘to be engaged in (rice-)growing.’

As we see, this prefix displays a wide range of functions determined by the meaning of the base word, without any distinct semantic boundaries.

3.3 Derivatives from lexical reciprocals

All the affixes used in these derivatives are also used, naturally enough, with non-reciprocals.

3.3.1 *Verbs with valency increase*

All the derivatives here are transitive and can be used in the passive voice, like ordinary transitives.

3.3.1.1 *Object-oriented causative reciprocals; types -R-kan or -(per-)R-kan.* Here are some illustrations.

- (44) a. *Mereka ber-temu.* ‘They meet.’
 b. *Tuhan mem-per-temu-kan mereka.* ‘God made them meet.’
 c. *Mereka di-per-temu-kan oleh Tuhan.* ‘They were brought together by God.’
- (45) a. *Fatimah dan Amir kawin.* ‘Fatima and Amir got married.’
 b. *Ayah-nya me-ngawin-kan Fatimah dan Amir.* ‘His father married F. and A.’
 c. *Fatimah dan Amir di-kawin-kan-nya.* ‘F. and A. were married by him.’

Here belong the following derivatives from the intransitives considered above:

(a) causatives with the suffix *-kan*:

- | | | |
|---|---|--|
| (46) <i>kawin</i> ‘to marry’ | → | <i>me-ngawin-kan</i> ‘to make (sb) marry’ |
| <i>sama</i> ‘same, equal’ | → | <i>me-nyama-kan</i> ‘to equalize’ |
| <i>ber-gabung</i> ‘to be joined/united’ | → | <i>meng-gabung-kan</i> ‘to unite, to fuse’ |
| <i>ber-pisah</i> ‘to part, get separated’ | → | <i>me-misah-kan</i> ‘to separate’ |
| <i>campur-baur</i> ‘to be mixed’ | → | <i>men-campur-baur-kan</i> ‘to mix’, etc.; |

(b) causatives with the circumfix *-(per...)-kan*:

- | | | |
|---|---|--|
| (47) <i>ber-kenal-an</i> ‘to make acquaintance’ | → | <i>mem-per-kenal-kan</i> , <i>me-nkenal-kan</i> ‘to acquaint/to introduce’ |
| <i>ber-beda</i> ‘to differ’ | → | <i>mem-(per-)beda-kan</i> ‘to differentiate’ |
| <i>ber-hubung-an</i> ‘to be connected’ | → | <i>mem-per-/meng-hubung-kan</i> ‘to connect’ |
| <i>ber-satu</i> ‘to unite’ (vi) | → | <i>mem-per-satu-kan</i> , <i>me-nyatu-kan</i> ‘to unite’ (vt) |
| <i>ber-kelahi</i> ‘to fight’ | → | <i>mem-per-kelahi-kan</i> ‘to make sb fight’ |
| <i>ber-sahabat</i> ‘to be friends’ | → | <i>mem-per-sahabat-kan</i> ‘to make sb friends’ |
| <i>ber-temu</i> ‘to meet’ (vi) | → | <i>mem-per-temu-kan</i> ‘to bring together/organize meetings’, etc. |

3.3.1.2 *Subject-oriented applicative reciprocals; types -R-kan or -per-R-kan.* As in the previous case, a one-place or a two-place intransitive is transformed into a two-place transitive. But the verb retains its subject-oriented character. The same markers are employed here as in the formation of causatives, and some of the derived forms have two meanings, causative and applicative (cf. *mem-per-kelahi-kan* i. ‘to make sb fight’, ii. ‘to fight over sth’).

In the case of the applicative meaning, the noun introduced by a preposition (= non-reciprocal argument) depending on the verb and/or optional in the underlying construction, becomes a direct (obligatory) object. It (i.e. *Fatimah*) cannot be omitted in (48b).

- | | |
|---------|---|
| (48) a. | <i>Amir dan Yusuf ber-cakap-cakap [tentang Fatimah].</i>
‘Amir and Yusuf talk [about Fatima].’ |
| b. | <i>Amir dan Yusuf mem-per-cakap-kan Fatimah.</i>
(same translation). |

Applicatives with the suffix *-kan*:

- | | | |
|------------------------------------|---|--|
| (49) <i>ber-bicara</i> ‘to speak’ | → | <i>mem-bicara-kan</i> ‘to discuss’ |
| <i>ber-runding</i> ‘to deliberate’ | → | <i>me-runding-kan</i> ‘to deliberate about.’ |

Applicatives with the circumfix *per...-kan*:

- | | | |
|-------------------------------------|---|--|
| (50) <i>ber-gunjing</i> ‘to gossip’ | → | <i>mem-per-gunjing-kan</i> ‘to gossip about’ |
| <i>ber-tengkar</i> ‘to quarrel’ | → | <i>mem-per-tengkar-kan</i> ‘to quarrel because of’ |
| <i>ber-debat</i> ‘to debate’ | → | <i>mem-per-debat-kan</i> ‘to debate on.’ |

3.3.1.3 *Transitivity of reciprocals; type -R-i.* In this case the comitative argument is transformed into a direct object. The human referent of the second argument poses as less active than the subject referent, which may result in the loss of the reciprocal meaning. The marker employed is the suffix *-i*.

- (51) a. *Amir ber-temu dengan Yusuf.* lit. 'Amir met with Yusuf.'
 b. *Amir me-nemu-i Yusuf.* 'Amir visited Yusuf.'
- (52) a. *Amir kawin dengan Fatimah.* 'Amir marries Fatima.'
 b. *Amir me-ngawin-i Fatimah.* 'Amir took Fatima as his wife.'
- (53) a. *Amir ber-tanding dengan Yusuf.* 'Amir entered into a contest with Yusuf.'
 b. *Amir me-nanding-i Yusuf.* 'Amir is equal in contest with Yusuf.'

3.3.2 Verbs with valency decrease

3.3.2.1 Anticausatives derived from three-place reciprocals; type *ber-R*. The prefix *ber-* transforms the underlying object-oriented reciprocals (see 3.2.2) into subject-oriented intransitive reciprocals, by way of retaining the reciprocal meaning. Compare:

- (54) a. *Ayam Amir ber-sabung dengan ayam Yusuf.*
 lit. 'Amir's cock fights with Yusuf's cock.'
 b. *Ayam Amir dan ayam Yusuf ber-sabung.*
 'Amir's cock and Yusuf's cock are fighting.'

Compare also:

- (55) *meng-adu* 'to bring together/make fight (rams, etc.)' → *ber-adu* 'to come together, to come to blows'
men-campur 'to mix' → *ber-campur* 'to get mixed'
meng-ganti 'to replace (sth with sth)' → *ber-ganti* 'to replace each other.'

3.3.2.2 Derived reciprocals compatible with simple constructions. This operation concerns qualitative verbs (analogues of European adjectives). Verbs of the type discussed in 3.2.1.2 are used with a second comitative object only, while derived reciprocals are also used in the simple construction. The operation is marked with the circumfix *ber...-an*:

- (56) a. *Rumah Amir dekat dengan rumah Yusuf.*
 lit. 'Amir's house is near Yusuf's house.'
 b. *Rumah Amir ber-dekat-an dengan rumah Yusuf.* (same meaning)
 c. *Rumah Amir dan rumah Yusuf ber-dekat-an.*
 lit. 'Amir's house and Yusuf's house are near each other.'
 d. **Rumah Amir dan rumah Yusuf dekat.* (intended meaning as in (c)).

Note that the suffix *-an* can be added to some of the above mentioned reciprocals with *ber-* and to root reciprocals without producing any changes in meaning and construction. This may be accounted for by the influence of one of the two principal ways in which morphological reciprocals are derived; cf.:

- (57) *ber-saing* 'to compete/contend' → *ber-saing-an* (same meaning)
ber-tengkar 'to quarrel' → *ber-tengkar-an* (same meaning).

3.4 Actional nominals with the circumfix *per...-an*

Nouns of action are derived (a) from lexical reciprocals and also (b) from nominal stems:

<i>me-lawan</i> 'to resist/oppose'	→	<i>ber-lawan-an</i> 'to oppose each other'
<i>me-nentang</i> 'to object'	→	<i>ber-tentang-an</i> 'to contradict each other'
<i>men-cumbu</i> 'to caress'	→	<i>ber-cumbu-an</i> 'to caress each other'
<i>me-negur</i> 'to greet'	→	<i>ber-tegur-an</i> 'to greet each other'
<i>me-nyentuh</i> 'to touch'	→	<i>ber-sentuh-an</i> 'to touch/be in contact'
<i>meng-genggam</i> 'to squeeze in (one's) hand'	→	<i>ber-genggam-an</i> 'to hold (fast) each other by the hand'
<i>me-rebut</i> 'to take away/snatch'	→	<i>be-rebut-an</i> 'to try to take away from each other, to fight for sth'
<i>me-nubruk</i> 'to bump (into)'	→	<i>ber-tubruk-an</i> 'to collide'
<i>me-langgar</i> 'to bump/run (into)'	→	<i>ber-langgar-an</i> 'to collide'
<i>mem-bentur</i> 'to bump/run (into)'	→	<i>ber-bentur-an</i> 'to collide'
<i>meng-gesek</i> 'to rub'	→	<i>ber-gesek-an</i> 'to rub against each other'
<i>me-mandang</i> 'to look'	→	<i>ber-pandang-an</i> 'to look at each other', etc.

In meaning, many of these reciprocals are close to some typical lexical reciprocals (note the English translations) or to verbs implying, to a greater or lesser degree, a reciprocated action (e.g. 'to resist', 'to be in contact' and the like). Reciprocals of physical contact are quite common among them.

4.2.1.2 *Reciprocals derived from two-place intransitives.* These are verbs taking an object with the prepositions *dengan* 'with', *kepada* 'to, with regard to', etc.:

(61) <i>ter-senyum</i> 'to smile'	→	<i>ber-senyum-an</i> 'to smile at each other'
<i>me-nyahut</i> 'to respond'	→	<i>ber-sahut-an</i> 'to shout to one another'
<i>ber-bisik</i> 'to whisper'	→	<i>ber-bisik-an</i> 'to whisper to each other'
<i>me-lekat</i> 'to stick (to)'	→	<i>ber-lekat-an</i> 'to stick, be glued together'
<i>kena</i> 'to be in contact'	→	<i>ber-kena-an</i> 'to be connected, to adjoin'
<i>cinta</i> 'to love'	→	<i>ber-cinta-an</i> 'to love each other/be lovers'
<i>pamit</i> 'to say goodbye'	→	<i>ber-pamit-an</i> 'to say goodbye to each other'
<i>dempet</i> 'to be close (to)'	→	<i>ber-dempet-an</i> 'to be cramped together.'

4.2.1.3 *Reciprocals derived from one-place (!) intransitives.* There are two verbs whose meaning implies an object which nevertheless cannot be expressed:

(61') <i>tepat</i> 'to hit (the mark)'	→	<i>ber-tepat-an</i> 'to coincide'
<i>salah</i> 'to miss (the aim)'	→	<i>ber-salah-an</i> 'to not coincide'. See also (97a–b).

4.2.2 Type *ber-R-R-an*

Reduplication of the root in circumfixed reciprocals may be due to a number of reasons. The main reasons are the following.

1. The necessity to avoid the homonymy of a *ber-R-an* reciprocal and a possessive verbal derivative from a noun of the same root with the suffix *-an* (cf. (62c) and (63b)):

- (62) a. *me-motong* 'to cut/cut off, to intercept sb's course'
 → b. *potong-an* 'a (cut-off) piece; form, shape'
 → c. *ber-potong-an* 'to consist of (cut-off) pieces/have (certain) shape, style'; cf.:
- (63) a. *me-motong* 'to cut, to cut off; intercept sb's course'
 b. **ber-potong-an* (cf. (62c))
 c. *ber-potong-potong-an* 'to intercept each other's course.'

2. The archaic character of the non-reduplicated root. Thus (64b) is registered in KUBI and absent in KBBI:

- (64) a. *kasih* 'to love'
 b. *ber-kasih-an* 'to love each other'
 c. *ber-kasih-kasih-an* (same).

3. Lexicalization of the meaning of a reciprocal form:

- (65) a. *Amir jauh dengan/dari Yusuf.* 'Amir is far from Yusuf.'
 b. *Amir dan Yusuf ber-jauh-an.* 'Amir and Yusuf are far from each other.'
 c. *Amir dan Yusuf ber-jauh-jauh-an.* 'Amir and Yusuf keep away from each other (avoid each other).'

4. Intensification of the reciprocal action, which commonly, it seems, manifests itself in the iterative meaning often involving variation in the performance of the repeated actions. Nearly all circumfixed reciprocals allow root reduplication for this purpose. Generally speaking, this is not characteristic of reciprocals only, as a great many non-reciprocal verbs can also be reduplicated for iteration (in this case, however, a contrast with the underlying reduplicated non-reciprocal stem is necessary); cf.:

- (66) a. *Amir sering me-meluk Yusuf.*
 'Amir often embraces Yusuf.'
 b. *Amir sering me-meluk-meluk Yusuf.*
 'Amir often embraces Yusuf in various ways.'
 c. *Kami sering ber-peluk-peluk-an.* (P. 134)
 'We often embrace each other [in various ways].'

Iterativity can be expressed in the context if a reciprocal is non-reduplicated, e.g. by the adverb *ber-kali-kali* 'repeatedly, not once, many times'; cf.:

- (67) *Kembali mereka ber-cium-an. Ber-kali-kali mereka ber-cium-an.* (R. 500)
 'They kiss again. They kiss many times.'

In the following reciprocals, iterativity is expressed by reduplication:

- (68) a. *me-megang* 'to hold on to sth/sb'
 → b. *ber-pegang-an* 'to hold fast on to each other'
 → c. *ber-pegang-pegang-an* 'to hold fast on to each other'
 d. *Amir me-megang-megang Yusuf* 'Amir touches Yusuf (in different ways).'

- (69) a. *Amir meng-hadap pada Yusuf.* 'Amir turns to face Yusuf.'
 b. *Amir meng-hadap-hadap [ke arah] Yusuf (yang sedang berlari-lari mengelilinginya).* 'Amir takes position facing [in the direction of] Yusuf (who is running round him).'
 c. *Amir dan Yusuf ber-hadap-an.* 'Amir and Yusuf face each other.'
 d. *Amir dan Yusuf ber-hadap-hadap-an.* 'Amir and Yusuf face precisely each other.'

5. A greater or lesser degree of denotational divisibility or non-simultaneity of two or more actions that comprise a reciprocal situation, i.e. a tendency to iconic designation. Thus, the following forms are either prevalent or used exclusively:

- (70) *ber-bunuh-bunuh-an* 'to kill each other'
ber-cakar-cakar-an 'to scratch each other'
ber-cubit-cubit-an 'to pinch each other'
ber-tolak-tolak-an 'to push each other'
ber-kirim-kirim-an 'to send to each other'
ber-tolong-tolong-an 'to help each other'
ber-kedip-kedip-an 'to wink at each other'
ber-sahut-sahut-an 'to call to each other'
ber-ambil-ambil-an 'to take from each other.'

A number of reduplicated reciprocals have no non-reduplicated counterparts, or the latter are at least very rare. This is related to the fact that repetition or differences in the performance of the same action are determined by the meaning of a given verb or implied by all possible contexts. For instance, *ber-kirim-kirim-an* 'to send each other' (letters: *ber-kirim-kirim-an surat* 'to correspond') presupposes reiteration, while *ber-sahut-sahut-an* 'to call to each other' may imply variety in its manifestation (variety of sounds, from different directions, with different intensity, etc.).

4.2.3 Type *ber-R[-an]*

Reciprocals with an optional suffix illustrate replacement of the historically older prefixed reciprocal derivation by later circumfixation (cf. Ogloblin & Zarbaliev 1993). The attested reciprocals of this type describe standard everyday situations.

- (71) *meng-antuk* 'to knock/touch' → *ber-antuk[-an]* 'to bump into each other'
meng-geser 'to rub' → *ber-geser[-an]* 'to rub against each other'
men-desak 'to press' → *ber-desak[-an]* 'to press close to each other'
men-jabat 'to hold' → *ber-jabat[-an]* 'to shake hands'
men-cium 'to kiss' → *ber-cium[-an]* 'to kiss each other'
me-rebut 'to embrace' → *be-rebut[-an]* 'to embrace each other'
cinta 'to love' → *ber-cinta[-an]* 'to love each other'
baik 'to be nice to sb' → *ber-baik[-an]* 'to be on good terms.'

The following examples illustrate the use of both variants that are interchangeable although there seem to be subtle semantic differences between them:

- (72) a. *Ber-desak, be-rangkul-an seperti anak-anak kucing kedinginan.* (P. 136)
 'They huddled to each other, hugging each other like freezing kittens.'

- b. *Dalam truk yang membawa kami ke rumah almarhum Kartika, kami ber-desak-an.* (BM. 37) lit. 'In the lorry that was taking us to the house of the late Kartika, we [stood] pressing to each other.'

4.2.4 Polysemy of the circumfix *ber-...-an*

This circumfix is also used to encode other meanings:

1. An iterative or joint action of several agents (cf. also the sociative in 10.1):

- (73) a. *Burung-burung terbang.* 'Birds are flying.'
 b. *Burung-burung be-terbang-an.* 'Birds are flying (in all directions, repeatedly).'

2. A prolonged action or state, or an action that covers some distance:

- (74) a. *Amir pergi.* 'Amir has left.'
 b. *Amir be-pergi-an.* 'Amir has gone away (far away or for a long time).'
- (75) a. *Bumi ber-getar.* 'The earth shook.'
 b. *Bumi ber-getar-an.* (T. 96) 'The earth quaked (all around).'
- (76) a. *Ia me-lumur(-i) mukanya dengan minyak.* 'He smeared his face with oil.'
 b. *Muka-nya ber-lumur-an darah.* 'His face was smeared with blood all over.'

The first two meanings can be presented as one with the following explanation: "...*ber-...-an* adds the semantic component 'diffuseness', i.e. plurality of actors, of action or of direction" (see Prentice 1987:921).

4.3 Non-productive means containing the prefix *ber-*

Most of the reciprocals belonging here have no correlates with the same stem among circumfixed reciprocals.

4.3.1 Type *ber-R*

Here belong verbs like the following:

- (77) *mem-bantah* 'to object' → *ber-bantah* 'to wrangle'
me-macu 'to chase' → *ber-pacu* 'to race (with one another)'
damai 'to be peaceful' → *ber-damai* 'to make up with each other.'

It should be remembered that the prefix *ber-* is the main affix to be found on lexical reciprocals (see Section 3).

4.3.2 Type *ber-R-R*

Compare the following derivational pair:

- (78) *ramah* 'to be friendly' → *be-ramah-ramah* 'to be on friendly terms, treat each other in a friendly manner.'

In comparison with (72a), the reduplicated form in (79) is rather common in the iterative sense:

- (79) *ber-desak* ‘to press to each other, to huddle’ → *ber-desak-desak[-an]* ‘to huddle to each other changing the degree of pressure, moving, etc.’

4.3.2.1 *Competitive reciprocals*. Here belong a few reciprocals derived from stative verbs or from adverbs. Reciprocals of different morphological types are cited together as they share root reduplication, unproductivity and meaning:

- (80) *cepat* ‘to be fast’ → *ber-cepat-cepat* ‘to compete in speed’
kuat ‘to be strong’ → *ber-kuat-kuat[-an]* lit. ‘to compete in strength’
dahulu ‘before, earlier’ → *ber-dahulu-dahulu-an* ‘to try to outstrip (leave behind) each other.’

4.3.3 *Type ber-R’-R’*

Reciprocals comprised of two different roots are included here. The roots are semantically close or synonymous:

- (81) a. *me-nyangkut* ‘to clutch’, *me-maut* ‘to cling to sth’
 b. *Kedua masalah itu ber-sangkut-paut* ‘Both these problems are closely related.’
- (82) a. *me-negur* ‘to greet, accost sb’ + *me-nyapa* ‘to greet’
 b. *ber-tegur-sapa* ‘to greet each other.’

4.3.4 *Type ber-si-R*

This double prefix is archaic. Dictionaries and grammars register the following derivatives (which have correlates with the same root among reciprocals of other types; see (80) and (60)):

- (83) *cepat* ‘to be fast’ → *ber-si-cepat* ‘to compete with each other in speed’
dahulu ‘before, earlier’ → *ber-si-dahulu* ‘to try to outstrip each other’
mem-bunuh ‘to kill’ → *ber-si-bunuh* ‘to kill each other.’

There are also a few derivatives with a non-reciprocal meaning:

- (84) *bisu* ‘dumb, mute’ → *ber-si-bisu* ‘to pretend to be dumb’
keras ‘hard’ → *ber-si-keras* ‘to take a firm stand.’

4.4 Substandard variant: Type *R-R-an*

This variant of circumfixed reciprocals characteristic of everyday speech is formed by the suffix *-an* with obligatory (as a rule) root reduplication (in everyday speech, the prefix *ber-* with other grammatical functions is also lost). This variant is a borrowing from the languages of Java, via the Jakarta dialect of Malay. This substandard variant also occurs in literary texts.

- (85) *Sejumlah ujud bayangan, kejar-kejar-an di situ*. (R. 168)
 ‘Several shadows [that] chase one another.’

The following reciprocals of this type have been registered in texts:

(86) <i>cium-cium-an</i>	‘to kiss each other’
<i>hantam-hantam-an</i>	‘to beat, cudgel each other’
<i>kejar-kejar-an</i>	‘to chase each other’
<i>pegang-pegang-an</i>	‘to hold each other by the hand’
<i>pukul-pukul-an</i>	‘to beat each other, to fight’
<i>peluk-peluk-an</i>	‘to hug, embrace each other’
<i>salam-salam-an</i>	‘to greet each other.’

Two reciprocals have occurred without the expected reduplication: *rebut-an* ‘to take away from each other’, *bentrok-an* ‘to collide, have a skirmish’.

In standard Indonesian, the pattern *R-R-an* occurs among verbals (*sakit* ‘to be ill’ → *sakit-sakit-an* ‘sickly, unhealthy’), nouns (*buah* ‘fruit’ → *buah-buah-an* ‘various fruits’) and adverbs (*terang* ‘clear’ → *terang-terang-an* ‘obviously, overtly’).

4.5 Pre-reduplicated reciprocals: Type *R-meN-R/R-i/R-kan*

As has been mentioned above, most of the circumfixed reduplicated reciprocals have one-root correlates. The difference between two parallel verbs may be very slight and hard to define. But pre-reduplicated reciprocals usually have an iterative sense.

4.5.1 Formation of pre-reduplicated reciprocals

The base verb, including its derivational affix (if it has one) and the active marker *meN-*, undergoes no change but its root is repeated in verb-initial position.

Most of the pre-reduplicated reciprocals derive from transitives with the prefix *meN-*. Here are lists of pre-reduplicated reciprocals that have parallel circumfixed reciprocals.

A. Reciprocals derived from transitives

1. Reciprocals derived from two-place transitives:

(87) <i>maki-me-maki</i>	‘to scold each other’
<i>sindir-me-nyindir</i>	‘to exchange biting remarks’
<i>benci-mem-benci</i>	‘to hate each other’
<i>bunuh-mem-bunuh</i>	‘to kill each other’
<i>ganggu-meng-ganggu</i>	‘to worry, tease each other’
<i>tolong-me-nolong</i>	‘to help each other’
<i>tuduh-me-nuduh</i>	‘to accuse each other’
<i>tepuk-me-nepuk</i>	‘to clap each other’
<i>kenal-me-ngenal</i>	‘to know each other’
<i>serang-me-nyerang</i>	‘to attack each other’
<i>desak-men-desak</i>	‘to press, crowd each other’
<i>tunjang-me-nunjang</i>	‘to support each other’
<i>pandang-me-mandang</i>	‘to exchange glances’
<i>lirik-me-lirik</i>	‘to look sideways at each other’
<i>geser-meng-geser</i>	‘to rub against each other’
<i>pukul-me-mukul</i>	‘to beat each other’
<i>bantu-mem-bantu</i>	‘to help each other’
<i>ejek-meng-ejek</i>	‘to ridicule each other’

<i>panggil-me-manggil</i>	‘to call each other’
<i>sambung-me-nyambung</i>	‘to continue each other’
<i>sapa-me-nyapa</i>	‘to greet each other’
<i>tarik-me-narik</i>	‘to pull each other’
<i>tawar-me-nawar</i>	‘to bargain with each other.’

2. Reciprocals derived from three-place transitives:

- (88) *ambil-meng-ambil* ‘to take sth from each other’
beri-mem-beri ‘to give sth to each other.’

B. Reciprocals derived from intransitives

1. Reciprocals derived from two-place or one-place intransitives with the prefix *meN-*:

- (89) *me-nyurat* ‘to write’ → *surat-me-nyurat* ‘to write to each other, correspond’
me-nyahut ‘to respond (to a call)’ → *sahut-me-nyahut* ‘to call to each other’
me-nyusup ‘to penetrate’ → *susup-me-nyusup* ‘to penetrate into each other.’

2. Reciprocals derived from verbs with the prefix *ber-*:

- (90) *ber-sambung* ‘to have a sequel’ → *sambung-ber-sambung* ‘to alternate, to continue (follow) each other’
ber-tanya ‘to ask’ → *tanya-ber-tanya* ‘to ask each other.’

Similar derivatives can be obtained from intransitive anticausative reciprocals which in their turn are derived from three-place lexical reciprocals (see 3.3.2.1 and 3.2.2):

- (91) *me-nyabung* ‘to let fight, to play off one against another’
→ *ber-sabung* ‘to fight/struggle with each other’ (about roosters)
→ *sabung-ber-sabung* ‘to fight (repeatedly).’
(92) *meng-ganti* ‘to replace sth by sth’
→ *ber-ganti* ‘to alternate/replace each other’
→ *ganti-ber-ganti* ‘to replace each other repeatedly.’

4.5.2 *Reciprocals with the transitivizing suffixes -i and -kan*

These reciprocals differ from circumfixed reciprocals in that they may contain suffixes of transitivity (note that suffixes cannot co-occur on a verbal form: they oust one another in the process of derivation). Compare:

- (93) a. *me-ngirim* ‘to send sth to sb’
b. *me-ngirim-i* ‘to send sb sth’
c. *kirim-me-ngirim-i* ‘to send sth to each other’,

but:

- d. *ber-kirim-kirim-an* ‘to send sth to each other’
e. *kirim-me-ngirim* (same).

The verbs in (93a) and (93b) differ in the required order of the objects. The difference between (93c) and (93e) is very subtle and hard to pinpoint.

Here are lists of the reciprocals in question.

1. Reciprocals with the suffix *-i*.

- | | | |
|------|------------------------------|-------------------------------------|
| (94) | <i>dahulu-men-dahulu-i</i> | 'to try to outstrip each other' |
| | <i>harga-meng-harga-i</i> | 'to value each other' |
| | <i>kirin-me-ngirim-i</i> | 'to send (sth) to each other' |
| | <i>percaya-mem-percaya-i</i> | 'to trust each other' |
| | <i>alah-meng-alah-i</i> | 'to make concessions to each other' |
| | <i>kawin-me-ngawin-i</i> | 'to enter into a marital relation' |
| | <i>cinta-men-cinta-i</i> | 'to love each other' |
| | <i>kasih-me-ngasih-i</i> | 'to love each other' |
| | <i>hormat-meng-hormat-i</i> | 'to respect each other' |
| | <i>jauh-men-jauh-i</i> | 'to move apart from each other' |
| | <i>liwat-me-liwat-i</i> | 'to pass each other' |
| | <i>kenal-me-nengal-i</i> | 'to know each other (well)' |
| | <i>suka-me-nyuka-i</i> | 'to like each other.' |

2. Reciprocals with the suffix *-kan*.

- | | | |
|------|-----------------------------|--------------------------------------|
| (95) | <i>empas-meng-empas-kan</i> | 'to throw each other (in wrestling)' |
| | <i>hibur-meng-hibur-kan</i> | 'to entertain each other' |
| | <i>omong-meng-omong-kan</i> | 'to discuss with each other' |
| | <i>salah-me-nyalah-kan</i> | 'to accuse each other.' |

3. There are also a few reciprocals with the circumfixes *per...-i*, *per...-kan*.

- | | | |
|------|------------------------------|---|
| (96) | <i>baik-mem-per-baik-i</i> | 'to correct each other' |
| | <i>olok-mem-per-olok-kan</i> | 'to ridicule each other' (Steinhauer 1994: 76). |

Note that pre-reduplication is the only possible pattern if the suffix of the base verb changes its root valency (cf. (97a) and (97c)). It should be borne in mind that there is only one slot for suffixes in verbs. In the case of secondary derivation the suffix of the base verb form is necessarily ousted. Thus, only (97d) is relatable to (97c), while (97b) derives from (97a):

- | | | | |
|------|----|----------------------------|--|
| (97) | a. | <i>salah</i> | 'to miss' (<i>Tembakannya salah</i> 'His shot missed') |
| | b. | <i>ber-salah-an</i> | lit. 'to be wrong/guilty against one another'
→ 'to contradict, to be contrary' |
| | c. | <i>me-nyalah-kan</i> | 'to accuse', lit. 'to declare wrong/guilty' |
| | d. | <i>salah-me-nyalah-kan</i> | 'to accuse each other.' |

Note that despite retaining the features of the morphological structure of transitive verbs, pre-reduplicated reciprocals of all types should be included among intransitives because they (a) take no direct object (cf. Section 5), (b) do not combine with pronominal enclitics which are common after transitive verbs, and (c) have no passive forms.

4.5.3 Comparison with circumfixed reciprocals

From a great many underlying verbs, both morphological types of reciprocals can be formed: *me-mukul* 'to beat' → *ber-pukul(-pukul)-an* 'to fight', *pukul-me-mukul* 'to fight'.

Kridalaksana (1983:398–401) pointed out that the circumfixed reciprocal denotes a less telic (limited) and more processual action. Demidjuk (1987:93) argues, with reference to Indonesian authors, that in a pre-reduplicated reciprocal the succession of the constituent actions is foregrounded. This opinion is supported by examples, cf.:

- (98) *Mereka ber-pandang-pandang-an hanya antara mereka saja.* (R. 71)
 ‘They exchanged glances with each other only’ (without looking at a third person; or: ‘They looked at each other only’).
- (99) *Mereka semua pandang-me-mandang.* (G. 123)
 ‘They all exchanged glances.’

(99) indicates a succession of actions, while (98) also allows simultaneous interpretation; cf. also:

- (100) *Pertanyaan-pertanyaan lain sudah ber-desak-desak dalam otakku.* (G. 18)
 ‘Other questions were already crowding in my mind’ (simultaneous interpretation is possible).
- (101) *Macam-macam bayangan desak-men-desak dalam pikiranku.* (G. 8)
 ‘Diverse images ousted each other out in my thoughts.’

In (101), successive interpretation is more likely; cf. the subsequent context: *bayangan itu didesak bayangan lain lagi* ‘[at once] this image was ousted by another’.

4.5.4 Iterative meaning of pre-reduplicated forms

These derivatives can also denote diverse actions of one or several persons performed at short intervals (a kind of iterative). The object is usually omitted. Compare:

- (102) *Ketika aku masuk ke rumah, tangan ibu yang gemetar sedang bungkus-mem-bungkus.* (R. 261-2)
 ‘When I entered the house, Mother’s trembling hands were wrapping [sth] into packages.’
- (103) *Mereka di sana penuh-sesak, angkat-meng-angkat, timbang-me-nimbang.*
 (Ge. II-135) ‘They are milling in a crowd there, taking [something], weighing.’

The iterative meaning can also be acquired by some circumfixed reciprocals:

- (104) a. *men-ngejar* ‘to chase, to pursue’
 b. *ber-kejar-an* ‘to chase, to pursue one another’
 c. *kejar-ber-kejar-an* ‘to chase, to pursue one another repeatedly, a long time, in various directions, etc.’
 d. *kejar-me-ngejar* (same translation).

4.5.5 Nominalization

Type *R-meN-R* derivatives sometimes occur in subject or object position. The patient is not named as a rule. Compare:

- (105) *Selalu ada terjadi balas-mem-balas.* (P. 125) ‘All the time an exchange of retorts goes on’, lit. ‘answering each other’; *mem-balas* ‘to answer.’

- (106) *Tidak jarang terjadi pukul-me-mukul, rebut-me-rebut.* (Ge. I-470)
 ‘Sometimes fights begin, mutual attempts to take [the loot] from each other’ (*me-rebut* ‘to take away from sb’).

5. Diathesis types of constructions with morphological reciprocals. Subject-oriented diathesis only

As the morphological types of reciprocals are not sensitive to diathesis, they are treated together below.

One problem insufficiently investigated so far in Indonesian concerns the status of prepositionless objects with intransitive verbs, including morphological reciprocals. Generally such objects do not take attributes, such as *itu* ‘that, this’, *-nya* ‘his/her/their’ and some others, which points to a closer connection between verb and the following noun than is usually the case with direct objects (see 5.1.3, 5.2 and 5.3 below). However, some experimental data are at variance with our textual material, therefore this point needs further investigation. On the semantic scope of such closely attached postverbal nouns see Ogloblin (1994).

5.1 “Canonical” reciprocals

These are one-place intransitive reciprocals derived from two-place transitives or two-place intransitives. The difference between the underlying structures is neutralized in the reciprocal constructions: both the direct and non-direct objects are deleted in the derived construction as co-referential with the subject.

5.1.1 *Derived from two-place transitives*

This is the principal type covering the overwhelming majority of reciprocals:

- (107) a. *Amir meng-ganggu Farid.* ‘Amir teases Farid.’
 b. *Amir dan Farid ganggu-meng-ganggu.* ‘Amir and Farid tease each other.’

See also (1), (59), (69), etc.

5.1.2 *Derived from two-place intransitives*

Here belong nearly all the reciprocals derived from verbs with the prefix *ber-* and a number of *meN-* verbs and root verbs (see their list in (61)). The object is introduced by the preposition *kepada* ‘with’:

- (108) a. *Amir cinta kepada Fatimah.* ‘Amir loves Fatima.’
 b. *Amir dan Fatimah ber-cinta-cinta-an.* ‘Amir and Fatima love each other.’

5.1.3 “Canonical” or “possessive” reciprocal?

In this case, a word denoting inalienable possession of the participants and specifying (or duplicating) the verbal meaning is added in a one-place construction (this is especially common with lexical reciprocals). Compare:

- (109) a. *Amir me-mandang Yusuf.* ‘Amir looked at Yusuf.’
 b. *Amir dan Yusuf ber-pandang-an.* ‘Amir and Yusuf looked at each other.’
 c. *Amir dan Yusuf ber-pandang-an mata.* ‘Amir and Yusuf looked into each other’s eyes.’

We prefer to interpret *mata* ‘eyes’ here as a kind of specifier with a vague syntactic status rather than as a direct object. Sentence (109c) may be compared with the underlying sentence (109d) where ‘Yusuf’ is an attribute of the direct object:

- d. *Amir me-mandang mata Yusuf.* ‘Amir looked into Yusuf’s eyes.’

In this case (109c) should be interpreted as a “possessive” type (see also 5.3). However, underlying sentences of type (109d) are sometimes not available or artificial (cf. (110c) below). Extensive objects like *mata* ‘eyes’, *muka* ‘face’ are quite common with lexical reciprocals which have no underlying non-reciprocal constructions, like *ber-temu muka* ‘to meet face to face’, *ber-beda pendapat* lit. ‘to differ in opinions’. This type then should be interpreted as an extension of the “canonical” diathesis type. Here is another similar example:

- (110) a. *Amir dan Yusuf ber-hadap-an.*
 ‘Amir and Yusuf [sat/stood] opposite each other.’
 b. *Amir dan Yusuf ber-hadap-an muka.*
 lit. ‘Amir and Yusuf [sat/stood] opposite each other face to face’ (*muka* ‘face’).
 c. **Amir meng-hadap muka Yusuf.*
 lit. ‘Amir [sat/stood] opposite Yusuf’s face.’

5.2 “Indirect” reciprocals

These are two-place reciprocals (transitive and intransitive) derived from three-place (transitive and intransitive) verbs. The subject of a reciprocal construction combines the agent and addressee roles.

5.2.1 Derived from three-place transitives

The underlying constructions may have two forms of the object naming the addressee: it is a direct object in (111a) due to the suffix *-i* and non-direct in (111b):

- (111) a. *Amir me-ngirim-i Farid surat.*
 A. *meN*-send-*i* F. letter
 ‘Amir sends Farid a letter.’
 b. *Amir me-ngirim surat kepada Farid.*
 A. *meN*-send letter to F.
 ‘Amir sends a letter to Farid.’

- c. *Amir dan Farid ber-kirim-kirim-an surat.*
 ‘Amir and Farid send each other letters’, ‘A. and F. correspond with each other.’

Here also belong *me-lempar/me-lempar-i* ‘to throw’, *mem-beri* ‘to give’, *meng-ambil* ‘to take’, etc.

5.2.2 Derived from three-place intransitives

In this case the prepositional object denoting an addressee is omitted and the other object is retained:

- (112) a. *Amir ber-tanya kepada Farid tentang Fatimah.*
 A. ber-ask to F. about F.
 ‘Amir asks Farid about Fatima.’
 b. *Amir dan Farid tanya-ber-tanya tentang Fatimah.*
 ‘Amir and Farid ask each other about Fatima.’

Reciprocals of this type are *omong-meng-omong-kan* ‘to talk with each other’ (← *ber-omong-omong* ‘to talk’, *ber-bisik-an* ‘to whisper to each other’ (← *ber-bisik* ‘to whisper’).

5.3 “Possessive” reciprocals

This type comprises two-place transitive reciprocals derived from two-place transitive constructions containing a direct object with an attribute. Between the referents of the latter two, the relationship of inalienable possession is obligatory.

- (113) a. *Amir me-nepuk bahu Farid.*
 A. meN-pat shoulder F.
 lit. ‘Amir patted Farid’s shoulder.’
 b. *Amir dan Farid tepuk-me-nepuk bahu.*
 A. and F. REC-meN-pat shoulder
 ‘Amir and Farid patted each other on the shoulders.’
 lit. ‘Amir and Farid patted each other with respect to shoulders.’
- (114) a. *Amir meng-genggam tangan Farid.*
 A. meN-squeeze hand F.
 ‘Amir squeezed Farid’s hand.’
 b. *Amir dan Farid ber-genggam-an tangan.*
 A. and F. REC-squeeze-REC hand
 ‘Amir and Farid hold tight each other by the hand.’

These constructions differ from those in 5.1.3 in that the base constructions contain regular direct objects. However, here again the objects in the derived constructions should not be identified with a regular direct object. The valency of the derived verb undergoes reduction in the way already mentioned (see the beginning of Section 5).

5.4 Object-oriented reciprocals absent?

There are no morphological means of forming this type of reciprocals from subject-oriented morphological reciprocals, in contrast to subject-oriented lexical reciprocals (see 3.3.1.1). Instead, syntactic means are used, cf. (114) and (115):

- (115) *Yusuf me-nyuruh Amir dan Farid ber-jabat-an tangan.*
 Y. meN-say A. and F. REC-shake-REC hand
 ‘Yusuf told Amir and Farid to shake hands.’

6. Periphrastic reciprocals with the auxiliary *saling* ‘mutually’

6.1 Introductory

The auxiliary *saling* is the most neutral and the least restricted means of encoding reciprocity. As was pointed out by Kridalaksana (1983:400), it occurs with non-reciprocal verbs of various affixal patterns. It is always placed in contact pre-position to the verb (see (1e)) and, as a rule, cannot be separated from the latter by other words. This auxiliary does not occur with any other parts of speech (cf. 6.4). Functionally, it is intermediate between an auxiliary and a prefix. There seem to be no other functionally similar auxiliary words in Indonesian.

There are no restrictions on the formation of reciprocals with *saling* ‘mutually’ other than the trivial semantic restriction (semantic homogeneity of agent and patient allowed by the underlying verb). Note, however, that verbs in the passive form seldom combine with *saling*. With regard to diathesis types, periphrastic reciprocals are almost no different from morphological reciprocals in that the same valency changes take place here, i.e. a transitive verb is intransitivized in the “canonical” diathesis type, and the direct object is retained in the “indirect” type. A minor difference from morphological reciprocals is that the underlying transitive verb retains its ability to combine with the pronominal enclitic:

- (116) *Kami, teman-teman-nya yang ketika hidup-nya saling me-rebut -kan-nya*
 we friend-PL-her REL when life-her mutually ACT-take.away -TR-her
ikut pula kehilangan. (C. 149)
 also PRTL lose
 ‘We, her friends who tried to take her away from each other when she was alive, also felt the loss.’

But on the other hand *saling* co-occurs with intransitive lexical reciprocals. As we see, it has a specific range of syntactic functions.

With respect to aspect, periphrastic reciprocals seem to be less specific than the morphological types. Periphrastic reciprocals are neutral aspectually, while circumfixed reciprocals tend to be processual and pre-reduplicated reciprocals are more likely to denote succession.

Instead of the auxiliary *saling*, the dialectal loan-word *baku* (with the same meaning) can be used. A reciprocal with this element denotes an intensive, “violent” action,

as Steinhauer (1994:81) describes it. The active prefix *meN-* is dropped as common in colloquial speech.

- (117) a. *Yusuf meng-hantam perampok itu.* 'Yusuf struck this robber.'
 b. *Mereka baku hantam.* 'They strike each other wildly.'

6.2 Diathesis types. Subject-oriented constructions only

6.2.1 "Canonical" reciprocals

6.2.1.1 *Derived from two-place transitives.* This case is analogous to (117) in that it also involves intransitivization:

- (118) a. *Amir meng-ganggu Farid.*
 'Amir teases Farid.'
 b. *Amir dan Farid saling meng-ganggu.*
 'They tease each other', lit. 'Amir and Farid mutually tease'; cf. also:
 (119) *Dengan tambahnya hari, mereka tambah saling me-nenal.* (C. 231)
 'In due course, they came to know each other better and better.' (See also (1e)).

6.2.1.2 *Derived from two-place intransitives.* The verb undergoes a valency change in the same way as in 5.1.2 (i.e. the preposition is not retained):

- (120) a. *Amir cinta kepada Fatimah.* 'Amir loves Fatima.'
 b. *Amir dan Fatimah saling cinta.* 'Amir and Fatima love each other.'

A textual example:

- (121) a. *Amir meng-angguk kepada Fatimah.*
 'Amir nods to Fatima.'
 b. *Kami ber-pandang-an dan saling meng-angguk.* (R. 340)
 'We exchanged glances and nodded to each other.'

6.2.2 "Indirect" reciprocals

The following examples, analogous to (111) and (112) respectively, illustrate this diathesis type:

- (122) a. *Amir me-ngirim-i Farid surat.*
 'Amir sends Farid a letter.'
 b. *Amir dan Farid saling me-ngirim-i surat-surat yang telah bertumpuk.*
 'Amir and Farid send each other letters that are already piling up.'
 (123) a. *Amir ber-tanya kepada Farid tentang Fatimah.*
 'Amir asks Farid about Fatima.'
 b. *Amir dan Farid saling ber-tanya tentang Fatimah.*
 'Amir and Farid ask each other about Fatima.'

Compare also (116) and (124):

- (124) *Mereka saling men-cerita-kan kesulitan pembayaran air.* (A. 412)
 'They told each other about the difficulties of paying for water.'

6.2.3 “Possessive” reciprocals

The following example is analogous to (113):

- (125) a. *Amir me-nepuk bahu Farid.* ‘Amir patted Farid’s shoulder.’
 b. *Amir dan Farid saling me-nepuk bahu.*
 lit. ‘Amir and Farid patted each other’s shoulders’, i.e. ‘Amir and Farid patted each other on the shoulder.’

A textual example:

- (126) a. *Beni me-neliti perubahan diriku.*
 ‘Beni looks closely for changes in me.’
 b. *Kami saling me-neliti perubahan yang bisa di-lihat.* (A. 69)
 ‘Both of us look attentively for changes in each other which could be [easily] discerned.’

6.3 Pleonastic use of the auxiliary *saling* with morphological and lexical reciprocals

This usage is not uncommon in texts and it may be accounted for by a desire to emphasize the reciprocal meaning or by a spontaneous “mutual attraction” of synonymous formations. Here are textual examples of *saling* co-occurrent with a lexical, circumfixed, and a pre-reduplicated reciprocal respectively:

- (127) *Sejak itu Prita dan pemuda itu saling dekat.* (A. 93)
 ‘Since then Prita and the young man drew closely together.’

(*dekat* ‘to be close’; cf. (31)). The auxiliary *saling* here plays the role described for *ber...-an* in 3.3.2.2.

- (128) *Mereka tak berani lagi saling ber-pandang-an muka.* (R. 69)
 ‘They did not any more dare to look each other in the face.’ (*me-mandang* ‘to look at sb’).
 (129) *Rupanya mereka saling ber-tubruk-an.* (A. 554)
 ‘Apparently they ran into each other’; cf. *me-nubruk* ‘to collide, run against’.
 (130) *Kami saling liwat-me-liwat-i.* (Ge. II-56) ‘We passed each other.’
 (cf. *me-liwat-i* ‘to go past sb’).

In the following example, *saling* co-occurs with a pre-reduplicated reciprocal derived from the lexical reciprocal *ber-debat* ‘to argue’ (see (25)):

- (131) *Kami saling debat-ber-debat.* (Ge. I-198) ‘We argued with each other.’

6.4 Nominalization

There are practically no action nominals with *saling*. However, *saling pe-ngerti-an* ‘mutual understanding’ is very commonly used (cf. the circumfix *per...-an* in 3.4).

6.5 Object-oriented reciprocals

The situation here is analogous to that described in 5.4; cf.:

- (132) *Amir me-larang Farid dan Yusuf saling me-nuduh.*
 ‘Amir forbids Farid and Yusuf to accuse each other.’

7. Means of expressing reciprocal arguments

7.1 The simple reciprocal construction

In this principal type of constructions a plural or dual agent of the verbal action is named by the subject, the same means of expression being employed for the latter as with non-reciprocal predicates (plural form of nouns and pronouns, collective nouns, conjoined word groups with coordinative conjunctions, etc.; see most of the examples above).

In simple constructions, two principal types of subject can be distinguished: subject expressed by a single word like ‘we’, ‘they’, ‘people’, ‘soldiers’, or by a word group like ‘two boys’, etc., and coordinated subjects, when each reciprocal argument is expressed by a separate word (cf. ‘Amir and Farid’, etc.). It is but natural that only reciprocal sentences with a coordinated subject can be transformed into discontinuous constructions.

We shall consider some extensions of the simple reciprocal construction which are not possible in the discontinuous construction.

1. The explicit expression of reciprocity *satu sama lain* ‘each other’, lit. ‘one with other’ (*sama* ‘with’). In the two registered examples this adverbial expression occurs with lexical reciprocals and serves to emphasize reciprocity, it seems:

- (133) *Mereka selalu ber-tengkar satu sama lain.* ‘They always quarrel with each other.’

This marker of reciprocity may also (though seldom) take the subject position. In (134a) it is the subject of the thematic (topical) construction:

- (134) a. *Satu sama lain ber-jauh-an letak-nya.* (A. 195)
 one with other REC-far-REC location-their
 ‘The one and the other are located (lit. ‘their location’) far from one another’
 (‘their location’ is the subject of subordinated predication).

A more common version:

- b. *Letak-nya ber-jauh-an satu sama lain.*
 lit. ‘Their locations are far from one another.’

The use of *satu sama lain* instead of the marker *saling* seems, however, not quite acceptable for stylistic reasons.

2. The preposition (*di*) *antara* ‘between’. This (complex) preposition within the subject seems to be substandard:

- (135) *Di antara mereka saling ber-pandang-an.* (R. 161)
 ‘They exchanged glances between themselves.’

3. The reciprocal arguments are expressed by an attribute of the subject which is a substantivized/nominalized lexical reciprocal, the predicate being expressed by a pre-duplicated reciprocal with an aspectual meaning. The derivational chain seems to be:

- (136) a. *Tiga orang itu ber-cakap-cakap.*
 ‘These three men talked.’
 → b. *Per-cakap-an antara tiga orang itu.*
 ‘The talk of these three men between themselves.’
 → c. *Per-cakap-an sambung-me-nyambung.*
 ‘The talk (was) continued’, lit. ‘continued each other.’

Compare a textual example:

- d. *Di dalam jip per-cakap-an antara tiga orang itu sambung-me-nyambung.*
 (R. 139) ‘In the jeep, the conversation of these three men continued (lit. ‘continued each other’).

4. Constructions with the subject expressed by a group of coordinated words containing repetition of the same noun cannot be transformed into discontinuous constructions, it seems:

- (137) *Manusia dan manusia bunuh-mem-bunuh.* (M. 23)
 lit. ‘Humans and humans kill each other.’

7.2 Discontinuous arguments with lexical reciprocals

All lexical reciprocals (with a few exceptions; see 3.3.1.2) can be used with discontinuous arguments, it seems. In this case the second argument usually has the preposition *dengan* ‘with’, i.e. the preposition which marks a comitative adjunct of non-reciprocal verbs:

- (138) *Amir datang [dengan Farid].* ‘Amir comes [with Farid].’

With some reciprocals, the prepositions *dari* ‘from’, *kepada* ‘towards’, etc. (commonly used with an object of two-place intransitives; see (13), (14), (15a), (65a), (108a), (111b)) are common:

- (139) a. *Mereka telah ber-pamit-an dengan ibu yang tua.* (A. 158)
 ‘They said goodbye to [their] old mother.’
 b. *Kakaknya itu ber-pamit-an kepada bapak dan emak-nya.*
 ‘Her eldest brother said goodbye to his father and mother.’

The second argument may have no preposition (i.e. a construction looks like a transitive one) in spoken language and in literary texts if a sentence is somewhat aphoristic. This seems to concern lexical reciprocals only :

- (140) coll. *Dia ingin ber-temu Fatimah.*
 ‘He wants to meet with Fatima.’
 (141) *Beras ber-ganti jagung. Jagung ber-ganti galek.* (Bl. 271)
 ‘Rice was followed by maize. Maize was followed by dried cassava.’

- (142) *Dan kembali hari ber-sambung hari.* (Bl. 275)
 ‘And again one day continued another’ (lit. ‘day continued [with] a day’).

7.3 Discontinuous arguments with morphological and periphrastic reciprocals

Native speakers permit the use of all types of reciprocals in the discontinuous construction, but judging by written texts the use of a reciprocal with discontinuous arguments seems to be determined by the degree of its lexicalization, and also by its semantic affinity to lexical reciprocals. The occurrence of the types of reciprocals in the discontinuous construction diminishes from (a) to (c):

- (143) a. lexical reciprocals (see Sections 3 and 7.2)
 b. prefixed (non-productive) and circumfixed reciprocals (see 4.2 and 4.3)
 c. pre-reduplicated and periphrastic reciprocals (see 4.5 and 6).

The types of reciprocals under consideration combine (almost) exclusively with the comitatively marked second argument (i.e. marked by the preposition *dengan* ‘with’). With respect to the diathesis types, discontinuous constructions are similar to simple reciprocal constructions.

1. Circumfixed reciprocals

(a) “Canonical” reciprocals:

- (144) a. *Amir men-cium Fatimah.* ‘Amir kisses Fatima.’
 b. *Amir dan Fatimah ber-cium-an.* ‘Amir and Fatima kiss.’
 c. *Amir ber-cium-an dengan Fatimah.* lit. ‘Amir kisses with Fatima.’

- (145) *Dan di situulah kau ber-kenal-an dengan Lola?* (G. 11)
 ‘And there you got acquainted with Lola?’

- (146) *Aku ber-pandang-pandang-an dengan mereka.*
 ‘I exchanged glances with them.’

(b) “Indirect” reciprocals. In the comitative construction, an object is common and even obligatory. The verb, however, is morphologically intransitive:

- (147) *Fatimah ber-kirim-kirim-an surat dengan Yusuf.*
 ‘Fatima corresponds (lit. ‘mutually-sends letters’) with Yusuf.’

(c) “Possessive” reciprocals:

- (148) *Rejo ber-pegang-an tangan dengan embok Karjo.*
 ‘Rejo was holding hands with Ma Karjo.’

2. *Pre-reduplicated reciprocals.* Although it is claimed in Ogloblin (1981) that these reciprocals are not used in comitative constructions, examples of such usage do occur, though very seldom (they are probably possible with only some of pre-reduplicated reciprocals). Here is an example for “canonical” reciprocals:

- (149) *Setiap bagian tunjang-me-nunjang dengan bagian yang lain.* (ASB. 82)
 lit. ‘Each part supports each other with another part.’

3. *Periphrastic reciprocals*. We do not have any textual examples of periphrastic reciprocals with a comitative argument. Our informant considers (150a) as ungrammatical:

- (150) a. **Saya saling men-cinta-i dengan Rayati*. 'I and Rayati love each other.'

But (150b), with a different word order (where *dengan* takes the position of the conjunction *dan* 'and'), is possible in colloquial speech:

- b. *Saya dengan Rayati saling men-cinta-i*. lit. 'I with Rayati mutually love.'

It is similar to simple reciprocal constructions with the coordinated subject. Examples like (150a) are cited in specialist literature although we have not found any in written texts. It is worthy of note that the periphrastic reciprocal in (150a) is semantically contiguous to a number of lexical reciprocals which are common in constructions of this type:

- (151) *A saling me-maki dengan B*. 'A quarrels with B.' (*me-maki* 'to scold sb')
(see Steinhauer 1994:86).

7.4 Non-reversible discontinuous constructions

In the discontinuous construction, the subject and object are not equal pragmatically. Hence the comitative object may be expressed by a noun of lower denotational status than the subject, particularly by a non-human noun if the subject is human. For this reason a discontinuous construction cannot sometimes be transformed into a simple reciprocal construction; cf. (152) and (153):

- (152) a. *Kami ber-hadap-an dengan musuh*. 'We are facing the enemy.'
b. *Kami dan musuh ber-hadap-an*. 'We and the enemy are facing each other.'
- (153) a. *Kami ber-hadap-an dengan kesulitan*. 'We are facing difficulties.'
b. **Kami dan kesulitan ber-hadap-an*. 'We and difficulties are facing each other.'

7.5 Passive constructions with derived reciprocals

These can be simple and discontinuous; see (37b), (44c), (45c), (154c).

8. Reciprocals derived from reflexives

The reflexive meaning is commonly expressed by the reflexive pronoun *diri* 'oneself' which can take direct object position. It is but natural that reciprocals can be derived only from those reflexives which are in their turn derived from three-place transitives, including causative ones. In such cases, a reciprocal construction is of the "indirect" diathesis type; cf.:

- (154) a. *Amir me-negenal Ali*. 'Amir knows Ali.'

As well as in other languages, the reciprocal relation is expressed by reciprocals derived from verbs like ‘to follow’, ‘to pursue’; the reduplicated form is preferable:

- (160) a. *meng-iring(-i)* ‘to accompany sb’
ber-iring-iring-an ‘to walk one behind the other, in a file’
 b. *me-ngejar* ‘to chase sb’
ber-kejar-kejar-an ‘to chase each other’
 c. *me-nyusul* ‘to follow sb’
ber-susul-susul-an ‘to follow each other.’ Compare also:
- (161) *Daun-daun sampah seperti armada ber-iring-iring-an.* (PR. 27)
 ‘Fallen leaves float (lit. ‘follow’) one after another like a fleet.’

As we see, reciprocals derived from the given verbs can denote referentially non-reciprocal actions, which is due to presenting the participants of a situation as identical or replacing one another.

- (162) *Dan pidato demi pidato sambung-me-nyambung dari radio itu.* (Bl. 346)
 lit. ‘And speech after speech on the radio continued (followed) one another.’

10. Sociative

10.1 Circumfixed sociative-like forms

They are derived by means of the circumfix *ber...-an* from one-place and two-place intransitives (including qualitative verbs), viz. root verbs and those with the prefixes *ber-*, *meN-*, *ter-*. The subject usually refers to more than two persons or things.

These verbs can be viewed as sociative with reservations. Their basic meaning is that of “great quantity” of an action, and plurality of the subject referents is one of the possible implications of this extensive meaning. The other aspects of this meaning are spatial or temporal duration. Thus, the verb *ber-tidur-an* ‘to sprawl in sleep’, ‘to oversleep’ (← *tidur* ‘to sleep’) can characterize a single subject referent. But the prevalent use of these verbs is with plural subjects, although the actions of co-participants can take place at a different time, in different places, in a different manner, etc. (cf. Agus (1989:218ff.) where some derivatives of this type are dealt with from the viewpoint of plurality of action (iterativity, etc.)). Compare:

- (163) a. *Ayah ber-baring di kamar.* (A. 402) ‘Father was lying in the room.’
 b. *Kambing-kambing telah ber-baring-an di sela-sela semak rimbun.* (A. 55)
 ‘The goats were already lying around among shady bushes.’
- (164) a. *Ranting itu patah.* ‘The branch broke.’
 b. *Ranting-ranting ber-patah-an.* ‘Branches are breaking.’
- (165) a. *Buah itu merah.* ‘This fruit is red.’
 b. *Jala kami ber-merah-an.* (A. 139) ‘Our fishing-nets became red.’

The following verbs also belong to the class of morphological sociatives (translation of the sociatives is omitted):

(166) <i>ber-degup</i> ‘to beat (of the heart)’	→	<i>ber-degup-an</i>
<i>ber-diam</i> ‘to live, to inhabit’	→	<i>ber-diam-an</i>
<i>ber-gantung</i> ‘to hang’	→	<i>ber-gantung-an</i>
<i>ber-baris</i> ‘to take up formation/draw up’	→	<i>ber-baris-an</i>
<i>ber-diri</i> ‘to stand’	→	<i>ber-diri-an</i>
<i>me-nangis</i> ‘to cry’	→	<i>ber-tangis-an</i>
<i>cecer</i> ‘to be lost, to slip away’	→	<i>ber-cecer-an</i>
<i>ter-dampar</i> ‘to be washed ashore’	→	<i>ber-dampar-an</i>
<i>jatuh</i> ‘to fall’	→	<i>ber-jatuh-an</i>
<i>muncul</i> ‘to come into evidence’	→	<i>ber-muncul-an</i>
<i>pucat</i> ‘to be pale’	→	<i>ber-pucat-an</i>
<i>me-nangis</i> ‘to cry’	→	<i>ber-tangis-an</i> .

The material discussed in this subsection is part of the problem of polysemy of the reciprocal marker *ber-...-an* and it is a continuation of Section 4.2.4 above.

10.2 Periphrastic sociative with the auxiliaries *sama* and *pada* ‘together’

These auxiliaries are used, like *saling*, in contact pre-position to the verb. Their only meaning is that of joint action. There are no morphological or semantic restrictions on their use in sociative constructions. The subject may have a plural or dual referent. The word *pada* is colloquial.

- (167) a. *Dia me-nunduk.* ‘He lowered his eyes.’
 b. *Keduanya sama me-nunduk.* (A. 453) ‘They both lowered their eyes.’
- (168) a. *Muncul sebuah keranjang.*
 ‘A basket appeared there.’
 b. *Lalu keranjang-keranjang pada muncul.* (A.203)
 ‘Then yokes and baskets appeared.’

The markers of joint action may sometimes co-occur with circumfixed reciprocals:

- (169) *pemain-pemain sama ber-pandang-an.* (A. 440) ‘The musicians exchanged glances.’

10.3 Periphrastic sociative forms with *saling* ‘mutually’

This auxiliary is sometimes used to express the sociative meaning rather than the reciprocal:

- (170) *Torkis dan isteri masuk ke dalam, muncul saling meng-gendong anak yang tidur.* (R. 276)
 ‘Torkis and his wife entered the house, (then) appeared with (lit. ‘mutually carry’) the sleeping child in their arms.’
- (171) *Kami saling me-nge-tahu-i betapa baik arti pergaulan.* (S. 24)
 ‘We [both] know (lit. ‘mutually know’) what a good thing personal contact is.’

11. Verbs of joint class membership

These verbs, semantically contiguous to sociatives and reciprocals, are formed with the help of the prefix *se-* which is a proclitic form of the numeral *satu* ‘one’ (they are interchangeable in colloquial speech). This prefix is added to root or affixed nouns. The subject refers to a plural or dual co-possessor of a third entity or entities. The verbs have a comitative variant with *dengan* ‘with’:

- (172) a. *Amir dan Hasan se-kelas.* ‘Amir and Hasan are in the same class at school.’
 b. *Amir se-kelas dengan Hasan.* ‘Amir is in the same class with Hasan.’

Here is a list of these verbs:

- (173) *se-bangsa* ‘to be of the same nation’
se-tanah-air ‘to be compatriots’
se-nasib ‘to have the same fate’
se-sekolah ‘to go to the same school’
se-pendapat ‘to be of the same opinion’
se-perasaan ‘to share the same feelings’
se-ketiduran ‘to share the bed, to be bed-fellows’
se-rumah ‘to live in the same house.’

12. Etymology of the reciprocal markers

Etymological and historical data on Indonesian reciprocal markers are rather scarce. We will confine ourselves to brief notes.

The prefix *ber-* probably originates from *mar-* (phonetically with the vowels [a] or [0]) found in Old Malay inscriptions of the 7th century. The latter prefix was used in intransitive and active transitive verbs. In medieval (classical) Malay the prefix *ber-* also had both of these functions. In Indonesian the active transitive function of *ber-* is only occasional in earlier texts. Transition from *mar-* to *ber-* can be accounted for by phonetic evolution (see Adelaar 1985: 191).

In the 7th century Malay, a single occurrence of the double prefix *marṣi-* has been found, which was described by Adelaar (1992: 396) as reciprocal (*marṣihāji* ‘to treat each other as royal’ ← *hāji* ‘king’). Its modern counterpart *bersi-*, however, practically does not occur in texts.

Both circumfixed and pre-reduplicated reciprocals are common in medieval Malay (see, for instance, a grammar of traditional Malay (van Wijk (1985: 106–108)).

According to Ogloblin & Zarbaliev (1993) the evolution of reciprocals in languages of the Western Indonesian area shows a certain shift from prefixal to circumfixal and suffixal means in their morphological structure. The suffixal component of the circumfix *ber-...-an* is historically connected to the idea of plurality or large quantity, which is still apparent both in Malay (cf. *laut* ‘sea’ → *laut-an* ‘ocean’) and in some closely related languages.

The auxiliary *saling* ‘mutually’ may be of rather ancient provenance, but we do not have the earliest textual evidence. It has counterparts in some related languages, e.g. *silih* ‘mutually’ in Old Javanese (cf. the Malay idiom *silih berganti* ‘to alternate with each other’).

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B. Verbal reciprocal marker only

Reciprocal constructions in Nêlêmwa (New Caledonia)

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1. Introduction

Nélêmwa is one of the twenty-eight Kanak languages spoken in New-Caledonia; they belong to the Oceanic subgroup of the Austronesian family. Nélêmwa, and its dialectal variant Nixumwak, are spoken by neighbouring groups (approximately one thousand speakers) in the far north of New Caledonia, around Koumak, Poum, Tiabet and the neighbouring islands (Brill 2002).

1.1 An overview of the *pe-* prefix

There are no reciprocal pronouns in Nélêmwa. Reciprocity is marked morphologically by the prefix *pe-* associated (under certain conditions) with the suffix *-i*. The circumfix *pe-...-i* is a reflex of the Proto-Oceanic reciprocal affixes **pa(R)i-...-i* (Pawley 1973:152). In Proto-Oceanic, this prefix (referred to as reciprocal¹) implies “mutual interaction between the entities denoted by the subject of the verb” and refers to “unified or conjoined

1. A ‘misleading label’ according to Pawley: “the strict reciprocal meaning was restricted to a subclass of verbs whose properties remain to be defined” (Pawley 1973:152).

action by a plural subject, or repeated action by a singular subject, or unification of objects” (Pawley 1973:150–1; see also Lichtenberk 2000; Bril 2005). Nêlêmwa *pe-* has all these meanings, but it does not express reflexivity.

1.1.1 Reciprocal meanings of *pe-*

They are as follows.

- *Subject-oriented reciprocity* (see 3.1). Reciprocity may be restricted (with dual subject arguments) or extended (with plural subject arguments). The reciprocal suffix *-i* (henceforth *R-i*) is restricted to the expression of reciprocity and only suffixed to transitive verbs (see table 3 and Section 3). *pe-* may be prefixed to any lexical item (verbal or nominal), it may also be prefixed to any class of nouns or verbs (intransitive, transitive, ditransitive, active or non-active). Reciprocal subject arguments may be animates or inanimates.
- *Object-oriented reciprocity* (see 3.2). With transitive verbs, *pe-* may express reciprocity between object arguments. Subject pronoun number is then indifferent (singular, dual or plural). The suffix *R-i* never appears in this case. Reciprocal objects are mostly (but not exclusively) inanimates.
- *Reciprocity and expression of identity*. With this meaning, *pe-* is prefixed to stative verbs expressing quality, to impersonal verbs and to nouns with predicative or argument function; it has a comparative force and expresses identity, similarity or symmetry between two or more items (see Section 9). The suffix *R-i* does not appear in this case either.

1.1.2 Polysemy of *pe-*

This prefix may have non-reciprocal meanings. In this case, the two arguments (subject and object) are not co-referential.

- *Sociative value of *pe-**: sociative subject arguments may be dual or plural.
- *Other values*. These are mostly chain relations indicating successive, reversible or non-reversible processes and adverbial² values such as intensive, diversative and spontaneous meanings (see Table 1 and Section 8). Subject pronoun number is indifferent (singular, dual or plural) and varies with the number of arguments involved (see Table 2).

The reciprocal, sociative and adverbial meanings of *pe-* all are very productive. With such semantic diversity, potential ambiguities are avoided by subject pronoun number, the occurrence of the suffix *R-i* and that of additional adverbs. The syntactic/semantic category of verbs also acts as a filter to help interpret the various meanings of *pe-*. With active verbs (transitive or intransitive), *pe-* may have any of these meanings. With stative verbs, *pe-* may express comparison as well as other meanings (intensive, diversative), but not the sociative meaning. There are other semantic filters: intransitive verbs of movement outrule

2. Here “adverbial” refers to the fact that such meanings are often expressed or reinforced by adverbs.

Table 1. Possible association of the prefix *pe-*

	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
<i>pe-</i> + stative verb	comparison	∅	∅	+
<i>pe-</i> + intransitive verb	+	∅	+	+
<i>pe-</i> + transitive verb	+	+	+	+
<i>pe-</i> + noun				
in predicative function	comparison	∅	+	+
in argument function	+	∅	+	+
<i>pe-</i> + pronouns ³	+	∅	+	+

Table 2. Types of subject pronoun agreement

Subject pronouns	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
dual or plural all persons	+	+	+	+

the reciprocal meaning; *pe-* may then express sociative or adverbial values (see Section 8). Context also helps interpret the meaning of *pe-*.

2. Notes on Nêlêmwa grammar

2.1 Nouns and pronouns

2.1.1 *Noun classes*

There are two main classes:

- Bound nouns have an obligatory possessive suffix (*-t* when the determiner is an inanimate noun or a collective, indeterminate animate noun such as *agu* ‘people’; *-n* for a 3rd person human possessor): *duxat-t* ‘noise’ (lit. ‘noise of this’), *axomoo-n* ‘mother’ (lit. ‘mother-his/her’). Bound nouns are marked directly by possessive suffixes or postposed possessor nominals: *pwaxi thaamwa ena* ‘the child of this woman’ (lit. ‘child woman this’). They express inalienable possession and include kinship terms and body parts.
- Independent nouns have an autonomous form (without any obligatory determination marker) as in *mwa* ‘house’, *bu* ‘bait, hook’. There are two subclasses of independent nouns, those which have direct (inalienable) possessive markers like bound nouns (*mwa-ny* ‘house-my’) and those which have indirect (alienable) prepositional posses-

3. Independent, deictic or anaphoric pronouns. *pe-* is never prefixed to subject or object personal pronouns.

sive markers (*i* for humans, *o* for inanimates): *bu i axaleny* ‘this man’s bait’, *bu i ye* ‘his bait/hook’ (lit. ‘bait of him’), (see B in Section 2.1.2).

Nouns do not vary in number. Number (singular, dual, or plural) is marked only by agreement with a subject pronoun or with deictic/anaphoric pronouns. In some cases, reduplication may also express plurality with the meaning ‘all sorts, all types of’.

2.1.2 Personal pronouns

The system of personal pronouns is given in Table 3.

2.1.3 Nouns as predicates

There is a noun-verb opposition evidenced by derivational processes such as nominalising affixes which derive verbal roots.

On the other hand, all lexical items (nouns, pronouns or verbs) may be predicates. Thus, nouns may have both argument and predicative functions. When nouns are used as predicates as in (1), they retain their nominal determiners and may be associated with aspect, modal markers and subject pronouns:

- (1) *i u thaamwa.*
 3SG PFV woman
 ‘It became a woman’ (a coconut was changed into a woman).

Table 3.

	Bound pronouns		Independent pronouns	Suffixes (Inalienable) possession (A)	Alienable possession (B)
	subject	object			
1SG	<i>na</i>	<i>-na</i>	<i>na</i>	<i>-ny</i>	<i>i na</i>
2SG	<i>co/yo</i> ⁴	<i>-yo</i>	<i>co</i>	<i>-m</i>	<i>i yo</i>
3SG	<i>i/Ø</i> ⁵	<i>-e/Ø</i>	<i>ye/e</i>	<i>-n /-t</i>	<i>i ye</i>
1DU.INCL	<i>hî</i>	<i>-hî</i>	<i>hî</i>	<i>-hî</i>	<i>i hî</i>
1DU.EXCL	<i>ma</i>	<i>-man</i>	<i>yaman</i>	<i>-man</i>	<i>i man</i>
1PL.INCL	<i>hâ</i>	<i>-hâ</i>	<i>hâ (âk)</i> ⁶	<i>-hâ</i>	<i>i hâ</i>
1PL.EXCL	<i>va</i>	<i>-va</i>	<i>yava(ak)</i>	<i>-va</i>	<i>i va</i>
2DU	<i>mo</i>	<i>-mon</i>	<i>yamon</i>	<i>-mon</i>	<i>i mon</i>
2PL	<i>wa</i>	<i>-wa</i>	<i>yawa(ak)</i>	<i>-wa</i>	<i>i wa</i>
3DU	<i>hli/Ø</i>	<i>-hli/Ø</i>	<i>hli/Ø</i>	<i>-hli</i>	<i>i hli</i>
3PL	<i>hla/Ø</i>	<i>-hla/Ø</i>	<i>hla(ak)/Ø</i>	<i>-hla</i>	<i>i hla</i>

4. *co* when sentence initial or with emphatic meaning; in all other positions *yo*.

5. For inanimates, 3SG, 3DU, 3PL are marked Ø.

6. Pronouns with final *-ak* are emphatic and occur in ceremonial speeches.

2.2 Verbs

There are four main categories:

- Stative verbs expressing quality (adjectives as a syntactic category do not exist).
- Intransitive verbs with active or non-active meaning.
- Intransitive or transitive verbs of feeling, speech with an indirect object. The indirect object (IO) is marked by a preposition (*i* + humans, *o* + inanimates⁷): *i hiiya* ‘he is jealous’, *i hiiya i hla* ‘he is jealous of them’.
- Transitive verbs with direct objects: most have a transitive flexion (generally marked by a vowel *-i*, *-e*, or of the (V)CV type), or marked by a transitive suffix (*-li* + inanimate objects): v.i. *fuung* and v.t. *fuug-e* ‘to gather’; v.i. *tuâ* and v.t. *tuâ-i* ‘to deceive’; v.i. *khet* and v.t. *khiri* ‘to comb’; v.i. *hiwi* and v.t. *hiwi-li* ‘to rub, grate’.

Some verbs (generally ended in *-a*) do not have any transitive flexion: *khua* ‘to bite’, *thiwalaxa* ‘to tickle’, *cabwa* ‘to pinch’, *oxo* ‘to follow’.

- Ditransitive verbs with either one direct and one indirect object, or with two indirect objects.

2.3 Case marking and word order

Argument structure is split: bound pronouns are accusative (they mark subject and object functions, coded as *s* and *o*), whereas nominal arguments are marked absolutive or ergative.

- Order of personal pronouns: *s* V-*o*

Subject pronouns are preverbal but non-proclitic, object pronouns are postverbal and enclitic (*s*V-*o*).

- Order and case marking of nominal arguments.

The neutral order is verb initial, followed by nominal arguments. The nominal prime argument of a transitive verb (coded A) is marked by agent morphemes ((*e*)*a* for human agents, *ru* for non-human or indefinite, collective human agents), whereas the nominal prime argument of an intransitive verb (coded S) is absolutive, like the second nominal argument of transitive verbs (the object, coded O). The absolutive case is marked \emptyset .

Besides, a prime human nominal argument is cross-referenced by a co-occurring subject pronoun (inanimates are zero-marked):

- (2) *i gi thaamwa ena.*
s V S
 ‘This woman is crying.’
 (*thaamwa* is absolutive and agrees with the subject pronoun *i*).

7. Thus, the indirect object pronouns of a verb and the indirect/alienable possessive pronouns are marked by the same paradigm introduced by the preposition *i*, *o* (see Table 3 on personal pronouns in 2.1.2).

- (3) *hla hiiya i ye a âlô mahleena.*
 3PL be,jealous CONN 3S AG child these.DEICT
 s V IO A
 ‘These children are jealous of him.’
 (*âlô* is ergative and agrees with the subject pronoun *hla*).

Agreement patterns as follows:

- with an intransitive verb: sVS (s = S);
- with a transitive verb: sVOA (s is co-referential with A; O may be a noun or a pronoun, or may be direct or indirect (IO)).

The transitive flexion of verbs varies with object determination, as well as its \pm human, \pm animate feature. Argument structure also varies with object determination:

- an indeterminate object is “incorporated”, verbal flexion is then indeterminate, the prime argument is absolutive as in an intransitive structure;
- with a determined object, verbal flexion is definite, the prime argument is ergative; this is the canonical transitive structure.

2.4 Valence and diathesis

There is no passive in Nêlêmwa; diathesis is expressed by variations of transitivity and verbal valence which can be reduced or increased by various syntactic means.

It may be increased with the causative prefix *fa-*: *coola* ‘to be strong’ \rightarrow *fa-coola* ‘to strengthen’. It can be decreased by nominalisation of verbs or by demotion of the second argument which is then marked as an oblique. This correlates with the absolutive marking of the prime argument (VOA \rightarrow V IO S) and the backgrounding of the agent with a change in diathesis (as in (4b)).

- (4) a. *hla hobwaxe vaayi a agu Pum.*
 3PL take.care.of cattle AG people P.
 ‘The people from Poum raise cattle.’ (VOA).
- b. *hla hobwaxe-wo o vaayi agu Pum.*
 3PL take.care.of-wo CONN cattle people P.
 ‘The people from Poum do some cattle-raising.’ (V IO S)
 (in such a construction, *-wo* fills the position of an indefinite, plural direct object).

Reciprocity and reflexivity are valence decreasing (intransitivising) constructions, due to the non-distinction of the prime and second arguments.

There is no specific morphological expression of reflexivity. For a limited set of verbs, it may be marked by co-referential subject and object pronouns: *i bwagi-e* ‘he returns’ (*i-* and *-e* are co-referential); *hla bwagi-hla* ‘they returned’. When the reflexive argument is a noun, the construction is intransitive and the nominal argument is absolutive: *i bwagi Pwayili* ‘Pwayili retraces his steps’.

Reflexivity may also be expressed by co-reference between the subject pronoun and the possessive determiner of the object-argument: *na khiri pôô-bwaa-ny* ‘I am combing

myself' (lit. 'I comb hair-head-my'). Most commonly, reflexivity is lexical and is expressed by intransitive verbs: *na hnet* 'I am blowing my nose'.

2.5 Tense/mood and aspect

Tense/mood and aspect are expressed mostly by preverbal or pre-predicate morphemes which may be combined. *u* is the marker of perfective form (*i u maak* 'he is dead'); but in narratives, the resultative/perfective aspect is usually unmarked (\emptyset); *io* marks the future, *o* the virtual. There is a complex set of aspect markers which may combine. The iterative marker is *aa*, the continuous marker *na*, the duration marker *gaa* ('still in the process of'), they are all anteposed to predicates.

2.6 Consonant lenition in intervocalic position

Final consonants /p/, /t/, /c/, /k/ regularly undergo lenition when followed by a vowel:

p	>	v (or) w	c[c]	>	y [j]
t	>	r	k [k], kh [x]	>	x [ɣ]

Lenition also occurs at word boundaries (-C#+V) when a final consonant is followed by a vocalic preposition; the phonetic change is then signalled by a hyphen: *jeuk* 'near, close to' – *jeux-i na* 'close to me'; *hla kuluk* 'they hide' – *hla kulux-i na* 'they hide from me'; *faxet* 'taboo' – *pe-faxer-i hli* 'their taboo relationship'; *whaayap* 'fight, war' – *hleeli pe-whaayaw-i hla* 'their wars' (lit. 'these mutual wars of theirs').

3. Types of reciprocal constructions

The suffix *R-i* only occurs with transitive verbs in "canonical" reciprocal constructions, as shown in Table 4.

Table 4. Occurrences of the reciprocal suffix *R-i*

	Reciprocity of subjects	Reciprocity of objects	Sociative	Other meanings (intensive, diversative, separative)
<i>pe-</i> + intransitive verb	\emptyset	*	\emptyset	\emptyset
<i>pe-</i> + transitive verb	<i>R-i</i>	\emptyset	\emptyset	\emptyset

* signals an ungrammatical construction; \emptyset signals the absence of the *R(-i)* suffix.

3.1 Subject-oriented reciprocity

3.1.1 “Canonical” reciprocals

The argument structure of “canonical” reciprocal constructions is intransitive; consequently, the nominal prime argument is absolutive. “Canonical” reciprocals can be derived from two-place transitives and two-place intransitives.

3.1.1.1 Reciprocals of two-place transitives. Reciprocal arguments are expressed in several ways: by nouns (type I); by subject pronouns (type II); by co-referential subject and object pronouns (type III).

- The circumfix *pe- ... -i* occurs in two “light” one-argument constructions:
 - type I: with a nominal reciprocal argument (3.1.1.1.1);
 - type II: with a dual/plural subject pronoun (3.1.1.1.2);
 - The prefix *pe-* occurs alone (without the suffix *R-i*) in the “heavy” two-argument construction (with two co-referential arguments):
 - type III: with co-referential subject and object pronouns (3.1.1.1.3).
- Note that this suffix is glossed as *R* further on.

3.1.1.1.1 Type I: Circumfix *pe-...-i* and a nominal reciprocal argument. There is one syntactic dual or plural nominal argument referring to participants in reciprocal relation.

- (5) *hli pe-thiwalaxa-i âlô mahliili.*
 3DU REC-tickle-R child this.DU.DEICT
 s V S
 ‘These two children tickle each other.’

The dual reciprocal nominal argument (*âlô mahliili*) is absolutive (S) as in any intransitive construction and agrees with the dual subject pronoun *hli*.

Compare the transitive ergative constructions in (6a), (7a), (8a) with reciprocal (6b), (7b) and (8b):

- (6) a. *hli yagei-hli a hliili meewu.*
 3DU help.TR-3DU AG these2.ANAPH brother
 s V o A
 ‘These two brothers help them.’
 b. *hli pe-yage-i hliili meewu.*
 3DU REC-help-R these2.ANAPH brother
 s V S
 ‘These two brothers help each other.’
- (7) a. *hli cabwa-hli a âlô mahliina.*
 3DU pinch-3DU AG child these2.DEICT
 ‘These children are pinching them.’
 b. *hli pe-cabwa-i âlô mahliina.*
 3DU REC-pinch-R child these2.DEICT
 ‘These children are pinching each other.’

- (8) a. *hla khua-hla ru tavia.*
 3PL bite-3PL AG dog
 ‘The dogs bit them.’
 b. *hla pe-xua-i tavia.*
 3PL REC-bite-R dog
 ‘The dogs bit each other.’

There are some exceptions; some transitive verbs do not allow the suffix *R-i*: this is the case of *not* ‘to watch’ whose transitive form is marked by final consonant fall (*nô*), which is preserved in the reciprocal construction.

- (9) *hli pe-nô hliili thaamwa.*
 3DU REC-watch these2.ANAPH woman
 ‘The two women are watching each other.’

3.1.1.1.2 Type II: Circumfix *pe-...-i* and a pronominal argument. The argument is a dual or plural pronoun.

A. Transitive verbs without transitive flexion or root modification.

With such verbs, the suffix *R-i* appears clearly, as there is no possible confusion with the transitive flexion (*-i*). Here is a short list of these verbs: *thiwalaxa* ‘to tickle’, *shêlâ* ‘to know’, *ko* ‘to chase’, *khua* ‘to bite, eat up’, *cabwa* ‘to pinch’, *oxo* ‘to follow’.

Compare non-reciprocal (10a) with reciprocal (10b):

- (10) a. *i ko-e.*
 ‘They chase him.’
 b. *hli pe-xo-i da.*
 3DU REC-chase-R DIR
 ‘They chase each other up.’ (lenition $k > x$ [ɣ])
- (11) *hla pe-xua-i.*
 3PL REC-bite-R
 ‘They bite each other.’
- (12) *hla pe-yêlâ-i.*
 3PL REC-know-R
 ‘They know each other.’ (lenition $sh [f] > y [j]$)
- (13) *hli pe-cabwa-i.*
 ‘They pinch each other.’
- (14) *hli pe-oxo-i.*
 ‘They follow each other (in a line).’

B. Transitive verbs with transitive flexion or root modification.

An example may be *weenge* ‘to agree on, discuss and institute sth’, which is a transitive verb with an obligatory inanimate object. The suffix *-i* is clearly reciprocal. Compare non-reciprocal (15a) with reciprocal (15b):

- (15) a. *hla weenge fek.*
 ‘They discussed to institute a custom.’

- b. *hli pe-weeng-i*.
 3DU REC-agree-R
 ‘They agreed with each other.’

In the case of *yage* ‘to help’, the transitive flexion (associated with a human object) and the reciprocal suffix are identical in form (both are marked by *-i*).

- (16) *hli pe-yage-i*.
 3DU REC-help-R
 ‘They help each other.’

As above, the verb *not* ‘to watch’ does not allow the *R-i* suffix (**hli pe-nô-i*). Only construction (19) (see below) with co-referential subject and object pronouns is allowed.

3.1.1.1.3 Type III: Without *R-i* and with co-referential subject/object pronouns. In the “heavy” construction, there are two syntactic arguments marked by co-referential subject and object pronouns; **R-i* is excluded. The choice of type II or type III, for verbs allowing both constructions, has semantic and diathetic correlates (see Section 3.1.5).

– Verbs with transitive flexion.

Compare non-reciprocal (17a), (18a) with reciprocal (17b), (18b): in (17) the intransitive root is *tuâ* ‘to lie, deceive’, the transitive form is *tuâi*:

- (17) a. *i tuâi-hli*.
 ‘He has deceived them.’
 b. *hli pe-tuâi-hli*.
 3DU REC-deceive.TR-3DU
 s V o
 ‘They deceived each other.’
 (18) a. *i fuugi-hla*.
 ‘He gathers them.’ (the intransitive form is *fuung*)
 b. *hla pe-wuugi-hla*.
 3PL REC-gather.TR-3PL
 ‘They are gathering/meeting [one another].’

– Verbs with root modification (vi *not*, vt *nô*):

- (19) *hli pe-nô-hli*.
 3DU REC-watch-3DU
 ‘They two are watching each other.’

– Transitive verbs without flexion:

- (20) a. *hli cabwa-hli*.
 ‘They pinch them.’
 b. *hli pe-cabwa-hli*.
 3DU REC-pinch-3DU
 ‘They are pinching each other.’
 (21) *hla pe-xua-hla*
 ‘They are biting one another.’

Type III does not allow any nominal reciprocal argument: **hli pe-cabwa-hli âlô mahleena* (intended meaning) ‘the children are pinching each other’ is ungrammatical, the correct sentence is (7b).

3.1.1.2 Reciprocals of two-place intransitives. Here is a short list of some of these verbs: *hiiya* ‘to be jealous’, *kâlaxi* ‘to be ashamed’, *boima* ‘to kiss, embrace’, *kuluk* ‘to hide’, *alu* ‘to stare, watch’, *faaxeen* ‘to ask, inquire’, *celec* ‘to nudge’, *ten* ‘to touch’.

These verbs have indirect objects marked by various prepositions (*i*, *o*; *nai*, *nao*): *hli kâlaxi i hli* ‘They are ashamed of them’; *i boima i ye* ‘She kisses him’.

Again, there are three possible constructions with similar functions and meanings, though the use of *R-i* is restricted to type I in this case:

type I: circumfix *pe-...-i* and a nominal reciprocal argument (3.1.1.2.1).

type II: *pe-* (without **R-i*) and a dual/plural subject pronoun (3.1.1.2.2).

type III: *pe-* (without **R-i*), and with coreferential subject/indirect object pronouns (3.1.1.2.3).

3.1.1.2.1 Type I: Circumfix *pe-...-i* and a nominal reciprocal argument. The nominal reciprocal argument is absolutive and agrees with the dual or plural subject pronoun. Compare non-reciprocal (22a), (23a) and reciprocal (22b), (23b):

- (22) a. *hla hiiya i agu maahleeli.*
3PL be.jealous CONN people those.ANAPH
‘They are jealous of those people.’
- b. *hla pe-hiiya-i agu maahleeli.*
3PL REC-be.jealous-R people those.ANAPH
‘Those people are jealous of each other.’ (absolutive prime argument).
- (23) a. *hli alu i na a hliili thaamwa.*
3DU stare CONN 1SG AG those.ANAPH woman
‘Those women are watching me.’
- b. *hli pe-alu-i hliili thaamwa.*
3DU REC-stare-R those.ANAPH woman
‘Those women are watching each other.’ (absolutive prime argument).

The suffix *R-i* is more restricted even in type I; some verbs do not allow it: for instance, *boima* ‘to kiss, embrace’ and *kuluk* ‘to hide’ do not allow it (see (38) and (70)); nor does *ten* ‘to touch’: *hli pe-ten agu mahliili* ‘those two persons are touching each other’. In fact, the use of *R-i* may have extended to some of these two-place intransitive verbs by analogy with “canonical” transitive verbs.

3.1.1.2.2 Type II: Without *R-i* and with a pronominal argument. The reciprocal argument is a dual or plural subject pronoun.

- (24) *hli pe-hiiya.* ‘They are jealous of each other.’
hli pe-boima. ‘They kiss.’
hli pe-kuluk. ‘They play hide and seek.’

Some verbs do not allow this construction: for instance, *alu* ‘to stare, watch’ only allows types I and III.

3.1.1.2.3 *Type III: Without R-i and with co-referential subject/indirect object pronouns.* In the “heavy” two-argument construction, the reciprocal arguments are marked by co-referential subject and indirect object pronouns. Here, *i* is the preposition marking the indirect object.

- (25) *hâ pe-hiia i hâ.* ‘We are jealous of one another.’
ma pe-faaxeen i man. ‘We question one another.’
hli pe-alu i hli. ‘They stare at each other.’

3.1.2 “Indirect” reciprocals of three-place verbs

In contrast to the usual absolutive marking of reciprocal nominal arguments, in the case of ditransitive verbs or ditransitive constructions, the presence of a non-co-referential object (direct or indirect) triggers the ergative marking of reciprocal nominal arguments (as in (26b)).

3.1.2.1 *Reciprocals of three-place transitive verbs (ditransitives).* Some of these verbs have an obligatory argument structure in which one of the objects is direct and the other is indirect, without any possible position inversion. This is the case of *khiiboxa* ‘to hit’.

Compare the transitive construction (26a) with the reciprocal construction (26b):

- (26) a. *i khiiboxa-ve balô shi âlô a axaleny.*
 3SG hit-DIR ball side child AG this.DEICT
 ‘This man sends the ball to the child.’
 b. *hla pe-khiiboxa-ve shi-hla balô a âlô mahleeli.*
 3PL REC-hit-DIR side-their.PL ball AG child these.ANAPH
 ‘The children send the ball to each other.’

The subject pronoun (*hla*), the recipient (*shi-hla*) and the prime nominal argument (*âlô*) are co-referential. The benefactive case marker *shi-* is a bound noun with a possessive determiner (a suffixed pronoun or a noun). The noun *shi-* ‘hand, claw, tentacle, extremity, side’ has been grammaticalised without losing its nominal properties.

Other verbs, such as *taxe* ‘to give’ (+ inanimate object; *taxi* +human object), allow dative shift: either object may be direct or indirect, according to stress and pragmatic value. In (27) reciprocity is expressed by *pe-* and co-referential subject and indirect object pronouns (*nai hla*); in (28) reciprocity is expressed by *pe-* and co-referential subject and object pronouns *hla*:

- (27) *hla pe-taxe hnoot nai hla.*
 3PL REC-give wealth LOC 3PL
 ‘They give riches to each other.’
 (28) *hla pe-taxi-hla o hnoot a agu mahleena.*
 3PL REC-give-3PL CONN wealth AG people these.DEICT
 ‘These people give each other riches.’

3.1.2.2 *Reciprocals with three-place intransitives (ditransitive constructions)*. Two variants can be distinguished:

- Ditransitive construction with two indirect objects.

Due to the presence of a non-co-referential indirect object argument (*puxet doo* in (29)), the prime argument is ergative as in any canonical transitive construction:

- (29) *hla pe-hiia i hla puxe-t doo a agu mahleeli.*
 3PL REC-jealous CONN 3PL reason-of.it land AG people those.ANAPH
 ‘Those people are jealous of one another on account of the land.’ (*agu* = ergative).

The marker of the oblique argument *puxe-t* is a noun meaning ‘origin, cause of’.

- Ditransitive construction with one indirect object:

- (30) *hli pe-yage-i o ya mwa a hliili meewu.*
 3DU REC-help-R CONN thatch house AG those2.ANAPH brother
 ‘Those two brothers help each other out with the thatching of the house.’
 (*meewu* = ergative).

3.1.3 “Possessive” reciprocals

In such cases, the subject pronoun and the possessive determiner of the object are co-referential. Compare middle-reflexive (31a) and reciprocal (31b–c):

- (31) a. *gi hli na khet.*⁸
 LOC.PRED 3DU CONT comb
 ‘They are combing.’
 b. *hli pe-khiri pôô-bwaa-hli.*
 3DU REC-comb.TR hair-head-their.DU
 ‘They comb each other’s hair.’
 c. *hli pe-khiri pôô-bwaa thaamwa.*
 3DU REC-comb.TR hair-head woman
 ‘The women comb each other’s hair.’ (lit. ‘They two comb mutually the hair-head of the women’; *thaamwa* is possessive determiner of *pôô-bwaa* and agrees with *hli*).

3.1.4 Reciprocals of intransitive verbs

The reciprocal suffix **R-i* never appears in this case (see (32b)).

- (32) a. *na thek na bwa ciic.*
 1SG hit LOC on wood
 ‘I hit on the piece of wood.’
 b. *hli pe-thek bwaa-hli.*
 3DU REC-bump head-their.DU
 ‘Their heads bumped against each other.’ (the subject pronoun and the sole nominal argument of the verb are co-referential).

8. The intransitive form is *khet* ‘to comb’; it is only used with the reflexive construction.

Table 5.

	LIGHT CONSTRUCTION		HEAVY CONSTRUCTION
	Type I 1 nominal argument	Type II 1 pronominal argument	Type III 2 coreferential subject/object pronouns
<i>pe-</i> transitive V (with direct object)	<i>pe-...-i</i> (cf. (8b))	<i>pe-...-i</i> (cf. (36a))	<i>pe-</i>
<i>pe-</i> two-place intransitive V (with indirect object)	<i>pe-...-i</i> (cf. (22b))	<i>pe-...-i</i> (cf. (35a))	<i>pe-</i> (cf. (35b))
<i>pe-</i> intransitive V	<i>pe-</i>	<i>pe-</i>	*

R-i = reciprocal suffix; + signals an existing construction; Ø signals a non-existent or ungrammatical construction.

3.1.5 Summary of the various reciprocal constructions: Diathesis and semantic values

The suffix *R-i* is restricted to “canonical” subject-oriented reciprocal constructions (excluding object reciprocity), in association with canonical transitive verbs, and with most two-place intransitive verbs (with indirect objects); it is also restricted to “light”, one-argument constructions (see Table 5).

The suffix *R-i* is excluded from the “heavy” construction with co-referential subject and object pronouns. It is also excluded with intransitive verbs and two-place intransitives when the reciprocal argument is a subject pronoun.

In Nêlêmwa, the choice of a “light” (one-argument) or “heavy” (two-argument) reciprocal construction has diathetic function. The “light” strategy has the functions of a middle voice, it is deponentive (33a, 34a, 35a, 36a) and refers to a single action involving several undifferentiated participants; while the “heavy” strategy with two co-referential arguments (33b, 35b, 36b) refers to several reciprocal, sequential or iterated actions and often denotes an ongoing action.

- (33) a. *hla pe-taxu.* ‘They are in exchange relationship.’
 b. *hla pe-taxi-hla o hnoot.* ‘They give each other riches.’ (see also (28)).
 (vi *taxu* ‘to make a gift’ has two transitive flexions, *taxe* (+ inanimate object), *taxi* (+ human object) ‘to give’)
- (34) a. *hli pe-faxet.*⁹ ‘They are taboo to each other.’
 3DU REC-be.taboo
- (35) a. *hla pe-kuluk.* ‘They play hide and seek.’
 b. *hla pe-kulux-i hla.* ‘They hide from each other.’ (in turns)
- (36) a. *hli pe-oxo-i.* ‘They are in line.’
 b. *hla pe-oxo-hla.* ‘They are following one another.’

9. Compare with the non-reciprocal transitive construction of *faxet* ‘to forbid, be taboo, set a taboo’: *na faxer-i ye.* ‘I am in taboo relation to her.’ *Faxet* ‘taboo’ is also a noun, see (111).

To quote Lichtenberk: “if the patient is of low salience, it is backgrounded, made non-prominent through not being encoded at all” (1991:179) [...] “there is a lower degree of distinctness of both the relations and the participants” (1991:181) [...] “the overall situation is conceptualised as an undifferentiated whole” (1991:182).

The “light” construction thus constitutes the core of the middle domain as defined by Kemmer (1993:243): “Middle: a semantic area comprising events in which (a) the Initiator is also an Endpoint or affected entity, and (b) the event is characterised by a low degree of elaboration”.

The “light” construction has depatientive and deagentive functions, it often refers to a state or property of the subject and expresses “natural” reciprocity (with verbs like ‘fight, meet, kiss, argue’, etc.) or self-directed actions with verbs of grooming.

As Kemmer (1993:247) notes, “The scale of transitivity [...] forms the conceptual underpinning for voice systems in general, and for reflexive and middle marking systems in particular”.

The middle value of the “reciprocal” prefix also appears in other Kanak languages: in Nemi, reciprocity is marked by the prefix *i-* or *u-* associated with *keu* ‘together’; without *keu*, this prefix may have generic meaning and refers to properties, permanence, duration. In Cemûhi, the prefix *pi-* also expresses reciprocity and the middle voice.

3.1.6 Argument structure in reciprocal constructions

Reciprocal arguments may be expressed by nouns, deictic or anaphoric pronouns, personal pronouns; they may be collective nouns such as *agu* ‘people’, *yameewu* ‘clan’, *âbeen* ‘foreigner, stranger’, etc. Reciprocal arguments may be coordinated nouns (see 38)).

- (37) *ma pe-hiiya i man ma Yul.*
 1.DU.EXC REC-be.jealous CONN us and Y.
 ‘Jules and I are jealous of each other.’ (lit. ‘we two are jealous of us with Jules’).
- (38) *hli pe-boima axomoo-n ma pwaxi-n thaamwa.*
 3DU REC-kiss mother-her and child-her girl
 ‘The mother and the girl kissed.’

Reciprocal nominal arguments are absolutive, except in transitive constructions with a non-co-referential direct or indirect object; the prime argument is then ergative as in (39a, b).

- (39) a. *hla u pe-weeng-i o foliik mahleeli a axamalaaleny.*
 3PL PFV REC-discuss-R CONN thing those.ANAPH AG these.DEICT
 ‘These men agreed on those things’.
- b. *hla u pe-weeng-i i thaamwa hleny.*
 3PL PFV REC-discuss-R CONN woman this.DEICT
 ‘They agreed about this woman’.

weenge is a transitive verb with an obligatory inanimate object. The transitive construction would thus be direct: *hla weenge foliik* ‘they agreed on that’ (see (15a)). The reciprocal construction requires the demotion of the direct object to the oblique position. But this is due to the specific argument structure of this verb and not to any general rule concerning

the case marking of the object in a reciprocal construction, as sometimes occurs in some languages: “the morphosyntactic behaviour of verbs designating natural reciprocal events varies. In some languages, such verbs must always be intransitive; if there is an affected entity in addition to the two mutually involved participants, it must receive coding different from ordinary objects (e.g. in Manam, which requires such objects to appear in the dative). In other languages, such verbs may take object noun phrases [. . .] although these NP may lack some syntactic properties of objects” Kemmer (1993: 107).

In Nêlêmwa, there is no such general restriction, the direct or indirect construction of the object is due to the argument structure of the verbs (see (26b), (27) for direct object, (29) and (40) for indirect object).

- (40) *hla pe-hiiya-i o doo ru yameewu.*
 3PL REC-be.jealous-R CONN land AG clan
 ‘These clans are jealous of each other because of the land.’

3.2 Object-oriented reciprocity

With transitive verbs, object arguments may be reciprocal; they are mostly – though not exclusively (see (44b)) – inanimates set in this type of relation by an animate being. Subject pronouns may be singular, dual or plural. Transitive flexions vary with the \pm human, \pm animate feature of the object. Object arguments may be dual or plural.

Compare (41a) and (41b): *hiwi-lî* is the transitive form (+inanimate) of *hiwi* ‘to rub, grate’. Without *pe-*, (41b) would mean that he is rubbing his hands but not against each other.

- (41) a. *i hiwi-lî hele.* ‘He is sharpening the knife.’
 b. *i pe-hiwi-lî ara-yi-n mali a âlô eli.*
 3SG REC-rub-TR palm-hand-his the.2 AG child this.ANAPH
 ‘This child is rubbing his hands [together].’

khi ‘to hit, strike, knock’ is a transitive verb without flexion; omission of *pe-* in (42b) would mean that the metal pieces are not hit against each other:

- (42) a. *i khi ga.* ‘He knocks on the bamboo (to call on people).’
 b. *i pe-khi dooviu mahliili.*
 3SG REC-hit iron those.2ANAPH
 ‘He hit the two metal pieces against each other.’

Compare the transitive construction in (43a) with (43b), where *pe-* signals that a plurality of objects are set in identical positions, with notions of adjustment, union, junction and symmetry. The affix *pe-* is prefixed to the locution *na bwaa-t* ‘to put on top/head’ with the meaning ‘to pile up’. Since subject and object arguments are not co-referential, the nominal prime argument is ergative:

- (43) a. *i na ara-tin bwa taap a Polie.*
 3SG put CLF.empty-tin on table AG P.
 ‘Polie puts the empty tin on the table.’

- b. *i pe-na bwaa-t ara-tin a Polie.*
 3SG REC-put top-of.it CLF.empty-tin AG P.
 ‘Polie piles up empty tins.’

Compare subject-oriented reciprocity in (44a) and (18b) with object-oriented reciprocity in (44b). *Agu* ‘people’ belongs to the category of collective human nouns and triggers the transitive flexion of inanimates (*fuuge*) as in (44b), which is evidence that *-i* in *wuug-i* (see (44a)) is the reciprocal suffix. (vi *fuung* ‘to pile up, gather’, vt *fuuge* (+inanimate or collective human object), vt *fuugi* (+definite human object)). Note consonant lenition [f] > [w]):

- (44) a. *hâ pe-wuug-i agu Pum ma agu Cavet.*
 we REC-gather-R people P. with people T.
 ‘We people from Poum and people from Tiabet have gathered.’
- b. *hâ pe-wuug-e agu Pum ma agu Cavet me hla pe-taxi-i*
 we REC-gather-R people P. with people T. AIM 3PL REC-give-R
do.
 forgiving
 ‘We have gathered people from Poum and Tiabet together so they forgive one another.’

Compare transitive (45a) and reciprocal (45b) in which *pe-* stresses object reciprocity and symmetry (*kêêlâ* is a transitive verb without flexion):

- (45) a. *i u kêêlâ fââlô nai ye a Kaavo.*
 3SG PFV join route LOC 3SG AG K.
 ‘Kaavo joins him on the way.’ (lit. ‘joins her way to him’).
- b. *i (pe-)kêêlâ kha mahliili a kââma-n.*
 3SG (REC)-join liana those2.ANAPH AG father-his
 ‘His father is joining the two ropes end to end.’

Such a construction with *pe-* requires that object arguments be in genuine reciprocal and symmetric relationship; it cannot express object sociativity (see 8.1.2).

4. Causatives and reciprocals

The prefix *pe-* can be associated with the causative prefix *fa-*. But while causative diathesis marks the causer/agent in the ergative (see (46b)), when associated with the reciprocal prefix, the causer is in the absolutive (see (46d)), as in any canonical reciprocal construction. Compare reciprocal (46c) and causative reciprocal (46d):

- (46) a. *hli kâlaxi i ye a kââma-n ma axomoo-n.*
 3DU be.ashamed CONN 3SG AG father-his and mother-his
 ‘His father and mother are ashamed of him.’
- b. *hli fa-kâlaxi i ye a kââma-n ma axomoo-n.*
 ‘His father and mother are making him feel ashamed.’
- c. *hli pe-kâlaxi kââma-n ma axomoo-n.*
 ‘His father and mother are ashamed of each other.’

- d. *hli pe-fa-kâlaxi agu mahliili.*
 ‘Those two persons are making each other feel ashamed.’ (*agu* is absolutive).

A causative reciprocal construction, as in (46d), can only express causers who are reciprocally involved in the situation. If the causer and the reciprocal arguments are not co-referential, a periphrastic causative construction is used with the verb *diya me* ‘to do in such a way that’; see also (60).

- (47) *hla diya me hla pe-khua-i tavia.*
 3PL make AIM 3PL REC-bite-R dog
 ‘They are making the dogs bite each other.’

5. *pe-* and lexical reciprocals

With active intransitive verbs which are lexical reciprocals, *pe-* stresses reciprocity:

- (48) a. *hla holae Anet.* ‘They said good-bye to/took leave of Annette.’
 b. *hli pe-holae.* ‘They say good-bye to each other.’
- (49) a. *hla whaayap.* ‘They make war.’ (against someone).
 b. *hla pe-whaayap agu Pum.* ‘People in Poum are fighting one another.’

jeuk ‘to be near’ is a locative predicate; without *pe-*, (50) would mean that the houses are close to another reference point, but not to one another:

- (50) *pe-jeuk awôlô mahleena.*
 REC-be.near dwelling these.DEICT
 ‘These dwellings are close to each other.’

In (51) *jeuk* has prepositional function with the meaning ‘close to’ in association with prepositions *i* (+ humans) and *o* (+ inanimates). *pe-* expresses reciprocity and symmetry; and without *pe-*, (51) would mean that they live close to another point of reference, but not to each other:

- (51) *hla mu pe-jeux-i hla.*
 3PL stay REC-near-CONN 3PL
 ‘They live close to each other.’

With stative verbs expressing quality and comparison or difference, such as *khare* ‘to be different, be a stranger’, *maariik* ‘to be similar’, the prefix *pe-* indicates that the property (similarity or difference) applies reciprocally to the arguments. Compare non-reciprocal (52a, b) and reciprocal (52c):

- (52) a. *hli khare.*
 ‘They are different (from us), strangers (to us).’
- b. *na khare nai yo.*
 1SG be.different LOC you
 ‘I am different from you.’ (transitive construction with indirect object).

- c. *hli pe-xare.*
 ‘They are different from each other.’

The reciprocal expression *pe-xare* has undergone lexical fossilisation and is re-analysed as a verbal modifier in (53a, b) meaning ‘separately from each other’.

- (53) a. *hla o pe-xare.* ‘They go their own way.’ (*o* ‘to go’; mutual relation).
 b. *hla hnawo pe-xare.* ‘They make a gift separately.’ (*hnawo* ‘to leave, give’).

It is also reinterpreted as a verb liable to be marked by the transitive suffix *-li*, with the meaning ‘to separate, put aside’, in (54):

- (54) *na pe-xare-li.* ‘I put them apart.’ [from each other] (object-oriented).

The verb *maariik* ‘to be similar’ is also a lexical reciprocal. When *maariik* has an inanimate argument, *pe-* is optional and merely stresses reciprocity:

- (55) (*pe-*)*maariik puyeva-t.*¹⁰
 REC-be.similar height-of.it
 ‘They are of the same height.’ (lit. ‘its height is similar’).

But with a human argument, *pe-* is obligatory; there are few such cases in Nêlêmwa:

- (56) *hli pe-maariik âlô mahliili.*
 3DU REC-be.similar child these.ANAPH
 ‘These children are similar to each other.’ (**hli maariik*).

6. Lexicalisation with *pe-*

6.1 Incomplete fossilisation

Some lexicalised reciprocals are only partially fossilised and their constituent elements may still be dissociated. Their meaning is usually different from that of the root.

The verb *pe-regek* ‘to be stuck’ is analysable into *pe-+tegek* (intervocalic lenition [t] > [r]); *tegek* ‘to be caught, hooked, resist’ also has an abstract meaning ‘to be difficult’. It expresses resistance and its meaning varies with the ±human feature of the argument. It does not imply any symmetry (X catches, Y is caught):

- (57) *tegek pwiak bwa pâânât.*
 be.caught net on rock
 ‘The net is caught on the rock.’

In (58), *pe-* expresses reciprocal and close contact, though the relation involved (rice/pot) is asymmetrical. The optional presence of a singular subject pronoun *i* is evidence that some kind of semantic fossilisation has occurred.

10. The inanimate possessive pronoun *-t* is compatible with singular or plural referents.

- (58) (i) *peregek lai ni cet.*
 (3SG) be.stuck rice in pot
 ‘The rice sticks to the pot.’

The prefix *pe-* expresses symmetry only when both participants belong to the same category, as in (59) where the prefixation of *taa-* has stative and resultative meaning.

- (59) *taa-veregék duu tiiwo hleny.*
 STAT-be.stuck leaf book this.DEICT
 ‘The pages of this book are stuck to one another.’
 (Note the intervocalic consonant lenition: [p] > [v] and [t] > [r] in the verb).

Such a form does not (yet?) allow an agent argument and is not yet interpreted as an active transitive verb, a lexical causative periphrasis is mandatory (see Section 4). This lexical causative is the verb *diya* ‘to make’ associated with *me* ‘in order to, so that’:

- (60) *na diya me peregek duu tiiwo hleny.*
 1SG do AIM be.stuck leaf book this
 ‘I am sticking the pages of this book together.’ (in process).
- (61) *hla diya me taa-veregék duu tiiwo hleny.*
 3PL do AIM STAT-be.stuck leaf book this
 ‘They have glued the pages of this book.’ (perfective, resultative aspect).

In the case of *peru-i*, which is both a noun ‘meeting’ and a verb ‘to meet, gather’, the fossilisation of < *pe-+tu* ‘find, encounter’+ *R-i* > is complete. Yet subject pronoun agreement is still dual or plural; cf.:

- (62) a. *i tu-e* ‘He finds her’.
 b. *hâ perui* ‘We have met’ (or) ‘See you soon!’

The comitative/co-agentive *ma* introduces the co-agent; the dual subject pronoun refers to the sum of participants:

- c. *mo perui ma ti?*
 2DU.EXC meet COM who
 ‘Who have you met?’ (lit. ‘You met with whom?’).

The word *pexaagiik* is a modifier analysable as *pe-* + *khaa* (distributive morpheme ‘each’) + *-giik* (numeral suffix ‘one’, it is generally suffixed to a numeral classifier to count classes of objects). *-xaaagiik* cannot be used autonomously. *Pexaagiik* expresses sequential, symmetric relations and chain relations.

- (63) *hla shaya pe-xaa-giik.*
 3PL work REC-DISTR-ONE
 ‘They work in turn.’

The unit *pe-o-xaaagiik* is composed of *pe-*+ *o* ‘go’+ *khaa* (distributive)+*giik* ‘one’; *pe-* marks the distributive meaning as applying symmetrically to the arguments.

- (64) *hli u pe-o-xaa-giik.*
 3DU PFV REC-go-DISTR-ONE
 ‘They each went their own way.’

6.2 Complete fossilisation

In such cases, the constituent elements are no longer analysable and the root may not even be distinguished. Yet, *pe-* retains its full reciprocal meaning and these expressions only accept dual or plural subject pronouns.

The unit *pe-whan* is both a noun ‘oath, agreement’ and an intransitive verb ‘to swear, promise, take an oath, espouse’; but *whan* has no lexical autonomy.

- (65) a. *hli pe-whan.*
 ‘They got married.’ (‘took an oath’).
 b. *hli pe-whan me io i na shi-n.*
 3DU REC-take.an.oath COMP FUT 3SG give BEN-his
 ‘They agreed that he would give it to him.’

Similarly, *penudavi* ‘to meet on the way’ is always used with dual or plural subject pronouns, which points out its reciprocal origin (*nudavi* has no lexical autonomy).

- (66) *ma penudavi ma thaamwa dalaen.*
 1DU.EXCL meet COM woman European
 ‘I met the European lady on the way.’ (lit. ‘We met on the way, the European lady and I’).

Finally, there are cases of metaphorical resemanticization which changes the meaning of the root. Thus, *pe-oda-i* ‘to fight, argue’ is derived from *oda* ‘to go up’:

- (67) *hli pe-oda-i nai âlô ena a hliili thaamwa.*
 3DU REC-oppose-R LOC child this.DEICT AG those2.ANAPH woman
 ‘Those women argue about this child.’

Similarly, when the verbal compound *o-wuung* (*o* ‘go’ + *wuung* ‘together’) is prefixed by *pe-*, it has the specific meaning ‘to be allied’:

- (68) *hli pe-o-wuung.* ‘They are allies.’ (lit. ‘They go together’).

7. Sequential and chain reciprocity

7.1 Sequential reciprocity

Reciprocity is generally associated with simultaneous processes, but lexical semantics may inflect it towards sequentiality. Thus, sequential reciprocity (i.e. ‘done in turn’), appears in (26b), (30), (31b). The relationship is symmetric.

- (69) *hla pe-pae balô a âlô mahleena.*
 3PL REC-throw ball AG child these.DEICT
 ‘The children are throwing the ball to one another.’ (sequential and reciprocal).

The item *kuluk* ‘to hide from view’ is another such example.

- (70) *hla pe-kuluk hleeli âlô.* ‘Those children play hide and seek.’ (they hide in turn).

Intransitive *kuut* ‘to stand’ allows an indirect transitive construction with the preposition *shi-*:

- (71) a. *hla kuut shi-hla.* ‘They visit them.’
 b. *hla pe-kuut shi-hla.* ‘They visit one another.’
 (the subject pronoun *hla* and the recipient *shi-hla* are co-referential).

7.2 Chaining

In some lexical contexts, *pe-* may express chaining, that is a single event in which participants are involved symmetrically ($X > Y > Z$), but not reciprocally. Compare the transitive construction in (72a) with chaining in (72b) :

- (72) a. *hla oxo-hla a agu mahleeli.*
 3PL follow-3PL AG people those.ANAPH
 ‘These people follow them.’ (*agu* is ergative).
 b. *hla pe-oxo-i.* ‘They walk in a line.’

8. Polysemy of *pe-*

8.1 Sociative meaning of *pe-*

8.1.1 Sociative subject arguments

The prefix *pe-* may refer to collective actors simultaneously involved in a common and identical process. Relation is thus symmetric, but non-reciprocal. Verbal semantics acts as a filter to allow the reciprocal or sociative interpretation.

- (73) *hla pe-gi.* ‘They are crying together.’ (vi *gi*, vt *gĩli*).
 (74) *hla pe-khuwo.* ‘They eat together.’

With transitive verbs, the sociative marker *pe-* may only refer to a collective subject argument; sociative objects are expressed lexically. As there are two non-co-referential arguments, the prime argument is ergative.

- (75) *hla pe-gĩli maaxa i aayo a hlaabai agu bwa fwamwa.*
 3PL REC-mourn.TR death CONN chief AG those.ANAPH people in country
 ‘The inhabitants of the country mourn the chief’s death together.’
 (76) *hla pe-taxe hnoot ru agu.*
 3PL REC-give.TR wealth AG people
 ‘People give away the riches together.’ (cf. with reciprocal constructions in (27), (28)).

8.1.2 Prefix *pe-* with lexical expressions of the sociative meaning

In case of semantic ambiguity between the reciprocal and the collective meaning, or between the intensive and the collective meaning as in (77b) (see Section 8.3), the sociative meaning of *pe-* may be emphasized by the adverb *wuung* ‘together’ (77c), derived from

the verb *fuung* ‘to gather, pile’. The construction in (77c) is emphatic in comparison with (77a).

- (77) a. *hâ shaya wuung.* ‘We work together.’
 b. *hâ pe-shaya.* ‘We work fast,’ (or) ‘We work together.’
 c. *hâ pe-shaya wuung.* ‘We work together.’

The sociative meaning of *pe-* may also be disambiguated and emphasized by the prepositional noun *mudi-* ‘in company of’, as in (78b), (see also (106)).

- (78) a. *co â mudi thaamwa ena.*
 2SG go company woman this.DEICT
 ‘Go with this woman.’
 b. *hla pe-â mudi-hla.*
 3PL REC-GO company-their.PL
 ‘They went away/left together.’

Without *mudi-*, (78b) might be interpreted as diversative in meaning (see 8.4.2).

8.1.3 Lexical expressions of sociative objects

Object sociativity may only be marked by adverbial and lexical items (such as *wuung*); *pe-* only refers to sociative subjects. The adverb *wuung* makes up a complex predicate with the verb and shows transitive agreement with it:

- (79) *i shaawô-lî wuug-e shimiz me taraushi.*
 3SG wash-TR together-TR shirt and trousers
 ‘She is washing the shirt and the pair of trousers together.’
 (80) *hâ fuug-e wuug-e duu ciic.*
 1PL.INCL gather-TR together-TR leaf tree
 ‘We have gathered the leaves of the tree together.’

8.2 Sociative and competitive meanings

Competition is one of the pragmatic interpretations of a collective process, it is conditioned by the semantics of the verb and its object, a single object common to all participants or an object specific to each of them (as in (83)). Competition involves more or less reciprocal and simultaneous actions. Compare the transitive and reciprocal constructions below (*khaaxa* ‘to push, drive in’ and *khaaya* ‘to give a tug’ are transitive verbs without flexion):

- (81) a. *i khaaxa-e du.*
 3SG push-3SG down
 ‘She pushed him down.’
 b. *hla pe-khaaxa do.* ‘They compete in assagai throwing.’
 (82) a. *hla khaaya-e na ni delek.*
 3PL tug-3SG LOC in mud
 ‘They took him out of the mud.’

- b. *hla pe-khaaya-i.*
 3PL REC-tug-R
 ‘They compete at tug-of-war’ (simultaneous).
- (83) *hli pe-kur-i doo-hla.*
 3DU REC-stick-R assagai-their.PL
 ‘They compete in throwing their assagai’ (simultaneously or in turn).
 (Here *-i* is the reciprocal suffix; the transitive form of the verb with inanimate objects being *kure*).

8.3 Intensive meaning

This meaning may develop from the sociative meaning ‘to do together’ to that of ‘to do quickly’. In this case, *pe-* means ‘to achieve a goal quickly, reach a high intensity, be fast’. Subject pronouns may be in any number, including singular (as in (85)). There are possible ambiguities with the sociative meaning, as in (84a) where, according to context, *pe-khoxo* (< *khoxo* ‘to be numerous, in great amount’) may mean ‘to be numerous together’ (sociative) or ‘to increase, be more numerous’ (intensive).

- (84) a. *pe-khoxo* ‘They are numerous together’, (or) ‘It increases.’
 b. *i diya me pe-khoxo.* ‘He did it so that there should be a great amount soon.’
- (85) *na pe-diya me toven.* ‘I did it fast to finish it.’
- (86) *hla pe-shaya.* ‘They work fast’, or ‘They move fast.’

As in other Kanak languages, *shaya* means ‘to move’ and ‘to work’.

Possible ambiguity with the sociative meaning is avoided by addition of lexical items such as *wuung* or *mudi-* (see (77b, c)). Some verb types may also filter the meaning: thus *bwaa* ‘to leave’ in (87) does not admit the sociative meaning of *pe-* (see (78b) for the sociative meaning ‘to leave together’).

- (87) *co yage-i-na ma io hi pe-bwaa.*
 2SG help-TR-me AIM FUT 1DU.INCL REC-leave
 ‘You helped me so we could leave earlier.’
- (88) *pe-noot at, pe-khîli at.*
 REC-wake.up sun REC-heat sun
 ‘Let the sun wake up soon and heat soon.’ (children’s song).
- (89) *kio pe-top ciic hleny.*
 NEG REC-rot wood this.DEICT
 ‘This wood does not rot fast.’
- (90) *i gi me i pe-hmoric mwa.*
 3SG cry and 3SG REC-have.hiccups in.the.end
 ‘He cried to the point of having hiccups.’

With active verbs, *pe-* may infrequently express iteration, but does not express duration:

- (91) *i pe-thalic.* ‘She stumbles.’ (over and over again; *thalic* ‘to stumble’).

In other Kanak languages (Nemi, Ozanne-Rivierre 1979; Cèmuhi, Rivierre 1980; Ajië, La Fontinelle 1976), the polysemous reciprocal-middle prefix expresses the sociative/collective meaning, intensity, iteration, and duration (verbal semantics allowing).

8.4 Non-volitional, undirected, separative action, diversative meaning

The prefix *pe-* also has a variety of interrelated meanings, with no clear boundary between them; both context and verbal semantics help direct the interpretation.

8.4.1 *Non-volitional, undirected meaning*

The prefix *pe-* may signal spontaneous, accidental events that escape intentionality, occur independently from the actor, are done without concertation, project or partner, thus in opposition to the sociative meaning.

– With an inanimate argument, *pe-* has anticausative interpretation as in (92b) and stresses the non-directed, non-volitional meaning:

- (92) a. *ku nuk fagau mwa.*
 PFV fall body house
 ‘The wall of the house fell down.’
- b. *pe-nuk du bwa doo pwâ-mago.*
 REC-fall DIR on earth fruit-mango
 ‘Mangoes are falling.’
 (without anyone shaking the tree, because they are ripe and numerous).

– With human agents and active verbs such as *diya* ‘to do’, *pe-* denotes a tentative undertaking done without any clear project, without any effort or specific intention, listlessly, with various degrees of success. It may have some adversative undertone. Context and verbal semantics help interpret such a meaning.

- (93) *i u pe-kâlap mwamaidu.*
 3SG PFV REC-lie.down over.there.down
 ‘He lay down.’ (having nothing else to do).
- (94) *na pe-â bwa on.*
 1SG REC-leave on sand
 ‘I go by the beach.’
- (95) *va pe-diya fagau mwa.*
 1PL.EXCL REC-make body house
 ‘We have tried to build the wall of the house.’ (as might be, without any preconceived plan or idea).
- (96) *na pe-diya yumwêli.*
 1SG REC-do thus
 ‘I am doing this just so.’ (without much enthusiasm).

8.4.2 *Diversative or separative meaning*

With this meaning, *pe-* is prefixed to active verbs. Subject agreement may be in any number. The diversative meaning of *pe-* is semantically related to the notion of an undi-

rected action, performed separately, on one's own (the reverse of the sociative meaning), as in (97):

- (97) *wa pe-diya roven fo awa-wa.*
 2PL REC-do all there.is will-your
 'You may do as you wish.'

With verbs of movement, *pe-* has the meaning of 'here and there', '(done) aimlessly':

- (98) *bu na xe na gaa pe-hâga du hmwiny.*
 as.for 1SG TOP 1SG DUR REC-fish down here
 'As for me, I'm going to go on fishing around here.' (listlessly, with no intention of catching any specific type of fish in any specific place).

With dual or plural subjects, there may be semantic ambiguities between the sociative and diversative readings of *pe-*, as in (99). Context, verbal semantics and additional adverbs help disambiguate the meaning.

- (99) *hla pe-hâgee mat.*
 3PL REC-fish at.low.tide
 'They are fishing together.' (or) 'They are fishing here and there at low tide.'

8.4.3 Lexical expression of the diversative/separative meaning

Various adverbs, such as *hayu* 'without aim, carelessly' and *hada* 'alone', help disambiguate or stress the diversative/separative meaning of *pe-*. Thus, without the adverbs, examples (100b) and (101b) might be interpreted as intensive: *i pe-vhaa* 'he speaks away' and *i u pe-shaya* 'he has worked/moved fast'. With a dual or plural subject pronoun, there might be some ambiguity with the sociative meaning, which would then be disambiguated by *wuung* 'together' (as in (77c)). As in the case of *wuung*, *hada* and *hayu* suffice to express the separative meaning, their association with *pe-* is emphatic:

– *hada* 'alone'

- (100) a. *i vhaa hada.*
 'He alone is speaking.'
 b. *i pe-vhaa hada.*
 'He speaks for himself.' (i.e. in his own name, not expressing a consensus).

– *hayu* 'haphazardly, without a project'

- (101) a. *i shaya-ayu.*
 'He works carelessly.' (without any method).
 b. *i u pe-shaya-ayu.*
 3SG PFV REC-work-careless
 'He has worked carelessly.' (the intervocalic aspirate of *hayu* is deleted).

9. Reciprocals and sociatives derived from nouns

9.1 Reciprocal nominal predicates with *pe-*: Comparison, symmetry and identity

This function of *pe-* appears when it is prefixed to nouns in predicative function. It may be prefixed to any type of noun (for example, denoting body parts and position). These nominal predicates are stative in meaning and *pe-* expresses symmetry, comparison of equality and identity (of function, direction, position). These nominal predicates retain their possessive determiners, but may have a subject pronoun just like verbs. In the reciprocal construction, the subject pronoun is then co-referential with a possessive determiner (as in (102), (115)).

– Symmetrical position.

1. *duaxa-t* ‘its back’, *duaxa-n* ‘his back’:

- (102) *ma pe-duaxa-man i man* (or: *ma pe-duaxa-i*).
 IDU REC-back-our.DU CONN us.DU
 ‘We are back to back.’ (lit. ‘We are reciprocally our back to us’).

2. *aramaa-t* ‘face’, *aramaa-n* ‘his face’:

- (103) *ma pe-aramaa-man i man* (or: *ma pe-araam-i*).
 IDU REC-face-our.DU CONN us.DU
 ‘We are facing each other.’ (lit. ‘We are reciprocally our face to us’).

3. *ida-t* ‘line, row’; *pe-ida-t* ‘be on the same line’:

- (104) *pe-ida-t dau eli me Negec*.
 REC-line-of.it island this.ANAPH and N.
 ‘That island is on a line with Negec.’ (it lies on a line with the island of Negec).

4. *avi-t* ‘side, flank’; *pe-avi-t* ‘to fit, be adjusted’:

- (105) *co paage kawa me pe-avi-t*.
 2PL lay.out corrugated.iron AIM REC-side-of.it
 ‘Lay out the sheets of corrugated iron so that they fit together.’

– Same direction.

fââla-t ‘way, journey, route’

- (106) *pe-fââla-man ma ye*.
 REC-route-our.DU with 3SG
 ‘He and I have travelled together.’

– Symmetrical quality or quantity.

1. *thala-t* ‘side, flank, width’; *pe-rala-t* ‘to be the same width’:

- (107) *pe-rala-hla*.¹¹ ‘They are of the same width.’

11. When reciprocal arguments are inanimate nominals, the pronoun *-t* is retained:

2. *ura-t* ‘length, distance’; *pe-ura-t* ‘to be the same length, distance’:

- (108) *pe-ura-hli.* ‘Both are of the same length.’
(agreement in the dual is compulsory, **pe-ura-t*).

3. *ka* ‘year’; *pe-kau-n* ‘to be the same age’ (*ka* changes to *kau-* before possessive determination):

- (109) *pe-kau-hli ma Yul.* ‘He is as old as Jules.’
REC-year-their.DU with J.

4. *khora-t* ‘piece of’; *pe-khora da* ‘to be one blood’ (*da* ‘blood’):

- (110) *va pe-khora da.* ‘We are of the same blood’; ‘our family.’

5. *faxet* ‘taboo’; *pe-faxet* ‘to be in taboo relationship’:

- (111) *pe-faxer-i há.* ‘(It’s) our taboo relationship.’
REC-taboo-CONN 1DU.INC

6. *bale-t* ‘the other’ (of a pair, a couple), ‘companion’:

- (112) *kio pe-bale-t.* ‘It is not the (right) pair.’ (*bale-t* is the predicate).
NEG REC-companion-of.it

- (113) *co na me pe-bale-t.* ‘Put them two by two.’
2SG put AIM REC-companion-of.it

7. *bala-t* ‘ally, partner’; (*bala-t* like *bale-t* is a lexical reciprocal); *pe-* stresses reciprocity or sociativity:

- (114) a. *bala-hla.* ‘their partner’
b. *pe-bala-hla.* ‘They are partners/in the same team.’
REC-ally-their.PL

8. *khooba-t* ‘number of’; *pe-khooba-t* ‘be the same number’:

- (115) *wa pe-khooba-wa.* ‘You are equal in number.’
2PL REC-number-your.PL

9.2 Reciprocal nouns with argument function

Without *pe-*, (116) would mean ‘during their war’ without any reciprocity.

pe-rala-t khaxa-yiic.
REC-width-of.it piece-of.log
‘The planks are the same width.’

If they are pronouns, the possessive plural pronoun is obligatory: *pe-rala-hla* (not **pe-thala-t*).

12. *whaayap* is a verb or a noun ‘(to make) war, fight’ with indirect possession marked by preposition *i*. Note intervocalic consonant lenition [p] > [w].

- (116) *na ni hleeli pe-whaayaw-i¹² hla.*
 LOC in those.ANAPH REC-fight-CONN 3PL
 ‘During their mutual fight.’ (lit. ‘in the mutual fights of theirs’).

Compare non-reciprocal (117a) with reciprocal (117b); the noun *puxi-t* ‘origin, cause, reason’ expresses causal relation:

- (117) a. *hla peeva puxi-hla hi thaamwa bai.*
 3PL argue reason-their.PL this woman that.ANAPH
 ‘They argue on account of that woman.’
 b. *kia fo pe-puxi-man na i khiibwa-na.*
 there.is.not thing REC-reason-our but 3SG hit-me
 ‘He hit me without any reason between us.’
- (118) *kia pe-bale-t.*
 there.is.not REC-companion-of.it
 ‘The other (one of a pair, couple) is missing.’ (*pe-bale-t* here is the nominal argument of the verb *kia*).
- (119) *hooli pe-bala-t ak.*
 that.ANAPH REC-ally-of.it man
 ‘A team of men.’ (*ak* has attributive function and specifies *pe-bala-t*).

9.3 Sociative nouns and pronouns

The relation implied here is sociative and inclusive; the prefix expresses symmetrical membership in a group or a whole.

– Prefixation of *pe-* to a noun or nominal group:

- (120) *pe-hmawa-t*
 ‘patch-work’ (*hmawa-t* ‘piece of it’).
- (121) *pe-hlaabai thaamwa, pe-hlaabai ak.*
 ‘those women (*thaamwa*) together, those men (*ak*) together.’

– Prefixation of *pe-* to a deictic, directional pronoun or independent pronoun:

- (122) *pe-hleena, pe-hlaaleny, pe-hlaidu, pe-yava.*
 REC-these REC-these REC-these.down.there REC-1PL
 ‘These together, these together, these down there together, we together.’
- (123) *xam pe-yamon, na ye hada!*
 ASRT REC-2DU.INDEP but 3SG.INDEP alone
 ‘You are together, but he is alone!’ (as the spokesman of his own views).

When prefixed to nouns, the polysemy of *pe-* is actually reduced to its two primitive meanings, viz. the reciprocal and the sociative.

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Reciprocal, sociative, middle, and iterative constructions in East Futunan

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1. Introduction

1.1 East Futunan

East Futunan is a Polynesian language spoken on Futuna, a small Pacific Ocean island to the east of Fiji. Futuna, together with Uvea Island, forms a French “overseas territory”. There are 4600 Futunans living on Futuna itself, while about as many more have emigrated to New Caledonia. From a typological standpoint, East Futunan is very closely related to the other western Polynesian languages (East Uvean, Tongan, Samoan, Tokelau, Niuafo’ou, etc.). These languages have in common a sizable proportion of their lexicon and numerous morphosyntactic features such as a weak noun/verb contrast, little morphology, and ergative argument marking (Clark 1976).

1.2 Means of expressing reciprocals in East Futunan

Derivational processes in these languages usually cover broad ranges of meanings. There are therefore no specific forms for the reciprocal, middle, or sociative. These three senses are nevertheless formally related by the fact of being expressed by the same derivational elements, together with other notions, such as plurality, iterativity, and succession. The affixes used to express this set of senses must therefore be examined with an end to picking out whatever can properly be referred to as reciprocal from the related notions. In East Futunan (as, in all likelihood, in the other western Polynesian languages), the reciprocal meaning associated with derivation by *fe-...-(C)aki* can only be obtained when the derivative takes a single argument denoting a plurality of animate beings. Otherwise, such derivatives will take one of the other values such as the sociative, the dispersive, the alternative, etc., whatever the valence of the base verb may be. In addition to these morphological derivational processes, East Futunan also has a lexical means of expressing the reciprocal sense (see Section 8).

2. Some notes on East Futunan grammar

2.1 Phonology and syllabic structure

East Futunan has a simple phonological system composed of five vowels [a, e, i, o, u], which may be either long or short, and eleven consonants [f, g[ŋ], k, l, m, n, p, s, t, v, 'ʔ]. Stress falls on the penultimate mora in the word. Canonic syllabic forms are V or CV. Consonant clusters are not allowed, and words always end with a vowel.

2.2 Noun and verb classes

The noun/verb contrast is weakly marked in the lexicon. Any lexical form can theoretically function as a noun or a verb without formal change (Moyse-Faurie 1997b). Nevertheless, derivational processes, which are very productive in East Futunan, do give rise to more clearly distinguishable verb and noun classes. Adjectives as a class formally distinct from intransitive stative verbs do not exist.

2.3 Sentence structure and morphology

There is little morphology other than derivational. There are neither declensions nor conjugations. Words do not vary in either gender or number with the exception of thirty odd intransitive verbs describing states, attributes, or positions, which can be partially reduplicated when taking an argument denoting a plurality of participants, e.g., *moe* (SG) – *momoe* (PL) ‘to sleep’; *kula* (SG) – *kukula* (PL) ‘to (be) red’. Oblique case markers take an *-a* suffix when they introduce a dual or plural pronoun or a proper noun, and an *-ate* suffix before singular pronouns. Except for the third person singular, which is always postposed, there are two sets of person markers: those in the first are preposed to the verb phrase and are part of the verbal constituent; those in the second are postposed, act as noun substitutes, and are preceded by case markers. Choice from one or the other of these sets depends on pragmatics (Moyse-Faurie 1997a).

2.4 Tense and aspect markers

Tense and aspect markers are free morphemes. They are generally preposed to the verb phrase and appear in initial position in unmarked sentences. The main tense/aspect markers are *e* ‘non-specific, general imperfective aspect’, *na* ‘past’, *koi* ‘durative’, *ku/kua* ‘perfective’, *ka* ‘imminent’. Only the successive marker *loa* is postposed to the verb phrase.

2.5 Verb classes and argument structure

East Futunan is an ergative language in the sense that the sole argument (S) of an intransitive verb is marked in the same way (as absolutive, by the marker *a* or by \emptyset) as the argument denoting the patient (O) of a transitive verb. The agent (A) of a transi-

tive verb is in the ergative (marked by *e*). Most other arguments are introduced by the oblique markers *i* or *ki*. The *i* marker precedes static spatial and temporal, as well as causal, oblique arguments, while *ki* introduces dynamic spatial and temporal oblique arguments, the patient of the so-called “middle” verbs, the recipient, and the instrumental. There is no passive voice. There are five classes of verbs (Moyses-Faurie 1992).

2.5.1 Impersonal intransitives

The verb with its tense-aspect marker suffices to form a sentence: *kua 'ua* <PFV rain> ‘It is raining’.

2.5.2 One-place intransitives

These verbs have a single argument introduced by the absolutive marker, whether an agent or a patient, as for example:

- | | | | |
|-----|---------------------------|-------------------------------|-----------------------|
| (1) | <i>ano</i> ‘to go’ | <i>makape</i> ‘to run’ | <i>mate</i> ‘to die’ |
| | <i>ifo</i> ‘to go down’ | <i>ma'uli</i> ‘to live’ | <i>nofo</i> ‘to stay’ |
| | <i>konā</i> ‘to be drunk’ | <i>mamafa</i> ‘to (be) heavy’ | <i>moe</i> ‘to sleep’ |
| | <i>lasi</i> ‘to (be) big’ | <i>moso</i> ‘to be cooked’ | <i>sola</i> ‘to flee’ |
| | <i>masaki</i> ‘to be ill’ | <i>'uli</i> ‘to (be) black’ | |

Locative, instrumental, causal phrases may be added, but are not considered as arguments. They are adjuncts, even with movement verbs.

- (2) *e makape a Soane i muli o lona toe.*
 IPFV run ABS S. OBL rear POSS his child
 ‘Soane is running after his child.’
- (3) *kua mate a ia i nānafi.*
 PFV die ABS 3SG OBL yesterday
 ‘He died yesterday.’

2.5.3 Two-place intransitives

Middle verbs is the name traditionally given by Oceanic linguists to verbs with an argument in the absolutive (the experiencer) and a second argument in the oblique case introduced by *ki*, denoting the patient. Actually, these are verbs with an obligatory indirect object. This is a semantically well-defined class containing only verbs of feeling, perception, or communication, e.g.:

- | | | | |
|-----|-----------------------------------|-------------------------|-------------------------|
| (4) | <i>tio</i> ‘to see’ | <i>māsau</i> ‘to speak’ | <i>kalaga</i> ‘to call’ |
| | <i>loi</i> ‘to lie, to tell lies’ | <i>oli</i> ‘to desire’ | <i>logo</i> ‘to hear’ |
| | <i>loto</i> ‘to want’ | <i>kamo</i> ‘to touch’ | <i>alofa</i> ‘to love’. |
- (5) *e kalaga le toe ki lona tinana.*
 IPFV call ART child OBL his mother
 ‘The child is calling his mother.’

2.5.4 Two-place transitives

Transitive or “ergative” verbs are verbs with a patient argument in the absolutive and an optional agent argument in the ergative, marked by *e*. These are all action verbs, e.g.:

- (6) *afa* ‘to seek’ *fō* ‘to wash’ *foke* ‘to peel’
ligi ‘to pour’ *sele* ‘to cut’ *soka* ‘to pound’
ta’aki ‘to dig up’ *’u’uti* ‘to bite’ *tamate* ‘to kill.’
- (7) *na sae loku kofu e le kulī.*
 PAST tear my dress ERG ART dog
 ‘The dog tore my dress.’

2.5.5 Three-place transitives

Three-place transitive verbs or “bitransitive verbs” have an additional recipient argument in the oblique case, e.g.:

- (8) *solī* ‘to give’ *vasi* ‘to share’
tufa ‘to distribute’ *vesilī* ‘to ask’
vae ‘to share, share out’; cf.:
- (9) *na solī e ia le tosi kia Kalepo.*
 PAST give ERG 3SG ART book OBL K.
 ‘He gave the book to Kalepo.’

2.6 Word order

The unmarked word order is VS, VAO, or VOA, when the arguments S, A, and O are nouns. These are generally introduced by a case marker, with order of appearance depending on pragmatic considerations. Two unmarked orders are possible with pronominal arguments:

1. VAO or VOA, as with nouns. In this postverbal position, a pronominal argument always precedes a non-pronominal one, whatever their case roles may be.
2. aVO or oVA, where ‘a’ and ‘o’ are pronouns from the preverbal set taking no case markers.

The unmarked verbal-sentence contains a verbal constituent (comprised of a tense-aspect marker, the verb itself, and sometimes an adverb and/or a preposed pronoun), followed by one or more arguments. Argument topicalisation and focalisation involve shifting to preverbal position and use of the preposition *ko* (the predicative/topic marker), which in some cases leaves a copy in the form of an anaphoric postverbal pronoun.

2.7 Verb derivation

In East Futunan, verb derivation often involves a change of valence by addition or by deletion of an argument. It may also retain all the arguments, this goes along with semantic correlates which will be discussed in detail. A detailed description of the main verbal affixes and their polysemy is necessary to understand how the expression of reciprocity and other related meanings are constructed in East Futunan syntax.

2.7.1 *By addition of an argument*

The causative prefix *faka-*, as well as the suffixes *-(C)aki* and *-(C)i* derive transitive verbs from intransitive ones.

2.7.1.1 *The causative prefix faka-*. Addition of an argument occurs when the causative prefix *faka-* is used. Verbs with a single argument acquire a second one, which will be placed in the ergative.

- (10) a. *e moso le ne'akai.* (vi)
 IPFV be.cooked ART food
 'The food is cooked.'
- b. *e faka-moso a ika e le fafine.* (causative vt)
 IPFV CAUS-be.cooked ABS fish ERG ART woman
 'The woman cooks the fish.'

2.7.1.2 *The suffix -(C)i*.¹ This is a transitivity suffix, but it also has an intensive, terminative sense, indicating that the action is carried to its term, and generally implying that the patient is affected to a greater degree:

- (11) a. *e kava le toe (i le niu).* (vi)
 IPFV climb ART child OBL ART coconut.palm
 'The child climbs up (the coconut palm)'
- b. *e kava-'i e le toe le niu.* (vt)
 IPFV climb-REC ERG ART child ART coconut.palm
 'The child climbs to the top of the coconut palm.'

2.7.1.3 *The suffix -(C)aki*. The suffix *-(C)aki* transitivity suffixes the verbs to which it applies, i.e., allows them to take an ergative argument, resulting in comitative, causative, or applicative senses. For each of these senses, the verbs attested in the author's own data are listed below.

2.7.1.3.1 *The comitative meaning*. A comitative meaning is given by the adjunction of the suffix *-(C)aki* to some intransitive verbs:

- (12) intransitive transitive
ifo 'to go down' → *ifo-'aki* 'to go down with'
moe 'to sleep' → *moe-'aki* 'to sleep on (i.e., go to sleep thinking of)'
nofo 'to stay' → *nofo-'aki* 'to stay with'
sola 'to flee' → *sola-faki* 'to flee with.'
- (13) a. *ifo ake le toe ki 'one o ma'ua a Sina Asoa aia.*
 go.down DIR ART child OBL sand and find ABS S. A. DEICT
 'The child went down to the beach and found Sina from Asoa there.'

1. The initial (C), in both *-(C)i* and *-(C)aki* stands for a stem consonant. In East Futunan, its most common (and only currently productive) representative is the glottal stop (noted by an apostrophe '); all other representatives of this stem consonant are now fossilised.

- b. *ti ifo-'aki loa le nofo'aga e lona tamana ki tai.*
 then go.down-REC SUC ART camp ERG his father OBL sea
 'Then his father went down with the camp to the seaside.'

2.7.1.3.2 *The causative meaning.* A causative meaning is given by the adjunction of the same suffix *-(C)aki* to some other intransitive or “middle” verbs:

- (14) intransitive or “middle” transitive
ako ‘to teach oneself’ → *ako-naki* ‘to teach’
eke ‘to sit, perch’ → *eke-naki* ‘to support’
sao ‘to be freed’ → *sao-faki* ‘to free’
sōsō ‘to move (oneself) over’ → *sōsō-'aki* ‘to push’
tausi ‘to feed oneself’ → *tausi-maki* ‘to feed’
tele ‘to be swept away’ → *tele-kaki* ‘to carry away’
tolo ‘to be dragged’ → *tolo-kaki* ‘to drag.’
- (15) a. *e eke le moa i le ta'ofufu o le fale.*
 IPFV perch ART hen OBL ART top POSS ART house
 ‘The hen perches on the top of the house.’
 b. *e eke-naki e le fafine le matu'a ki aluga.*
 IPFV perch-REC ERG ART woman ART old.man OBL upwards
 ‘The woman helps the old man to stand up.’

2.7.1.3.3 *The applicative meaning.* An applicative meaning is given by the adjunction of the suffix *-(C)aki* to some intransitive verbs:

- (16) intransitive transitive
'oso ‘to rush’ → *'oso-faki* ‘to rush to get’
ulu ‘to go in, start up’ → *ulu-faki* ‘to ask for permission, pray for.’
- (17) a. *e kau 'oso ki fafo.*
 IPFV 1SG rush OBL outside
 ‘I rush outside.’
 b. *na 'oso-faki loku tamana e le fenua.*
 PAST rush-REC my father ERG ART people
 ‘People rushed upon my father.’

2.7.2 *By deletion of an argument*

The resultative prefix *ma-* and a few occurrences of the prefix *fe-* derive transitive verbs into intransitives.

2.7.2.1 *Resultative.* An argument is dropped when the resultative prefix *ma-* is used, e.g., the derived verb *ma'ofa* takes only one argument and cannot acquire an ergative one. In semantic terms, the prefix *ma-* gives the base verb a resultative meaning (as the result of some past action):

- (18) a. *e 'ofa le pusatu'u e Muni.*
 IPFV take.apart ART cupboard ERG M.
 ‘Muni takes the cupboard.’

- b. *e ma-'ofa le pusatu'u (i Muni).*
 IPFV RES-take.apart ART cupboard OBL M.
 'The cupboard has been taken apart (owing to Muni).'

2.7.2.2 Middle. Valence reduction may occur when the *fe-* prefix has a middle value (see 3.1.2.2).

2.7.2.3 Reciprocal. A similar type of valence decrease may also occur with the complex *fe-... -(C)aki* when associated with the reciprocal meaning (see 3.3.1).

2.7.3 By retaining all the arguments

2.7.3.1 Sociative. One of the basic roles of the prefix *fe-* is sociative (see 3.1.2.1).

2.7.3.2 Adverbial meaning. The suffix *-(C)i* may be attached to transitive verbs. In this case, only its adverbial meaning is relevant. The valence of the verb remains unchanged, but the action is carried to its term, and the patient is totally affected. The prefix *fe-* may also have an adverbial meaning (see 3.1.2.3).

2.8 Verbalising

2.8.1 With the suffix *-(C)ia*

There is another suffix which allows a verb to add an ergative argument: *-(C)ia*. From a semantic standpoint, the patient, which remains in the absolutive, is again affected to a greater degree by the action of the derived verb. Unlike *-(C)i*, however, *-(C)ia* has been lexicalised and is no longer productive. However, it can act as a verbaliser:

- (19) *ala* 'road' → *ala-fia* 'to take a road without permission, trespass'
po'uli 'night' → *po'uli-gia* 'to be overtaken by night' (lit. to be benighted).

2.8.2 With the suffix *-(C)i*

This suffix can be used to derive verbs from nouns. The meaning of this derivation is 'to make use of':

- (20) *pa'atai* 'salt' → *pa'atai-i* 'to salt sth.'
saga 'tongs' → *saga-i* 'to use tongs.'

2.8.3 With the causative prefix *faka-*

This prefix can also be used to derive verbs from nouns, with a causative meaning:

- (21) *aliki* 'chief' → *faka-aliki* 'to make sb chief.'
va'e 'leg, foot' → *faka-va'e* 'to lay (foundations).'

3. Morphological types of reciprocals (“canonical” diathesis type only)

3.1 Derivatives with the prefix *fe-*

3.1.1 *The reciprocal meaning (involving two participants only)*

The prefix *fe-* can mark a reciprocal involving no more than two participants, although its primary sense is sociative. The reciprocal sense appears with a dozen of verbs, which can be either transitive, as for example:

- (22) *lau* ‘to say, to tell’ *tā* ‘to hit’ *to’o* ‘to take’
mili ‘to stroke, rub’ *tuli* ‘to pursue’
poko ‘to push’ *tegi* ‘to stroke’

or “middle” verbs, as for example:

- (23) *peu* ‘to disagree’ *sogi* ‘to kiss.’
- (24) a. *e peu le toe ki lona tinana.*
 IPFV disagree ART child OBL his mother
 ‘The child opposes his mother.’
 b. *e fe-peu a Katalina mo Ivete.*
 IPFV REC-disagree ABS K. and I.
 ‘Katalina and Ivete disagree with each other.’
- (25) a. *e tuli e Petelo lona gā taina.*
 IPFV chase ERG P. his CLF brother
 ‘Petelo is chasing his little brother.’
 b. *e fe-tuli a lāua.*
 IPFV REC-chase ABS 3DU
 ‘They are both chasing each other.’

The use of *fe-* alone in a reciprocal meaning involving only two participants remains an exception, and is restricted to verbs denoting actions often performed by only two participants. Generally, *fe-* must be associated with the suffix *-’aki* to mark a reciprocal involving two or more participants (see 3.3.1). In fact, the suffix *-’aki* may always be added in combination with *fe-* to express the same reciprocal meaning.

3.1.2 *Non-reciprocal meanings of fe-*

As mentioned, the prefix *fe-* has various other, more basic senses than the reciprocal. Each sense usually involves a limited number of verbs which are, in some cases, semantically related. There are also instances in which verbs prefixing *fe-* can acquire different senses in different contexts, depending in particular on whether they have an argument denoting one or more participants.

3.1.2.1 *The sociative meaning.* Prefixing *fe-* to some (generally action) verbs marks a plural, or more precisely, an action performed jointly by several participants belonging to a

single group:² the non-derived base form is compatible with a singular or plural absolutive, but the derivative obtained by prefixing *fe-* is only compatible with an absolutive argument denoting a plurality of participants.

1. The sociative meaning of *fe-* can be obtained with intransitive verbs such as *kapu* ‘to run after, drive away’, *kē* ‘to scream, cry out’, *tau* ‘to be at war’, *velo* ‘to fight with spears’. The verb without the prefix is thus used for actions performed by individuals, each for his own purpose (examples (26a) and (27a)), while *fe-* is prefixed when the action is performed jointly and with a single purpose (examples (26b) and (27b)):

- (26) a. *e kapu a toe ki le fā fitipolo.*
 IPFV run.after ABS child OBL ART CLF ball
 ‘Children are running after the ball.’
 b. *e fe-kapu a toe ki le fā fitipolo.*
 IPFV REC-run.after ABS child OBL ART CLF ball
 ‘Children are running together after the ball.’

2. The prefix *fe-* can also be attached to transitive verbs with the same sociative meaning. This is the case, for example, with *tagi* ‘to cry’, *taki* ‘to carry in the hand’ or *koti* ‘to cut with scissors’:

- (27) a. *e taki e Samino lana kete.*
 IPFV carry.in.the.hand ERG S. his bag
 ‘Samino carries his bag in his hand.’
 b. *e fe-taki lalā kete e Setefano mo Samino.*
 IPFV REC-carry.in.hand their bag ERG S. and S.
 ‘Setefano and Samino are carrying their bag together.’

Note that, when the meaning of *fe-* is not reciprocal, no reduction in the number of arguments occurs: the transitive verbs *taki* or *koti* cited above retain the ability to take two arguments when *fe-* is prefixed with a sociative meaning, as in (27b).

3.1.2.2 The middle meaning. In East Futunan, the middle meaning of grooming actions is usually either lexicalised (i.e. expressed by lexically middle verbs, as *ma’anu* ‘to bathe’, *seluselu* ‘to comb’) or by transitive verbs, the two arguments of which refer to the same entity:

- (28) *e kau fefegu loku isu.*
 IPFV 1SG wipe my nose
 ‘I wipe my nose.’

2. When the sociative meaning is restricted to two participants, the use of the noun *soa* ‘peer, companion’, as a preverbal modifier, is preferred to the prefix *fe-*:

- e soa ano a Kalepo mo Petelo ki Numea*
 IPFV peer go ABS K. and P. OBL N.
 ‘Kalepo and Petelo are going together to Numea.’

The second argument may be incorporated into the verb:

- (29) *e tele gutu loku tamana.*
 IPFV shave mouth my father
 ‘My father is shaving.’

There are no reflexive pronouns like ‘myself’, ‘yourself’ in Futunan.

The use of *fe-* is limited to a few verbs designating actions performed on one’s own body. The transitive verbs *lole* ‘to rub (with the hand or a glove)’, *lomi* ‘to massage’, *olo* ‘to rub (with pumice)’, *’umo* ‘to pinch’ and *vaku* ‘to scratch’ are all rendered intransitive and take on a middle meaning after prefixing *fe-*. In the following examples, *vaku* ‘to scratch’ and *’umo* ‘to pinch’ take two arguments in (30a), (31a), while their derivatives with *fe-* take only one in (30b), (31b):

- (30) a. *e ke vaku le tu’a o lou toe.*
 IPFV 2SG scratch ART back POSS your child
 ‘You are scratching your child’s back.’
 b. *e ke fe-vaku i le kai e namu.*
 IPFV 2SG REC-scratch OBL ART eat ERG mosquito
 ‘You are scratching [yourself] because of mosquito bites.’
- (31) a. *e ’umo le toe e lona tinana.*
 IPFV pinch ART child ERG his mother
 ‘The mother is pinching her child.’
 b. *e kau fe-’umo pe kau moemiti fakatotonu pe le’ai.*
 IPFV 1SG REC-pinch or 1SG dream really or not
 ‘I pinch myself to know if I am dreaming or not.’

3.1.2.3 *The adverbial meaning ‘with difficulty’.* The prefix *fe-* is also used to indicate that an action is hard to perform or requires persistence, as when the agent has to try several times in succession. In the following example, *fe-* does not have a sociative meaning as in (27b), since the agent is an individual. Here, though applied to the same verb *taki* ‘to carry in the hand’, *fe* takes on the adverbial meaning defined above:

- (32) a. *e taki e Samino lana kete.*
 IPFV carry.in.the.hand ERG S. his bag
 ‘Samino carries his bag in his hand.’
 b. *e fe-taki e Samino lana kete.*
 IPFV REC-carry.in.the.hand ERG S. his bag
 ‘Samino carries his bag in his hand with difficulty.’

Likewise, *fe-* lends an adverbial modification to the verbs *oli* ‘to desire’, and *fai* ‘to do’ in the following examples. Again, the arguments denote individuals:

- (33) a. *e kau fe-oli ke kau ano ki Mala’e.*
 IPFV 1SG REC-want that 1SG go OBL M.
 ‘I want to go to Malae at any cost.’
 b. *e kau fe-fai ki saku motokā kae le’ese feauga i laku fāfalā.*
 IPFV 1SG REC-do OBL my car but not be enough OBL my money
 ‘I do my best to get a car but I am short of money.’

The use of *fe-* with such an adverbial meaning is not restricted to a few verbs, as for the middle. But it seems that the agent argument must be singular.

3.1.3 Lexicalisations

There are a few fossilised derivatives in *fe-*, but the available examples show no indication of a reciprocal meaning.

1. The verb *feluku* ‘to move (house)’ derives in all likelihood from *luku*, a verb still found in the expression *luku le taua* ‘to skim off the film (formed when edible curcuma is cooked on hot stones)’, an action which, as expected, involves a repetitive gesture.

2. Although there is no longer a verb **lutu*, the verbs *felutu* ‘to squirm, struggle (trying to get somewhere)’ and *felutu’aki* ‘to struggle together’ must certainly derive from it.

3. A fossilised *fe-* can also be found in verbs describing repetitive noises: *fegati* or *fetatoti* ‘to gnash (teeth)’ and *fenoti* ‘to click (said of the jaws of large black ants)’.

4. The derivative *fe-tuli* (← *tuli* ‘to chase’) can have either the reciprocal meaning ‘to chase each other’ when the sole argument denotes two participants as in (25b), or the (highly lexicalised) meaning ‘to hurry, do quickly’ when the argument denotes an individual:

- (34) *e kau fe-tuli.*
 IPFV 1SG REC-chase
 ‘I hurry.’

3.1.4 Derivatives from non-verbal roots (*fe-* prefixed to nouns)

In a single case, *fe-* is used to mark a noun plural: *fetāina* ‘siblings’ (the plural of *taina* ‘sibling’). The same prefix is also probably to be found in *fe’ilo* ‘distant relative, acquaintance’ (← *iloa* ‘to know’).

3.1.5 Nominalisations

The prefix *fe-*, associated with the nominalising suffix *-ga*, derives a few verbs into nouns denoting actions which involve two or more participants:

- (35) *kapu* ‘to run after’ → *fe-kapu-ga* ‘pursuit’
peu ‘to disagree’ → *fe-peu-ga* ‘dispute, contestation’
tau ‘to fight’ → *fe-tau-ga* ‘fight.’

3.2 Reciprocals with the complex *fe...-(C)i*

The suffix *-(C)i* normally has a transitivity effect and an intensive sense (see 2.7.1.2): the action is carried to its term, and the patient is fully affected. In association with the prefix *fe-*, it loses its transitivity effect, but generally retains its intensive sense. Derivatives in *fe...-(C)i* are all intransitive verbs, which take on mainly a sociative, but secondarily an iterative, and in exceptional cases a reciprocal sense.

3.2.1 *The reciprocal meaning*

In East Futunan, *fe-...-(C)i* can have a reciprocal meaning in the following derivative only, and even this one is not acceptable to all speakers.

- (36) *alofa* ‘to love’ → *fe-alofa-ni* ‘to like each other’, as in (37) below,
but most speakers consider this derivative to be a loanword from East Uvean.
- (37) *e fe-alofa-ni le fenua.*
IPFV REC-love-REC ART people
‘People like each other.’

3.2.2 *Non-reciprocal meanings*

3.2.2.1 *The sociative meaning.* The verbs listed below are intransitive, except for *tagi* ‘to cry’:

- (38) *lele* ‘to fly’ → *fe-lele-i* ‘to fly away together (as frightened birds)’
sigā ‘to fall’ → *fe-sigā-i* ‘to fall down together’
sola ‘to flee’ → *fe-sola-ki* ‘to flee together’
tagi ‘to cry’ → *fe-tagī-si* ‘cry together, at the same time or again and again.’

1) An example with a non-derived intransitive verb:

- (39) a. *kua sola le toe ki lona tupuna.*
PFV run.away ART child OBL his grandmother
‘The child ran away to its grandmother.’
b. *e fe-sola-ki a toe o nono i le salatamu.*
IPFV REC-run.away-REC ABS child in.order.to hide OBL ART policeman
‘The children are running together away to hide from the policeman.’

2) An example with a non-derived transitive verb:

- (40) a. *na tagi e au le mate o Petelo.*
PAST cry ERG ISG ART death POSS P.
‘I cried over the death of Petelo.’
b. *na fe-tagī-si a toe ki lolotou tinana.*
PAST REC-cry-REC ABS child OBL their mother
‘The children cried together over their mother’s death.’

3.2.2.2 *The iterative meaning.* An iterative meaning may result from affixing *fe-...-(C)i*, as for example in the case of the following intransitive verbs:

- (41) *sali* ‘to flow’ → *fe-sali-i* ‘to drip’
sopo ‘to jump’ → *fe-sopo-i* ‘to jump several times.’
- (42) a. *e sali ga’ega’e le tane.*
IPFV flow weakly ART water tank
‘The water tank is leaking slowly.’
b. *e fe-sali-i le vai ki le moelaga o lona tupuna.*
IPFV REC-flow-REC ART water OBL ART mat POSS his grandmother
‘Water is dripping on his grandmother’s mat.’

3.2.3 Lexicalisations

Two cases can be distinguished here.

1. Lexicalisations involving an iterative meaning. For instance, *fe-tio-fi* ‘to keep everything for sb, watch over sb’s interests’ derives from *tio* ‘to see’, to which it now bears a fairly tenuous semantic relation. *fe-olo-ni* ‘to follow one another, succeed one another’ is undoubtedly derived, but the only verb *olo* means ‘to scrape, rub’.

2. Lexicalisations involving a reciprocal meaning. The prefix *fe-* appears in fossilised form in some derivatives which are semantically reciprocal, e.g., *felāvei* ‘to meet together’ and *felōgoi* ‘to argue’ are probably former derivatives of *lave* ‘to know where’ and *logo* ‘to hear’. This type of derivation involving the suffix *-i* and vowel lengthening is, however, no longer productive.

- (43) *na mā felāvei i koloa.*
 PAST 1DU.EXC meet OBL store
 ‘We met at the store.’

3.2.4 Polysemy of the same derivative

A derivative may have different meanings depending on its syntactic context. Thus, *fe-sopo-’i* (← *sopo* ‘to jump’) may mean ‘to jump several times’ or ‘to jump together’, depending on whether its argument denotes one or more participants.

1) The iterative meaning, with a singular argument:

- (44) a. *e fe-sopo-’i le kulī mei le vaka ki le tasi a vaka.*
 IPFV REC-jump-REC ART dog from ART boat OBL ART one POSS boat
 ‘The dog is jumping from one boat to another.’

2) The sociative meaning, with a plural argument:

- b. *e fe-sopo-’i a toe i le mala’e sekolā.*
 IPFV REC-jump-REC ABS child OBL ART playground school
 ‘Children are jumping together in the school playground.’

3.2.5 Derivatives from non-verbal roots

There is only one known example of a derivative from a nounlike stem: *soa* ‘companion, peer’ yields *fe-soasoa-ni* ‘to go along with sb (going somewhere)’. This derivative thus has a sociative meaning:

- (45) *e fe-soasoa-ni a Malia mo Ana o ano ki Alo.*
 IPFV REC-peer.RED-REC ABS M. and A. in.order.to go OBL A.
 ‘Malia and Ana are going together to Alo.’

3.3 Derivatives with the complex *fe-...-(C)aki*

3.3.1 The reciprocal meaning (involving two or more participants)

The complex *fe-...-(C)aki* is a combination of affixes which is generally used to express the reciprocal. This is not to say, however, that the reciprocal is its primary sense. Other senses listed below are equally frequent. It is true, nevertheless, that the stem consonant

used for the reciprocal is almost always the glottal stop, and derivation in *-’aki* is in fact the only productive one. When the derivatives have senses other than the reciprocal, the stem consonant is not preferentially the glottal stop. Derived verbs with a reciprocal sense take a single argument and cannot have another one in the ergative. The base verb is usually “middle” or transitive, but can also be an intransitive verb designating a position.

3.3.1.1 Subject/agent-oriented diathesis types of reciprocal constructions

3.3.1.1.1 Reciprocals deriving from transitive verbs. A few transitive verbs also allow derivation with a reciprocal meaning:

- | | | | |
|------|--------------------------|---|--|
| (46) | <i>lau</i> ‘to tell’ | → | <i>fe-lau-’aki</i> ‘to tell each other’ |
| | <i>mili</i> ‘to massage’ | → | <i>fe-mili-’aki</i> ‘to touch each other’ |
| | <i>tā</i> ‘to hit’ | → | <i>fe-tā-’aki</i> ‘to hit each other’ |
| | <i>tali</i> ‘to answer’ | → | <i>fe-tali-’aki</i> ‘to answer each other’ |
| | <i>tamate</i> ‘to kill’ | → | <i>fe-tamate-’aki</i> ‘to kill each other’ |
| | <i>’umo</i> ‘to pinch’ | → | <i>fe-’umo-’aki</i> ‘to pinch each other.’ |

Reciprocal derivation applied to transitive verbs allows only one argument. The derived verbs can no longer take an argument in the ergative.

- (47) a. *na tali loa e Ufigaki le ’aumai o le kava.*
 PAST accept SUC ERG U. ART arrival POSS ART kava
 ‘Ufigaki accepted that the kava be brought.’
- b. *e fe-tali-’aki le fenua i le fonu.*
 IPFV REC-ANSWER-REC ART people OBL ART meeting
 ‘People answer each other during the meeting.’
- (48) a. *na tamate a Petelo e Paulo.*
 PAST kill ABS P. ERG P.
 ‘Paulo killed Petelo.’
- b. *o fe-tamate-’aki fa’i le kau Alo talie kua po’uli e le’ese koi*
 and REC-kill-REC only ART CLF A. because PFV be.dark IPFV not DUR
fe-lave-’aki a lātou.
 REC-know.where-REC ABS 3PL
 ‘And the Alos killed each other, because it was dark and they couldn’t locate each other any longer.’

3.3.1.1.2 Reciprocals deriving from two-place intransitive (“middle”) verbs. The reciprocal meaning is usually obtained from a middle base verb, i.e., a verb requiring a second argument in the oblique case. “Middle” verbs have an absolutive argument denoting the experiencer, and an argument in the oblique case denoting the patient. We may recall that these verbs, the prime candidates for reciprocal derivation because of their meaning, are all verbs of feeling, perception, or communication. Here are a few examples:

- (49) *alofa* ‘to love’ → *fe-alofa-’aki* ‘to love each other’
’ita ‘to be angry’ → *fe-’ita-’aki* ‘to be angry at each other’
kē ‘to cry out’ → *fe-kē-’aki* ‘to argue with each other’
māsau ‘to speak’ → *fe-māsau-’aki* ‘to talk over’
meo ‘to be unhappy’ → *fe-meo-’aki* ‘to be unhappy with each other’
pati ‘to say’ → *fe-pati-’aki* ‘to talk to each other’
sogi ‘to kiss’ → *fe-sogi-’aki* ‘to kiss each other’
tio ‘to see’ → *fe-tio-’aki* ‘to see each other’
vesili ‘to ask’ → *fe-vesili-’aki* ‘to question each other’; cf.:
- (50) a. *e tio a ia ki se matu’a e ’au i le ala.*
 IPFV see ABS 3SG OBL ART old.man IPFV come OBL ART road
 ‘He is looking at an old man coming on the road.’
 b. *ofolele kua fe-tio-’aki le sā tagata o lā fe-iloa-’aki.*
 suddenly PFV REC-see-REC ART CLF man and 3DU REC-know-REC
 ‘Suddenly the two men looked at each other and recognized each other.’
- (51) a. *e ’ita a Paulo ki lona āvaga.*
 IPFV be.angry ABS P. OBL his wife
 ‘Paulo is angry at his wife.’
 b. *e fe-’ita-’aki a Lotoato mo Sanele.*
 IPFV REC-be.angry-REC ABS L. and S.
 ‘Lotoato and Sanele are angry at each other.’

The derived verbs have a single argument and can no longer take a second argument introduced by *ki* and denoting a patient.

3.3.1.1.3 Reciprocals deriving from intransitive verbs. A few positional verbs allow derivation by *fe-...-(C)aki* with a reciprocal meaning. All the following verbs are intransitive; they may take a locative modifier, often simply a directional term, as in (52):

- (52) *e ’aga mai a Petelo.*
 IPFV face DIR ABS P.
 ‘Petelo is opposite (to the speaker).’

Here belong at least the following verbs:

- (53) *tītu’a* ‘to turn one’s back’ → *fe-tītu’a-’aki* ‘to turn backs to each other’
’aga ‘to face’ → *fe-’aga-’aki* ‘to face each other’
sili ‘to pass by, be in front’ → *fe-sili-’aki* ‘to cross each other’ (or *fe-sili-kaki*)
sipa ‘to be crooked’ → *fe-sipa-’aki* ‘to be crooked with respect to each other, to intersect.’

Compare:

- (54) a. *e sili le motokā a Kalala iō ’oku.*
 IPFV pass.by ART car POSS K. by mine
 ‘Kalala’s car is driving past my house.’
 b. *e fe-sili-’aki a Iasinito mo Fapiano i lamatu’a.*
 IPFV REC-pass.by-REC ABS I. and F. OBL road
 ‘Iasinito and Fapiano are passing each other on the road.’

- (55) a. *e tītū'a mai a Isaia kia māua.*
 IPFV turn.one's.back DIR ABS I. OBL 1DU.EXCL
 'Isaia is turning his back to us.'
- b. *e tā fe-tītū'a-'aki.*
 IPFV 1DU.INCL REC-turn.one's.back-REC
 'We are turning our backs to each other.'
- (56) a. *e sīpa le pa'ā o le fale.*
 IPFV be.crooked ART wall POSS ART house
 'The wall of the house is not straight.'
- b. *e fe-sīpa-'aki le tānaki o moelaga.*
 IPFV REC-be.crooked-REC ART gathering POSS mat
 'Mats are not piled neatly.'

3.3.1.2 *Semantic equivalents of the “possessive” diathesis type (“quasi-possessive”).* In Futunan, genitive constructions may be used for semantic roles other than possession. In verbal sentences, with transitive or intransitive verbs, the agent may be marked as the possessor by a genitive noun phrase, and no ergative argument is needed:

- (57) a. *na lavea a lima o le sā tagata.*
 PAST injure ABS hand POSS ART CLF man
 'The two men injured their hands.'

The reciprocal construction is identical with it except that the verb must be a derivative:

- b. *na fe-lavea-'aki a lima o le sā tagata.*
 PAST REC-injure-REC ABS hand POSS ART CLF man
 'The two men injured each other's hands.'

Another example with *ligi*, an ergative verb:

- (58) a. *e ligi lana kafe.*
 IPFV pour his coffee
 'He is pouring his coffee.'
- b. *e fe-ligi-'aki alāua kafe.*
 IPFV REC-pour-REC their coffee
 'They are pouring each other's coffee.'

3.3.1.3 *Semantic equivalents of the “indirect” diathesis type (“quasi-indirect”).* In a bitransitive construction, the recipient is in the oblique case. An agent and a recipient in reciprocal relation may be expressed in two different ways, but in both cases, there is a valence reduction:

1. Either a possessive construction is used (as in 3.3.1.2). The recipient and agent are both expressed as possessors in a genitive noun phrase, in the absolutive case.

- (59) a. *na solī e Petelo a tosi kia Paulo.*
 PAST give ERG P. ABS book OBL P.
 'Petelo gave books to Paulo.'

- b. *na fe-soli-'aki a tosi a Petelo mo Paulo.*
 PAST REC-give-REC ABS book POSS P. and P.
 'Petelo and Paulo gave books to each other.'

2. Or the agent and recipient belong to the same coordinated noun phrase, in which case the absolutive patient (*le fā niu matu'u*) in (60a) is peripherised as an instrumental adjunct (*ki niu matu'u*) in (60b):

- (60) a. *e tuki e Paulo le fā niu matu'u kia Petelo.*
 IPFV throw ERG P. ART CLF coconut dry OBL P.
 'Paulo throws a dry coconut at Petelo.'
- b. *e fe-tuki-'aki a Paulo mo Petelo ki niu matu'u.*
 IPFV REC-throw-REC ABS P. and P. OBL coconut dry
 'Petelo and Paulo throw dry coconuts at each other.'

3.3.2 Non-reciprocal meanings of the complex *fe-...-(C)aki*

It is not the sole function of *fe-...-(C)aki* derivation to express the reciprocal. It is also used to express aspectual values such as the habitual, or adverbial meanings such as the iterative, the dispersive, or the successive (Lichtenberk 1985). In such a case, the derived verb retains the valence of the base verb, and there is no intransitivisation as in the case of the reciprocal meaning. The derived verb can retain two arguments, one in the absolutive and the other in the ergative. Derivation then has no syntactic consequences, only semantic and/or aspectual ones. The meaning of the derivative may show a certain degree of lexicalisation, often intensified in translation though less perceptible to a Futunan. The meanings other than the reciprocal resulting from derivation by *fe-...-(C)aki* are listed below.

3.3.2.1 The sociative meaning. Derivation by *fe-...-(C)aki* may result in a sociative meaning, whereby the action is performed jointly or concomitantly over time. This sense can be found for derivatives from both transitive and intransitive verbs.

1. Derivatives from intransitive verbs:

- (61) *ō* 'to lay (eggs)' → *fe-ō-faki* 'to lay and hatch (eggs) together'
somo 'to grow' → *fe-somo-'aki* 'to grow simultaneously'
'uluga 'to rest (head on a pillow)' → *fe-'uluga-'aki* 'to share (the same pillow).'
- (62) a. *e ō a moa e lua ki le ōfaga e tasi.*
 IPFV lay ABS hen IPFV two OBL ART nest IPFV one
 'The two hens are laying in the same nest.'
- b. *e fe-ō-faki a moa e lua i le ōfaga e tasi.*
 IPFV REC-lay-REC ABS hen IPFV two OBL ART nest IPFV one
 'The two hens lay and hatch *together* in the same nest.'

The translation 'to lay and hatch together' of the derivative in (62b) is an attempt to render the more extended nature of the action in comparison with the more punctual sense of the non-derived verb in (62a). This durative meaning also justifies the use of the stative locative marker *i* in (62b), indicating that the hens are to stay in the nest for some time, while (62a) introduces the locative with the dynamic marker *ki* to show that the nest where

the hens are going to lay is only a temporary destination. Here are a few more examples with intransitive verbs:

- (63) a. *e somo vave le la'akau leinei.*
 IPFV grow fast ART tree this
 'This tree grows fast.'
 b. *kua fe-somo-'aki a 'ufi.*
 PFV REC-grow-REC ABS yam
 'Yams all grew at the same time.'
- (64) a. *e 'uluga le toe ki le fā pila.*
 IPFV rest.one's.head.on.a.pillow ART child OBL ART CLF pillow
 'The child is resting his head on a pillow.'
 b. *e fe-'uluga-'aki a Vasa mo Sanele.*
 IPFV REC-rest.one's.head.on.a.pillow-REC ABS V. and S.
 'Vasa and Sanele are resting their heads on the same pillow' (they share one pillow).

2. Derivative from transitive verbs (a single example):

- (65) *koti* 'to cut (with scissors)' → *fe-koti-'aki* 'to cut (with scissors) together.'
- (66) *e natu a au o ma'ua atu a Petelo mo Sosefo e fe-koti-'aki e*
 IPFV arrive ABS 1SG and find DIR ABS P. and S. IPFV REC-cut-REC ERG
lāua a le siapo.
 3DU ABS ART bark-cloth
 'I found Petelo and Sosefo cutting a bark-cloth together.'

3.3.2.2 *The successive meaning.* Derivation by *fe-...-(C)aki* may also indicate that the actions are performed consecutively. The following are transitive verbs whose derivatives retain the same valence as the base verb:

- (67) *laga* 'to lift' → *fe-laga-'aki* 'to lift in succession'
sulu 'to put on (clothing)' → *fe-sulu-'aki* 'to put on (clothing) one after another'
taki 'to carry in the hand' → *fe-taki-'aki* 'to carry in the hand, one after another'
to'o 'to take' → *fe-to'o-'aki* 'to pass from hand to hand, carry in succession.'
- (68) a. *e sulu loku gā kie e Sosefo.*
 IPFV put.on my CLF cloth ERG S.
 'Sosefo puts on my loin-cloth.'
 b. *e fe-sulu-'aki loku gā kie e toe.*
 IPFV REC-put.on-REC my CLF cloth ERG child
 'Children put on my loin-cloth by turns.'

3.3.2.3 *The alternative meaning.* The movement designated by the derivative is of a back-and-forth nature. There is only one (intransitive) verb in the author's data which has an alternative derivative:

- (69) *ano* 'to go' → *fe-ano-'aki* 'to go back and forth, to and fro.'
- (70) a. *na ano loku tamana o faifeua i le tai malō.*
 PAST go my father in.order.to fish OBL ART tide low
 'My father went fishing at low tide.'

- b. *e fe-ano-'aki le tēpitē i le vakalele.*
 IPFV REC-go-REC ART deputy OBL ART plane
 'The deputy is flying to *and fro*' (between two well-defined places).

3.3.2.4 The iterative meaning. The action is performed several times ('again and again') by one or more participants. The base verb may be either transitive or intransitive, and derivation does not affect the initial valence.

1. Intransitive verbs:

- (71) *tapa* 'to flash (as lightning)' → *fe-tapa-'aki* (or *fe-tapa-laki*) 'to flicker (as lightning).'
- (72) a. *e tapa le uila.*
 IPFV flash ART lightning
 'Lightning flashes.'
- b. *e fe-tapa-'aki le uila i le lagi.*
 IPFV REC-flash-REC ART lightning OBL ART sky
 'Lightnings flicker (flash *again and again*) in the sky.'

The derivative *fe-ulu-'aki* (from the intransitive verb *ulu* 'to go in, to go out') also has an iterative meaning when it means 'to go into several houses in succession':

- (73) *na fe-ulu-'aki sa'ele a ia i loto o fale ma'uke ai.*
 PAST REC-enter-REC everywhere ABS 3SG OBL inside POSS house many very
 'He enters (and goes out of) many houses *successively*.'

2. Transitive verbs:

- (74) *ave* 'to take away' → *fe-ave-'aki* 'to take to one place after another, peddle'
- ligi* 'to pour' → *fe-ligi-'aki* 'to pour several times from one container into another'
- lomi* 'to press, squeeze' → *fe-lomi-taki* 'to swallow bit by bit; pack down (so as to get in as much as possible)'
- opotu* 'to put together' → *fe-opotu-'aki* 'to be piled one on top of another'
- siki* 'to move sth' → *fe-siki-'aki* 'to move sth about.'

The iterative meaning is one of the most common results of using *fe-...-(C)aki* to form derivatives from transitive verbs. The derivatives remain transitive and able to take an ergative argument:

- (75) a. *e ligi e Lita le vai ki fagu.*
 IPFV pour ERG L. ART water OBL bottle
 'Lita is pouring water into bottles.'
- b. *e fe-ligi-'aki e Lita le vai ki fagu.*
 IPFV REC-pour-REC ERG L. ART water OBL bottle
 'Lita is pouring water from bottle to bottle.'
- (76) a. *e kau lomi le 'ua o loku tinana.*
 IPFV 1SG press ART neck POSS my mother
 'I am massaging my mother's neck.'

- b. *na fe-lomi-taki e le tama ona kāvega ki lana pāsikete*
 PAST REC-PRESS-REC ERG ART boy his belongings OBL his suitcase
ke ō.
 in.order.that be.room
 ‘The boy pressed his belongings into his suitcase in order to make room for them’
 (the action is iterative, for the boy has to press *several times* to make room for his belongings).

3.3.2.5 *The habitual meaning.* Derivation by affixing *fe-...-(C)aki* can result in an habitual meaning with at least the following verbs:

- (77) *loi* (‘middle’ verb) ‘to lie/tell lies’ → *fe-loi-saki* ‘to lie all the time’
taka (vi) ‘to go, come around, walk about’ → *fe-taka-’aki* ‘to go around often.’
- (78) a. *na taka loku taina nāpō i Kolopelu.*
 PAST walk my brother yesterday.evening OBL K.
 ‘My brother walked round in Kolopelu yesterday evening.’
 b. *e matala fa’i kia tātou fuli anei e fe-taka-’aki i le vasa.*
 IPFV clear only OBL 1PL.INC all here IPFV REC-walk-REC OBL ART channel
 ‘It is clear for all of us who *often* go both ways across the channel.’
- (79) a. *e loi le toe ki lona tinana.*
 IPFV lie ART child OBL his mother
 ‘The child lies to its mother.’
 b. *kua fe-loi-saki le toe ki lona tamana i lona ī.*
 PFV REC-lie-REC ART child OBL his father OBL his fear
 ‘The child lied *over and over again* to his father because he feared him.’

3.3.2.6 *The dispersive meaning.* The action takes place at different places at the same time. The derivatives retain the same valence as the non-derived verb.

1. Intransitive verbs:

- (80) *pū* ‘to be perforated’ → *fe-pū-’aki* ‘to have holes all over.’
- (81) a. *e pū le pa’ā o le fale.*
 IPFV have.holes ART wall POSS ART house
 ‘The wall of the house has holes in it.’
 b. *e fe-pū-’aki le pa’ā o le fale.*
 IPFV REC-have.holes-REC ART wall POSS ART house
 ‘The wall of the house is full of holes.’

2. Transitive verbs:

- (82) *lago* ‘to chock (up)’ → *fe-lago-’aki* ‘to chock (up) all round.’
- (83) a. *e lago le motokā ki le la’akau e Petelo kae fetogi lona fā*
 IPFV chock ART car OBL ART stick ERG P. while change his CLF
teka.
 wheel
 ‘Petelo chocks (the wheel of) the car with a stick while changing the wheel.’

- b. *e fe-lago-'aki le vaka i 'one e Sosefo.*
 IPFV REC-chock-REC ART boat OBL sand ERG S.
 'Sosefo is chocking up (both sides of) the boat on the beach.'

3.3.2.7 *The diversative meaning.* The movement occurs in several directions at the same time.

1. Intransitive verbs:

- (84) *lele* 'to fly' → *fe-lele-'aki* 'to fly off in all directions'
sopo 'to jump' → *fe-sopo-'aki* 'to jump all about.'
- (85) a. *e sopo a toe i lolotou fiafia.*
 IPFV jump ABS child OBL their joy
 'Children are joyfully jumping.'
 b. *e fe-sopo-'aki a toe talie e mānonogi.*
 IPFV REC-jump-REC ABS child because IPFV play(PL)
 'Children are joyfully jumping *about* because they are playing.'
- (86) a. *ti lele atu le amatuku ki le tasi atu a gāne'a.*
 and fly DIR ART egret OBL ART other DIR POSS place
 'And the egret flew a little farther.'
 b. *e kau tio ki manu e fe-lele-'aki i le lagi.*
 IPFV 1SG see OBL bird IPFV REC-fly-REC OBL ART sky
 'I am looking at the birds flying *hither and thither* in the sky.'

2. Transitive verbs:

- (87) *futi* 'to pull out or off' → *fe-futi-'aki* 'to pull in all directions'
tuli 'to chase' → *fe-tuli-'aki* 'to chase in all directions'; cf.:
- (88) a. *na futi le moa e le tagata.*
 PAST pull ART chicken ERG ART man
 'The man was plucking a chicken.'
 b. *e fe-futi-'aki e toe le ma'ea o le lūlū'aga.*
 IPFV REC-pull-REC ERG child ART rope POSS ART swing
 'Children are pulling the rope of the swing *in every direction*.'
- (89) a. *e tuli e Petelo lona gā taina.*
 IPFV chase ERG P. his CLF brother
 'Petelo is chasing his little brother.'
 b. *e tio atu a au i le tasi a usu e fe-tuli-'aki e*
 IPFV see DIR ABS 1SG OBL ART one POSS morning IPFV REC-chase-REC ERG
lāua le gā uviki 'uli.
 3DU ART CLF young.pig black
 'I saw them one morning chasing a small black pig *all over the place*.'

3.3.2.8 *The causative meaning.* There is only one recorded example of a *fe-...-(C)aki* derivative with a causative meaning:

- (90) *sola* 'to flee' → *fe-sola-taki* (or *fe-sola-faki*) 'to help sb flee.'

3.3.3 Lexicalisations

In addition to taking on a reciprocal meaning, the meaning of a verb may change slightly under the effects of derivation. In the following two cases, for example, derivation attenuates or restricts the meaning of the base verb:

- (91) *mili* ‘to massage’ → *fe-mili-’aki* ‘to touch each other (as children at play)’
kapu ‘to chase, drive away (by running after)’ → *fe-kapu-’aki* ‘to expel (verbally)’
- (92) a. *e kau kapu le toe ki fafo.*
 IPFV 1SG drive.out ART child OBL outside
 ‘I am driving the child out of the house.’
- b. *e fe-kapu-’aki a Sosefo mo Toviko i le kāiga o lolā*
 IPFV REC-drive.out-REC ABS S. and T. OBL ART domain POSS their
tamana.
 father
 ‘Sosefo and Toviko are chasing each other (with words) from their father’s domain.’
 (Each one says that the domain belongs to him).

In other cases, on the contrary, the derivative has a wider meaning than the base verb. Thus, *fe-sopo-’aki* ‘to jump about’ (← *sopo* ‘to jump’) has an extended (metaphorical) meaning, ‘to sleep with many women’. The introduction of new techniques can also cause shifts in meaning. Thus, the transitive verb *tui* now means ‘to sew’ but also retains its original meaning ‘to insert (an awl) through sheets of pandanus-leaf roofing’:

- (93) a. *e tui e le finematu’a loku kofu.*
 IPFV SEW ERG ART old.woman my dress
 ‘The old woman is sewing my dress.’

The meaning of the derivative *fe-tui-laki* ‘to cross each other’, appears rather distantly related to the base root, but the relationship becomes clearer when considered in the light of the original sense of the awl being passed from one worker to another through the roofing leaves.

- b. *na fe-tui-laki alāua motokā i nānafi.*
 PAST REC-insert-REC their car OBL yesterday
 ‘They met driving on the way yesterday.’

3.3.4 Derivatives from non-verbal roots

Some terms used both as nouns and as verbs can have derivatives formed with the complex *fe-...-(C)aki*. These derivatives are often semantically closer to the nominal than to the verbal sense of the base term.

- (94) *sele* ‘knife; to cut’ → *fe-sele-’aki* (or *fe-sele-taki*) which means:
- i. ‘to fight *each other* with knives’ (reciprocal)
 - ii. ‘to tie crosswise (certain components of house frames)’ (lexicalisation)
 - iii. ‘to oppose, thwart sb’ (causative, not unlike the notion expressed by the French idiom *mettre des bâtons dans les roues*).

- (95) *taka* ‘shoe; to walk’ → *fe-taka-’aki* which means:
- i. ‘to walk about *together*’ (sociative)
 - ii. ‘to come, to go around *often*’ (habitual)
 - iii. ‘to wear the *same* shoe size’ (reciprocal, deriving from the nominal sense of the base term).
- (96) *’uluga* ‘pillow; to rest (head on a pillow)’ → *fe-’uluga-’aki* ‘to share the same pillow’ (sociative).

4. Expression of reciprocal arguments

A reciprocal derivative cannot have more than one argument, which must be in the absolutive case. In terms of grammatical class, this argument may be a dual or plural pronoun, a collective noun (e.g., *le fenua* ‘people’), or an unbroken coordinate phrase composed of two terms connected by *mo* ‘and, with’, denoting both the agent and the patient of the same action. Genitive noun phrase arguments in reciprocal constructions have been described in 3.3.1.2.

4.1 Pronoun argument

The participants in the reciprocal relationship can be denoted by dual or plural pronouns. It will be recalled that there are two sets of pronouns in Futunan, one of which is postposed to the verb, as in (97a), while the other is preposed, as in (97b):

- (97) a. *e fe-māsau-’aki a mātou.*
 IPFV REC-talk-REC ABS 1PL.EXC
 ‘We are talking to each other.’
- b. *e lotou fe-loi-’aki.*
 IPFV 3PL REC-lie-REC
 ‘They are lying to each other.’

4.2 Noun argument

There can only be one noun argument, and it must denote a plurality of individuals:

- (98) *ko fenua e fe-fuā-’aki.*
 TOP people IPFV REC-jealous-REC
 ‘People, they are jealous of each other.’

4.3 Coordinate noun phrase with the connector *mo*

The grammatical morpheme *mo* has a variety of functions. It can coordinate two terms of the same grammatical class as in (99a) or introduce a comitative phrase with two different arguments as in (99b):

- (99) a. *ko le fā 'ula'ula mo le gā tuna.*
 TOP ART CLF prawn and ART CLF eel
 'These are a prawn and a small eel.'
- b. *ti ano loa a ia mo sana matātagata.*
 then go SUC ABS 3SG with one.of.his sentry
 'Then he leaves with one of his sentries.'

When one of the arguments denotes the speaker, there are two ways of expressing the comitative:

1) with the 1st person singular pronoun:

- (100) a. *na kau vusu i nānafi mo Paulo.*
 PAST 1SG fight OBL yesterday with P.
 'I fought with Paulo yesterday.'

2) With a 1st person dual pronoun, this inclusive construction being more common despite its ambiguity (the following sentence could also mean 'the two of us fought together against Petelo'):

- b. *na mā vusu i nānafi mo Paulo.*
 PAST 1DU.EXC fight OBL yesterday with P.
 'Paulo and I fought yesterday.'

When the term introduced by *mo* is not in a coordinate construction, it can be separated from the term which is its syntactic partner. When a derived verb has a reciprocal meaning, *mo* coordinates the two participants in the reciprocity relationship, which form a single grammatical argument in the absolutive case. The components of the coordinate phrase cannot be disjoined:

- (101) *e fe-tio-'aki le toe mo lona tinana.*
 IPFV REC-see-REC ART child and his mother
 'The child and his mother are looking at each other.'
- (102) *e fe-vaku-'aki a Petelo mo Paulo.*
 IPFV REC-scratch-REC ABS P. and P.
 'Petelo and Paulo are scratching each other.'

4.4 The conditions required for expressing reciprocity

In terms of the arguments involved, a reciprocal meaning is only possible when both the following conditions hold:

1. There is only one argument and it is in the absolutive case.
2. This argument denotes at least two participants.

The verb cannot have a reciprocal meaning when it takes two grammatical arguments. The derived verb in (103), for example, which has one argument (*le toe*) in the absolutive and a second (*ki lona tinana*) in the oblique case, cannot under any circumstances be a reciprocal. In this case, it happens to be diversative:

- (107) *sola* ‘to flee’:
 → *fe-sola-’aki* ‘to flee from place to place’ (iterative)
 → *fe-sola-ki* ‘to flee together’ (sociative)
 → *fe-sola-taki* ‘to help sb flee and go with him’ (causative)
 → *fe-sola-faki* ‘to help sb flee by himself’ (causative).
- (108) *tolo* ‘to be dragged’:
 → *tolo-kaki* ‘to drag’ (transitive)
 → *fe-tolo* ‘to push and shove all at once’ (sociative)
 → *fe-tolo-’aki* ‘to push and shove each other’ (reciprocal)
 → *fe-tolo-fi* ‘to teem (as ants)’ (diversative + lexicalisation).

6. Causatives and reciprocals

The causative suffix *faka-* can be combined with the complex *fe-...-(C)aki*. The primary derived meaning is either reciprocal or causative.

6.1 Causatives derived from reciprocals (patient-oriented reciprocals)

If the causative prefix is the first element in the derivative, it transitivises the verb which had become intransitive through affixation of *fe-...-(C)aki*. The latter’s reciprocal meaning is retained and the secondary derivative means ‘to get two people to act on *each other*’. Let us compare the three sentences in (109):

In (109a), the verb *’u’uti* ‘to bite’ is transitive, non-derived, and not reciprocal. There are two arguments, *le toe* in the absolutive (marked \emptyset) and *le kulī* in the ergative (marked *e*).

In (109b), the verb is derived by affixing *fe-...-(C)aki* and there is only one grammatical argument denoting two participants, and the derivative has a reciprocal meaning.

In (109c), the verb *faka-fe-’u’uti-’aki* is a secondary derivative. The reciprocal meaning attributed to the complex *fe-...-(C)aki* is retained, but the new derivative now takes two arguments (one in the absolutive, the other in the ergative case), owing to the causative prefix *faka-*.

- (109) a. *na ’u’uti le toe e le kulī.* (non-reciprocal, vt)
 PAST bite ART child ERG ART dog
 ‘The dog bit the child.’
- b. *na fe-’u’uti-’aki a le sā kulī.* (reciprocal, vi)
 PAST REC-bite-REC ABS ART CLF dog
 ‘The two dogs bit each other.’
- c. *na faka-fe-’u’uti-’aki a le sā kulī e le toe.* (causative reciprocal, vt)
 PAST CAUS-REC-bite-REC ABS ART CLF dog ERG ART child
 ‘The child *made* the two dogs bite each other.’

Here is another example with the “middle” verb *māsau* ‘to speak, talk’:

- (110) a. *e kau māsau mo le Pātele kiate koe.*
 IPFV 1SG talk with ART Father OBL 2SG
 ‘The Father and I are talking to/about you.’
- b. *e fe-māsau-’aki a mātou.*
 IPFV REC-talk-REC ABS 1PL.EXC
 ‘We are talking to each other.’
- c. *na faka-fe-māsau-’aki e Petelo a Malia mo Atonio.*
 PAST CAUS-REC-talk-REC ERG P. ABS M. and A.
 ‘Petelo *made* Atonio and Malia talk to each other.’

6.2 Reciprocals derived from causatives

If, on the other hand, *fe-...-(C)aki* is affixed after causative derivation, the ultimate derivative must take a single argument and have a reciprocal meaning. Derivation proceeds by three stages, starting from the non-derived base verb.

1. The non-derived verb may be intransitive, as *gakulu* in (111a); causative derivation transitivity the base verb (in 111b). A secondary derivative is obtained by affixing *fe-...-(C)aki*, resulting in:

(a) a reciprocal meaning if there is only one argument denoting more than one participant, as in (111c),

(b) a non-reciprocal meaning if there are two grammatical arguments: in (111d), the derivation yields an iterative meaning, there being two grammatical arguments, one in the absolutive and the other in the ergative.

- (111) a. *e gakulu le fale i le afā.* (non-reciprocal, vi)
 IPFV move.slightly ART house OBL ART hurricane
 ‘The house sways slightly due to the hurricane.’
- b. *e faka-gakulu le nofo’aga o le fenua e le tu’ēkelesia.* (non-reciprocal, causative vt)
 church.guard
 ‘The church guards *make* people move slightly.’
- c. *e fe-faka-gakulu-’aki a le sā toe.* (reciprocal, vi)
 IPFV REC-CAUS-move.slightly-REC ABS ART CLF child
 ‘The two children make *each other* move away slightly.’
- d. *e fe-faka-gakulu-’aki le nono’a o le puaka e loku tamana.* (non-reciprocal, vt)
 father
 ‘My father *makes* the knot move slightly around (the feet of) the pig.’

2. The verb *lava* is transitive and means ‘to put on (clothing)’. The causative derivative in (112b) *faka-lava* means ‘to clothe, dress sb’ and is a bitransitive verb; in (112c) the meaning is reciprocal, as there is only one argument denoting more than one participant, and *fe-faka-lava-’aki* means ‘to clothe each other’:

- (112) a. *e kau lava loku gā kie.* (non-reciprocal, vt)
 IPFV 1SG put.on my CLF cloth
 ‘I put on my loin-cloth.’
- b. *e faka-lava se gā kie e loku māsaiki kiate*
 IPFV CAUS-put.ON ART CLF cloth ERG my aunt OBL
au. (non-reciprocal, causative bitransitive)
 1SG
 ‘My aunt provides me with a loin-cloth.’
- c. *e fe-faka-lava-’aki a le tau fe’au’aki.* (reciprocal, vi)
 IPFV REC-CAUS-put.ON-REC ABS ART couple fiancés
 ‘The fiancés are being dressed’ (by each other’s family, as is usually done in Futuna).

7. Nominalisation of reciprocals

The noun/verb contrast is weak in the Polynesian languages and results essentially from grammatical contextualisation. A derivative may thus be used as a noun like any other lexical form. Its meaning as a noun is, however, generally copied from its meaning as a verb. Thus, the derivative *fe-tuli* ‘to chase each other’ has a reciprocal meaning involving two participants, and can be used without formal change as a noun meaning ‘chasing, pursuit’, as long as it is preceded by the specific singular article (Moyse-Faurie 2005):

- (113) *ko le sā fili e ga’ega’e i le lā fe-tuli.*
 TOP ART CLF enemy IPFV be.tired OBL ART their REC-chase
 ‘The two enemies are tired of chasing each other.’

Any verb, whether derived or not, thus has the same ability to appear as a noun:

- (114) a. *na fualoa lomā tio ki le vaka i le ava.*
 PAST last.long our see OBL ART boat OBL ART channel
 ‘We watched the boat in the channel for a long time’ (*lit.* our looking at the boat in the channel lasted long).
- b. *na fualoa lomā fe-tio-’aki ka na le’ese mafai ke mā*
 PAST last.long our REC-see-REC when PAST not possible that 1DU.EXC
fe-māsau-’aki.
 REC-talk-REC
 ‘We looked at each other for a long time without speaking’ (*lit.* ‘our looking at each other lasted long before we were able to speak to each other’).

In one case, however, a verb, ‘*au*’ ‘to come, to arrive’ has given rise to a derivative, *fe’au’aki*, which has become strongly lexicalised as a noun meaning ‘fiancés’ (see example (112c)). As a verb, it means ‘to see each other regularly (in courtship)’.

8. The preverb *fetau* ‘simultaneously’ as a reciprocal marker

Preverbs are lexical tense/aspect modifiers which are preposed to the verb phrase. The preverb *fetau* ‘at the same time’ is undoubtedly composed of the prefix *fe-* discussed above and the preverb *tau*, which has an iterative meaning ‘from time to time, often’.

8.1 Incompatibility of the preverb *fetau* with the complex *fe-...-(C)aki* in the reciprocal meaning

The preverb *fetau* is incompatible with the reciprocal meaning of *fe-...-(C)aki* derivation, but can itself confer this meaning on the verb. This is only possible, however, when it modifies a transitive verb with only one grammatical argument. If the verb is intransitive, or if it is transitive and has two grammatical arguments (one in the absolutive and the other in the ergative), *fetau* can only make an aspectual contribution:

1) with an intransitive verb:

- (115) a. *na fetau ano a lāua.*
 PAST at.the.same.time go ABS 3DU
 ‘They both left *at the same time*.’

2) With a transitive verb taking two grammatical arguments:

- b. *e fetau ave e lāua a le puaka.*
 IPFV at.the.same.time take.away ERG 3DU ABS ART pig
 ‘They take away the pig *at the same time*.’

The preverb *fetau* can only bring about a reciprocal meaning when it modifies a non-derived verb with a single grammatical argument denoting more than one participant. (116a) contains *fetau* and differs only in an adverbial way from (116b), which has a reciprocal *fe-...-’aki* derivative: *fetau* seems to add an element of simultaneity:

- (116) a. *na fetau ’u ’uti a kulī.*
 PAST at.the.same.time bite ABS dog
 ‘Dogs have bitten each other *simultaneously*.’
 b. *na fe-’u ’uti-’aki a kulī.*
 PAST REC-bite-REC ABS dog
 ‘Dogs have bitten each other.’

The preverb *fetau* is still not often used to express a reciprocal meaning. Its use in this way is just as rare as that of the prefix *fe-* with the same reciprocal meaning (see 3.1.1).

8.2 Compatibility of the preverb *fetau* with the complex *fe-...-(C)aki* in a non-reciprocal meaning

The preverb *fetau* is compatible with derivation by *fe-...-(C)aki* when this complex results in a meaning other than the reciprocal. In such case, however, *fetau* has only the adverbial

sense of simultaneity. (117) shows this use of *fetau* with an adverbial sense, together with a derived verb having an alternative sense:

- (117) *e fetau fe-ano-'aki a fenua.*
 IPFV at.the.same.time REC-GO-REC ABS people
 'People go *hither and thither* at the same time.'

9. The adverbial phrase *ki loto* 'among themselves'

The expression *ki loto* <OBL inside> is generally used in locative modifying phrases to mean 'inside, within':

- (118) *e fafa'o e le fenua a 'ufi ki loto o le vaka.*
 IPFV load ERG ART people ABS yam OBL inside POSS ART boat
 'People are loading the yams onto the boat.'

The adverbial use of the expression *ki loto* alone (i.e., without a following possessive marker *o* and a modifier) can be associated with verb derivation by *fe...-(C)aki* to reinforce the sense of reciprocity and mutual involvement of the participants:

- (119) *e fe-māsau-'aki le kau aliki ki loto ke ma'ua se tonu.*
 IPFV REC-talk-REC ART CLF chief OBL inside in.order.to find ART idea
 'Chiefs are talking *together* to each other in order to find a solution.'

The adverbial phrase *ki loto* can also be used to reinforce the reciprocal meaning obtained by the use of the prefix *fe-* alone:

- (120) *e fe-poko a le sā toe ki loto.*
 IPFV REC-push (for play) ABS ART CLF child OBL inside
 'The two children are pushing each other for fun.'

10. Etymology of the reciprocal markers

The Polynesian languages have inherited the Proto-Oceanic (POC) prefix **paRi-*, which regularly gives *vei-* in Fijian (Dixon 1988), the Melanesian language most closely related to Polynesian. This prefix, which can be reconstructed as **fe-* in Proto-Polynesian (PPN), has retained its primary sociative meaning in all the daughter languages, although it appears under a variety of labels such as the collective in Fijian, the plural marker for certain verbs in Samoan (Mosel & Howdhaugen 1992), or, sporadically, the dual-only reciprocal marker in Futunan. This prefix can also be found throughout the Oceanic subgroup in combination with either of two suffixes: **-(C)i* reconstructed for POC or **-(C)aki* reconstructed for Proto-Central-Pacific (Pawley 1973). Combining the prefix **paRi-* with one or the other of these suffixes produces meanings including the reciprocal. Thus, in Fijian, *vei...-(C)i* conveys a reciprocal meaning (as in *vei-loma-ni* 'to love each other'), while *vei...-(C)aki* commonly confers a dispersive or alternative meaning on verbs of motion ('all

over the place', 'hither and thither', 'back and forth'), e.g., *vei-toso-yaki* 'to move here and there all over the place', *vei-voce-yaki* 'to paddle back and forth'. It would seem, however, that in the western Polynesian languages *fe-...-(C)aki* alone expresses not only the reciprocal but the iterative, dispersive, alternative, and other related senses as well. The sense of *fe-...-(C)i* is essentially sociative, a meaning originally expressed by the *fe-* prefix alone. With its range of meanings, the complex *fe-...-(C)aki* can be applied to verbs taking one, two, or three arguments. In his Tongan grammar, Churchward (1953) calls such derivatives *reciprocatives* (with the meaning 'hither and thither') when they are obtained from intransitive verbs, and *reciprocals* (in the usual sense) when they come from "middle" or transitive verbs.

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PART VI

Non-prototypical polysemy

A. Verbal and pronominal reciprocal markers

Reciprocals and related meanings in To'aba'ita

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1. Introduction

To'aba'ita is a member of the Oceanic subgroup of Austronesian languages. It is spoken by approximately 13,000 people in the northern tip of the island of Malaita in the south-east Solomon Islands. The present account of the language is based on the data collected between 1980 and the present.¹

To'aba'ita has a variety of means to encode reciprocal situations, that is situations where two (or more) participants stand in identical relations to each other: A to B and B to

1. I am grateful to a number of speakers of To'aba'ita for providing me with the data on which this study is based, in particular to Lawrence Foanaota and Reuel Riianoa. Since this paper was originally written, new information on reciprocals in the language has come to hand, which, however, I have not been able to incorporate here.

A. And as is commonly the case cross-linguistically, the elements used to express reciprocal situations are polysemous: they have other, non-reciprocal uses. Before investigating in detail the properties of the To'aba'ita reciprocal constructions it is necessary to discuss briefly the relevant aspects of To'aba'ita grammar.

2. Some aspects of To'aba'ita grammar

To'aba'ita is an accusative SVO language. Subjects are indexed by preverbal elements that also mark tense (factive vs. non-factive) or sequentiality:²

- (1) 'O *thaofa?*
 2SG.FACT be.hungry
 'Are you hungry?'
 (2) ... *to'a 'e-ki keka tha'a.*
 people that-PL 3PL.SEQ flee
 '...(and) the people fled.'

Direct objects other than 3rd person are indexed by means of independent personal pronouns:

- (3) *Nia e³ kwa'e nau 'ana alafolo.*
 3SG 3SG.FACT hit 1SG INST k.o.club
 'He hit me with an alafolo club.'

In the case of 3rd person pronominal objects, there are two strategies available. One is to use the independent personal pronoun:

- (4) 'O *riki kera?*
 2SG.FACT see 3PL
 'Did you see them?'

The other is to use the object-marking suffix:

- (5) 'O *riki-da?*
 2SG.FACT see-3PL.OBJ
 'Did you see them?'

If the direct object participant is encoded by a lexical NP, the verb carries the object-marking suffix *-a* regardless of the grammatical number of the object; cf. (6) and (7):

- (6) *Nau ku rongo-a kini 'eri.*
 1SG 1SG.FACT hear-3.OBJ woman that
 'I heard the woman.'

2. The factative subject markers have non-future reference; the non-factive markers have future reference, and they are also used to express the imperfective aspect with dynamic verbs. The main function of the sequential markers is to express sequences of situations.

3. The 3rd person singular factative subject marker has two free variants, *e* and *'e*; cf. (3) and (40b).

- (7) *Nau ku rongo-a kini 'e-ki.*
 1SG 1SG.FACT hear-3.OBJ woman that-PL
 'I heard the women.'

(Without a lexical NP, the suffix *-a* indexes only 3rd person singular objects; see (12c) below.)

The independent pronouns are invariable: the same forms are used regardless of syntactic position (subject, object, possessor); see, for example, the 3rd personal singular pronoun *nia* in (3) above and (8) below:

- (8) *Nau ku rongo nia.*
 1SG 1SG.FACT hear 3SG
 'I heard him.'

The various pronominal forms (the independent pronouns, the subject-tense markers, the object suffixes, and the possessive suffixes) distinguish three numbers: singular, dual, and plural. Example (9) shows the 3rd person dual independent pronoun *keero'a* in object position:

- (9) *'O riki keero'a?*
 2SG.FACT see 3DU
 'Did you see the two of them?'

Compare (4) above, which contains the 3rd person plural pronoun *kera*.

It should be noted though that with the exception of the independent pronouns the plural forms are not infrequently used in place of the corresponding dual forms. For example, in (10) the plural sequential subject marker is used instead of the dual marker (cf. *keko* in (29) below):

- (10) *Roo wane baa ki keka oli na'a faafi-a roo subi baa ki.*
 two man that PL 3PL.SEQ return PERF with-3.OBJ two k.o.club that PL
 'The two men went back with the two *subi* clubs.'

Three classes of transitive verbs can be distinguished in To'aba'ita on the basis of their form. One takes the transitive suffix *-Ca'i/-Cani*, where *C* is a variable consonant, including zero. The form *-Ca'i* is used with independent pronouns as direct object, while *-Cani* is used when an object-marking suffix is attached:

- (11) a. *futa*
 'be born'
 b. *futa-nga'i nau*
 give.birth.to-TR 1SG
 'give birth to me'
 c. *futa-ngani-a wela.*
 give.birth.to-TR-3.OBJ child
 'give birth to a child.'

The second type takes the transitive suffix *-Ci*, regardless of the type of direct object:

- (12) a. *ngata*
 'speak'
 b. *ngata-fi nia*
 scold-TR 3SG
 'scold him/her'
 c. *ngata-fi-a*
 scold-TR-3.SG.OBJ
 'scold him/her.'

The third type of transitive verb takes neither *-Ca'i/-Cani* nor *-Ci*:

- (13) a. *rongo*
 'hear, listen'
 b. *rongo 'oe*
 hear 2SG
 'hear you'
 c. *rongo-da*
 hear-3PL.OBJ
 'hear them.'

With some verbs, the relation between the intransitive and the corresponding transitive verb is causative, as in (11) above, while with others it is applicative, as in (12). This is true of all three derivational processes exemplified above. And as examples (12a–c) show, the semantic relation between the source verb and the derived verb need not be fully predictable ('speak' vs. 'scold').

Besides the derivational processes just discussed, there is another way to form causative transitive verbs, and that is by means of the prefix *fa'a*-:

- (14) a. *kuukuru*
 'be.short'
 b. *fa'a-kuukuru-a*
 CAUS-be.short-3SG.OBJ
 'shorten it, make it short(er).'

We can now turn to the various ways of encoding reciprocal situations.

3. Lexical reciprocals

Before considering the various types of reciprocal construction, I will briefly discuss lexical reciprocals, that is verbs whose reciprocal interpretation is not signalled in any overt way. Such verbs are, or may be, semantically transitive, that is, the event is or may be directed at another participant, and they do have formally transitive variants, but they can be used intransitively to encode reciprocal situations. Since lexical reciprocals do not overtly signal the reciprocal nature of a situation, they may be ambiguous between a reciprocal and a non-reciprocal interpretation, the degree of ambiguity being dependent on the meaning of the verb.

Lexical reciprocals are found both with symmetrical and with non-symmetrical predicates. The first set of examples below illustrates a symmetrical predicate. To'aba'ita has a verb *o'e* 'to copulate, have sex', which can be used both transitively and intransitively, as in (15) and (16) respectively:

- (15) *Wane e o'e-a kini.*
 man 3SG.FACT copulate.with-3.OBJ woman
 'The man copulated with the woman.'
- (16) *Wane e o'e faafi-a kwai-na.*
 man 3SG.FACT copulate against-3.OBJ spouse-3SG.POSS
 'The man committed adultery against his wife.'

The verb can also be used intransitively with a non-singular subject to express a reciprocal situation:

- (17) *Keero'a kero o'e.*
 3DU 3DU.FACT copulate
 'The two of them copulated (with each other).'

Even though (17) could in principle encode a non-reciprocal situation (each of the two people copulating with some other person), the normal interpretation is reciprocal.

Examples (20) and (21) further below show that non-symmetrical predicates also can encode reciprocal situations without any overt marking of reciprocity. Here too it is the intransitive variants of the verbs that are used. To'aba'ita has an intransitive-transitive pair of verbs *to'o* (vi) 'to hit (sth), hit/impact with a bang/thud' and *to'e* (vt) 'to hit sb/sth, nudge sb', with different vowels in the second syllable. Example (18) demonstrates the use of the intransitive variant to encode a non-reciprocal situation, and (19) illustrates the transitive variant:

- (18) *Te'e fa niu e to'o.*
 one CLF coconut 3SG.FACT impact
 'A coconut fell (to the ground from a tree) with a thud.'
- (19) *Wane e to'e nau.*
 man 3SG.FACT nudge 1SG
 'The man nudged me.'

And as sentence (20) shows, the intransitive variant *to'o* can be used with a non-singular subject to express a reciprocal situation:

- (20) *Roo tarake kere⁴ to'o.*
 two truck 3PL.FACT impact
 '(The) two trucks collided.'

The meaning of (20) is more likely to be reciprocal than non-reciprocal ('The two trucks hit something').

4. The 3rd person plural factative subject marker has two free variants, *kere* and *kera*; cf. (20) and (23).

On the other hand, the next example is vague as to whether the situation being encoded is a reciprocal or a non-reciprocal one, very much like its English counterpart.

- (21) *Roo wane kere ngalungalu.*
 two man 3PL.FACT speak.angrily.RED
 ‘The two men spoke angrily.’

Compare:

- (22) *ngalu-fi-a*
 speak.angrily-TR-3SG.OBJ
 ‘speak angrily to sb, berate.’

There is a way of making it explicit that the activity of speaking angrily is reciprocal; see example (26) in Section 4.

To summarize: in To’aba’ita, both symmetrical and non-symmetrical predicates can function as lexical reciprocals. With lexical reciprocals, the participants in a reciprocal situation are encoded only once, as subjects. As will be seen in the next section, To’aba’ita has a reciprocal construction where the relevant participants are encoded exclusively as subject.

4. Morphological reciprocals

To’aba’ita has a morphological reciprocal construction formed by means of the prefix *kwai-*, accompanied, under certain conditions, by the suffix *-i*. The suffix *-i*, used only in conjunction with *kwai-*, is used with most (but not all) verb stems of two morae; it is not used with stems of more than two morae, excluding the causative prefix *fa’a*; see (55) in Section 8.1.1. (To’aba’ita lexical morphemes are at least bimoraic.) For example:

- (23) *Roo wela kera kwai-kwa’e-i.*
 two child 3PL.FACT REC-hit-REC
 ‘The two children hit each other.’
- (24) *Kini bia wane kera kwai-’oli-i.*
 woman and man 3PL.FACT REC-embrace-REC
 ‘The woman and the man embraced.’
- (25) *Roo wela kero kwai-ili-fa’i.*
 two child 3DU.FACT REC-imitate-TR
 ‘The two children imitated each other.’
- (26) *Roo wane kere kwai-ngalu-fi.*
 two man 3PL.FACT REC-berate-TR
 ‘The two men spoke angrily to each other.’

Compare (26), which contains a morphological reciprocal, and (21) in the preceding section, where the intransitive, non-reciprocal form *ngalungalu* is used to (non-explicitly) encode the same type of reciprocal situation.

The morphological reciprocal construction is used not only with non-symmetrical predicates, as in the examples above, but also with symmetrical predicates:

- (27) *Roo wane kera kwai-toda-i.*
 two man 3PL.FACT REC-meet-REC
 'The two men met.'

Although a reciprocal situation typically consists of two relations (A to B, and B to A), this is not necessarily the case. The situation encoded in (28) consists of more than two reciprocal relations:

- (28) *To'a fuu kera firu keka kwai-kwa'e-i.*
 people that.down 3PL.FACT fight 3PL.SEQ REC-hit-REC
 'The people down there are fighting, hitting each other.'

The morphological reciprocal construction appears restricted to use with transitive non-reciprocal verbs. However, clauses with morphological reciprocals are syntactically intransitive: the relevant participants are encoded only as subject; there is no direct object.

Further examples of morphological reciprocals will be given in Section 7.

5. Pronominal means of expressing reciprocity

To'aba'ita has another way of expressing reciprocal situations which may, but need not, employ an explicit marker of reciprocity. This construction uses a pronominal form in non-subject position that is co-referential with the (non-singular) subject. For convenience, I will refer to this way of encoding reciprocal situations as the "pronominal reciprocal construction". Note that the term "pronominal reciprocal construction" does not identify a construction that encodes exclusively reciprocal situations; as discussed in what follows, the same construction may be used to encode non-reciprocal situations. In the context of the present discussion, the term "pronominal" subsumes the independent personal pronouns and the possessive suffixes.

In example (29), the 3rd person dual independent pronoun co-referential with the subject occurs in direct object position:

- (29) *Keero'a keko thathami keero'a 'a-fa bongi 'eri.*
 3DU 3DU.SEQ like 3DU at-CLF day that
 'The two of them liked each other on that day.'

In the context in which sentence (29) occurs (in a text), the situation being encoded is reciprocal (see (39) in Section 7); however, out of context the object pronoun *keero'a* could be non-coreferential with the subject pronoun ('they_i liked them_j'), or it could be co-referential with the subject, but the situation being encoded would be reflexive rather than reciprocal ('they liked themselves'). Following is another example:

- (30) *Roo wane kere ilama-ta'i keero'a.*
 two man 3PL.FACT spite-TR 3DU
 'The two men spite each other.'

Sentence (30) could also be given a non-reciprocal interpretation: ‘The two men spite them.’

The various types of reciprocal construction will be compared in Section 7, but some remarks on the differences between morphological and pronominal reciprocals are in order at this point. As mentioned in Section 4, morphological reciprocals are restricted to use with transitive verbs, that is to cases where the relevant participants would be the subjects and the direct objects in the corresponding non-reciprocal sentences. Pronominal reciprocals are not restricted in this way: a pronominal form co-referential with the subject may occur not only in direct object position, as in (29) and (30) above, but also in other positions. In (31), the independent pronoun functions as object of the preposition *uri*:

- (31) *Wane na'i bia thaari na'i kero 'onionga uri keero'a ka tootoo*
 man this and girl this 3DU.FACT tease toward 3DU 3SG.SEQ stay.RED
bana.
 only
 ‘The man and the girl keep teasing each other.’

In the next example, it is the possessive suffix on the direct object that is co-referential with the subject:

- (32) *Kero musu-a babali-daro'a.*
 3DU.FACT kiss-3.OBJ cheek-3DU.POSS
 ‘The two of them kissed each other on the cheek.’
 lit. ‘The two of them kissed their cheeks.’

And in (33), the same possessive suffix, co-referential with the subject, is attached to the recipient preposition *a*:⁵

- (33) *Roo kini kero tonafale i a-daro'a.*
 two woman 3DU.FACT give.present to RECIP-3DU.POSS
 ‘The two women gave presents to each other.’

Since the pronominal forms, of themselves, do not mark reciprocalness, pronominal reciprocals may be ambiguous between a reciprocal and one or more non-reciprocal interpretations. This is true of all the examples above. So (32) could also mean ‘They_i kissed them_j on the cheeks.’ (For obvious reasons a reflexive interpretation is not available here.) To make it explicit that the situation being encoded is reciprocal, the pronominal construction may be used in an explicitly reciprocal periphrastic construction, which is discussed in the next section.

5. The so-called “possessive” suffixes are used in possessive as well as some other types of construction; see (36) for another use of the possessive suffix.

6. Periphrastic reciprocals

There are two subtypes of the periphrastic reciprocal construction, depending on the marker used. One subtype, the more common of the two, employs the element *kwailiu* after the pronominal form co-referential with the subject. *Kwailiu* consists of the intransitive verb *liu* 'to walk past/around, pass (by), roam (about)' and the prefix *kwai-*, which is also used to form morphological reciprocals. (Even though *liu* is bimoraic, *kwailiu* does not take the suffix *-i*.) The next set of sentences contains periphrastic reciprocal constructions using *kwailiu* with the pronominal forms in direct object positions (see (34) and (35)) and an oblique object position (see (36)). For the sake of simplicity, *kwailiu* is written as a single form.

- (34) *Roo wane kera ngata-fi keero'a kwailiu.*
 two man 3PL.FACT berate-TR 3DU REC
 'The two men berated each other.'
- (35) *Kamare'a mere 'adomi kamare'a kwailiu tai si manga.*
 1DU(EXC) 1DU(EXC).FACT help 1DU(EXC) REC some CLF time
 'We help each other sometimes.'
- (36) *Keko thathamia-a u'unu 'a-daro'a⁶ bii keero'a kwailiu.*
 3DU.SEQ like-3.OBJ converse BEN-3DU.POSS COM 3DU REC
 'The two of them liked to chat with each other.'

Note that even though *kwailiu* is derived from a verb, the *kwailiu* reciprocal construction does not involve verb serialisation because, unlike in verb serialisation in To'aba'ita, an oblique object may intervene between the semantically main verb and *kwailiu*.

The other subtype of the periphrastic reciprocal construction uses the reversive ('back and forth') marker *olili*, which is a reduplication of the intransitive verb *oli* 'to return, move back' (see also Section 8.2.2 below). *Olili* follows the semantically main verb in a serial verb construction:

- (37) *Roo kini kero fale olili 'ani keero'a.*
 two woman 3DU.FACT give REVERS to 3DU
 'The two women gave [presents] to each other.'

The periphrastic reciprocals are typically used in conjunction with pronominal reciprocals (because the latter are not explicitly reciprocal), but they can be used in conjunction with the morphological reciprocal construction:

- (38) *Botho kera kwai-'ala kwailiu.*
 pig 3PL.FACT REC-bite REC
 'The two pigs bit each other.'

The semantic contribution of the periphrastic reciprocal markers is discussed in the next section.

6. The possessive suffix on 'a is co-referential with the subject, but it does not mark reciprocalness here.

7. The various types of reciprocal constructions compared

As we have seen, To'aba'ita has three basic types of reciprocal construction: morphological reciprocals, which use the prefix *kwai-*, sometimes in combination with the suffix *-i*, on the verb, pronominal reciprocals, and periphrastic reciprocals with *kwailiu* or *olili*. The periphrastic construction is used in conjunction with the pronominal construction and – less commonly – with the morphological construction.

Morphological reciprocals on the one hand and pronominal reciprocals on the other are different in that in the former the relevant participants are encoded only once, as subject, while in the latter they are encoded twice, once as subject and once as non-subject. In a non-reciprocal situation, such as that encoded in 'X hit Y', there are two participants in a non-symmetrical relation to each other: they play different roles in the situation (agent vs. patient). On the other hand, in a reciprocal situation, such as that encoded in 'X and Y hit each other', there are (typically) two participants that play identical pairs of roles in the situation (agent and patient). On account of that, the two participants in a reciprocal situation are less distinct from each other than the two participants in a non-reciprocal situation. (For the notion of distinctness of participants see Langacker & Munro (1975), Langacker (1976), Hopper & Thompson (1980), and for its relevance to To'aba'ita reciprocals Lichtenberk (1991a)).

The morphological and the pronominal constructions are motivated by the nature of reciprocal situations in different ways. Morphological reciprocals, where the participants are encoded only once, reflect the relatively low degree of distinctness of the two participants: the participants are treated as being involved in the situation in the same way. On the other hand, pronominal reciprocals, where the two participants are encoded (at least) twice, reflect the fact that the overall reciprocal situation consists of a pair of relations, and that in each relation the two participants occupy different roles. In other words, the two participants in a reciprocal situation can be viewed from different perspectives: as playing the same pair of roles in the overall situation, which motivates single encoding; or as playing distinct roles in the relations that constitute the overall situation, which motivates double encoding. (For more detailed discussion of the motivatedness of the two types of reciprocal constructions in To'aba'ita and in general see Lichtenberk (1991a) and (1994), respectively.) It is the double encoding of the participants that gives the pronominal construction greater flexibility relative to the morphological construction: the relevant participants need not correspond to the subject and the direct object participants in the corresponding non-reciprocal situations.

In some cases, one and the same reciprocal situation may be encoded in more than one way. In the next example taken from a text, a reciprocal situation is encoded three times in three different ways: first by means of two separate clauses, each one encoding one of the relations that constitute the overall situation, followed by a non-explicit pronominal reciprocal construction, which is then followed by a pronominal construction with a periphrastic reciprocal:

- (39) *Thaari 'eri ka thathami-a tha wela 'eri ma wela 'eri mena ka*
 girl that 3SG.FACT like-3.OBJ ART child that and child that CONTR 3SG.SEQ
thathami-a la'u bo'o thaari 'eri. Keero'a keko thathami keero'a 'a-fa bongi
 like-3.OBJ also INTS girl that 3DU 3DU.SEQ like 3DU at-CLF day
'eri. Keero'a keko kani-a ruanaa. Keko thathami keero'a kwailiu.
 that 3DU 3DU.SEQ tie-3.OBJ friendship 3DU.SEQ like 3.DU REC
 'The girl liked the boy (lit. 'child'), and the boy, too, liked the girl. They liked each other
 on that day. They formed a friendship. They liked each other.'

In Section 6 it was said that the form *kwailiu* can be used to explicitly identify a situation encoded in a clause as reciprocal. While this is true, in (39) *kwailiu* is used in the last sentence even though the reciprocalness of the situation is made explicit in the first sentence. Here the subsequent use of *kwailiu* serves not to disambiguate but rather to emphasise the reciprocalness of the relations.

In the next pair of examples, taken from the same text as (39), a pronominal reciprocal construction (40a) and a morphological reciprocal construction (40b) refer to the same instance of meeting:

- (40) a. ... *keero'a keko 'olo-a fa thato na keero'a keki toda*
 3DU 3DU.SEQ agree.on-3.OBJ CLF day REL 3DU 3DU.NFACT meet
keero'a...
 3DU
 '... they [the boy and the girl] agreed on a day when they would meet...'
 b. ...'e *lae ura kula baa nia toda-a thaari baa ma keero'a*
 3SG.FACT go to place that 3SG meet-3.OBJ girl that and 3DU
keko 'olo 'i ei keki kwai-toda-i.
 3DU.SEQ agree at there 3DU.NFACT REC-meet-REC
 '... he went to the place where he had met the girl and where they had agreed to meet.'

The next pair of examples shows a morphological reciprocal (41a) and a periphrastic reciprocal (41b) used with the verbs 'to swear (at)', transitive and intransitive respectively, without any obvious difference in meaning:

- (41) a. *Roo wane kera kwai-kwala-ngi.*
 two man 3PL.FACT REC-SWEAR.at-TR
 'The two men swore at each other.'
 b. *Roo wane kera kwala olili 'ani keero'a.*
 two man 3PL.FACT swear REVERS to 3DU
 'The two men swore at each other.'

Examples (39)–(41) demonstrate that one and the same reciprocal situation can be expressed in more than one way. However, there are also cases where the different reciprocal constructions are not fully synonymous. The difference in meaning has to do with the temporal configurations of the relations that constitute a reciprocal situation vis-à-vis each other. The relations may be sequential or more or less simultaneous (with various degrees of overlap). In some cases, a reciprocal construction treats the reciprocal situation as a unified whole, disregarding the nature of the temporal configuration of the constitutive relations (see Lichtenberk (1991a) for more discussion). To indicate that the

relations are sequential, To'aba'ita may use a periphrastic reciprocal. For example, in (42) the implication is that first one child hit the other and then the latter retaliated:

- (42) *Roo wela kera kwa'e keero'a kwailiu.*
 two child 3DU.FACT hit 3DU REC
 'The two children hit each other.'

On the other hand, in (43), with a morphological reciprocal, there is no indication of the temporal configuration of the instances of hitting. Even though the blows are more likely to be sequential than simultaneous, the morphological reciprocal construction presents the situation as a unified whole:

- (43) *Roo wela kera kwai-kwa'e-i.*
 two child 3PL.FACT REC-hit-REC
 'The two children fought (exchanged punches, blows).'

Similarly in the next pair of examples: sentence (44) encodes a situation where first one pig attacks the other and the latter then attacks the former, while sentence (45) is silent about the temporal configurations of the subevents:

- (44) *Botho kera kwai-'ala kwailiu.*
 pig 3PL.FACT REC-bite REC
 'The two pigs bit each other.'
- (45) *Botho kera kwai-'ala.*
 pig 3PL.FACT REC-bite
 'The two pigs were biting each other.'

In the next pair of examples, the first one implies that there was more than one instance of embracing, with person A embracing person B, and person B then embracing person A:

- (46) *Kera 'oli keero'a kwailiu.*
 3PL.FACT embrace 3DU REC
 'They embraced each other.'

On the other hand, if the two people were engaged in one mutual embrace, it would be sentence (47) that would be appropriate:

- (47) *Kera kwai-'oli-i.*
 3PL.FACT REC-embrace-REC
 'They embraced.'

For an example of the reverse marker *olili* encoding a sequential reciprocal situation see (92) in Section 8.2.2.

As pointed out in Section 5, the pronominal reciprocal construction is syntactically more flexible than the morphological construction in that it is not restricted to transitive non-reciprocal verbs. On the other hand, the pronominal construction may be ambiguous between a reciprocal and a non-reciprocal interpretation. To avoid ambiguity, a periphrastic reciprocal marker may be used. With at least one verb, the morphological and the pronominal constructions may, but need not be, combined, and there is a difference in meaning between a sentence with a combined morphological-and-pronominal

reciprocal and a corresponding sentence with only the morphological reciprocal. In (48), the two types of construction co-occur, and the meaning is that of the two participants helping each other on different occasions (A helping B on some occasions, B helping A on other occasions):

- (48) *Kera kwai-'adomi ngado ba-daro'a 'ani keero'a.*
 3PL.FACT REC-help always just-3DU.POSS to 3DU
 'The two of them always help each other.'

Sentence (49), on the other hand, contains only the morphological reciprocal, and the meaning is that of a collective action, the participants co-operating, working in unison:

- (49) *Kulu kwai-'adomi 'ana na'are-laa.*
 1PL REC-help with cook-NR
 'Let's do the cooking together', 'Let's co-operate in the cooking.'

The morphological reciprocal in (49) is used when the roles of the participants are non-distinct. On the other hand, the presence of the pronominal construction individuates the participants and highlights the fact that they stand in asymmetrical relations to each other in the subevents that make up the total situation encoded in (48).

Not only is the pronominal construction syntactically more flexible than the morphological construction, it is also more productive. Some verbs cannot form a morphological reciprocal, and in such cases the pronominal construction must be used, with or without a periphrastic reciprocal marker. *Lukata'i* 'to leave, abandon' is one such verb:

- (50) *Kera {luka-ta'i keero'a kwailiu / *kwai-luka-ta'i}.*
 3PL.FACT leave-TR 3DU REC REC-leave-TR
 'They left each other', i.e. 'They got divorced.'

There are also verbs that may occur in the *kwai*-...(-i) construction, but the situation that is being encoded is not reciprocal. This brings us to the topic of polysemy of the reciprocal markers.

8. Other uses of the reciprocal markers

8.1 The morphological reciprocal

8.1.1 *Depatientives*

The construction *kwai*-...(-i) is used with some other functions besides encoding reciprocal situations. Of these, the most prominent one is what I refer to as the "depatientive" function. Just as morphological reciprocals, clauses with verbs in the depatientive construction are syntactically intransitive. However, while with morphological reciprocals the subject encodes jointly the subject and the direct object of the source verb, this is not the case with depatientive verbs. The subject of a depatientive verb corresponds to the subject of the source verb; the direct object of the source verb is not encoded at all. Consider the

next set of examples. In (51) the verb *labata'i* 'to harm, affect sb/sth in a bad way' is used transitively:

- (51) *Wane e labata'i nau.*
 man 3SG.FACT harm-TR 1SG
 'The man harmed me.'

In (52), with the prefix *kwai-*, the verb *labata'i* is used depatientively: the subject of (52) corresponds only to the subject of (51) rather than to the union of the subject and the object. Unlike reciprocal verbs, depatientive verbs may have a (semantically) singular subject:

- (52) *Wane baa 'e kwai-laba-ta'i.*
 man that 3SG.FACT DEPAT-harm-TR
 'The man harms people, damages, destroys things.'

With depatientive verbs, the patient (or another type of participant encoded as the direct object of the source verb) is backgrounded, not expressed. Typically, the depatientive construction is used when the identity of the patient (etc.) is not relevant. It expresses a type of situation rather than a specific occurrence of that type of situation. The patient is general; the activity encoded by the verb is directed not at a specific participant but at a certain type of entity. The sentence is primarily a statement about the agent; it characterises the agent, attributes a certain property to him, her, it. Thus, (52) above says that the man is a certain type of person: he is in the habit of harming people, damaging things.

In fact, the verb *labata'i* cannot be used in the morphological reciprocal construction. In the next example, even though the subject is non-singular, the interpretation is depatientive, not reciprocal:

- (53) *Roo wane kero kwai-laba-ta'i.*
 two man 3DU.FACT DEPAT-harm-TR
 'The two men harm people, etc.'; not *'The two men harm each other.'

To express a reciprocal situation, the verb *labata'i* must occur in the pronominal construction, with or without a periphrastic reciprocal marker:

- (54) *Roo wane kero laba-ta'i keero'a.*
 two man 3DU.FACT harm-TR 3DU
 'The two men harm each other.'

Following is another example of the depatientive construction expressing a characteristic of the referent of the subject:

- (55) *Oomea 'eri 'e kwai-fa'a-ma'u-i 'asia na'a.*
 enemy that 3SG.FACT DEPAT-CAUS-be.afraid-DEPAT very
 'The enemy is very frightening.'

(For co-occurrence of the prefixes *kwai-* and *faqa-* see Section 9.)

Depatientive verbs are also used in noun phrases as modifiers of the head noun to express a characteristic of the referent of the noun phrase (which corresponds to the subject of the depatientive verb). The depatientive verb is linked to the head noun by the particle *ni*:

- (56) *wane ni kwai-laba-ta'i.*
 man PRTL DEPAT-harm-TR
 'man who harms others, etc.'

Examples (57) and (59) also contain noun phrases with depatientive verbs as modifiers:

- (57) ... *to'a ni kwai-tole-i.*
 people PRTL DEPAT-lead-DEPAT
 '(political, religious) leaders'; compare:
- (58) ... *ma wane 'eri ka tole-a wela 'eri ...*
 and man that 3SG.SEQ lead-3.OBJ child that
 '... and the man led the child ...'
- (59) *wane ni kwai-'olo-fi.*
 man PRTL DEPAT-give.false.promise-TR
 'man of false promises'; compare:
- (60) *Wane 'e 'olo-fi nau.*
 man 3SG.FACT give.false.promise-TR 1SG
 'The man gave me a false promise.'

Although depatientive verbs are typically used to encode types of situations and to attribute properties or characteristics to participants, they may be used to refer to specific occurrences of events; but here too the patient is backgrounded, suppressed. What is relevant is a participant's performance of the activity, not the identity of the patient:

- (61) *Nau ku kwai-amasi 'e a'i ta wane si fula.*
 1SG 1SG.FACT DEPAT-call.sb.for.help 3SG.FACT NEG.VB some man NEG arrive
 'I called for help, (but) nobody came'; compare:
- (62) *amasi-a to'a.*
 call.sb.for.help-3.OBJ people
 'call people to (come and) help.'

The next example also encodes a unique situation. Here the subject of the depatientive verb is inanimate and non-agentive:

- (63) *Anunu e thaungi-a Diabana ka kwai-talo-fi.*
 earthquake 3SG.FACT hit-3.OBJ J. 3SG.SEQ DEPAT-spread.through-TR
 'The news of the earthquake in Japan spread, became known.'
 lit. 'An earthquake hit Japan, and it [the news about it] spread.'

The meaning of the transitive verb *talofi* is 'to spread/resound/be heard throughout a place (about a sound, news)', with the place encoded as the direct object:

- (64) *O'o e talo-fi-a fanua.*
 drum 3SG.FACT spread.through-TR-3SG.OBJ place
 'The (sound of the) drum was heard throughout the place.'

In (65) a nominalised form of *'adomi* 'to help' is used depatientively:

- (65) ... 'i laa kwai-'adomi-a na God o ili-a i a-mili'a.
 in inside DEPAT-help-NR REL God 2SG.FACT do-3.OBJ for BEN-1PL.POSS
 '... in the help that you, God, give us' (lit. 'do for us').

Examples (48) and (49) in Section 7 above demonstrate that the form *kwai-'adomi* can also function as a morphological reciprocal.

The depatientive and the reciprocal functions are related in two ways. One is the backgrounding of one of the core roles in a transitive situation (Lichtenberk 1991a). In a reciprocal situation, the two participants are relatively non-distinct from each other because they both play identical pairs of roles in the situation: the agent-patient opposition (for example) is not salient. Recall that with morphological reciprocals the two participants are encoded only once, in subject, agent position; there is no overt encoding of the patient. Prominence is given to the agent roles: two or more participants are involved in performing the same event. The fact that those same participants are also patients is signalled only by the form of the verb. And with depatientives, it is only the agent that is relevant; the exact identity of the patient is not relevant, and the patient is backgrounded, not expressed.

The other factor is plurality of relations of the same type that constitute an overall situation. In reciprocal situations, there is plurality of relations: A to B, and B to A. And depatientive verbs typically encode types of events that take place habitually, frequently, even though there may be just a single participant involved in the performance of those events. As will be seen in what follows, the factor of plurality of relations is relevant to other types of polysemy involving reciprocals (see Lichtenberk (1997) for general discussion of the notion of plurality of relations). The use of the depatientive construction to encode unique events is most likely an extension from the function of encoding habitual, customary events.

8.1.2 Chaining situations

In a chaining situation, a number of participants are involved in the same type of relation, but not reciprocally: A to B, B to C, C to D, etc. (see Lichtenberk 1985). To encode chaining situations, To'aba'ita uses the form *kwaisuli*. *Kwaisuli* derives historically from a transitive verb ***suli* 'to follow' (Lichtenberk 1991b) and the prefix *kwai-* used in morphological reciprocals.⁷ *Kwaisuli* can be used to refer to a spatial or a temporal configuration of the relations; see (66) and (67) respectively:

- (66) *Tini-na kofe e⁸ too kwaisuli.*
 tin-3SG.POSS coffee 3SG.FACT be.located CHAIN
 'The tins of coffee are lined up.'

7. In present-day To'aba'ita, *suli* functions as a prolative preposition 'along, following', 'during', 'about' and as a conjunction 'because', 'until'.

8. The singular subject marker is used here to refer to the collectivity of the tins rather than conceptualising them individually.

- (67) *Wela kera futa kwaisuli.*
 child 3PL.FACT be.BORN CHAIN
 'The children (siblings) were born in quick succession.' (This could be said about children born to the same parents in successive years.)

Chaining relations also are characterised by plurality of relations of the same kind.

8.1.3 *Non-reciprocal middles*

The *kwai*...(-*i*) construction is also used with a few verbs to impart to them a meaning reminiscent of some of the functions of the middle voice found in a number of Indo-European languages. As is the case with morphological reciprocals and with deponentives, clauses with (non-reciprocal) middle-like meanings are intransitive. In some cases, the referent of the subject acts on himself, herself, or for his or her own benefit:

- (68) ... *thaina-na bia maka nia kera kwai-thathai na'a na ni*
 mother-3SG.POSS and father 3SG 3PL.FACT MID-make.ready PERF COMP ART
keero'a sifo 'i maa-na uusia.
 3DU descend to place-3SG.POSS market
 '... his mother and father had got (themselves) ready to go down to the market.'

Without *kwai*-, *thathai* can function as an intransitive verb 'to be ready' and as a transitive verb 'to make ready, provide sb (with sth)'. Unlike intransitive *thathai*, which signifies being in a state, *kwai-thathai* signifies assuming, entering a state (getting ready).

The notion of change of state is also present in the next example. To'aba'ita has an intransitive verb *karangi* 'to be close' and a transitive variant *karangi* 'to be close to'. The latter can take the prefix *kwai*- to signify a change of state: 'to move close(r), approach':

- (69) *Kera kwai-karangi na-mai.*
 3PL.FACT MID-approach PERF-hither
 'They have moved closer.'

The middle form *kwai-karangi* is also used, in free variation with the transitive variant *karangi-a* 'to be close to it', to encode imminent events:

- (70) *Wane 'e {kwai-karangi / karangi-a} kai oli na'a.*
 man 3SG.FACT MID-approach be.close.to-3SG.OBJ 3SG.NFACT return PERF
 'The man is about to go back.'

The verb *kwai-karangi* 'to move close(r), approach' encodes what Kemmer (1993) terms 'translational motion'. According to Kemmer, translational motion is not infrequently encoded by the middle-voice construction in languages where the middle voice is well developed. In To'aba'ita the non-reciprocal middle-like function of *kwai*...(-*i*) is not very common; *kwai-karangi* is the only middle-verb form encoding translational motion I am aware of.

The non-reciprocal middle uses of *kwai*...(-*i*) are different from the deponentive function: with deponentives, the event is directed from one participant (encoded as subject) to another, different participant (not encoded); while with the middles such as the ones in (68) and (69), the participant both performs and undergoes the event.

8.1.4 Examples of other verbal uses of *kwai-*

In addition to the types of extension of the morphological reciprocal construction discussed above, there are also a number of cases where, today at least, the motivation for the extension is not obvious. (All of the cases I am aware of contain only the prefix *kwai-*, not the suffix *-i*.) The source verbs are transitive, and most, though not all, of the derived verbs are intransitive; they do not take direct objects. Following is a small selection.

To'aba'ita has a transitive verb *kulufa'i/kulufani* 'to hang, suspend sth' (cf. *kulu* 'to hang (vi), be suspended'). The form *kwai-kulufa'i* is used to characterize physical infirmity of old people, as in (71), and to describe a kind of weather, as in (72):

- (71) *Wane e ara'i ka kwaikulufa'i na'a.*
 man 3SG.FACT be.old 3SG.SEQ be.infirm PERF
 'He is an old man and has become infirm (can walk, move only with difficulty).'
- (72) *Fanua 'e kwaikulufa'i.*
 place 3SG.FACT be.overcast
 'It's a "heavy", dull day, overcast with no breeze.'

There is a reflexive transitive verb *taofa'i* 'to trip, stumble over sth', whose object must be co-referential with the subject; for example:

- (73) *Nau ku tao-fa'i nau 'ana fau.*
 1SG 1SG.FACT stumble-TR 1SG over stone
 'I tripped, stumbled over a stone.'

The derived form *kwaitaofa'i* is used with the meaning 'to cause bad blood (among people)'. The people affected are encoded as an oblique object; that is, *kwaitaofa'i* is not used depatientively. For example:

- (74) *Botho e kwaitaofa'i i ma'aluta-da.*
 pig 3SG.FACT cause.bad.blood in among-3PL.POSS
 'The pig (affair) is causing bad blood among them.' (One family's pig keeps rooting up the soil around the village.)

There is a transitive verb *kookodo* 'to carry sth on a stick over one's shoulder, the load being suspended from one end of the stick (the rear end)' (cf. *kodo* 'stick'). And there is *kwaikodo*, also a transitive verb, which refers to carrying two loads on a stick over one's shoulder, the two loads being suspended from the opposite ends of the stick, one at the front, one at the back; see (75) and (76) respectively:

- (75) *Nau kwai kookodo-a baeke-'e koukou.*
 1SG 1SG.NFACT carry.on.stick-3.OBJ bag-of cocoa
 'I'll carry the bag of cocoa seeds on a stick.'
- (76) *Nau kwai kwaikodo-a roo baeke-'e koukou.*
 1SG 1SG.NFACT carry.on.stick-3.OBJ two bag-of cocoa
 'I'll carry the two bags of cocoa seeds on a stick.'

Notice that the verb *kwaikodo* has a direct object (indexed on the verb by means of the suffix *-a*), which is never the case with morphological reciprocals.

8.1.5 A variant of the reciprocal prefix used with nouns

To'aba'ita has a prefix *wai-*, which is historically a doublet of *kwai-* (see further below). *Wai-* is used as a derivational prefix with some kinship terms. With certain of those kinship terms, the structure of the derived noun is *wai-N-na*, where N is a kinship term, and *-na* is a suffix that elsewhere functions as the 3SG possessive marker (see (77) and (79) below). In such derived kinship terms, *-na* does not have a possessive-marking function; it does not contrast with any of the other possessive suffixes there. Some of the derived terms signify a collection of people in a reciprocal, symmetrical kinship relation. Compare (77) and (78), and (79) and (80):

- (77) *do'ora-na*
sibling.of.the.same.sex-3SG.POSS
'his brother', 'her sister.'
- (78) *wai-do'ora-na*
'siblings (of the same or opposite sex).'
- (79) *kwai-na*
spouse-3SG.POSS
'his/her spouse.'
- (80) *roo wai-kwai-na*
two spouses
'married couple.'

Also included here is the term for 'friend, trading partner' *ruana*. *Ruana* takes the prefix *wai-*, but not the suffix *-na*, most likely because the noun is historically complex, consisting of *rua* 'two' and the 3SG possessive suffix *-na*. (The 3SG possessive suffix is added to cardinal numerals to form ordinal forms; i.e. a friend is one's second (person).) In the example below, *wai-ruana* occurs in the predicate:

- (81) *Kamare'a roo kini mere wai-ruana.*
IDU two woman IDU.FACT friends
'The two of us, women, are friends, trading partners.'

The terms for 'mother' and 'father' also can occur in the *wai-N-na* construction to form collective nouns. However, here the relations between the members of the set are converse rather than symmetrical: the source noun identifies one of the relations, while the other, converse relation is only implied. Compare (82) and (83), and (84) and (85):

- (82) *thaina-na*
mother-3SG.POSS
'his/her mother'
- (83) *wai-thaina-na*
'mother's group'; i.e. mother and her child(ren), (but not her husband).

If the husband/father is included in the group (whether his wife is present or not), the term *wai-maka-na* must be used:

- (84) *Wai-maka-na baa ki kere tatha na'a.*
 father's.group that PL 3PL.FACT pass PERF
 'The man and his family have gone by'; compare:
- (85) *maka nia*
 father 3SG
 'his/her father.'

The derived kinship terms exemplified above take the suffix *-na* even in those cases where the source noun does not take possessive suffixes. To'aba'ita has two types of possessive construction. One takes possessive suffixes to index the possessor (in addition, the possessor may be encoded by means of a lexical NP); see (82) above. The other type does not take possessive suffixes; the possessor is expressed only by means of an NP (pronominal or lexical); see (85).

The prefix *wai-* is also optionally added to some other kinship terms by itself, without the suffix *-na*. The base form and the derived form are synonymous; the derived form does not have a collective significance:

- (86) (*wai-*)*di'i nau*
 cross.cousin 1SG
 'my cross-cousin.'
- (87) (*wai-*)*funga nau*
 parent.in.law 1SG
 'my father-in-law', 'my mother-in-law.'

Although *wai-* and *kwai-* are phonologically different (*w* is a labio-velar glide /w/, while *kw* represents a labio-velar stop /kp/), historically they are doublets, as consideration of data from other Oceanic languages, more or less closely related to To'aba'ita, reveals. The 'Are'are language, which is closely related to To'aba'ita, has the form *hai* (Geerts 1970), used to form morphological reciprocals: *hai-raputa'i* 'to beat one another'. *Hai* is also used to form kinship terms in a way analogous to that found in To'aba'ita: *rua hai mama-na* 'father and child' (*rua* 'two', *mama* 'father' *-na* 3SG possessive suffix). And the language also has the form *hai-riu* 'here and there, around, about, scattered; reciprocally' (*riu* 'to pass; spread (of epidemics), travel), which corresponds to the To'aba'ita periphrastic reciprocal marker *kwailiu*. Fijian, more distantly related to To'aba'ita, has the prefix *vei-* (Milner 1972), used, sometimes in combination with the suffix *-i*, to form morphological reciprocals: *vei-kila-i* 'to know each other'. The prefix is also used with some kinship terms, again in a way analogous to that found in To'aba'ita: *vei-taci-ni* 'siblings (of same or opposite sex)' (*taci* 'younger sibling of same sex'), *vei-tama-ni* 'man and his family, man and his children' (*tama* 'father'). And in Futunan, also a fairly distant relative of To'aba'ita, *fe-* is used to form morphological reciprocals and it is also found with at least one kinship term: *fe-taina* 'siblings' (*taina* 'sibling') (see Moyses-Faurie, Ch. 35 on East Futunan).

Blust (forthcoming) has reconstructed ***payi-* for Proto-Eastern-Malayo-Polynesian as a prefix of reciprocal and collective action, while Ross (1988) has reconstructed the forms ***payi-* and ***pa(k)i-* for Proto-Oceanic (a descendant of Proto-Eastern-Malayo-Polynesian). The expected reflex in To'aba'ita is **fai-*. For some reason, in the proto-

language from which To'aba'ita and a few other very closely related languages are descended the prefix underwent an irregular change of earlier ***f* to ***w*. Later on in the history of these languages, ***w* changed to *kw* (Lichtenberk 1988), but inexplicably, the prefix ***wai-* did not undergo the change in its kinship-term function. Whatever the Proto-Oceanic form(s) may have been, the use of 'Āre'āre *hai-*, Fijian *vei-*, Futunan *fe-*, and To'aba'ita *kwai-/wai-* with verbs to form morphological reciprocals and with kinship terms is clearly the same basic pattern.

It is not difficult to see the connection between the reciprocal and the kinship-term functions. Kinship terms are inherently relational, and most of the forms derived by means of the prefix *wai-* are collective, semantically plural. That is, there is plurality of relations: two or more participants in a reciprocal/converse relation to each other.

8.2 The periphrastic reciprocals

8.2.1 *Dispersive situations*

In a dispersive situation, as the term is used here, there are multiple occurrences of an event, each instance of the event being characterised by a different directionality from a common point of origin. Dispersive situations are encoded by means of the form *kwailiu*. As mentioned in Section 6, *kwailiu* consists of the verb *liu* 'to walk past/around, pass (by), roam (about)' and the prefix *kwai-*. Following are a few examples of the dispersive function of *kwailiu*:

- (88) *Kera oli kwailiu.*
 3PL.FACT return DISPERS
 'They went back their own ways, to their respective places, homes'
- (89) *Keka ngali kwailiu bo-na'a 'ani-a uri si kula kera ki.*
 3PL.SEQ take DISPERS INTS-PERF with-3SG.OBJ to CLF place 3PL PL
 'They took them to their respective places.'

The subject of a verb encoding a dispersive situation may be singular:

- (90) *'Osi 'uu kwailiu 'ana ta'erau!*
 2SG.NEG throw DISPERS with rubbish
 'Don't throw the rubbish all over the place!'

Even if the subject is singular, as in (90), there is plurality of subevents/relations of basically the same kind in the overall situation.

8.2.2 *Reversive situations*

A reversive situation consists of two or more subevents of the same type with reversed directionalities: 'back and forth'. Reversive situations are encoded by means of the form *olili*, which is a reduplication of the verb *oli* 'return, move back'. To encode a reversive situation, *olili* occurs in a serial verb construction where the first verb encodes the subevents. As example (91) shows, the subject of the verb encoding a reversive situation may be singular:

- (91) *Gwau-na 'ai e lae olili.*
 head-3SG.POSS tree 3SG.FACT go REVERS
 'The top of the tree swayed back and forth.'

Reciprocal situations, specifically those where the relations are sequential to each other, are in fact a subtype of the reversive situation: two (or more) participants alternately acting on each other:

- (92) *Roo wela kere nangasi olili 'ani keero'a 'a-fa bolo.*
 two child 3PL.FACT throw REVERS to 3DU with-CLF ball
 'The two children tossed the ball back and forth to each other.'

9. Co-occurrence of the morphological reciprocal marker with other verbal morphology

To'aba'ita is not rich in derivational morphology. Other than the morphological reciprocal marker *kwai-...(-i)*, verbs may carry a transitive suffix, and the causative prefix (see Section 2 for examples). The reciprocal marker freely co-occurs with the transitive suffixes; see examples (25) and (26) in Section 4. (Even though reciprocal verbs may carry a transitive suffix, they are intransitive syntactically in the sense that they do not take direct objects.) On the other hand, I have come across no cases of co-occurrence of the causative prefix *fa'a-* and the morphological reciprocal marker when a reciprocal situation is to be encoded (but see further below). No forms **faqa-kwai-...(-i)* or **kwai-faqa-...(-i)* encoding reciprocal situations have been found in spite of attempts to elicit such forms. Verbs with the causative prefix have been found to occur only in the pronominal reciprocal construction. For example:

- (93) a. *Roo wela kera fa'a-ma'u keero'a kwailiu.*
 two child 3PL.FACT CAUS-be.afraid 3DU REC
 'The two children frighten each other.'

not:

- b. **roo wela kera kwai-fa'a-ma'u(-i).*

However, the causative prefix *fa'a-* and the prefix *kwai-* (with or without *-i*) may co-occur when the meaning is other than reciprocal. Depending on the verb, the order of the prefixes is *kwai-fa'a-* or *fa'a-kwai-* with a difference in meaning. For example, there is an intransitive verb *maruki* 'to be alive', a causative transitive verb *fa'a-maruki* 'to save sb's life, bring (back) to life', and there is also a depatientive intransitive verb *kwai-fa'a-maruki* 'to save lives, bring (people) back to life':

- (94) *wane ni kwai-fa'a-maruki.*
 man PRTL DEPAT-CAUS-be.alive
 'Saviour' (lit. 'man who saves lives').

There is also a depatientive verb *kwai-fa'a-ma'u-i* 'to frighten (people), be frightening'; cf. *ma'u* (vi) 'to be afraid' and *fa'a-ma'u* (vt) 'to frighten sb':

- (95) *Oomea 'eri 'e kwai-fa'a-ma'u-i 'asia na'a.*
 enemy that 3SG.FACT DEPAT-CAUS-be.afraid-DEPAT very
 'The enemy is very frightening.'

Notice that the form *kwai-fa'a-ma'u-i* can be used with a depatientive force but not a reciprocal force (see (93b) above).

There is a transitive verb *karangi* 'to be close to', an intransitive middle verb *kwai-karangi* 'to move close(r)' (see example (69) in 8.1.3), and there is also a causative transitive verb *fa'a-kwai-karangi* 'to cause sth to be close(r)':

- (96) *Kulu fa'a-kwai-karangi-a ba-kulu'a faafangaa na'i.*
 1PL(INC) CAUS-MID-be.close.to-3.OBJ just-1PL(INC).POSS feast this
 'Let's move the (time of the) feast closer (to now).'

There do not appear to be many verbs that can take both prefixes, in either order.

10. Summary and conclusions

To'aba'ita has two types of construction that explicitly identify a situation being encoded as reciprocal: morphological reciprocals using *kwai-...(-i)*, and periphrastic reciprocals using *kwailiu* or *olili*. The periphrastic reciprocal markers are used in conjunction with pronominal means of expressing reciprocalness and, less frequently, in conjunction with the morphological reciprocal construction.

As is typically the case cross-linguistically, the markers of reciprocal situations in To'aba'ita are polysemous. There are a number of factors that underlie, motivate the polysemies. The primary one is plurality of relations (as discussed in Lichtenberk 1997). This is true of the reciprocal, depatientive, chaining, kinship-term, dispersive and reversion uses of the forms. Another is the relative non-distinctness of the core participants in the relations that make up a reciprocal situation, by virtue of each of the participants playing the same pair of roles. Of the two roles, it is the one encoded in subject position that is the more prominent one, e.g. agent as opposed to patient. It is the backgrounding of the roles otherwise encoded in object position (e.g. patient) coupled with the plurality of relations that unite the reciprocal, chaining, depatientive, and the other middle-like uses of *kwai-...(-i)*.

The use of *kwailiu* to encode reciprocal situations is most likely a back-extension from the use of the element as a dispersive-situation marker, the dispersive-marking function being united with the reciprocal-marking function through the factor of plurality of relations. Similarly, the use of *olili* to encode reciprocal situations is an extension from the reversion function: the motivating factor is, once again, plurality of relations together with reverse directionalities of the subevents.

A number of motivating factors have been mentioned in the course of this paper as underlying the development of the polysemies. It needs to be stressed, however, that in the absence of historical and comparative evidence these suggestions, albeit not implausible, can only remain hypotheses.

The To'aba'ita elements used to encode reciprocal situations are polysemous, but it does not follow that the polysemies are a To'aba'ita-internal development. Although the possibility of independent developments in To'aba'ita and related languages cannot be discounted (as the studies included in this volume demonstrate, some such polysemies are found in other language families), it is very likely that at least some of the polysemies developed early in the history of the language. An example is the use of historically the same prefix to derive morphological reciprocals and collective kinship terms.

In many languages of the world, the reciprocal function is a later extension from a reflexive (or a more general middle) function. This is not so in the case of To'aba'ita and its relatives. A prefix marking, among other things, reciprocal situations can be reconstructed to a pre-Proto-Oceanic stage: Blust (forthcoming) has reconstructed ***payi-* for Proto-Eastern-Malayo-Polynesian as a prefix of reciprocal and collective action. I have suggested elsewhere (Lichtenberk 1997) that the reciprocal function of *kwai-* in To'aba'ita (and its cognates in other Oceanic languages) is one aspect of a more general earlier function, that of marking of plurality of relations of the same basic type that constitute an overall situation.

The origin of the proto-form from which To'aba'ita *kwai-* is descended is unknown, but there is no reason to assume that its function of marking plurality of relations, including reciprocalness, was an extension from an earlier reflexive function. This suggests that in languages that do have polysemies uniting reflexive and reciprocal meanings with other meanings of the kinds discussed here, the latter may be more closely connected to the reciprocal function than to the reflexive function.⁹

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9. For example, Geniušienė (1987) considers the deponentive function (which she calls 'absolute') to be (ultimately) an extension from the reflexive function in languages with a reflexive-reciprocal deponentive polysemy. However, as the To'aba'ita case demonstrates, deponentives may be related to reciprocals without being related to reflexives.

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B. Verbal reciprocal marker only

Reciprocals in Mundari

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1. Introduction

1.1 The Mundari language

Mundari, which belongs to the Munda language family, is spoken in the state of Tharkhand and the northern areas of the state of Orissa in India. According to the census of India 1981, the number of speakers of Mundari is 752,683. But in the same census the number of speakers of Munda is also recorded as 348,839. The names Munda and Mundari seem to be confused. It is likely that the census officer did not have the perfect criteria for naming the languages in India. There is actually no difference between the Munda language and the Mundari language linguistically. Thus the total number of the speakers of Mundari may be more than one million. From the linguistic point of view, the designation of Munda is used for the language family. Mundari, on the other hand, refers to an individual language, namely the language of Munda people.

The Munda languages are divided into two groups: North Munda and South Munda. The North Munda language group comprises Korku and the Kherwarian languages which include Mundari, Ho, Santali, Korwa, Asuri, Birhor and Turi. The South Munda language group consists of Kharia, Juang, Gutob, Remo, Gtaʔ, Gorum, Juray and Sora.

The genetic relationship between Munda and Mon-Khmer was proposed by W. Schmidt (1906). He suggested an “austroasiatischer Sprachstamm” which comprises the Munda languages, the Khasi and Nicobarese languages in South Asia, the Palaung-Wa, Mon-Khmer and Malacca languages in Southeast Asia. W. Schmidt also advanced the “Austic theory”, that Austroasiatic is genetically related to Austronesian. The latter connection, however, remains unproved.

Mundari has four dialects: Hasadaʔ, Naguri, Tamaria and Keraʔ. Among these, Hasadaʔ is considered to be the standard language, and the description presented here is based on the data from this dialect.

1.2 Overview

The Mundari language uses morphological derivation to code the reciprocal meaning, viz. the infix *-pV-*. The reciprocal infix, which is productive, can be attached to transitive verbs only. Thus,

- (1) a. *Soma=ñ lel-ki-ʔ-i-a.*
 S.=1SG.SBJ see-COMPL-TR-3SG.OBJ-PRED
 ‘I saw Soma.’
- b. *Soma ad añ do=ling le-pe-l-ke-n-a.*
 S. and I TOP=1.DU.EXC.SBJ see-REC-see-COMPL-INTR-PRED
 ‘Soma and I saw each other.’

The infix *-pV-* is the only means of expressing the reciprocal meaning. In addition to this, reduplication of the personal pronoun is sometimes used for emphasizing or contrasting the actors of a reciprocal action (see 3.1.1). Apart from this, there are no pronominal expressions like *each other*.

Reciprocal verbs form all the three diathesis types of subject-oriented constructions, and object-oriented constructions are formed with causative operator verbs. When combined with verbs, the reciprocal marker is monosemous, i.e. it has no other meanings, while in combination with non-verbal stems it may also have the intensifying meaning and meanings connected with plurality.

2. Grammatical notes

2.1 Word classes

For Mundari there has been a lengthy discussion of the difficulties in categorizing words into classes in terms of the traditional definitions of the parts of speech (see Evans & Osada (2005) for details). A prototypical lexical verb can be used as a noun without any morphological change, while a prototypical noun can only be verbalized by attaching verbal endings. For example,

- (2) a. *buru* i. ‘mountain’
 ii. ‘to heap up’
- b. *jom* i. ‘to eat’
 ii. ‘food.’

However, in the given sense, it is easy to define the word class membership of lexemes. Thus nouns can be morphologically marked for certain grammatical categories such as noun class (animate/inanimate) and number (singular/dual/plural).

The verb can be marked for grammatical features such as aspect and mood. Secondly, it can take affixes for voice and transitivity which are related to grammatical functions such as subject and object. The verb agrees with subject and object in person and number which are marked by a personal suffix.

In addition to noun and verb we set up the following word classes: pronoun, adjective, postposition, adverb, numeral, conjunction, particle, interjection and expressive.

2.2 Word order

Mundari NPs do not inflect for case: both the subject and object of a sentence are morphologically unmarked. The subject and object of a sentence are determined by word order. The unmarked word order is as follows: **S + O + Verb**. Examples are given as in (3a) and (3b).

- (3) a. *pusi-ko seta-ko=ko jom-ke-d-ko-a.*
 cat-PL dog-PL=3PL.SBJ eat-COMPL-TR-3PL.OBJ-PRED
 ‘The cats ate the dogs.’
 b. *seta-ko pusi-ko=ko jom-ke-d-ko-a.*
 dog-PL cat-PL=3PL.SBJ eat-COMPL-TR-3PL.OBJ-PRED
 ‘The dogs ate the cats.’

In addition to two arguments a postpositional phrase or adverb denoting location or time can be inserted in any position before the verb, as illustrated in (3c). (Note here that the italic capital letters *T*, *D*, *R* and *N* denote retroflex phonemes according to the style of *Indian Linguistics*).

- c. *setaʔ-re seta-ko maNDi=ko jom-ke-d-a.*
 morning-in dog-PL food=3PL.SBJ eat-COMPL-TR-PRED
 ‘In the morning the dogs ate the food.’

Furthermore, the beneficiary can be positioned in between object and verb. We will discuss the beneficiary in 2.6.3. When ambiguity is clearly excluded on semantic grounds the subject and object of a sentence can change places.

2.3 The noun

2.3.1 Noun classes

Nouns are divided into animate and inanimate in terms of the system of concord between subject, object and verb. When an animate noun is acting as subject the personal pronominal suffix is placed in the preverbal slot or at the end of a verb (we will see it in 2.4.2). When an animate noun is acting as object the personal pronominal suffix occupies the slot before the predicator *-a* after the transitive marker *-d* in non-future indicative sentences. In the case of an inanimate noun as a subject or object, such suffixes do not appear at all. Examples (4a) and (4b) illustrate subject agreement, and (3b) and (3c) object agreement.

- (4) a. *bonga-ko=ko senoʔ-ja-n-a.*
 god-PL=3PL.SBJ GO-INGR-INTR-PRED
 ‘The gods have gone.’
 b. *samae senoʔ-ja-n-a.*
 time GO-INGR-INTR-PRED
 ‘The time has gone.’

2.3.2 Number

The number marking system for nouns in Mundari has three values, i.e. singular-dual-plural. Singular is unmarked, and the dual and plural markers are *king* and *ko* respectively. Countable nouns are marked for number irrespective of their animacy. Thus,

- (5) a. *hon* 'a child' – *hon-king* 'two children' – *hon-ko* 'children.'
 b. *kitab* 'a book' – *kitab-king* 'two books' – *kitab-ko* 'books.'

2.3.3 Case relations

Case relations in Mundari are mainly marked by postpositions. Thus, instrumental is expressed by the postposition *te* following a noun or pronoun. Comitative is expressed by postposing *lo?* after a noun or pronoun.

The possessive is coded by the suffixes *-a?*, *-rea?/-ra?* and *-ren*. The possessive suffix *-a?* denotes alienable possession by an animate noun, while *-rea?/-ra?* and *-ren* indicate alienable possession by an inanimate noun. The distinction between *-rea?/-ra?* and *-ren* is made on account of the animacy of the head noun. We demonstrate it in the following chart.

(6)			Possessed	
			animate	inanimate
Possessor	animate	<i>-a?</i>	<i>-a?</i>	
	inanimate	<i>-ren</i>	<i>-rea?/-ra?</i>	

2.4 The verb

2.4.1 Verbal structure

The verbal morphology of Mundari is very complicated. The basic verbal structure may be described in terms of an order element formula as follows:

- (7) (NP=S) Verb base + (ASP marker) + (-*n*) + -*a* (=S)
 + (-*d*/-?) (+O)

Note the following: (a) *-n* is an intransitive marker, *-d* a transitive marker, *-?* stands for its morphological variants; (b) the transitive marker and the intransitive marker only appear when an aspect marker is present; (c) the suffix *-a* (predicator) is used to indicate the main verb of the clause, excepting certain imperative forms.

A verbal base is formed by affixing to a verbal stem. Verbal bases can be simple or complex; complex bases are formed by reduplication or serializing of the verbal stem. Verbal stems may be either transitive, or intransitive, or diffuse (i.e. transitive-intransitive, like the English *break*). Intransitive verbs are few in number (here belong, *inung* 'to play', *ang* 'to dawn', *DoNDo* 'to be foolish', and the like). The intransitive or transitive use of diffuse verbs is distinguished by means of intransitive and transitive suffixes, *-n* and *-d* respectively (see 2.6.2).

2.4.2 Agreement

The following personal pronominal suffixes are used for subject-object agreement:

(8)		SG	DU	PL
	1st (INC)	- <i>n̄</i>	- <i>lang</i>	- <i>bu</i>
	(EXC)		- <i>ling</i>	- <i>le</i>
	2nd	- <i>m</i>	- <i>ben</i>	- <i>pe</i>
	3rd	- <i>e/-i/-eʔ/ -iʔ</i>	- <i>king</i>	- <i>ko</i>

The same forms are used for subject and object, but they occupy different slots. The subject agreement element is attached either to the end of the verb or as a clitic to the preverbal NP which may be not only the subject (see (9)) but also a non-subject (see (13a) and (14a) where it is attached to the direct object). The object agreement element occurs before the predicator *-a* after the transitive marker *-d* in non-future indicative sentences. In the future tense, it occurs between a verbal base or an aspect marker and the predicator *-a*.

2.5 Valency decreasing means

2.5.1 Reflexive

It is expressed by the suffix *-en* after consonants or *-n* after vowels; e.g.:

- (9) *Soma=eʔ lel-en-ta-n-a.*
 S.=3SG.SBJ see-REFL-PROGR-INTR-PRED
 ‘Soma is looking at himself.’

The reciprocal marker is monosemous and never attached to non-verbal stems.

2.5.2 Reciprocal

As we demonstrated in 1.2, the reciprocal decreases verb valency. Thus a reciprocal verbal base takes only the intransitive marker *-n* even with ditransitive verbs (see 3.1.2).

2.5.3 Passive

Passive verbal bases can be formed by suffixing *-oʔ* to a verbal stem. The passive suffix can be attached to either transitive or intransitive verbs. The passive may imply the potential sense.

- (10) a. *ayum* ‘to hear’ → *ayum-oʔ* ‘to be audible’
 b. *lel* ‘to see’ → *lel-oʔ* ‘to be visible’
 c. *duRum* ‘to sleep’ → *duRum-oʔ* ‘to feel sleepy.’

Some verbs cannot be passivized due to the implication of volitionality, e.g. *coʔ* ‘to kiss’ → **cog-oʔ*.

2.6 Valency increasing means

2.6.1 Causative

It is expressed by the unproductive prefix *a-*:

- (11) a. *jom* ‘to eat’ → *a-jom* ‘to feed’
 b. *nu* ‘to drink’ → *a-nu* ‘to give to drink.’

2.6.2 Conjugation change

This procedure concerns diffuse verbs (see 2.4.1). For convenience we shall consider the transitive use of diffuse stems as causativization. Here are examples:

- | | | | |
|---------|-------------|-----|--|
| (12) a. | <i>dub</i> | i. | ‘to sit’ (with the intransitive marker <i>-n</i>) |
| | | ii. | ‘to cause to sit’ (with the transitive marker <i>-d</i>) |
| b. | <i>bolo</i> | i. | ‘to enter’ (with the intransitive marker <i>-n</i>) |
| | | ii. | ‘to cause to enter’ (with the transitive marker <i>-d</i>). |

2.6.3 Benefactive

The benefactive suffix *-a* (always followed by the beneficiary agreement marker) indicates not only a beneficiary added to two-place transitive but also (optionally) an indirect object of ditransitives, and in this case both forms may coincide. Although the benefactive suffix increases valency when added to a two-place transitive, the benefactive verbal base takes the intransitive marker *-n* only. This may be the reason why reciprocals cannot be derived from them. Compare:

- | | | |
|---------|---------------|------------------------------------|
| (13) a. | <i>daru=m</i> | <i>maʔ-ke-d-a.</i> |
| | tree=2SG.SBJ | cut-COMPL-TR-PRED |
| | | ‘You cut the tree.’ |
| b. | <i>daru=m</i> | <i>mag-a-ñ-ke-n-a.</i> |
| | tree=2SG.SBJ | cut-BEN-1SG-COMPL-INTR-PRED |
| | | ‘You cut the tree <i>for me</i> .’ |

2.7 Tense and aspect

The tense system is represented by future (unmarked) and non-future (marked). In the future tense, the transitive and intransitive markers are not used. The non-future (covering present and past) is indicated by an aspect marker placed after the transitive or intransitive marker. The aspect markers are classified into perfective and imperfective.

3. Diathesis types of reciprocal constructions

3.1 Subject-oriented diatheses

A reciprocal verbal base can take only the intransitive marker. A reciprocal construction requires a dual or plural form of the subject. The reduplicated personal pronoun with the emphatic particle *ge* is sometimes used as a subject for the emphatic or contrastive purpose (see (15b)). This is a simple reciprocal construction; i.e. the arguments are expressed by the subject.

Simple reciprocal constructions can be homogeneous and heterogeneous (see Section 8). The comitative marker *-loʔ* can also introduce an object, in which case the verb does not agree with it, while in (17b) we observe agreement. In “possessive” reciprocal constructions a heterogeneous subject with the comitative marker is obligatory.

3.1.1 “Canonical” reciprocals: Subject symmetrical with direct object

The basic means of forming reciprocals is illustrated by the following examples:

- (14) a. *hora-re hon-ko=ñ ad-ke-d-ko-a.*
 way-in child-PL=1SG.SBJ miss-COMPL-TR-3PL.OBJ-PRED
 ‘I missed the children on the way.’
 b. *hora-re=le a-pa-d-ke-n-a.*
 way-in=1PL.EXC.SBJ miss-REC-miss-COMPL-INTR-PRED
 ‘We missed each other.’
- (15) a. *am DaNDaʔ-te=ñ dal-ke-d-me-a.*
 you stick.by=1SG.SBJ hit-COMPL-TR-2SG.OBJ-PRED
 ‘I hit you with a stick.’
 b. *ako-ako ge DaNDaʔ-te=ko da-pa-l-ke-n-a.*
 they-they EMPH stick.by=3PL.SBJ hit-REC-hit-COMPL-INTR-PRED
 ‘It is they that hit each other with sticks.’
 c. *ako-loʔ=le da-pa-l-ke-n-a.*
 they-with=1PL.EXC.SBJ hit-REC-hit-COMPL-INTR-PRED
 ‘We and they hit each other.’

3.1.2 “Indirect” reciprocals: Subject symmetrical with indirect object

In this case the subject of the underlying construction is symmetrical with the indirect object, therefore the latter is omitted in the reciprocal construction. The valency decreases but the direct object is retained. Nevertheless, the transitive marker is replaced, surprisingly enough, by the intransitive marker, as on “canonical” reciprocals.

- (16) a. *Soma seta hon-ko=eʔ om-ki-ʔ-i-a.*
 S. dog child-PL=3SG.SBJ give-COMPL-TR-3SG.OBJ-PRED
 ‘Soma gave the dog to the children.’
 b. *seta-ko=le o-po-m-ta-n-a.*
 dog-PL=1PL.EXC.SBJ give-REC-give-PROGR-INTR-PRED
 ‘We are giving the dogs to each other.’

As is mentioned above, the benefactive and the reciprocal markers do not co-occur. In other words, a reciprocal construction with the meaning ‘We cut trees for each other’ cannot be derived from the sentence given in (13b).

3.1.3 “Possessive” reciprocals: Inalienable possession only

They are formed from two-place transitive constructions with a possessive attribute to the direct object denoting inalienable possession. The symmetrical relation holds between the underlying subject and possessive attribute. Therefore the latter is deleted, the direct object being retained. As a result, the valency does not decrease but the transitive marker is also surprisingly replaced by the intransitive marker, as in the case of “indirect” reciprocals.

The peculiar feature of “possessive” reciprocals is that the subject is (as is mentioned in 3.1) obligatorily heterogeneous, i.e. consisting of two nominals of which the first is unmarked and the other takes the postposition *-loʔ* ‘with’; e.g.:

- (17) a. *Soma hon-ko-a? ub=e? laTab-ke-d-a.*
 S. child-PL-POSS hair=3SG.SBJ cut-COMPL-TR-PRED
 ‘Soma cut the children’s hair.’
- b. *Soma ay-a? hon-lo? ub=king la-pa-Tab-ja-n-a.*
 S. he-POSS child-with hair=3DU.SBJ cut-REC-CUT-INGR-INTR-PRED
 ‘Soma and his child have cut each other’s hair.’

There are no reciprocal constructions of the alienable “possessive type”. Thus the following sentence is not attested in Mundari:

- (18) **Soma ay-a? hon-lo? kagoj=king la-pa-Tab-ja-n-a.*
 S. he-POSS child-with paper=3DU cut-REC-CUT-INGR-INTR-PRED
 ‘Soma and his child have cut each other’s paper.’

3.2 Object-oriented diathesis: Causatives from subject-oriented reciprocals only

There are no non-causative object-oriented reciprocal constructions in Mundari. It is, however, possible to causativize reciprocals. Constructions of this type involve serial verbs with the operator verb (see 5.2) *rika* ‘to cause’ following the reciprocal verbal base. For instance:

- (19) a. *seta-king hora-re=king go-po-y-ta-n-a.*
 dog-DU street-on=3DU.SBJ kill-REC-kill-PROGR-INTR-PRED
 ‘Two dogs are fighting each other on the street.’
- b. *hon-ko hora-re seta-king=ko go-po-y-rika-ke-d-king-a.*
 child-PL street-on dog-DU=3PL.SBJ kill-REC-kill-cause-COMPL-TR-3DU.OBJ-PRED
 ‘The children caused two dogs to fight each other on the street.’

4. Passives and reflexives from reciprocals

As is mentioned in 2.5.3, the passive in Mundari implies non-volitionality and/or potentiality. Thus, (20a) with the passive form of the reciprocal *a-pa-d-* ‘to miss each other’ (← *ad-* ‘to miss sb’) describes a situation when the participants missed each other for some external reason, e.g. because of the fog:

- (20) a. *a-pa-d-o?-ta-n-a=le.*
 miss-REC-miss-PASS-PROGR-INTR-PRED=1PL.EXC.SBJ
 ‘We are almost missing each other.’

Reciprocals are rarely, if at all, reflexivized, but of course in a meaning different from that in 2.5.1. According to my informant, reflexive marking on a reciprocal verb amounts to emphasizing or contrasting the reciprocal situation. Therefore it is unacceptable to use reflexive marking in the context implied by (20a). In (20b) the exact meaning of *a-pa-d-* ‘to miss each other’ is emotional:

- b. *a-pa-d-en-ta-n-a=le.*
 miss-REC-miss-REFL-PROGR-INTR-PRED=1PL.EXC.SBJ
 ‘We are making ourselves miss each other.’

5. Reciprocal constructions with serial verbs

5.1 Serial verbs

A serial verb is a bound complex of two verbal stems with one set of inflectional suffixes for both. There are two types of serial verbs: type A comprised of two main verbs and type B comprised of the main verb and operator (a kind of semi-auxiliary).

Type A: both verbs are as a rule semantically related (they may be synonyms or antonyms):

- (21) a. *hatu-re=ko jom-nu-ke-d-a.*
 village-in=3PL.SBJ eat-drink-COMPL-TR-PRED
 ‘They ate and drank in the village (= they had dinner in the village).’
 b. *ne gaRa gaRi-te-ko har-parom-ke-d-a.*
 this river car-by-3PL.SBJ drive-CROSS-COMPL-TR-PRED
 ‘They drove the car and crossed the river.’

Type B: the operator indicates completion, causativity, permission, etc. of the action or process expressed by the main verb. The meaning of an operator is sometimes different from its meaning as a main verb, cf. *jom* ‘to eat’ (main verb) vs. ‘to do for one’s benefit’ (operator; see (21c)):

- c. *giti?-jom-a-bu.*
 sleep-for.one’s.benefit-PRED-1PL.INC.SBJ
 ‘We will sleep for our benefit.’

5.2 Reciprocal use

Let us consider the reciprocal use of both types of serial verbs.

Type A. In this type the reciprocal marker can be attached to both stems of a serial verb. In other words, a serial verb in this case is comprised of two reciprocals. (22) illustrates a complete derivational chain of this type of reciprocal serial verb:

- (22) a. *hoRo-ko=m ma?-ke-d-ko-a.*
 people-PL=2SG.SBJ cut-COMPL-TR-3PL.OBJ-PRED
 ‘You cut the people with an axe.’
 b. *hoRo-ko=m goy-ke-d-ko-a.*
 people-PL=2SG.SBJ kill-COMPL-TR-3PL.OBJ-PRED
 ‘You killed the people.’
 c. *hoRo-ko=m ma?-goy-ke-d-ko-a.*
 people-PL=2SG.SBJ cut-kill-COMPL-TR-3PL.OBJ-PRED
 ‘You killed the people with an axe.’
 d. *hoRo-ko piRi-re=ko ma-pa-?-ta-n-a.*
 people-PL field-in=3PL.SBJ cut-REC-cut-PROGR-INTR-PRED
 ‘The people are cutting each other with axes in the field.’
 e. *hoRo-ko piRi-re=ko go-po-y-ta-n-a.*
 people-PL field-in=3PL.SBJ kill-REC-kill-PROGR-INTR-PRED
 ‘The people are killing each other in the field.’

- f. *hoRo-ko piRi-re=ko ma-pa-ʔ-go-po-y-ta-na-ko.*
 people-PL field-in-3PL.SBJ cut-REC-cut-kill-REC-kill-PROGR-INTR-3PL.SBJ
 ‘They are fighting each other with axes.’

Note here that *ma-pa-ʔ-goy* and *maʔ-go-po-y* do not exist.

Type B. In this type, the main verb alone can acquire the reciprocal marker. In other words, two principal cases of the use of reciprocals in serial formations can be distinguished: (Type A) reciprocal + reciprocal, and (Type B) reciprocal + operator.

- (23) a. *Soma seta-ko=eʔ lel-ruRa-ke-d-ko-a.*
 S. dog-PL=3SG.SBJ see-again-COMPL-TR-3PL.OBJ-PRED
 ‘Soma saw the dogs again.’
 b. *Soma-loʔ=le le-pe-l-ruRa-ke-n-a.*
 S.-with=1PL.EXC.SBJ see-REC-see-again-COMPL-INTR-PRED
 ‘I/we with Soma (EXC = and nobody else) saw each other again.’

6. Simultaneity and succession

The interpretation of reciprocal actions as simultaneous or successive may be determined by the lexical meaning of the underlying verb. For instance, the reciprocal *a-pa-d-* ‘to miss each other’ (← *ad-* ‘to miss sb’) denotes simultaneous actions of both participants (see (14b)), whereas the reciprocal *la-pa-Ta-b-* ‘to cut each other’s (hair)’ (← *laTab-* ‘to cut (with scissors)’) implies successive actions (see (17b)).

7. Productivity and restrictions on reciprocal formation

The reciprocal infix is basically productive. The restrictions on reciprocal formation are rather trivial and common to many languages with productive reciprocal markers. It is worth noting that even newly borrowed verbs can take the reciprocal marker:

- (24) a. *suri* (← English *sorry*) ‘to feel sorry for sb’
 b. *su-pu-ri* ‘to feel sorry for each other.’

8. Means of expressing symmetrical actants

The subject of a reciprocal construction must be marked for plurality. There are two principal ways of expressing it:

1) the subject is expressed by the plural or dual number of a noun phrase followed by a pronominal clitic (see (19a)), or by a pronominal clitic alone implying it (see (14b), (16b));

2) the subject is expressed by two noun phrases (followed by a pronominal clitic) connected either by a coordinative conjunction (see (1b)) or by a comitative postposition

(see (17b)). In the latter case the first noun phrase can be omitted (see (23b)). As was mentioned, the peculiarity of “possessive” reciprocals is the use of comitative connection only (see 3.1.3).

9. The reciprocal marker with other than verbal stems

9.1 Reciprocal meaning in locative adverbs

Adverbs of place are formed from nouns denoting location by means of the postposition *-re*: *japaʔ-re* ‘near’ (← *japaʔ* ‘short distance’), *sangin-re* ‘far’ (← *sangin* ‘distance’). These two adverbs are lexical reciprocals and, interestingly, they take the reciprocal infix. When both (all) symmetrical participants are expressed by the subject, we obtain a subject-oriented reciprocal construction, and an object-oriented construction if they are expressed by the object:

- (25) a. *baba aRi-japaʔ-re=ko roa-ke-d-a.*
 rice edge-near-in=3PL.SBJ transplant-COMPL-TR-PRED
 ‘They transplanted the rice seedlings near the edge (of the rice field).’
 b. *baba ja-pa-paʔ-re=ko roa-ke-d-a.*
 rice near-REC-near-in=3PL.SBJ transplant-COMPL-TR-PRED
 ‘They transplanted the rice seedlings which were near each other.’

9.2 Non-reciprocal meanings

The reciprocal marker occurs in a number of adjectives, nouns and numerals, though in non-reciprocal meanings. All of them are unproductive.

9.2.1 Intensive meaning in adjectives

The adjective in Mundari has much in common with the verb. Thus *marang* ‘big, great’ when used predicatively can be marked for aspect, mood, voice and (in)transitivity like a predicate verb. It might be said that one word class covers two semantically different classes, i.e. adjectives and verbs.

A number of adjectives take the reciprocal marker but they do not acquire the reciprocal meaning ‘each other’ (which is but natural as these adjectives are one-place words). Instead, they acquire the intensive meaning ‘very’ (this is the sole test justifying us in setting up adjectives as a distinct word class). It is interesting to note that the head noun modified by an adjective with the reciprocal marker takes the plural marker though it may be either singular or plural in meaning:

- (26) a. *en marang hoRo*
 ‘that great person’
 b. *en ma-pa-rang hoRo-ko*
 that great-REC-great person-PL
 i. ‘that very great person’ ii. ‘those very great persons.’

At least seven adjectives denoting size, shape and the like take the reciprocal infix, because of semantic limitations on intensification:

- | | | | |
|------|----------------------------|---|-------------------------------------|
| (27) | <i>marang</i> ‘big, great’ | → | <i>ma-pa-rang</i> ‘very big, great’ |
| | <i>huRing</i> ‘small’ | → | <i>hu-pu-Ring</i> ‘very small’ |
| | <i>jiling</i> ‘long’ | → | <i>ji-pi-ling</i> ‘very long’ |
| | <i>salangi</i> ‘tall’ | → | <i>sa-pa-langi</i> ‘very tall’ |
| | <i>Dingae</i> ‘short’ | → | <i>Di-pi-ngae</i> ‘very short’ |
| | <i>cakar</i> ‘wide’ | → | <i>ca-pa-kar</i> ‘very wide’ |
| | <i>moTo</i> ‘fat’ | → | <i>mo-po-To</i> ‘very fat.’ |

It is noteworthy that some pronouns: demonstrative (e.g. *naminung*, etc. ‘this much (more than one expects)’), interrogative (*cimunung*, etc. ‘how much’) and indefinite (*jaiminung*, etc. ‘to any extent, whatever be’), when modifying an intensive adjective also acquire the reciprocal infix (by way of a kind of “pleonastic agreement”):

- | | | |
|------|----|---|
| (28) | a. | <i>naminung marang hoRo-ko ka=ñ lel-aka-d-ko-a.</i> |
| | | this.much big person-PL NEG=1SG.SBJ see-CONT-TR-3PL.OBJ-PRED |
| | | ‘I have never seen so many big person(s).’ |
| | b. | <i>nam-p-inung ma-pa-rang hoRo-ko ka=ñ</i> |
| | | this.much-REC-this.much big-REC-big person-PL NEG=1SG.SBJ |
| | | <i>lel-aka-d-ko-a.</i> |
| | | see-CONT-TR-3PL.OBJ-PRED |
| | | ‘I have never seen all so big (but more than one’s expectation) person(s).’ |
| (29) | | <i>cim-p-unung hu-pu-Ring tai-ke-n-a.</i> |
| | | how.much-REC-how.much small-REC-small remain-COMPL-INTR-PRED |
| | | ‘How small was it?’ |
| (30) | | <i>jaim-p-unung ji-pi-ling-re-o ka=ñ suku-a.</i> |
| | | whatever-REC-whatever long-REC-long-in-also NEG=1SG.SBJ like-PRED |
| | | ‘Anything that is too long I don’t like.’ |

9.2.2 Collective meaning in nouns

Generally speaking, the reciprocal marker does not commonly occur with nouns. There are only a few instances of the reciprocal marker with the total reduplication of the verb stem, these formations being usually used as nouns with a kind of collective meaning. We have found only two nouns of this kind:

- | | | | | | |
|------|----|---------------------------------|----|--------------------------|------------------|
| (31) | a. | <i>jom</i> | i. | ‘to eat’, ii. | ‘food’ (cf. (2)) |
| | b. | <i>jom-jom</i> | | ‘to eat up (completely)’ | |
| | c. | <i>jom-jo-po-m-ko=ñ</i> | | <i>lel-aka-d-a.</i> | |
| | | eat-eat-REC-eat-PL-1SG.SBJ | | see-CONT-TR-PRED | |
| | | ‘I have seen something to eat.’ | | | |
| (32) | a. | <i>om</i> | | ‘to give’ | |
| | b. | <i>om-om</i> | | ‘to give repeatedly’ | |
| | c. | <i>om-o-po-m</i> | | ‘something to exchange.’ | |

This type of formation is also found in the following noun:

- (33) a. *hon* 'child'
 b. *hon-ho-po-n* 'descendant, offspring.'

As far as I know, this is the only noun that takes the reciprocal marker. According to Pinnow (1966:184), there is the same infix for the formation of abstract terms, and pluralization in Khmer. The archaic formation with the *-p-* infix is still retained in these cases.

9.2.3 *Distributive meaning in numerals*

The relevant forms are given below in column 3 of (34). Here are the explanations of these data:

(a) in column 1, the cardinal numerals are given; two to ten contain the suffix *-ia/-ea* added after a consonant or *-a* after a vowel;

(b) in column 2, distributive forms are shown; all of them are derived by reduplication: partial in 'one' to 'six' and in 'ten', total in 'seven', 'eight' and 'nine';

(c) in column 3, there are only five distributive forms: the forms meaning 'one each', 'two each' and 'five each' are marked with the reciprocal infix (they are synonymous to the respective forms in column 2). The forms for 'four each' and 'five each' in column 3 (they are given in square brackets) coincide completely with the respective forms in column 2 but their morphemic structure is reanalyzed, and as a result a marker identical with the reciprocal marker comes to be distinguished. (It remains unclear whether analogous extension can be discerned in 'one', 'two' and 'five' or, which is more likely, the reciprocal infix with the distributive meaning is absent in these forms because reduplicated forms could be reanalyzed as containing this infix). Here are the forms in question (a few parallel forms are omitted here as irrelevant for our purposes).

(34) Cardinal numerals		Distributive numerals		
		reduplicated	infixd	
<i>miad</i>	'one'	<i>mi-mi-ad</i>	<i>mi-pi-ad</i>	'one each'
<i>bar-ia</i>	'two'	<i>ba-ba-r-ia</i>	<i>ba-pa-r-ia</i>	'two each'
<i>api-a</i>	'three'	<i>ap-ap-i-a</i>	[<i>a-pa-pi-a</i>]	'three each'
<i>upun-ia</i>	'four'	<i>up-up-un-ia</i>	[<i>u-pu-pun-ia</i>]	'four each'
<i>moNe-a</i>	'five'	<i>mo-mo-Ne-a</i>	<i>mo-po-ne-a</i>	'five each'
<i>turi-a</i>	'six'	<i>tu-tu-ri-a</i>	–	'six each'
<i>ee-a</i>	'seven'	<i>ee-a ee-a</i>	–	'seven each'
<i>iral-ia</i>	'eight'	<i>iral-ia iral-ia</i>	–	'eight each'
<i>are-a</i>	'nine'	<i>are-a are-a</i>	–	'nine each'
<i>gel-ea</i>	'ten'	<i>ge-ge-l-ea</i>	–	'ten each.'

10. Lexicalization

In the following pairs of underlying and derived verbs, the derived verb has undergone lexicalization, by way of losing its standard semantic reciprocal relationship with the base verb. Nevertheless, the derived verbs do have a reciprocal meaning and for this reason they are a specific subclass of lexical reciprocals, viz. that of marked lexical reciprocals.

- (35) *elang* ‘to scold’ → *e-pe-lang* ‘to quarrel’
bai ‘to make’ → *ba-pa-i* ‘to negotiate’
kaji ‘to say’ → *ka-pa-ji* ‘to quarrel’
ota ‘to press with hand’ → *o-po-ta* ‘to wrestle’
nam ‘to get’ → *na-pa-m* ‘to meet.’
- (36) a. *maNDi=ko nam-ke-d-a.*
 food=3PL.SBJ get-COMPL-TR-PRED
 ‘They got the food.’
 b. *Soma-lo?=le na-pa-m-ke-n-a.*
 S.-with=1PL.EXC.SBJ meet-REC-meet-COMPL-INTR-PRED
 ‘We and Soma (lit. ‘We with Soma’) met.’

The following noun derived from a reciprocal verb is also a lexical reciprocal: *kul* ‘to send’ → *ku-pu-l* ‘to send each other’ → *ku-pu-l* ‘a relative’ (If John is Mary’s relative, Mary is John’s relative too); compare also the noun *hon-ho-po-n* ‘descendant’ derived from *hon* ‘child’.

A specific case is the verb *goy* ‘to kill’. When used as an operator it has the intensifying meaning ‘to the utmost degree’: *rasika-goy* ‘to rejoice excessively’ (see Osada 1992: 112–5). As mentioned above, operators within serial verbs do not take the reciprocal infix (see Type B in 5.2), but this rule is violated in the following serial verb, the main verb being used metaphorically:

- (37) *goy-go-po-y=le kami-ja-n-a.*
 kill-kill-REC-kill=1PL.EXC.SBJ work-INGR-INTR-PRED
 ‘We have worked extremely hard’ (‘almost dying of fatigue’).

11. Etymological notes

The reciprocal infix is attested throughout the North Munda group; i.e. the Kherwarian languages which comprise Santali, Ho, Korwa, Asur, Birhor and Turi, and Korku, but it does not occur in the South Munda group.

The reciprocal construction in Santali, which is closely related to Mundari, is slightly different from that in Mundari. Bodding (1929) wrote on the reciprocal construction in his book on Santali Grammar. According to him, the reciprocal marker occurs with nouns in Santali. For example,

- (38) *raj* ‘kingdom’ → *rapaj* ‘a collective/number of kings’ (lit. ‘collection’).

Furthermore, the reciprocal base can take the transitive suffix and get the causative meaning like diffuse stems in Mundari, thus forming an object-oriented reciprocal construction:

- (39) *ne-pe-l-ke-t'-kin-a=ko.*
 see-REC-see-COMPL-TR-3DU.OBJ-PRED=3PL.SBJ
 ‘They made them see each other.’

Synchronic data on reciprocal constructions in the Kherwarian languages are not described well enough. Pinnow (1966: 184–5) writes about the origin of reciprocal marker in the following way: “Consequently, the reciprocal meaning in Kherwari seems to be of a secondary nature and to appear as a substitute for the (here) missing prefix **qəl-*”. As we mentioned in 9.2.2, there is the *-p-* infix for formation of abstract terms, pluralization in Khmer; e.g. *rien* ‘to learn’ → *rəpien* ‘study’ (Pinnow 1966: 184). Thus it seems to me that the *-p-* infix formation could go back to proto-Austroasiatic.

As for the origin of the plural infix and reciprocal infix, in the opinion of Zide & Anderson (2001: 520), “[the] infixed element of the reciprocal in Proto-Munda is likely an intrusion from another infix, possibly one originally used with nouns.”

Postscript

I wrote this paper in 1996. Since then I have slightly changed my terminology; e.g. indicative marker instead of predicator. But in this paper I preserve the former terms. For the new terminology Evans & Osada (2005) may be useful.

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PART VII

Monosemous reciprocal markers

A. Verbal and pronominal reciprocal markers

Reciprocals and sociatives in Evenki (with an appendix on Manchu)

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Acknowledgments

Sources

References

1. Introduction

1.1 Evenki

Evenki belongs to the Tungusic family, widely considered to form a branch of the Altaic languages. This family comprises three subgroups, the Northern (or Siberian), the Southern (or Amur) and the Manchu. (There is another classification in which two subgroups are distinguished, the Northern group and the Southern group including Manchu.) The Northern subgroup includes Evenki (numbering 30,000 persons), Even (17,200), Negidal (640) and Solon (the Solons live in the north-eastern part of China; they may number several thousand (Kormushin 1990: 480)). The Southern group includes five languages, Nanai (12,000 persons), Ulcha (3,200), Udehe (2,000), Oroch (915), and Uilta (180) (see Tishkov (ed.) 1994). Manchu (4.3 million) and Sibo, or Xibo, or Colloquial Manchu (about 27,000 speakers from an official nationality of 83,700 in Xinjiang, north-western part of China) form the third subgroup of the Tungusic family. Only about 70 to 1,000 speakers of Manchu were reported in 1990 (see Bright 1992: 182). The founders of the powerful state of Tsing (Qing) which controlled all of the huge state of China between 1644 and 1911, have forgotten their language and now speak Chinese. The Manchu branch also includes the extinct Jurchen language (there are inscriptions and texts dated 12th–15th centuries). The speakers of this language founded a state (it existed between 1115 and 1234) which had the northern part of China under its rule.

The number of native speakers of Evenki in Russia does not exceed 15 thousand. Evenks live on vast territories in Siberia, Far East of Russia, and in the north of China and Mongolia (where they are called Oroqs or Orochons; about 12,000). There is the Evenki Autonomous Region with the territory of about 768 thousand square kilometres; its population is about 30,000 and only about 5,000 of them are Evenks. If we sum up all the territories of Siberia and the Far East of Russia inhabited by the Evenks, the total will equal the territory of at least one third of Russia. There is hardly another people in the world as small as the Evenks that is aboriginal to such a vast area, as they were a nomadic people.

Evenki is also remarkable for its number of dialects and subdialects, about 50 all in all. They are subdivided into three groups, Northern, Southern and Eastern. The Northern dialects of Evenki are spoken in the northern part of the Krasnojarsk and Irkutsk regions, and the Southern dialects around Lake Baikal and in Buryatia. The Eastern dialects are spoken in the Republic of Saha-Yakutia, in the Amur and Khabarovsk regions and on the Island of Sakhalin.

Description of reciprocals and sociatives in this chapter is based mainly on the data from the Vanavara dialect of the Evenki Autonomous Region (the capital is Tura) of the Krasnojarsk region. This dialect belongs to the Southern group of Evenki dialects which have formed a basis for the literary Evenki language since 1962. These dialects are spoken in the villages of Baikit, Poligus, Mutoraj, Strelka-Chunja and Vanavara. Further below, the data from other dialects (Northern and Eastern) are also used occasionally for comparison.

The Evenki language acquired its writing system in the early twenties of the 20th century. It was based on the Latin alphabet but later (in the early thirties) it was replaced by the Cyrillic alphabet. Nowadays, books and newspapers are published in Evenki.

1.2 Overview

Reciprocity is marked by the suffix *-maat/-meet/-moot* and, much less commonly, *-lda-maat*, with no semantic difference between them; e.g.:

- (1) a. *Asi hunat-wi iče-žere-n.*
 woman daughter-her see-PRES-3SG
 ‘The woman sees her daughter.’
 b. *Asa-l iče-meet-čere-Ø / iče-lda-meet-čere-Ø.*
 woman-PL see-REC-PRES-3PL see-REC-PRES-3PL
 ‘The women see each other.’

The reciprocal meaning may also be expressed by the reciprocal pronoun *memegil-wer* (2a) and by the reflexive pronoun *mer-wer* ‘self’ (2c); both may co-occur with a suffixed reciprocal verb form (see (2b) and (2d)),

- (2) a. *Asa-l memegil-wer iče-žere-Ø.*
 woman-PL each.other-their see-PRES-3PL
 ‘The women see each other.’
 b. *Asa-l memegil-wer iče-meet-čere-Ø.*
 woman-PL each.other-their see-REC-PRES-3PL
 (same translation).
 c. *Asa-l mer-wer iče-žere-Ø.*
 woman-PL self see-PRES-3PL
 i. ‘The women see *themselves*.’
 ii. ‘The women see *each other*.’
 d. *Asa-l mer-wer iče-meet-čere-Ø.*
 ‘The women see each other.’

The sociative and the comitative meanings are encoded by the suffix *-lda*, e.g.:

- (3) a. *Asi suru-re-n.*
 woman go.away-NFUT-3SG
 ‘The woman went away.’
 b. *Asa-l suru-lda-re-Ø.*
 woman-PL go.away-SOC-NFUT-3PL
 i. ‘The women went away/left together.’ (sociative)
 ii. ‘The women went away/left with someone else.’ (comitative)

The sociative suffix *-lda* can also express the reciprocal meaning (on about 30 verb bases), both subject-oriented (4a) and object-oriented (4b); the latter cannot be encoded by the reciprocal suffix *-maat*. There is a special marker *-lta/-lte* which derives reciprocal adverbs from a limited number of bases with spatial/locative meanings (4c).

- (4) a. *iče-* ‘to see’ → *iče-ldə-* ‘to see each other’
 b. *ulli-* ‘to sew sth (to sth)’ → *illi-ldə-* ‘to sew (two things) together joining them’
 c. *daga* ‘close, next to’ → *daga-lta* ‘next to each other’ (also ‘row’).

There seem to be no restrictions on reciprocal formation, with the exception of trivial ones.

1.3 Database

The material for this chapter has been mainly obtained from informants and from specialist literature (Konstantinova 1964; Lebedeva et al. 1985; Vasilevich 1958). The informants Yulija Sverchkova and Melidora Uvachan have provided important information on the northern Evenki dialects. Examples elicited from our informants are given without attribution. Examples borrowed from folklore texts and specialist literature are given with reference to the sources.

2. Grammatical notes

2.1 General characteristics. Sentence structure. Morphology

Evenki is an agglutinating (suffixal) language with no prefixes. It has non-rigid SOV word order, rich verbal morphology and predominantly participial and converbal syntax. Adjectives, demonstrative and possessive pronouns, and numerals always precede the head noun. Suffixes beginning with consonants /ɾ/, /v/, /d/, /g/ may change after stem-final voiceless and nasal consonants. For instance, the initial /w/ (e.g. of the definite accusative case, causative, passive and reflexive-possessive suffixes) changes into /m/ after the stem-final /n/. The letter *ž* indicates a voiced palatalized stop /d/ symmetrical to the voiceless stop indicated by *č*. Long vowels are rendered by geminated letters.

The reciprocal suffix *-maat* alternates with *-maači* in certain positions, e.g. when followed by the inchoative (*-l*) or the causative (*-wkan*) suffix. The suffixes containing vowels other than /ə/ or /i/ have vowel harmony variants – three at the most, namely, /a/, /e/ and /o/; e.g., the variants of the reciprocal suffix are *-maat/-meet/-moot*; further below, we give mostly one variant in the text, with the vowel /a/.

2.2 Case. Number. Possessivity

The Evenki noun has thirteen cases (the Comitative can also be viewed as a special non-case form):

- (5) Nominative – Ø (marks the subject)
 Accusative 1 – *-wa/...* (marks the definite direct object; is deleted when followed by a reflexive-possessive marker, e.g. in the reciprocal pronoun *memegil-Ø-wer*)

possessor: depending on the person of the subject it may mean ‘our’, ‘your(PL)’, or ‘their’. In the examples these markers are glossed as ‘my’, ‘your (SG)’, ‘his’, ‘her’, ‘our’, ‘your (PL)’ or ‘their’, depending on the person/number/gender of the possessor.

2.3 Tense/aspect system. Agreement

There are eight tenses; the markers are:

- (9) *-ra/∅* – non-future tense (*-ra* for 3SG and all plural forms, *∅* for 1SG and 2SG; with stative verbs it denotes present tense situations, and with other classes of verbs, recent past situations)
- žara/...* – present tense
- ča/...* – past tense
- žača/...* – imperfect
- ŋki* – iterative past
- ža/...* – future 1
- žaŋa/...* – future 2
- žalla/...* – future 3.

There are about ten aspectual markers. The most common are imperfective *-ža*, inchoative *-l*, and semelfactive *-sin*.

There are two types of agreement. The first one coincides with the personal possession nominal markers (see (7a)) and is used with tense forms which go back to (and coincide with) participles. The second type is the system of verbal agreement markers proper. Agreement markers of the finite verb forms are the following:

(10)	Nominal type		Verbal type	
	SG	PL	SG	PL
1st p.	<i>-w</i>	<i>-wun/-t</i>	<i>-m</i>	<i>-w/-p</i>
2nd p.	<i>-s</i>	<i>-sun</i>	<i>-nni</i>	<i>-s</i>
3rd p.	<i>-n</i>	<i>-tən</i>	<i>-n</i>	<i>-∅</i>

2.4 Non-finite verb forms

There are about fifteen converbs and ten participles. The most common are the habitual participle (marker *-wki*), the converb of anteriority (marker *-ksa*) and the temporal-conditional converb (in *-mi*).

2.5 Voice system. Means of valency change. Their combinability

There are five productive means of changing the valency and/or the number of participants, traditionally regarded as voices in Evenki grammar: causative, passive, stative-resultative, reciprocal, sociative and comitative. The marker *-ldə* when used in the sociative meaning does not change syntactic valency of the base verb but it changes the number of participants, and when used comitatively it increases valency (see (3b)). There is no specialized reflexive suffix in Evenki (reflexivity is expressed pronominally (70)). In

this respect Evenki, like other Tungusic languages, differs from the neighbouring Turkic languages and manifests similarity to the neighbouring Mongolic languages.

Below, the valency-changing means are illustrated (for details see Nedjalkov 1997: 226–31).

2.5.1 Causatives

a. Productive causatives

Causative derivation (suffix *-wkan/-pkan/-mukan*) increases the valency of the base verb by one (11a). The causative suffix is translated by means of the causative verbs ‘to make, order, let’, etc. Causatives are freely derived from all pure transitive and intransitive stems (i.e. stems with no other voice/valency suffixes) and also from sociatives and a few reciprocals. Causatives are not formed from passives proper.

- (11) a. *iče*- ‘to see sth’ → *iče-wken*- ‘to show sth to sb’ →
→ *iče-wken-meet*- ‘to show sth to each other.’

b. Non-productive causatives

Seven unproductive suffixes derive about 100 causatives from intransitive bases; e.g:

- (11) b. *aru*- ‘to come to life’ → *aru-w*- ‘to revive’ (about 50 pairs; see also (41))
deru- ‘to get tired’ → *deru-gi*- ‘to tire sb’ (about 20 pairs)
murdure- ‘to bend down’ → *murduree-n*- ‘to bend sth down’ (more than 10 pairs)
somna- ‘to stir’ → *somna-lbu*- ‘to stir sth (body part)’ (about 10 pairs)
baldəw- ‘to be brought up’ → *baldəw-ga*- ‘to bring sb up’ (less than 10 pairs).

The suffix *-w* also derives about 20 causatives from transitive bases (on the passive and anticausative usages of this remarkable suffix see 2.5.3 and 2.5.5 below); e.g.:

- (11) c. *uku*- ‘to suck the breast (of a baby)’ → *uku-w*- ‘to give a baby the breast’
bodo- ‘to follow sb’ → *bodo-w*- ‘to make sb follow.’

2.5.2 Sociative and comitative

Sociative derivation is possible from all pure verb stems and also from causatives, but not from reciprocals and passives. If in the case of the sociative meaning the valency is retained, in the comitative usage it increases as a comitative object is added (which is often omitted); cf. the translation ‘with someone else’ in (12ii):

- (12) *Asa-l žu-wa iče-wke-ldə-re-Ø.*
woman-PL house-ACC see-CAUS-SOC-NFUT-3PL
i. ‘The women showed the house [to someone else] *together*.’
ii. ‘The women showed the house [to someone else] *together with someone else*.’

See also (3b).

2.5.3 Passive and stative-resultative

Passive derivation (suffix *-w/-p/-mu*) is possible from all transitive stems including causatives (thus resulting in either personal or impersonal passive constructions), almost

all intransitives (resulting in impersonal passive constructions only) and seven intransitive “weather” verbs (resulting in personal adversative passives). As mentioned, the marker *-w* can also function as a non-productive causative suffix (see (11b) above). Passives are not derived from reciprocals and sociative stems (for an exception see (55c) where the suffix *-ldə* has a spatial reciprocal meaning).

- (13) a. *oo-* ‘to make’ → *oo-w-* ‘to be made’
 waa- ‘to kill’ → *waa-w-* ‘to be killed.’

The stative-resultative marker is the suffix *-ča*; e.g.:

- b. *loko-* ‘to hang sth’ → *loku-ča-* ‘to be hung’, ‘to hang’ (vi)
 uj- ‘to tie sth’ → *ui-če-* ‘to be tied to.’

2.5.4 Reciprocal

Reciprocal derivation is impossible from passive and sociative stems. The combination *-ldə-meet* is not a reciprocal marker on sociative bases but a complex reciprocal suffix (see section 4). Reciprocal derivation is possible with causative stems; cf.:

- (14) a. *Asa-l žu-l-war iče-wken-meet-te-Ø.*
 woman-PL house-PL-their see-CAUS-REC-NFUT-3PL.
 ‘The women showed their houses to each other.’
 b. *Nuŋartən eme-wken-meet-čere-Ø.*
 they come-CAUS-REC-PRES-3PL
 ‘They cause each other to come.’

2.5.5 Anticausative

Anticausatives with the suffix *-rga/-rge* are possible from verbs denoting destruction or change of state (about 20 derivatives). From a small group of verbs, anticausatives are formed by means of the passive suffix *-w/-p/-mu* (about 30 derivatives).

- (15) a. *kapu-* ‘to break sth’ → *kapu-rga-* ‘to break’ (vi)
 etə- ‘to tear sth’ → *etə-rge-* ‘to tear’ (vi)
 luk- ‘to untie sth’ → *luki-rga-* ‘to become untied’
 b. *das-* ‘to close sth’ → *dasi-w-* ‘to close’ (vi)
 sukča- ‘to break sth’ → *sukča-w-* ‘to break’ (vi)
 nii- ‘to open sth’ → *nii-w-* ‘to open’ (vi).

3. Reciprocals with the suffix *-maat*

3.1 Subject-oriented constructions only

This type of reciprocal constructions includes four diathesis types, “canonical”, “indirect”, “benefactive” and “possessive”. Two-diathesis reciprocals are lacking in Evenki, which distinguishes it from Even (see Malchukov, Ch. 39, §3.1.1.3).

3.1.1 “Canonical” reciprocals

“Canonical” reciprocals are derived from (1) two-place transitive stems; (2) two-place intransitive stems; (3) one-place intransitive stems.

3.1.1.1 *Derived from two-place transitives.* Reciprocal forms may be derived from any two-place transitive stem if it requires or allows an animate (almost exclusively human) object; e.g.:

- (16)
- | | |
|------------------------|--|
| <i>adula-maat-</i> | ‘to view each other attentively’ |
| <i>aj-maat-</i> | ‘to cure each other’ |
| <i>ajaw-maat-</i> | ‘to love each other’ |
| <i>alama-maat-</i> | ‘to mimic each other’ |
| <i>alat-maat-</i> | ‘to wait for each other’ |
| <i>ana-maat-</i> | ‘to push each other’ |
| <i>anuu-maat-</i> | ‘to push each other’ |
| <i>asakta-maat-</i> | ‘to chase each other’ |
| <i>baka-maat-</i> | ‘to find each other’ |
| <i>bolgi-maat-</i> | ‘to offend/tease each other’ |
| <i>čerkat-maat-</i> | ‘to abuse each other’ |
| <i>doldə-maat-</i> | ‘to hear each other’ |
| <i>eeri-meet-</i> | ‘to call each other’ |
| <i>garpāt-maat-</i> | ‘to shoot at each other’ (from a bow) |
| <i>guja-maat-</i> | ‘to butt each other’ |
| <i>heŋket-meet-</i> | ‘to abuse each other’ |
| <i>iče-meet-</i> | ‘to see each other’ |
| <i>ikte-meet-</i> | ‘to hit each other’ |
| <i>iktu-meet-</i> | ‘to hit each other’ |
| <i>iremee-meet-</i> | ‘to visit each other’ |
| <i>kolto-moot-</i> | ‘to hit each other with a fist’ |
| <i>kumle-meet-</i> | ‘to embrace each other’ |
| <i>legii-meet-</i> | ‘to abuse each other’ |
| <i>nimeg-meet-</i> | ‘to visit each other’ |
| <i>n’ukani-maat-</i> | ‘to kiss each other’ |
| <i>pektəru-meet-</i> | ‘to fire a gun at each other’ |
| <i>saa-maat-</i> | ‘to know each other’ |
| <i>seripče-meet-</i> | ‘to track each other down’ |
| <i>sipkit-meet-</i> | ‘to track each other down’ |
| <i>sogintu-maat-</i> | ‘to kick each other’ (of horses) |
| <i>sookat-maat-</i> | ‘to tease each other’, ‘to banter with each other’ |
| <i>tanče-maat-</i> | ‘to pull each other’ |
| <i>tokto-moot-</i> | ‘to chop/cut/hack each other’ (with a sword, knife, axe) |
| <i>tureet-meet-</i> | ‘to abuse each other’ |
| <i>təkunŋgit-meet-</i> | ‘to offend each other’ |
| <i>təl-meet-</i> | ‘to understand each other’ |
| <i>ulekki-meet-</i> | ‘to deceive each other’ |
| <i>waa-maat-</i> | ‘to kill each other’ |

- žarga-maat-* 'to abuse, offend each other'
žawa-maat- 'to take, seize each other', etc.

Sentential examples:

- (17) a. *Uučak oron-mo ije-l-di-wi kapu-ra-n.*
 saddle.deer reindeer-ACC horn-PL-INST-its break-NFUT-3SG
 lit. 'A saddle-deer broke (i.e. 'fought and defeated') a reindeer with his horns.'
- b. *Oro-r ije-l-di-wer kapu-maat-ta-Ø.*
 reindeer-PL horn-PL-INST-their break-REC-NFUT-3PL
 'The reindeer fought each other with their horns.'
- (18) a. *Muri-sa-kaku-r sogintu-maat-če-žere-Ø.* (EF. 67)
 horse-PL-MAGN-PL kick-REC-IPFV-PRES-3PL
 'The horses are kicking each other.'
- b. *Beje-l amutkan-ma bargimnak ŋinduka-r-di iktu-maat-čere-Ø.* (EF. 302)
 man-PL lake-ACC across pole-PL-INST hit-REC-PRES-3PL
 'The men are fighting with poles on the other shore of the lake.'
- c. *Garpat-maat-če-pki n'ur-il-di-i nekun-nen ...* (EF. 232)
 shoot-REC-IPFV-PART arrow-PL-INST-his younger.brother-COM
 'He and his younger brother were shooting arrows at each other.'
- d. *Buru-de-ne-l, bu žawa-ssa-maat-če-če-wun.* (K. 158)
 fall-IPFV-CONV-PL we grab-try-REC-IPFV-PAST-1PL
 'Falling, we tried to grab at each other.'

3.1.1.2 *Derived from two-place intransitives.* Following are some reciprocals of this type (the case in brackets refers to the object of the underlying verb):

- (19) *aksa-maat-* (ALL.2) 'to take offence at each other'
bele-meet- (DAT) 'to help each other'
ŋele-meet- (ABL.1) 'to be afraid of each other'
siwuta-maat- (ALL.2/COM) 'to whisper to each other'
tepke-meet- (ALL.2/COM) 'to shout at/to each other'
tureet-meet- (COM) 'to talk with each other'
təkun-maat- (ABL.2) 'to get angry with each other'
ulguče-meet- (COM) 'to talk with each other'; cf.:
- (20) a. *Nuŋartən girki-l-du-wer bele-re-Ø.*
 they friend-PL-DAT-their help-NFUT-3PL
 'They helped their friends.'
- b. *Nuŋartən bele-meet-te-Ø.*
 they help-REC-NFUT-3PL
 'They helped each other.'
- (21) a. *Nuŋartən girki-l-taki-wer təkul-la-Ø.*
 they friend-PL-ALL-their get.angry-INCH-NFUT-3PL
 'They got angry with their friends.'
- b. *Nuŋartən təkun-maat-ta-Ø.*
 they get.angry-REC-NFUT-3PL
 'They got angry with each other.'

3.1.1.3 *Derived from one-place intransitives; irreversible reciprocal constructions.* There is a semantic group of one-place intransitives which allow reciprocal derivation: it consists of base verbs denoting uttering of sounds by birds and animals. They imply an addressee (by the nature of things) which is practically never expressed, though it is possible with some base verbs. Therefore these derivatives can be regarded as irreversible reciprocals, because the reciprocal marker does not correspond to any constituent of the underlying construction.

- (22) a. *Čipiča čulli-žara-n.*
small.bird squeak-PRES-3SG
'The bird is squeaking.'
b. *Čipiča-l čulli-maat-čara-Ø.*
bird-PL squeak-REC-PRES-3PL
'The birds are squeaking to each other.'
- (23) a. *Murin keenari-žara-n.*
horse neigh-PRES-3SG
'The horse is neighing.'
b. *Muri-r keenari-maat-čara-Ø.*
horse-PL neigh-REC-PRES-3PL
'The horses are neighing to each other.'
- (24) a. *Žur ŋinaki-r gogo-žoro-Ø.*
two dog-PL bark-PRES-3PL
'Two dogs are barking.'
b. *Žur ŋinaki-r gogo-moot-čoro-Ø.*
two dog-PL bark-REC-PRES-3PL
'Two dogs are barking at each other.'

This group of reciprocals includes the following derivatives:

- | | |
|--|---|
| (25) <i>čerŋa-</i> 'to cheep' | → <i>čerŋa-maat-</i> 'to cheep to each other' |
| <i>čiŋeri-</i> 'to roar' | → <i>čiŋeri-meet-</i> 'to roar at each other' |
| <i>čiwi-</i> 'to cackle/cluck' | → <i>čiwi-maat-</i> 'to cackle/cluck to each other' |
| <i>čulli-</i> 'to squeak' | → <i>čulli-maat-</i> 'to squeak to each other' |
| <i>eŋte-</i> 'to produce sounds' (of deer and elk) | → <i>eŋte-meet-</i> 'to exchange sounds' |
| <i>er'e-</i> 'to produce sounds' (of deer) | → <i>er'e-meet-</i> 'to exchange sounds' |
| <i>gogo-</i> 'to bark' | → <i>gogo-moot-</i> 'to bark at each other' |
| <i>iit-</i> 'to growl' | → <i>iit-meet-</i> 'to growl at each other' |
| <i>keenari-</i> 'to neigh' | → <i>keenari-maat-</i> 'to neigh to each other' |
| <i>kuunii-</i> 'to whistle' (of birds) | → <i>kuunii-meet-</i> 'to whistle to each other' |
| <i>mere-</i> 'to moo' | → <i>mere-meet-</i> 'to moo to each other' |
| <i>wakwana-</i> 'to croak' | → <i>wakwana-maat-</i> 'to croak to each other.' |

3.1.1.4 *Two- and one-place intransitives of motion. Dialectal variation.* Below, two two-place and two one-place verbs of motion are considered. Reciprocals derived from these verbs denote meeting or movement towards each other. As for two-place verbs of motion (e.g. *eme-* 'to come', *ŋene-* 'to go'), only a few northern dialects (e.g. the Katanga dialect

spoken in the northern part of the Irkutsk region) allow reciprocal constructions such as the following:

- (26) a. *Tar beje nuŋan-dula-n eme-žere-n / ηene-žere-n.*
 that man he-ALL-3SG come-PRES-3SG / go-PRES-3SG
 ‘This man is coming / going to him.’
 b. *Beje-l eme-meet-čere-Ø.*
 man-PL come-REC-PRES-3PL
 ‘The men are coming to each other.’
 c. *Beje-l ηene-meet-čere-Ø.*
 man-PL go-REC-PRES-3PL
 ‘The men are going to each other.’

The only intransitive verb of motion that allows reciprocal derivation in all Evenki dialects is *nulgi-* ‘to nomadize, lead a nomadic life’. The verb of motion *il-* ‘to stand up’ allows reciprocal derivation only in some northern (e.g. Katanga) dialects. Compare:

- (27) a. *Nuŋartən agi-tki nulgi-žere-Ø.*
 they forest-ALL nomadize-PRES-3PL
 ‘They are nomadizing to the taiga forest.’
 b. *Nuŋartən nulgi-meet-čere-Ø.*
 they nomadize-REC-PRES-3PL
 i. ‘They nomadize in the direction of *each other’s* place.’
 ii. ‘They nomadize in parallel directions.’
 (28) a. *Nuŋartən il-la-Ø.*
 they stand-NFUT-3PL
 ‘They stood up.’
 b. *Nuŋartən il-maat-ta-Ø.*
 they stand-REC-NFUT-3PL
 ‘They stood up opposite each other.’

3.1.2 “Indirect” reciprocals

This type of reciprocal constructions involves reciprocal relations between the subject and underlying indirect object referents. Typical verbs yielding “indirect” reciprocals are those of giving and taking away, and also others taking an indirect (dative or ablative) object:

- (29) *ani-maat-* ‘to give presents to each other’
buu-meet- ‘to give sth to each other’
borit-maat- ‘to divide into parts and give parts to each other’
duku-maat- ‘to write sth to each other’
ga-maat- ‘to take, buy sth from each other’
tən-/təhi-/tasse-meet- ‘to pull, try to grab sth from each other’
žawa-maat- ‘to take, seize sth from each other’; cf.:
- (30) a. *Bejetken girki-du-wi dukuwun-me duku-žara-n.*
 boy friend-DAT-his letter-ACC write-PRES-3SG
 ‘The boy is writing a letter to his friend.’

- b. *Bejetke-r dukuwu-r-we duku-maat-čara-Ø.*
 boy-PL letter-PL-ACC write-REC-PRES-3PL
 ‘The boys are exchanging letters.’
- (31) a. *Kuŋaka-r ewike-r-we tässe-meet-čere-Ø.*
 child-PL toy-PL-ACC pull-REC-PRES-3PL
 ‘The children are trying to take toys from each other.’
- b. ... *žur ahatka-r inme-we tahi-meet-čere-Ø.* (EF. 78)
 two girl-PL needle-ACC pull-REC-PRES-3PL
 ‘... two girls are pulling a needle from each other.’

There are also reciprocals from three-place morphological causatives derived from two-place transitives:

- (31') a. *Tar beje žü-wa-n iče-re-n.*
 this man house-ACC-his.3SG see-NFUT-3SG
 ‘This man saw his [not his own] house.’
- b. *Nuŋan tar beje-du žü-wi iče-wken-e-n.*
 he this man-DAT house-his.OWN see-CAUS-NFUT-3SG
 ‘He showed his house to this man.’
- c. *Nuŋartən memegil-du-wer žü-l-war iče-wken-meet-te-Ø.*
 they each other-DAT-their house-PL-their see-CAUS-REC-NFUT-3PL
 ‘They showed each other their own houses.’

3.1.3 “Benefactive” reciprocals

Two-place transitives with an *optional* indirect object can form reciprocal constructions of the “indirect” type with the benefactive meaning. As the benefactive object is optional, i.e. it is not implied by the verbal meaning, this type of reciprocals may be included among adverbial reciprocals. These reciprocal constructions, like the types considered above, may optionally contain the dative form of the reciprocal pronoun *memegil-du-wer* ‘for each other’ (without this pronoun these reciprocals may also be interpreted as “possessive”, with the meaning ‘they built each other’s houses’; see 3.1.4); e.g.:

- (32) a. *Tar beje nuŋan-dun žü-wa oo-ra-n.*
 that man he-DAT house-ACC make-NFUT-3SG
 ‘That man built a house (put up a tent) for him.’
- b. *Nuŋartyn [memegil-du-wer] žü-l-war oo-maat-ta-Ø.*
 they each.other-DAT-their house-PL-their.OWN make-REC-NFUT-3PL
 ‘They built houses for each other.’

3.1.4 “Possessive” reciprocals

This type of reciprocals seems to be uncharacteristic of Evenki, and we could elicit a limited number of “possessive” reciprocals from the informants. Thus, for instance, most of the Yakut sentences of this type (see Nedjalkov & Nedjalkov, Ch. 26, §4.1.3) cannot be translated into Evenki by means of reciprocals. Examples at our disposal contain a direct object of inalienable possession, therefore it obligatorily contains the reflexive-possessive suffix *-wer*. In the reciprocal construction, the attribute of the direct object (izafet construction) is deleted, cf. *nuŋan dəlgan-ma-n* in (33a):

- (33) a. *Tar beje nuŋan dalgan-ma-n doldə-žara-n.*
 that man s/he voice-ACC-his/her hear-PRES-3SG
 ‘That man hears his/her voice.’
 b. *Nuŋartən dalg-a-r-war doldə-maat-čera-Ø.*
 they voice-PL-their hear-REC-PRES-3PL
 ‘They hear each other’s voices.’
- (34) a. *Nuŋartən dere-l-wer iče-meet-čere-Ø.*
 they face-PL-their see-REC-PRES-3PL
 ‘They see each other’s faces.’
 b. *Nuŋartən kuŋaka-r-war saa-maat-čere-Ø.*
 they child-PL-their know-REC-PRES-3PL
 ‘They know each other’s children.’
 c. *Nuŋartən ŋaale-l-wer (usike-r-di) uj-meet-te-Ø.*
 they arm-PL-their strap-PL-INST tie-REC-NFUT-3PL
 ‘They tied each other’s arms (with straps).’

3.1.5 Expression of reciprocal arguments. Dialectal variation

3.1.5.1 The simple reciprocal construction. In this sphere the state of things seems to be the same as in non-reciprocal constructions. The reciprocal arguments are expressed in two main ways, by a simple subject (most commonly), i.e. by a plural nominal (like *nuŋartən* ‘they’, *beje-l* ‘men’, *bejetke-r* ‘boys’, etc., cf. (36a)), and by a conjoined subject, i.e. by two nominals (cf. (36b)). In the latter case two variants are possible: (a) each nominal, the first one optionally, is marked by the conjunctive and clitic particle *-da* (see (35b) and (36b)); (b) only the second nominal is marked by the comitative suffix *-nun* (note that this suffix cannot be repeated like the particle *-da*; see (35c) and (36c)); it combines mostly with animate nouns. As mentioned, the same types of subject occur in non-reciprocal constructions as well.

- (35) a. *Nuŋartən tatkit-tula ŋene-žere-Ø.*
 they school-ALL.1 go-PRES-3PL
 ‘They are going to school.’
 b. *Eni[-da] hunad-in-da tatkit-tula ŋene-žere-Ø.*
 mother-and daughter-her-and school-ALL.1 go-PRES-3PL
 ‘Mother and her daughter are going to school.’
 c. *Eni hunat-nun-mi tatkit-tula ŋene-žere-Ø.*
 mother daughter-with-her school-ALL.1 go-PRES-3PL
 (same translation).
- (36) a. *Nuŋartən n’ukani-maat-čere-Ø.*
 they kiss-REC-PRES-3PL
 ‘They are kissing each other.’
 b. *Eni[-da] hunad-in-da n’ukani-maat-čere-Ø.*
 mother-and daughter-her-and kiss-REC-PRES-3PL
 ‘Mother and her daughter are kissing each other.’
 c. *Eni[*-nun] hunat-nun-mi n’ukani-maat-čere-Ø.*
 mother-with daughter-with-her kiss-REC-PRES-3PL
 (same translation).

In cases like (36b), the reciprocal verb must agree with both nouns. In cases like (36c) the reciprocal verb may agree with the first noun only (not only in the Southern dialects but also in the Northern dialects). If agreement with the first noun only is regarded as the property of the discontinuous construction, type (36d) can be considered as discontinuous, i.e. the second reciprocant is an object. Thus a *-nun-* form may encode two meanings, that of conjoining, as in (36c), and comitative, as in (36d). The same type of rather trivial homonymy (conjoining vs. comitative) is attested in a number of other languages, e.g. in Chinese (Hoa et al., Ch. 49, §5.2.2.1), Turkic languages (see Nedjalkov, Ch. 28 on Kirghiz, §8), Japanese (Alpatov & Nedjalkov, Ch. 25, §4.2), etc., but in the latter languages these meanings are determined by the position of the marker: if it is placed between the nominals it is conjoining, and if it is postposed to the second nominal (i.e. it functions as a conjunction or as a postposition) the meaning is *comitative*. In Evenki, the suffix *-nun* always takes the same position – on the second nominal, whatever the meaning, i.e. the feature of position is not employed and the only distinctive feature is that of agreement. Thus (36d) can be regarded as discontinuous with a comitative object: this construction topicalizes the first argument.

- d. *Eni hunat-nun-mi n'ukani-maat-čere-n.*
 mother daughter-with-her kiss-REC-PRES-3SG
 (same translation as (36c)).
 lit. 'Mother with her daughter is kissing each other.'

The contrast between (36c) and (36d) is neutralized if both nominals are plural (and one of them is not 1st or 2nd person): in this case it is not clear whether the verb agrees with the first plural nominal or with both. Thus the opposition of (a) the simple construction with a heterogeneous subject and (b) the discontinuous construction with a comitative object is (morphologically) neutralized in Evenki, and it is difficult to distinguish between them.

- e. *Nuŋartən hunat-nun-mer n'ukani-maat-čere-Ø.*
 they daughter-with/and-their kiss-REC-PRES-3PL
 i. 'They *and* their daughter are kissing each other.'
 ii. (same as (i)), lit. 'They *with* their daughter are kissing each other.'

3.1.5.2 *The discontinuous reciprocal construction. Dialectal variation.* Above, we have defined the conditions which may serve to distinguish the discontinuous construction. They pertain to those cases when the first argument is singular. If it is plural, the distinction is neutralized, because the agreement is no help (see above).

It is different in the Eastern dialects where the verb always agrees with the first argument only (i.e. (35c) is ungrammatical in other dialects), but distribution into simple and discontinuous constructions according to the feature discussed above produces the same result. The differences between the dialects may be shown as follows:

(37)			Agreement	
	Noun	Noun + <i>-nun</i>	(Southern and Northern dialects)	(Eastern dialects)
	PL	PL/SG	PL (simple or discontinuous)	PL (discontinuous)
	SG	PL/SG	SG (discont.) or PL (simple)	SG (discontinuous)

As in the Eastern dialects the verb agrees with the first argument only, and if it is singular it indicates the discontinuous construction, then even the cases with the plural first argument (formally, we cannot distinguish whether the predicate agrees with the first or with both arguments) can be regarded as discontinuous by analogy with the former case. The following two examples illustrate the difference between the dialects which is in evidence if the first argument is singular: in (38) plural agreement on the predicate is allowed and in (39) it is not. Adverbials like *umnet* ‘suddenly’, *esikeken* ‘now’ can be inserted between the first and second arguments, i.e. between *eni* and *hunat-nun-mi* in (39).

Southern and Northern dialects

- (38) *Eni hunat-nun-mi n'ukani-maat-čere-n / n'ukani-maat-čere-Ø.*
 mother daughter-and-her kiss-REC-PRES-3SG kiss-REC-PRES-3PL
 ‘Mother and her daughter are kissing each other.’

Eastern dialects (Amur)

- (39) *Eni hunat-nun-mi n'ukani-maat-čere-n / *n'ukani-maat-čere-Ø.*
 mother daughter-with-her kiss-REC-PRES-3SG kiss-REC-PRES-3PL
 (same translation).

Note that the co-participant in a non-reciprocal construction may also be expressed by forms with the suffixes *-nan* (only on kinship terms), *-gali*, *-tai*, and *-t/-di* (usually on inanimate nouns). But, we repeat, in constructions with morphological reciprocals the co-participant is almost exclusively expressed (if at all) by means of a *-nun* form. The *-nan* form which is very rare in reciprocal constructions (see, however, (18c)) is rejected by our informants, though in (40a) it appears as part of the subject. Compare (*asi* means ‘woman’ and ‘wife’, but with the suffix *-nan* its meaning is ‘wife’):

- (40) a. *Beje asi-nan žu-wa iče-re-Ø.*
 man wife-COM house-ACC see-NFUT-3PL
 ‘The man and his wife saw the house.’
 b. **Beje asi-nan iče-meet-te-Ø.*
 man wife-COM see-REC-NFUT-3PL
 (intended meaning:) ‘The man and his wife saw each other.’
 c. *Beje asi-nun iče-meet-te-Ø.*
 man woman-COM see-REC-NFUT-3PL
 ‘The man and the woman saw each other.’

3.1.6 Productivity and restrictions on reciprocal derivation

It seems that most of the base verbs whose meaning pragmatically allows reciprocity of action have reciprocal derivatives. Derived transitives with the productive causative suffix *-wkan/-pkan* (e.g. *eme-wken-* ‘to make/let/allow (to) come’, *suru-pken-* ‘to make/let/allow (to) go away’) can take the reciprocal suffix with ease (see 2.5.4), whereas reciprocals from those with the unproductive causative marker *-w* are rejected by the informants; cf.:

- (41) *eme-* ‘to come’ → *eme-w-* ‘to bring sth/sb, lead sb to’ → **eme-w-meet-*
ii- ‘to enter’ → *ii-w-* ‘to bring sth/sb into’ → **ii-w-meet-*
juu- ‘to go out’ → *juu-w-* ‘to take sth/sb out’ → **juu-w-meet-*
ηene- ‘to go’ → *ηene-w-* ‘to carry sb/sth’ → **ηene-w-meet-*
suru- ‘to go away’ → *suru-w-* ‘to take sth/sb, lead sb away’ → **suru-w-meet-*
tege- ‘to sit down’ → *tege-w-* ‘to seat sb, put sb/sth down’ → **tege-w-meet-*
ugi- ‘to mount (a horse/deer)’ → *ugi-w-* ‘to put sb on a horse/deer’ → **ugi-w-meet-*,

and so are a few other reciprocals from verbs of motion and some other semantic groups. The reason for this restriction possibly lies in the fact that these unproductive “old” causatives tend to occur with inanimate direct objects, whereas animate objects of causative situations usually involve productive (“younger”) causative forms with the suffix *-wkan/-pkan*. This may also be due to a certain unnaturalness of intended reciprocal situations.

3.2 Restrictions on causative derivation from reciprocals. Dialectal variation

Causative derivation from reciprocals is much more restricted in Evenki than in Even (cf. Malchukov, Ch. 39, §4.1.2). Thus, for instance, the informants are reluctant to accept (42b):

- (42) a. *Žur ηinaki-r kik-maat-ča-tən.*
 two dog-PL bite-REC-PAST-3PL
 ‘Two dogs were biting each other.’
 b. *Žur etərke-r ηinaki-r-ve kik-maači-wkan-ča-tən.*
 two old.man-PL dog-PL-ACC bite-REC-CAUS-PAST-3PL
 ‘Two old men provoked dogs to bite each other.’

Generally, causatives from reciprocals sound awkward in most cases. True, the dialects differ in this respect: the forms under (43) are accepted only by some informants for the Southern and Northern dialects and are absolutely rejected for the Eastern dialects:

- (43) *iče-meeči-wken-žere.* ‘they cause/permit some people to meet.’
ηorča-maači-wkan-žere. ‘they cause (e.g. us) to fight.’

It is surprising that in case of necessity, in order to express a meaning like (42b) and (43), e.g. of the object-oriented type ‘We send the children to meet each other’, some informants resort to forms with the reverse “illogical” morphemic sequence *-wkan-maat* instead of *-maači-wkan*, i.e. the sequence generally reserved for the subject-oriented diathesis types, namely, “canonical” of two-place morphological causatives (14b); cf. (104b) in Manchu) or “indirect” of three-place morphological causatives (31’). This may result in homonymy; cf.:

- (44) *Bu kuηaka-r-ve arča-wkan-maat-ta-p.*
 we child-PL-ACC meet-CAUS-REC-NFUT-1PL
 i. ‘We make *each other* meet the children.’ (subject-oriented) “indirect”
 ii. ‘We make the *children* meet *each other*.’ (object-oriented) embedded “canonical”

3.3 *Nomina actionis*

Names of action can be derived from all reciprocal verbs by means of the marker *-n* which derives nouns from verbs in general.

- (45) *ulgučen-* ‘to tell’ → *ulguče-meet-* ‘to converse’ → *ulguče-meeči-n* ‘conversation’
waa- ‘to kill’ → *waa-maat-* ‘kill each other’ → *waa-maači-n* ‘battle, killing each other.’

4. Reciprocals with the complex suffix *-ldə-maat*

These seem to be possible with all the verbs that allow reciprocal derivation with *-maat* (see, for instance, the verbs in (16), (19), (25), and (29)). No exceptions have been found so far. This suffix seems to be more emphatic with respect to the reciprocal meaning than *-maat*. Reciprocals in *-maat* are much more common in texts than those in *-ldə-maat* (note that the sequence *-maači-ldə* is ungrammatical, in contrast to the closely related Solon language). In discontinuous constructions, the co-participant with such derivatives is always expressed by the *-nun* form. In texts, the following derivatives with the suffix in question occur most commonly. Most of them are lexicalized or derived from lexical reciprocals. They are predominantly subject-oriented, and only one is object-oriented; cf.:

Subject-oriented reciprocals

- (46) a. Derived from two-place transitives
baka- ‘to find’ → *baka-ldə-maat-* ‘to meet each other’
žawa- ‘to seize’ → *žawa-ldə-maat-* ‘to seize each other (e.g. while wrestling).’
 b. Derived from two-place intransitives
gun- (ALL.2) ‘to say (sth) to sb’ → *gu-ldə-meet-* ‘to come to an agreement’
ηorča- (COM) ‘to fight with sb’ → *ηorča-ldə-maat-* ‘to fight with each other.’
 c. Derived from three-place transitives
borit- ‘to divide sth among sb’ → *bori-ldə-maat-* ‘divide sth among each other’
buu- ‘to give’ → *buu-ldə-meet-* ‘to give sth to each other’
žuket- ‘to change’ → *žuge-ldə-meet-* ‘to exchange sth with each other.’

Object-oriented reciprocals

- d. *uj-* ‘to tie sth to sth’ → *ui-ldə-meet-* ‘to tie sb/sth together (e.g. with a belt or rope).’

5. Sociatives and comitatives with the suffix *-ldə*

5.1 Subject-oriented sociatives

The sociative and the reciprocal meanings do not seem to combine in the same clause. Therefore it is but natural that sociatives do not co-occur with the reciprocal pronoun. But if the suffix *-ldə* is reciprocal in meaning, it may freely co-occur with the reciprocal

pronoun (see 6.2). There are only trivial semantic restrictions on sociative derivation with this suffix. Sociatives are derived from both intransitive and transitive verbs.

5.1.1 *Derived from intransitives*

The meaning of joint action can also be implicit in the verbal semantics. Thus, sentence (47a), as well as its English translation, commonly (but not obligatorily) describes a joint action; (47b) implies a joint action due to the suffix *-nun* in the expression of the co-participant, while (47c) and (47d) explicitly describe a joint action:

- (47) a. *Nuḡartən tatkit-tula ηene-re-Ø.*
 they school-ALL.1 go-NFUT=3PL
 ‘They went to school.’ (usually together, but may be separately)
- b. *Bu girki-l-nun-mer tatkit-tula ηene-re-w.*
 we friend-PL-COM-OUR school-ALL go-NFUT-1PL
 ‘We and (lit. with) our friends went to school.’ (together)
- c. *Bu girki-l-nun-mer tatkit-tula ηene-ldə-re-w.*
 we friend-PL-COM-OUR school-ALL go-SOC-NFUT-1PL
 ‘We and our friends went to school together.’
- d. *Nuḡartən tatkit-tula ηene-ldə-re-Ø.*
 they school-ALL go-SOC-NFUT-3PL
 ‘They went to school together.’

As a rule, sociatives presuppose animate subjects, though exceptions are possible:

- (48) a. *Usi-ke-r umnet etərge-re-Ø.*
 belt-DIM-PL suddenly tear-NFUT-3PL
 ‘The thin belts broke (got torn) suddenly.’
- b. *Usi-ke-r umnet etərge-ldə-re-Ø.*
 belt-DIM-PL suddenly tear-SOC-NFUT-3PL
 ‘The thin belts suddenly broke together.’

5.1.2 *Derived from transitives*

Subject-oriented sociatives can be derived from non-derived and formally derived causative transitives (from both two- and three-place verbs; cf. (12)).

5.2 Object-oriented sociatives. Referential ambiguity

Causative constructions seem to freely derive from subject-oriented sociatives. The subject may be either singular or plural and the object is necessarily plural; cf.:

- (49) a. *Kuḡaka-r suru-re-Ø.*
 child-PL go.away-NFUT-3PL
 ‘The children went away.’
- b. *Kuḡaka-r suru-ldə-re-Ø.*
 child-PL go.away-SOC-NFUT-3PL
 ‘The children went away together.’

- c. *Asi kuŋaka-r-we suru-ldə-wken-e-n.*
 woman child-PL-ACC go.away-SOC-CAUS-NFUT-3SG
 ‘The woman made/ordered to/let the children go away together.’

If the subject is plural, referential ambiguity is possible: the sociative meaning may refer both to the object referents (by way of “inheriting” this from the underlying construction; cf. (49b)), as in (49c), and to the subject referents:

- d. *Asa-l kuŋaka-r-we suru-ldə-wken-e-Ø.*
 woman-PL child-PL-ACC go.away-SOC-CAUS-NFUT-3PL
 i. ‘The women made the children go away together.’
 ii. ‘The women together made the children go away.’ (cf. also (55b))

5.3 The discontinuous construction. Comitative

By definition, sociative discontinuous constructions are interpreted as comitative, i.e. as constructions in which the subject referent takes part in the action of the object referent. As is shown in 3.1.5, it is difficult to determine the status of the comitative group in Evenki – as that of an object or part of the subject. It is only in one case that the situation is quite clear: it is when the subject names only one singular participant and the co-participant is not named. Compare:

- (50) *Eni ewike-r-we iče-wke-ldə-re-n.*
 mother toy-PL-ACC see-CAUS-SOC-NFUT-3SG
 ‘The mother showed [someone] the toys (with someone else, but not the toys together with sth, e.g. with books).’

A similar (comitative) interpretation is possible for plural subjects, if the context supports this reading and not the sociative. Reciprocal constructions, with omitted second co-participant, usually sound elliptical and are as a rule ungrammatical.

6. Residual reciprocals with the suffix *-ldə*

6.1 Introductory

These verbs are far from numerous (we have registered 25 items) but rather frequent in texts. Thus, for instance, about 90 per cent of *-ldə* forms found in two volumes of Evenki folklore (EF and IF) have a reciprocal, and not a sociative meaning. It is the frequency of verbs of this unproductive group that accounts for the preservation of the reciprocal function (probably the earliest meaning) of this suffix on these verbs. All these verbs, with two exceptions (see one-place intransitive *il-* ‘to stand up’ in (51b) and two-place intransitive *kusi-* ‘to fight sb’ in the text above (51a)), are derived from two- and three-place transitives.

6.2 Subject-oriented reciprocals. Transitive discontinuous constructions

Reciprocals with *-ldə* can also take the reciprocal suffix *-maat* instead of *-ldə* or together with it. Thus some verbs have reciprocal doublets and even triplets, if we take into consideration the above assertion that *-maat* may be replaced by the complex suffix *-ldə-maat* without any perceptible change of meaning (see section 4). Reciprocal doublet forms we have found in texts are listed in (51). Some of the bases are lexical reciprocals (see (51a)), and some are non-reciprocal verbs (51b). The most common are verbs denoting actions like fighting, agreeing, meeting, etc. With all the derivatives, the co-participant is named by a comitative form marked with *-nun*. If the base verb is an intransitive lexical reciprocal the result may be a four-member group of synonyms: *kusi-* ‘to fight’ (vi) → *kusi-ldə-/kusi-maat-/kusi-ldə-maat-* ‘to fight (with each other)’. In the following list, forms like *kusi-ldə-maat-* are omitted.

- (51) a. *arča-* ‘to meet’ (vt) → *arča-ldə-/arča-maat-* ‘to meet each other’
ηorča- ‘to fight’ (vi) → *ηorča-ldə-/ηorča-maat-* ‘to fight with each other’
turga- ‘to meet’ (vt) → *turga-ldə-/turga-maat-* ‘to come across/run into sb’
žugət- ‘to exchange’ (vb) → *žuge-ldə-/žuge-meet-* ‘to exchange sth between
oneselves’ (K. 159)
- b. *ana-* ‘to push’ (vt) → *ana-ldə-/ana-maat-* ‘to push each other’
baka- ‘to find’ (vt) → *baka-ldə-/baka-maat-* ‘to meet each other’
garpa- ‘to shoot (arrows)’ → *garpa-ldə-/garpa-maat-* ‘to shoot at each other’
gun- ‘to say to sb’ (vt) → *gu-ldə-/gu-meet-* ‘to come to an agreement’
iče- ‘to see’ (vt) → *iče-ldə-/iče-meet-* ‘to see/meet each other’
il- ‘to stand up’ (vi) → *ili-ldə-/il-maat-* ‘to stand opposite each other’
kik- ‘to bite’ (vt) → *kiki-ldə-/kik-meet-* ‘to bite each other’
taag- ‘to recognize’ (vt) → *taagi-ldə-/taagi-maat-* ‘recognize each other’ (K.159)
žawa- ‘to seize’ (vt) → *žawa-ldə-/žawa-maat-* ‘to seize each other.’

In most cases, we observe a standard semantic opposition (like *ana-* ‘to push sb’ → *ana-ldə-/ana-maat-* ‘to push each other’); in a few typologically expected cases, lexicalization occurs (cf. *gun-* ‘to say (sth) to sb’ → *gu-ldə-/gu-meet-* ‘to come to an agreement’ and *il-* ‘to stand up’ → *ili-ldə-/il-maat-* ‘to stand opposite each other’), and one derivative in *-ldə* is lexicalized while the *-maat* derivative (as one with a “younger” reciprocal marker) is semantically related to the base verb in a standard way.

- d. *waa-* ‘to kill’ → *waa-ldə-* ‘to fight with each other’, cf. *waa-maat-* ‘kill each other’.

Sentential examples:

- (52) a. *Žur ηinaki-r kiki-ldə-žere-Ø.*
two dog-PL bite-SOC-PRES-3PL
‘Two dogs are biting each other.’
- b. *Oro-r ana-ldə-žara-Ø.*
reindeer-PL push-SOC-PRES-3PL
‘Reindeer are pushing each other.’

- c. *Mit'e taagi-ldə-ža-p!* (K. 159)
 we recognize-SOC-FUT-1PL
 'Let's recognize each other!' (a game)

Two transitive verbs with the meaning 'to meet sb' (*baka-ldə-* and *turga-ldə-*) allow both the comitative form of co-participant with the suffix *-nun* (53b) and its accusative form thus retaining its direct object status (cf. (53a) and (53c), (54a) and (54b)):

- (53) a. *Bi etərken-me baka-ča-w.*
 I old.man-ACC meet-PAST-1SG
 'I met an/the old man.'
- b. *Bi etərken-nun baka-ldə-ča-w.*
 I old.man-COM meet-SOC-PAST-1PL
 'I and an/the old man met each other.'
- c. *Bi etərken-me baka-ldə-ča-w.*
 I old.man-ACC meet-SOC-PAST-1PL
 'I and an/the old man met each other.'
- (54) a. *Nuŋan beje-we turga-ra-n.*
 he man-ACC meet-NFUT-3SG
 'He met a man.'
- b. *ŋene-žene, ŋene-žene, turga-ldə-ra-n ulama muri-či beje-we.* (EF. 84)
 go-CONV go-CONV meet-SOC-NFUT-3SG red horse-COM man-ACC
 'When travelling, he met a man with a red horse.'

6.3 Object-oriented reciprocals. Verbs of joining together. Dialectal variation

In the Southern and Eastern dialects, derivatives in *-ldə* from transitives (both two- and three-place) which denote joining or fixing of two or more things together may have only the standard sociative or comitative meaning (55b.i), while in some Northern dialects (Ilimpeya and Erbogachon) this form may have two interpretations (due to referential ambiguity), not only (55b.i) but also object-oriented spatial reciprocal, i.e. (55b.ii). In this case the suffix *-ldə* sounds to a certain degree pleonastic. The form in *-ldə* has two meanings (like the English translations of (55b)).

- (55) a. *Nuŋan usi-l-we herke-če-n.*
 he belt-PL-ACC tie-PAST-3SG
 'He tied the belts.'
- b. *Nuŋan usi-l-we herke-ldə-če-n.*
 he belt-PL-ACC tie-SOC-PAST-3SG
 i. 'He [together with someone else] tied the belts.' (comitative action)
 ii. 'He tied the belts together.' (spatial reciprocal)

A verb with the suffix *-ldə* can be used in the passive voice only if it has a spatial reciprocal meaning (i.e. a meaning like (ii) in (55b)):

- c. *Usi-l herke-ldə-w-če-l bi-si-Ø.*
 belt-PL tie-SOC-PASS-PAST-PL be-PRES-3PL
 'The belts are tied together.'

Among verbs in *-ldə-meet*, in the Southern dialects there is only one object-oriented reciprocal, namely *ui-ldə-meet* ‘to tie sb/sth together’ (46d). There is also one similar object-oriented reciprocal with the suffix *-ldə*, namely *gilbe-ldə* ‘to tie reindeer together in a caravan’ (K. 159). In the Northern dialects, they are more numerous (about ten); *-ldə* seems to be pleonastic in most of the cases. The object referents (in both the base and derived construction) are expressed either (a) by a plural noun in the accusative or (b) by two nouns, accusative and allative 1 (see *moo-laa* in (57)). Like any other object, they may be ellipted and recovered from the context (see *oro-r* in (58)). Derivatives in *-ldə* emphasize plurality of the object referents. They differ from their base verbs in case frames: both the derivative and the base verb may take an accusative and an allative object, or a plural accusative object only (thus, if we omit *moo-laa* in (57) the sentence will acquire the meaning ‘The man fixed the sticks to each other’), but only the verbs in *-ldə* may also take a comitative object (a form in *-nun*) instead of the allative. The suffix *-maat* is not used in this meaning. Here is the list:

- | | | | |
|------|---|---|---------------------------------------|
| (56) | <i>dalbu-</i> ‘to glue sth to sth’ | → | <i>dalbu-ldə-</i> (same) |
| | <i>gilbe-</i> ‘to tie a reindeer to a reindeer’ | → | <i>gilbe-ldə-</i> (same) |
| | <i>herke-</i> ‘to tie sth to sth’ | → | <i>herke-ldə-</i> (same) |
| | <i>kiŋege-</i> ‘to screw sth into sth, attach’ | → | <i>kiŋege-ldə-</i> (same) |
| | <i>tule-</i> ‘to fix/attach sth to sth’ | → | <i>tule-ldə-</i> (same) |
| | <i>təpken-</i> ‘to fix, nail/pin sth to sth’ | → | <i>təpke-ldə-</i> (same) |
| | <i>təre-</i> ‘to press sth to sth’ | → | <i>təre-ldə-</i> (same) |
| | <i>uj-</i> ‘to tie sth to sth’ | → | <i>ui-ldə-</i> (same) |
| | <i>ulli-</i> ‘to sew sth’, ‘to sew sth to sth’ | → | <i>ulli-ldə-</i> ‘to sew sth to sth.’ |

Examples:

- (57) *Tar beje mooka-r-we moo-laa təpke-ldə-re-n.*
 that man stick-PL-ACC tree-ALL fix-SOC-NFUT-3SG
 ‘That man fixed the sticks to the tree.’
- (58) *Mullikan, alba-ra-n sapka-že-mi [oro-r] gilbe-ldə-kit-pe*
 unable cannot-NFUT-3SG master-IPFV-CONV reindeer-PL tie-SOC-NR-ACC
oro-r suča-wan-de-pki-l. (K. 166)
 reindeer-PL tear.away-ITER-IPFV-PART-PL
 ‘He was unable to learn how to tie reindeer into a caravan, the reindeer escape all the time.’

7. Constructions with the reciprocal pronoun *memegil-wer* ‘each other’

7.1 Introductory

The reciprocal pronoun *me-me-gi-l-wer* ‘each other’ has a number of case forms. It consists of five components (see 14.4) and zero accusative case marker (this is connected with the presence of the reflexive-possessive suffix *-wer*; see (5)). The case form of the reciprocal pronoun is determined by the governing properties of the base verb; it has no nominative case form (note in bypassing that Udehe has the nominative case form of the reciprocal

propoun *mene-mene*; see Nikolaeva, Ch. 23, §4.1); the following case forms occur in the examples cited here:

(59)	Accusative	<i>memegil-Ø-wer</i>	‘each other’
	Comitative	<i>memegil-nun-mer</i>	‘with each other’
	Dative	<i>memegil-du-wer</i>	‘to each other’
	Allative 1	<i>memegil-dule-wer</i>	‘to each other’
	Allative 2	<i>memegil-təke-wer</i>	‘to each other’
	Ablative	<i>memegil-duk-wer</i>	‘from each other’
	Prolative	<i>memegil-duli-wer</i>	‘about each other.’

We have no examples where the suffixed reciprocal marker is not interchangeable with the reciprocal pronoun. Moreover, some reciprocals may not allow the omission of the reciprocal pronoun. “Possessive” constructions with a reciprocal pronoun are not used.

7.2 Subject-oriented constructions

7.2.1 “Canonical” reciprocals

7.2.1.1 *With two-place transitives*. Examples:

- (60) *Aakni-l memegil-Ø-wer aw-ra-Ø.*
 elder.brother-PL each.other-ACC-REFL wash-NFUT-3PL
 ‘The brothers washed each other.’
- (61) *Nuḡartən memegil-Ø-wer waa-re-Ø.*
 they each.other-ACC-REFL kill-NFUT-3PL
 ‘They killed each other.’

(Henceforth the reflexive-possessive suffix *-wer* on the pronoun is not glossed.)

7.2.1.2 *With two-place transitives with a split object valency*. Here belong a few verbs from the group treated in 7.2.1.1. The difference lies in the fact that in this case the underlying construction contains an object denoting a body part, which makes the semantic object expressed twice, as a whole and as an affected body part; e.g.:

- (62) a. *Bi nuḡan-man ḡaale-l-duk-in žawa-Ø-m.*
 I s/he-ACC hand-PL-ABL-his/her take-NFUT-1SG
 ‘I took him/her by the hand.’
- b. *Bu etərken-nun memegil-Ø-wer ḡaale-l-duk-war žawa-ra-p.*
 we old.man-COM each.other-ACC hand-PL-ABL-OUR take-NFUT-1PL
 ‘The old man and I took each other by the hands.’

7.2.1.3 *With two-place intransitives*. The reciprocal pronoun acquires a dative, allative, ablative, prolative, or comitative case form (cf. 3.1.1.2); e.g.:

- (63) a. *Nuḡartən memegil-du-wer bele-re-Ø.*
 they each.other-DAT-their help-NFUT-3PL
 ‘They help each other.’

- b. *Nuḡartən memegil-təki-wer təkul-la-Ø*
 they each.other-ALL.2-their get.angry-NFUT-3PL
 ‘They got angry with each other.’

7.2.1.4 *With one-place intransitives.* One-place intransitive verbs denoting uttering of sounds by birds and animals, like *čerḡa-* ‘to cheep’, *čineri-* ‘to roar’, etc. can take a comitative or dative or allative form of the reciprocal pronoun (for a list of these verbs see 3.1.1.3); e.g.:

- (64) a. *Čipiča-l memegil-nun-mer čulli-žara-Ø.*
 bird-PL each.other-COM-their squeak-PRES-3PL
 ‘Birds are squeaking to/with each other.’
 b. *Muri-r memegil-təki-wer keenari-žara-Ø.*
 horse-PL each.other-ALL.2-their neigh-PRES-3PL
 ‘The horses are neighing to each other.’

7.2.2 “Indirect” reciprocals

In this type of construction, the reciprocal pronoun is mostly in the dative or allative or ablative case (cf. 3.1.2); e.g.:

- (65) a. *Beje-l memegil-du-wer oro-r-wor buu-če-tən.*
 man-PL each.other-DAT-their reindeer-PL-their give-PAST-3PL
 ‘The men gave their reindeer to each other.’
 b. *Etərke-r memegil-duk-wer oro-r-wor ga-ra-Ø.*
 old.man-PL each.other-ABL.1-their reindeer-PL-their take.away-NFUT-3PL
 ‘The old men took their reindeer from each other.’

7.2.3 “Benefactive” reciprocals

These are possible with two-place transitives, the reciprocal pronoun taking the place of an optional indirect object of beneficiary (cf. 3.1.3); e.g.:

- (66) *Beje-l žu-l-wa memegil-du-wer oo-ra-Ø.*
 man-PL house-PL-ACC each.other-DAT-REFL make-NFUT-3PL
 ‘The men built houses for each other.’

7.3 Object-oriented constructions; the reciprocal personal-possessive pronoun *memegil-me-tən* ‘each other-ACC-their’

Reciprocals with the reflexive-possessive pronoun *memegil-Ø-wer* cannot be used in object-oriented constructions. This pronoun must necessarily have the matrix subject as its antecedent both in non-embedded (67a) and embedded clauses (67b). As for object-oriented constructions, personal-possessive reciprocal pronouns (cf. (7) and (8)) are used here: the pronoun for the 1PL object is *memegil-wun/te*, for the 2PL object it is *memegil-sun*, and for the 3PL object *memegil-tən*. Thus, this pronoun agrees with the object in person and number (see (67c)).

- (67) a. *Tari-l ɲinaki-r memegil-Ø-wer kik-ča-tən.*
 this-PL dog-PL each.other-ACC-REFL bite-PAST-3PL
 ‘These dogs bit each other.’
- b. *Žur etərke-r ɲinaki-r-we memegil-dula-wer kiki-wkan-ča-tən.*
 two old.man-PL dog-PL-ACC each.other-ALL-REFL bite-CAUS-PAST-3PL
 ‘The two old men made the dogs bite each other (= the old men).’
- c. *Žur etərke-r ɲinaki-r-we memegil-we-tən kiki-wkan-ča-tən.*
 two old.man-PL dog-PL-ACC each.other-ACC-their bite-CAUS-PAST-3PL
 ‘The two old men made the dogs bite each other (= the dogs).’

7.4 Co-occurrence of the reciprocal pronoun with suffixed reciprocals

The reciprocal pronoun is generally optional if a suffixed reciprocal is used. Pleonastic use of two reciprocal markers is probably determined by the speaker’s desire to emphasize reciprocity. “Canonical” suffixed reciprocals (e.g. *waa-maat-* ‘to kill each other’, *uree-meet-* ‘to be alike/similar’) take the reciprocal form *memegil-Ø-wer* (2b), and “indirect” reciprocals (like *buu-meet-* ‘to give sth to each other’) take the dative case form *memegil-du-wer*. Sometimes, instead of the different case forms, its comitative form *memegil-nun-mer* can be used. Thus, for instance, it may occur with “benefactive” suffixed reciprocals: it adds the sociative meaning thus producing a “sociative-reciprocal” interpretation of the construction.

- (68) a. *Nuɲartən žu-l-war oo-maat-te-Ø.*
 they house-PL-their make-REC-NFUT-3PL
 ‘They built houses (put up tents) for each other.’
- b. *Nuɲartən žu-l-war memegil-nun-mer oo-maat-te-Ø.*
 they house-PL-their each.other-COM make-REC-NFUT-3PL
 ‘They built houses for each other with each other.’

7.5 *Nomina actionis*

Verbs with a reciprocal pronoun can be nominalized by means of the present participle marker *-žari*; cf.:

- (69) a. *Nuɲartən memegil-Ø-wer aw-žara-Ø.*
 they each.other-ACC-their wash-PRES-3PL
 ‘They wash each other.’
- b. *Bi nuɲartən memegil-Ø-wer aw-žari-wa-tən iče-če-w.*
 I they each.other-ACC-their wash-PART-ACC-their see-PAST-1SG
 lit. ‘I saw their washing each other.’ (cf. 3.3)

8. Reciprocals with the reflexive pronoun *mer-wer* ‘ourselves/ourselves/themselves’

This pronoun can be used in both the reflexive and the reciprocal meanings (in fact, the latter meaning is not registered in the texts at our disposal but it is confirmed by our

informants; it requires additional checking). It has the same case forms as the reciprocal pronoun *memegil-wer* (see 7.1):

(70)	Accusative with zero marking	<i>mer-Ø-wer</i>	‘themselves/each other’
	Dative	<i>mer-du-wer</i>	‘to themselves/each other’
	Allative 1	<i>mer-dule-wer</i>	‘to themselves/each other’
	Allative 2	<i>mer-təki-wer</i>	‘to themselves/each other’
	Ablative	<i>mer-duk-wer</i>	‘from themselves/each other’
	Prolative	<i>mer-duli-wer</i>	‘about themselves/each other’

Three main cases of its usage can be distinguished. Its reflexive or reciprocal meaning is determined by the lexical meaning of the verb base or, to be more precise, by pragmatic factors (needless to say, if this pronoun is singular it allows reflexive interpretation only).

1. The reciprocal meaning is actualized if the reflexive reading is pragmatically inappropriate:

- (71) *Nuḡartən mer-wer n'ukani-žara-Ø.*
 they themselves kiss-PRES-3PL
 i. ‘They are kissing *each other*.’
 ii. *‘They are kissing *themselves*.’

2. The reflexive reading is more appropriate pragmatically; in this case the reciprocal suffix is needed on the verb for the reciprocal meaning to be actualized:

- (72) a. *Nuḡartən mer-wer aw-žara-Ø.*
 they themselves wash-PRES-3PL
 i. ‘They wash *themselves*.’
 ii. ?‘They wash *each other*.’
 b. *Nuḡartən mer-wer aw-maat-čara-Ø.*
 they themselves wash-REC-PRES-3PL
 ‘They wash *each other*.’

3. Both the reciprocal and reflexive reading are more or less equally possible. In this case, for unambiguous reciprocal reading, the suffix *-maat* must also be used:

- (73) a. *Nuḡartən homootə-wa waa-re-Ø.*
 they bear-ACC kill-NFUT-3PL
 ‘They killed the bear.’
 b. *Nuḡartən mer-wer waa-re-Ø.*
 they themselves kill-NFUT-3PL
 i. ‘They killed *themselves*.’
 ii. ‘They killed *each other*.’
 c. *Nuḡartən mer-wer waa-maat-te-Ø.*
 they themselves kill-REC-NFUT-3PL
 ‘They killed *each other*.’

9. Simultaneity and succession of reciprocal subevents

As in a number of other languages, simultaneity or succession of reciprocal subevents is determined by the lexical meaning of the base verb and context. Thus (1b) generally has a simultaneous interpretation. Other verbs usually imply successive arrangement of the subevents, which may be explicated by the adverbs *amarultat* ‘one after another/the other’ and *geetäkin* ‘in turn’, ‘by turns’; cf.:

- (74) *Nuḡartən amarultat pektəru-meet-čere-Ø.*
 they one.after.another fire-REC-PRES-3PL
 ‘They fire at each other one after the other.’

Reciprocals with lexical meanings like ‘to exchange (letters)’ and ‘to visit each other’s places’ naturally imply subevents being performed at a different time; cf.:

- (75) a. *Asa-l dukuwu-r-we duku-maat-čara-Ø.*
 woman-PL letter-PL-ACC write-REC-PRES-3PL
 ‘The women write letters to each other.’
 b. *Beje-l ireme-meet-čere-Ø.*
 man-PL visit-REC-PRES-3PL
 ‘The men visit each other.’

10. Lexicalization

Lexicalization of suffixed reciprocals and sociatives seems to be very rare. Here are the four instances at our disposal:

- (76) *gun-* ‘to say (sth) to sb’ → *gu-meet-/gu-ldə-* ‘to come to an agreement’
waa- ‘to kill’ → *waa-ldə-* ‘to fight with each other’
žoki- ‘to fix/repair’ → *žoki-ldə-* ‘to come to an agreement’
žuge- ‘to change sth for sth’ → *žuge-ldə-* i. ‘to alternate with each other’
 ii. ‘to change (the course)’; cf.:

- (77) a. *Bu žuge-ldə-wet-čere-w.* (K. 166)
 we change-SOC-ITER-FUT-1PL
 ‘We shall take turns with each other.’
 b. *Bira neḡneni-täkin menḡi-vi žugu-vi žuge-ldə-žeče-n.* (B. 192)
 river spring-each its.own-its way-its change-SOC-IPFV-3PL
 ‘Each spring the river changed its course.’

11. Lexical reciprocals

By definition, lexical reciprocals do not have any non-reciprocal counterparts. The simple and the discontinuous (with the reversal of the arguments) construction with a lexical reciprocal are usually synonymous, which is their distinctive feature, i.e. (for subject-oriented reciprocals) ‘A converses with B’ = ‘B converses with A’ = ‘A and B converse [with

each other]’, and (for object-oriented reciprocals) ‘C links A to B’ = ‘C links B to A (given homogeneity of A and B) = ‘C links A and B’. Most of subject-oriented lexical reciprocals have meanings like ‘to fight’, ‘to quarrel’, ‘to meet’, ‘to converse’, ‘to come to an agreement’, ‘to copulate’, etc. All these verbs can take *-maat* (and some also take *-ldə*; cf. *ηorča-/ηorča-maat-/ηorča-ldə* ‘to fight’; see (51a)) which may emphasize the reciprocal meaning, the forms being synonymous (this does not concern the verbs under (76)).

1. *Subject-oriented lexical reciprocals*. Three valency groups are distinguished here.

(a) *Two-place intransitives*. The case frame is the same for all the verbs, both non-suffixed and suffixed: NOM + COM; NOM + NOM (= NOM.PL); cf.:

- (78) a. *Nuŋan girki-nun-mi upču-žara-n / upču-meet-čere-n.*
 he friend-COM-his quarrel-PRES-3SG quarrel-REC-PRES-3SG
 ‘He quarrels with his friend.’
 b. *Nuŋan girki-n-da upču-žara-Ø / upču-meet-čere-Ø.*
 he friend-his-and quarrel-PRES-3PL quarrel-REC-PRES-3PL
 ‘He and his friend quarrel.’

The following verbs can be used in type (78a) constructions:

- (79) *bulen-* ‘to fight’ *musse-* ‘to quarrel, argue’
gedə- ‘to come to an agreement’ *ηorča-* ‘to fight, wrestle’
girkile- ‘to be friends’ *sirun-* ‘to mate’ (of deer)
gookčan- ‘to compete, rival’ *sookan-* ‘to copulate’
gukčan- ‘to compete, rival’ *turet-* ‘to converse, talk’
kusi- ‘to fight’ *upču-* ‘to quarrel, squabble.’

(b) *Two-place transitives*. So far, we have only two verbs on our list which may have the case frames NOM + ACC; NOM + NOM (= NOM.PL); the verb *uree-* ‘to be alike, resemble’, ‘to coincide’ also has the case frame NOM + COM (80c); the other verb is *turga-* ‘to meet’ considered above among reciprocals in *-ldə* (54).

- (80) a. *Bejetken asatkan-me uree-žere-n / uree-meet-čere-n.*
 boy girl-ACC be.like-PRES-3SG / be.like-REC-PRES-3SG
 ‘The boy is like the girl in appearance.’
 b. *Bejetken asatkan-da uree-žere-Ø / uree-meet-čere-Ø.*
 boy girl-and be.like-PRES-3PL / be.like-REC-PRES-3PL
 ‘The boy and the girl are alike in appearance.’
 c. *Bejetken asatkan-nun uree-žere-Ø / uree-meet-čere-Ø.*
 boy girl-COM be.like-3PL / be.like-REC-PRES-3PL
 ‘The boy and the girl are alike in appearance.’

(c) *Three-place transitives*. Here belong *borit-* ‘to divide, distribute’ and *žuget-* ‘to exchange’; the case frame of the non-suffixed lexical reciprocals is NOM + ACC + COM and the reciprocal construction has “indirect” diathesis, but the meaning of the reciprocal is ‘among themselves’.

- (81) a. *Nuŋartən ulle-we mata-l-nun borit-ta-Ø.*
 they meat-ACC neighbour-PL-COM divide-NFUT-3PL
 i. ‘They divided meat *with* the neighbours.’
 ii. ‘They divided meat *among* the neighbours.’

- b. *Nuḡartən ulle-we bori-maat-ta-Ø.*
 they meat-ACC divide-REC-NFUT-3PL
 ‘They divided the meat among themselves.’

2. *Object-oriented lexical reciprocals.* Here belong non-suffixed verbs listed in (56). The reciprocal suffix is ungrammatical on these verbs (82b).

- (82) a. *Nuḡan mooka-r-we [moo-laa] tǝpke-re-n.*
 he stick-PL-ACC tree-ALL fix-NFUT-3SG
 i. ‘He fixed the sticks to the tree.’ (unless the bracketed word is omitted)
 ii. ‘He fixed the sticks to one another.’ (if the bracketed word is omitted; cf. (57))
- b. **Nuḡan mooka-r-we [moo-laa] tǝpke-meet-te-n.*
 he stick-PL-ACC tree-ALL fix-REC-NFUT-3SG
 (same intended meanings).

12. Reciprocal adverbs in *-lta/-lte/-lto* of the *daga-lta* ‘next to one another’ type

In Evenki, there are nominal stems whose case forms appear as adverbs or postpositions and denote converse relations (like (a) *A is behind B* which implies (b) *B is in front of A* and (c) *A and B are behind one another* on condition that A and B belong to the same class of objects) or reciprocal relations (like (a) *A is close to B* which implies (b) *B is close to A* and (c) *A and B are close to each other* on the same condition). Their base stems take the suffix *-lta* and thus become adverbs denoting either proper reciprocal relations (like ‘close to each other’; one adverb) or, mostly, distributive relations (like ‘behind one another’, ‘above one another’; six adverbs). Cincius (1946:95) claims: “... in Evenki and Even, a totality of objects situated in space in a given direction with respect to one another is described by derivatives from the stems of some adverbs and verbs by means of the suffix *-lta/-lte*”. We have found seven such adverbs in Cincius (1946), Vasilevich (1958:27, 768) and Konstantinova (1964:93) and another seven have been elicited from our informants.

A list of the reciprocal adverbs (and two adjectives, see *bargi-lta* and *daga-lta*) is given in (85). They are derived from nominal bases (one base is verbal, see *ulbu-*; the meaning of this lexical reciprocal corresponds to the meaning of the derived adverb) with various spatial meanings, e.g. *ojo* ‘upper part of (a mountain, building, tree, etc.)’, *bargi(da-)* ‘the other side of (the river)’, etc. From these nominal bases, spatial adverbs are formed by means of different locative case markers depending on position or direction of motion (*amar* ‘side, back’ → *amar-du* ‘(to be, stand) behind sth’ (see (83)), *amar-dula* ‘behind (motion towards)’, *amari-li* ‘behind (motion past, along)’, etc.) These adverbs can be used as postpositions which agree in person and number with the head noun (cf. *nuḡan amar-du-n* ‘behind him’, *bu amar-du-wun* ‘behind us’, *nuḡartən amar-du-tən* ‘behind them’, etc.; see (7a)). The derivatives can undergo substantivization while retaining the spatial meaning of the adverb; e.g. ‘the back’ → ‘behind (sth/sb)’ → ‘one behind another’ → ‘queue’; cf. also ‘(arithmetical) column’, ‘row’, ‘storey’. The reciprocal adverbs occur in texts much less frequently than the non-reciprocal adverbs and postpositions with the same stems. Semantically two-place reciprocal adverbs are relatable to two-place postpositions;

in other words, they are used in simple and discontinuous constructions respectively (cf. (83b) and (83c); the suffix *-t* in (84b) is a marker of instrumental case serving also as an adverbializer).

- (83) a. *Oron amar-du ilit-čara-n.*
 reindeer behind-DAT stand-PRES-3SG
 ‘The reindeer stands behind.’
- b. *Oro-r žuu amar-du-n ilit-čara-Ø.* (discontinuous)
 reindeer-PL house behind-DAT-its stand-PRES-3PL
 ‘The reindeer stand behind the house.’
- c. *Žu-l / oro-r amaru-lta ilit-čara-Ø.* (simple)
 house-PL reindeer-PL one.after.another stand-PRES-3PL
 ‘Houses/reindeer stand one after another.’
- (84) a. *Bejetken hergu-duk sekte-duk čowokolot-čo-n.*
 boy lower-ABL branch-ABL grasp-PAST-3SG
 ‘The boy grasped at the lower branch.’
- b. *Bejetke-r ture-r hergume-lte(t) duku-žara-Ø.*
 boy-PL word-PL one.under.other write-PRES-3PL
 ‘The boys are writing words in a column/one under another.’

The postpositions are given as bases of the derivatives in *-lta/-lte/-lto*. They are quoted mostly with the dative case marker and a possessive 3SG or 3PL marker (the case marker may be preceded by the component *-da* with a vague locative meaning).

- (85) a. *amar-du-n* ‘behind sth/sb’ → *amaru-lta* i. ‘(sth) situated one behind/after another’ ii. ‘queue’
čagi-da-du-n ‘farther on, behind sth/sb’ → *čagi-da-lta* ‘farther on one after another’
ojo-du-n ‘above/on sth/sb’ → *ojo-lto* i. ‘(sth) situated one above/over another’
 ii. ‘column’ (in writing), iii. ‘storey’
daga-du-n ‘near sth/sb’ → *daga-lta* i. ‘nearest, closest’
 ii. ‘(sth) situated next to one another’
 iii. ‘row’, iii. ‘crossroads’
dari-da-du-n ‘at the side next to sth/sb’ → *dari-lta* ‘at the side one behind another’
goro-du ‘far’ → *goro-lto* ‘far away one behind/next to another’
hergi-de-du-n ‘below/under sth/sb’ → *hergu-me-lte* i. ‘one below another’
 ii. ‘column’
mureli ‘around sth/sb’ → *mureli-lte* ‘around one after another’
oldon-du-n ‘at the side next to sth/sb’ → *oldoni-lta* ‘one upon another’
sigdale-du-tən ‘in between/among them’ → *sigdale-lte* ‘(sth) situated in between’
ugi-le-n ‘above sth/sb’ → *ugi-me-lte* i. ‘(sth) situated one above another’
 ii. ‘storey’
žüle-du-n ‘in front of sth/sb’ → *žüle-lte* lit. ‘one in front of another’
 = ‘one after another’
- b. *bargi-da-du-n* ‘opposite sth/sb’ → *bargi-lta* ‘opposite’ (adj.)
ulbu- ‘to walk single file’ → *ulbu-lte* i. ‘(in) single file’, ii. ‘queue’ (K. 93).

These postpositions which express all the main spatial relations can be grouped semantically in the following way:

- | | | |
|----|-------------------------|--|
| 1. | a. 'above/upon sth/sb' | <i>ojo-du-n, ugi-le-n,</i> |
| | b. 'below/under sth/sb' | <i>hergide-du-n</i> |
| 2. | a. 'behind sth/sb' | <i>amar-du-n, čagi-da-du-n, dari-gida-du-n</i> |
| | b. 'in front of sth/sb' | <i>bargi-da-du-n, žüile-de-du-n</i> |
| 3. | a. 'near sth/sb' | <i>daga-du-n</i> |
| | b. 'far from sth/sb' | <i>goro-du</i> |
| 4. | 'between/among sth/sb' | <i>sigdale-du-tən</i> |
| 5. | 'around sth/sb' | <i>mureli</i> |
| 6. | a. 'in/inside sth' | <i>doo-du-n</i> |
| | b. 'outside sth' | <i>tuli-du-n.</i> |

The latter two adverbial stems under 6 which form postpositions with various spatial meanings do not yield derivatives with the suffix *-lta*.

13. Reciprocals derived from nouns

Reciprocals can be formed only from four nouns three of which are derived by means of the reciprocal suffix, and one verb by means of the sociative suffix; cf. respectively:

- | | | | |
|---------|---------------------------------|---|---|
| (86) a. | <i>dəl</i> 'head' | → | <i>dəl-maat-</i> i. 'to fight/struggle pressing hands together', ii. 'to wrestle butting heads against each other' (of men)/ 'to pull each other by the hair' (of women) (only in the Ilimpeya and Erbogachon dialects) |
| | <i>mire</i> 'shoulder' | → | <i>mire-meet-</i> 'to marry' |
| | <i>turen</i> 'word', 'language' | → | <i>turet-meet-</i> 'to talk with each other' |
| b. | <i>ŋaale</i> 'arm' | → | <i>ŋaale-ldə-</i> 'to wrestle holding each other by the hands.' |

14. Notes on etymology. Genetic relations of reciprocal and sociative markers

In some instances the spelling differences between the compared entities may be due to the different graphic means employed in the sources we have used. Sometimes, we cite only one of the possible synharmonic variants of the suffixes instead of all.

14.1 The reciprocal suffix *-maat*

This suffix is attested in all Tungusic languages (except Manchu which uses mostly the suffix *-ndu* instead (see 15.1) and possibly Solon where it occurs with *-ldi* only). It is represented by the following forms (and their harmonic variants) across languages:

- | | | |
|------|---------------------|---|
| (87) | <i>-maat-/maaci</i> | Evenki, Even, Negidal (on Even see Malchukov, Ch.39, §3) |
| | <i>-maši-ldi</i> | Solon (Poppe 1931:120–1) |
| | <i>-maaci</i> | Nanai, Ulcha, Uilta, Oroch (on Nanai see Avrorin 1961:43) |
| | <i>-masi</i> | Udehe (Nikolaeva, Ch. 23, §3). |

The form *-maači* is probably the primary form: in the Northern group of Tungusic languages, /č/ before vowels changes into /t/ before consonants and in word-final position (the latter not in Even): Evenki *alač-i-nni* ‘(you.sg) wait/waited’ – *alat-te-n* ‘(he) waits/waited’ (Cincius 1949:198, 210–1). Originally, the suffix *-maači* seems to have consisted of two components, *-maa* and *-či*; the origin of the first component is less clear. The morpheme *-či* is productive in Tungusic languages and appears both independently and within other suffixes. In Evenki, this morpheme has allomorphs *-t* and *-či* and it denotes a durative or iterative action (as is known, iterativity is semantically related to reciprocity). Compare Evenki *doldə-* ‘to hear’ → *doldə-t-* ‘to listen to sb’, *waa-* ‘to kill’ → *waa-t-* ‘to kill repeatedly’. This suffix is retained in its original form *-či* in the Southern Tungusic languages; cf. Nanai *garpa-* ‘to shoot from a bow’ → *garpa-či-* ‘to shoot repeatedly’. The component *-či* is part of the complex suffix *-waači/-weeči*, *-paači/-peeči* (the latter allomorphs coincide with some of the allomorphs of the reciprocal suffix in Nanai, cf. *-maači/-meeči*, *-paači/-peeči*); cf. *xukču-* ‘to attack sb’ → *xukču-peeči-* ‘to attack repeatedly’ (see Avrorin 1961:42–6).

One may tentatively assume that the first component *-maa* of the reciprocal suffix is genetically related to the productive Evenki suffix *-maa/-mee/-moo* which expresses intensity and certainty; e.g.: *ičet-* ‘to look at’ → *ičet-mee-* ‘to look at sb intently’, *eme-* ‘to come’ → *eme-mee-* ‘to come without fail’ (cf. Lebedeva et al. 1985:90). For a different version of the etymology see Ramstedt (1952:180–1).

The suffix *-maat* is probably of relatively recent origin, at least it is “younger” than sociative *-ldə*: it is practically monosemous while *-ldə* has retained a reciprocal meaning. However, in other Tungusic languages *-maat* is registered in some non-reciprocal meanings, though very scarcely. Thus, in Even there is a very limited number of fossilized verbs with such meanings (cf. Malchukov, Ch. 39, §3.3). In Nanai and Udehe a few verbs with this suffix and sociative meaning are attested (cf. Nanai *saoli-mači-* ‘to feast together’, see Avrorin 1961:44; on Udehe see Nikolaeva, Ch. 23, §3.3.2). The assumption concerning the recent origin of *-maat* is supported by the fact that there is a sequence *-ldə-meet* and the suffix *-ldə* with the reciprocal meaning (see sections 4 and 6) but there is no sequence *-maači-ldə* in either Evenki or Even. This sequence is however attested in Solon (see Poppe 1931:121). But, judging by Poppe’s grammar and the appended glossary (which is rather short, pp. 37–84), there is no suffix *-maaši* in Solon, but only *-maaši-ldi* and *-ldi* both with the reciprocal meaning (in Poppe (1931) there is not a single Solon form with the sociative meaning):

- (88) *žanži-* ‘to speak, say’ → *žanži-maaši-ldi-* ‘to exchange words’
žawa- ‘to grasp’ → *žawa-maaši-ldi-/žawa-ldi-* ‘to grasp each other, wrestle’
 (Poppe 1931:82, 83; see also (90b)).

Note that there are a few isolated derivatives in which the meaning of the reciprocal suffix differs from the standard meaning (either lexicalization or an obsolete meaning): Nanai *gele-* ‘to ask’ → *gele-meeči-* ‘to look for’, *etu-* ‘guard’ → *etu-meeči-* ‘to show caution’ (Avrorin 1961:43). Materially similar to the reciprocal suffix is the modal (debitive) suffix

-maači(n)/-meeči(n); cf. Evenki *ulguče-* ‘to tell’ → *ulguče-meeči-* ‘to be obliged to tell’. But we do not see here any semantic connection with the reciprocal or any related meaning.¹

14.2 The sociative suffix *-ldə*

The component *-l-* of the suffix *-ldə* is probably genetically related to the plural marker on nouns and participles (cf. *sulaki-l* ‘foxes’); the origin of *-də* is unclear. It is highly probable that this suffix was previously reciprocal in meaning (cf. the reciprocal marker *-lda* in Mongolic languages which also has the sociative meaning ‘many and/or together’; see Nedjalkov et al., Ch. 29, §§4.1–4.1.2.1, 14); this meaning is preserved by *-ldə* in a limited group of verbs in Evenki (see section 6). It remains an open question whether this suffix is either of common Altaic origin or was borrowed by Tungusic languages from Mongolic languages (or *vice versa*). It should be taken into account that the Manchu reciprocal suffix *-ndu* is genetically related to the Evenki sociative *-ldə*. (Alternation /l/ > /n/ in certain phonetic contexts is characteristic of Manchu; it occurs not only in the reciprocal suffix; cf. Evenki *dōldi-* ‘to hear’ – Manchu *donži-* ‘to hear’; C. 214–5) Unlike *-ldə*, the Manchu *-ndu* (← *ldu*) (see Zakharov 1879: 170) mostly expresses the reciprocal meaning, like the genetically related suffix *-lda* in Solon (cf. (90b)).²

1. Similarly, we do not see any semantic connection with the reciprocal meaning in most of the following derivatives: this is either an accidental (partial) material coincidence or some intermediate links are lost. Probably the data of other languages may throw light on this relationship, therefore we cite these data, though we regard this suffix as a homonym of the reciprocal suffix *-maat* which we consider as monosemous. As a matter of fact, all Evenki dialects possess a homonymous suffix *-maat* with a number of evaluative (in the broad sense) meanings: restrictive ‘at least’, focal ‘even’, pejorative ‘carelessly’, of weakened process or action, etc. This suffix can also be attached to nouns and numerals to express the meanings ‘at least’, ‘if only’. However, this suffix differs morphologically from the reciprocal suffix: in positions where *-maači* appears, the suffix in question has a variant *-maatə*. The derivatives cited below are unproductive, some meanings being represented by a very limited number of verbs. Here are these meanings (the meaning of the underlying verb is included in that of the derivative): (1) the meaning ‘carelessly’: *oo-maat-* ‘to make, build sth badly, carelessly’, *bi-meet-* ‘to live badly, poorly’; (2) the meaning of weakened action (Katanga dialect only): *nii-meet-* ‘to open a little’, *aa-maat-* ‘to sleep a little’; (3) the restrictive meaning (four verbs of motion): *eme-meet-te-n* ‘at least he has come’; (4) low degree of certainty: *bu-meet-te-n* ‘probably he died’; (5) the iterative meaning: *som-maat-* ‘to close several times’ (see also (105)). In all these meanings, one may discern a general (rather vague) sense of deviation from the norm or expectation.

- (x) *N’ukani-maat-ča sot dəlača-kan dunne-we* (N. 9)
 kiss-ITER-PART very sun-DIM earth-ACC
 ‘The Sun was repeatedly kissing the Earth.’

2. It is not quite clear in what way the component *-ldə* of the complex suffix *-ldə-wun* is related to sociative *-ldə*. The suffix *-ldə-wun* is used in deverbal and denominal nouns with the meaning of instrument, animals, and some others; cf. *ikte* ‘tooth’ → *ikte-ldə-wun* ‘medicine for toothache’; *simki-* ‘to cough’ → *simki-ldə-wun* ‘medicine for coughing’, *ollomoo-* ‘to go fishing’ → *ollomoo-ldə-wun* ‘eagle-fisher’ (but *ollomoo-wun* ‘fishing gear’), *siŋerekeen* ‘mouse’ → *siŋeree-ldə-wun* ‘bird-mousecatcher’ (Konstantinova 1964: 159–60; Boldyrev 1979: 41; see also Benzing 1955: 121). The component *-wun* is also used singly in these meanings; cf.: *perii-* ‘to rotate around the axis’ → *perii-wun* ‘a drill’. The complex *-ldə-wun* is registered only in Evenki, Even and Negidal; the other Tungusic languages

suffix is genetically related to the materially similar (or identical) suffix which also involves plurality: it occurs in both Northern and Southern Tungusic languages in derivatives like Ulcha and Orok *ila* ‘three’ → *ila-lta* ‘(period of) three days’; in Udehe such derivatives render meanings like iterative ‘three times’, and in Negidal they have both meanings. In Evenki, the consonant /t/ of this suffix has undergone assimilation, cf. *ila-lla* ‘(period of) three days’. The component *-l* of this suffix is most likely genetically related to the plural suffix *-l* on nouns and participles; the component *-ta*, in Cincius’ opinion, is also related to the idea of plurality. The latter component appears in the distributive suffix *-ta-l*, with the opposite arrangement of the components, cf. Evenki *ila-tal* ‘in threes’ (in contexts like “They got three cups of rice each”). In other Tungusic languages, only *-ta* appears in this function, cf. Ulcha *ila-ta* with the same meaning. (The data are borrowed from Cincius 1946:98, 100, 112, 115, 1949:115, 198.)

14.4 The reciprocal pronoun *mee-mee-gi-l-wer* ‘each other’

This section concerns the morphological structure of this pronoun in different Tungusic languages. The table under (91a) shows its dialectal variants (with segmentation into functionally corresponding components). Alongside the dialectal variants of Evenki, the data of the Even and Negidal languages are included (we have no information on the other languages; the Even data are borrowed from Malchukov (Ch. 39, §4.2.1)). The variety of forms of the reciprocal pronoun is surprising, but the general morphological pattern is the same: (partial) reduplication of the reflexive pronoun and use of the reflexive-possessive suffix, the main difference being the plural markers. The Uchur and Urmi dialects have two variants of the reciprocal pronoun (cf. Vasilevich 1958:269–72; Cincius 1982:23). The forms cited are subject-oriented reciprocal pronouns; an object-oriented reciprocal pronoun is registered in Even and Evenki (cf. the subject-oriented pronoun *meen-meen-ur* where *-ur* is a reflexive-possessive marker (cf. (91a)) and object-oriented *meen-meen-ten* where *-ten* is a personal-possessive marker in agreement with the object; see Malchukov, Ch. 39, §4.2.2; cf. *memegil-wer* and *memegil-tan* in 7.3 above).

The ideal scheme of reciprocal pronouns in Tungusic languages has seven positions shown in (91a), but in reality forms with no more than six components, including a zero marker, are attested:

(a) the first and the third slots are taken up by the reduplicated first syllable *mee[n]* of the reflexive pronoun ‘oneself’: cf. ACC. *men-mi* translated as ‘myself/yourself/himself/herself/itself’, *me-r-wer* translated as ‘ourselves/yourselves/themselves’ depending on the person and number of the antecedent;

(b) the filling in of the second slot is attested only once: it is occupied by the plural affix *-r* in Uchur;

(c) the fourth slot is occupied only in two cases: by the unproductive Vanavara affix *-gi-* of unclear meaning, which is retained on a number of nouns derived from nominals (*anda* ‘friend’ → *anda-gi* ‘friend’), and the affix *-lii* in the form *mee-mee-lii-l-wer* cited in (91) which seems to be the result of the assimilation of *-gi-* by the following *-l*, because this plural marker is attested only in combination with *-gi* or *-lii*;

(d) the fifth slot is occupied by the plural suffix *-l-* or *-r-*;

(e) the sixth slot is taken up by a case marker. In (91a) it is occupied by the accusative case marker represented here by zero: reflexive-possessive forms of nouns and adjectives, i.e. forms ending in *-wi/-war/-wer/...*, always have zero accusative marking (for other case markers see (59));

(f) the seventh slot is occupied by a suffix of reflexive possession (cf. the reflexive pronoun *me-r-wer* ‘ourselves / yourselves / themselves’ (depending on the person of a plural antecedent) which can be used as a reciprocal pronoun ‘each other’, too (see (7c)).

The schema under (91a) is not applicable to all the Tungusic languages. The scheme under (91b) reflects the reciprocal pronouns that are not covered by (91a): they are heterogeneous and therefore the meanings of morphemes do not correspond to the meanings attributed to each slot in (91a). Only slot 7 is always filled in by a reflexive-possessive-plural morpheme in all the languages and dialects.

(91) a.	1	2	3	4	5	6	7	
	‘self’	PL	‘self’	?	PL	case	REFL-POSS.PL	Dialect/language
	<i>mee</i>	–	<i>-mee</i>	<i>-gi</i>	<i>-l</i>	∅	<i>-wer</i>	Vanavara
	<i>mee</i>	<i>-r</i>	<i>-mee</i>	–	<i>-r</i>	∅	<i>-wer</i>	Uchur
	<i>mee</i>	–	<i>-mee</i>	–	<i>-r</i>	∅	<i>-wer</i>	Uchur, Urmi, Chumikan
	<i>mee</i>	–	<i>-mee</i>	<i>-lii-</i>	<i>-l</i>	∅	<i>-wer</i>	Erbogachon, Nepa
	<i>meen</i>	–	<i>-meen</i>	–	–	∅	<i>-wer</i>	Sakhalin, Urmi
	<i>meen</i>	–	<i>-meen</i>	–	–	∅	<i>-ur</i>	Even (West. dial.)
	<i>maa</i>	–	<i>-maa</i>	–	<i>-r</i>	∅	<i>-wej</i>	Negidal
(91) b.	1	2	3	4	5	6	7	
	<i>me</i>	<i>-fei</i>	<i>-me</i>	–	–	–	<i>-fei</i>	Udehe (Ch. 23, §3.1)
	<i>meer</i>	–	<i>-tek</i>	–	–	∅	<i>-mur</i>	Even, East. dial. (Ch. 39;4.3.1)
	<i>dia</i>	–	<i>-dia</i>	–	–	∅	<i>-wari</i>	Nanai (Avrorin 1961:42–3)

Table (91b) needs some explanation. Thus, in Udehe the reciprocal pronoun has only two forms, the accusative *me-fei-me-fei* and the nominative *mene-mene* which is of very limited use; therefore slot 6 is marked with a dash instead of ∅. In this pronoun the repeated component *-fei* is a reflexive-possessive-plural marker. The pronoun *me-fei-me-fei* is in fact a reduplicated plural reflexive pronoun *me-fei* ‘(my/your/him/her)-self’ (Nikolaeva, Ch. 23, §4.1). We have no information on some of the languages of the Southern group, but we can assume that in these languages the reciprocal pronoun is similar to the forms listed above, i.e. reduplication and reflexive-possessive-plural suffixation are employed, since they also possess a reflexive pronoun similar to the one from which the reciprocal pronoun is derived. In Nanai, however, which has a reflexive pronoun *me-pi* (ACC.SG) and *me-peri* (ACC.PL), a respective reciprocal pronoun is not attested; the form *dia-dia-wari* ‘each other’ (< *dia* ‘comrade’) is used instead, usually with suffixed reciprocals (but more often the combination *mene dola* ‘between oneselves’ is used; Avrorin 1961:42–3). In the Even Eastern dialect the morpheme *-tek* (*-teken* in the oblique cases) is used instead of a reduplicated reflexive stem.

In Manchu there is no reciprocal pronoun. Instead, it has an invariable reciprocal adverb *ixunde* ‘mutually’ (see 15.3). As to the reflexive pronoun, it is descended from the

noun *beje* ‘man, person, body, appearance’ (cf. some Turkic and Mongolic languages; see Ch. 26 on Yakut, §2.6; Ch. 29 on Buryat, §8.1), and not from the root *men-* (see Cin-cius 1949:26, 262). Thus, in this respect Manchu differs markedly from other Tungusic languages.

15. Appendix: Reciprocals and sociatives in Written Manchu

15.1 Introductory

Written Manchu (preserved in the vast literature of the 17th–19th centuries) was the language of the Manchu élite who ruled a huge Chinese empire for about three centuries, and it was used in official documentation (cf. 1.1). It is interesting to note that since 1728 the language of the Russian correspondence sent to China was obligatorily Manchu (side by side with Russian) for 150 years (Zakharov 1875: xxix).

This brief survey is based on the data of Manchu registered in *A Complete Manchu-Russian Dictionary* by Zakharov (1875), his Manchu grammar (1879) and the grammars of Manchu by Avrorin (2000) and Orlov (1873). The main source is the dictionary by Zakharov (1875 = Z1) based on the data of the Manchu-Chinese dictionaries and also his thirty years of work involving the Manchu language. In this dictionary, about 3,500 verbs are registered and over 1,850 of them are root verbs (Avrorin 2000:152). It contains about 100 derivatives with reciprocal and sociative meanings (over half of them are sociative; if a verb is ascribed both meanings, it is counted twice; there are 6 such verbs; see (103)). On the basis of this limited number Avrorin (2000:184) draws a conclusion that these derivatives are petrified to a considerable degree.

We have transliterated the Manchu data from Cyrillic used in (Z1) by substituting Latin characters for Cyrillic (with slight corrections), therefore there may be phonetic errors from the viewpoint of later investigations, but this is irrelevant for our purposes. The translations in square brackets are ours: they are made by analogy with the translations of similar derivatives.

There are three main markers of reciprocity and sociativity: *-ndu*, *-nu* and *-ča/-če/-čo* (the variants are accounted for by vowel harmony; it concerns the vowels /a/, /e/ and /o/ and not /u/ and /i/). The derivatives with these suffixes comprise 92 items. These derivatives are the main material of this section. The remaining four peripheral suffixes *-ntu*, *-du*, *-ša/-še/-šo* and *-ta/-te/-to* occur on about 10 verbs (they are considered in 15.5).

There are no clear semantic distinctions between the suffixes *-ndu*, *-nu* and *-ča*, but there is a general tendency of prevalent reciprocal or sociative use of each. As (92) shows, the suffix *-ndu* is prevalent in the reciprocal meaning and *-ča* in the sociative meaning, while *-nu* is intermediate in this respect with a slight preference for the sociative meaning (we realize that it is risky to draw conclusions on the basis of such a limited amount of data, but the quantitative differences are indicative of the tendencies in their usage).

(92)	Derivatives with reciprocal meaning	Derivatives with sociative meaning	Total
- <i>ndu</i>	25	14	39
- <i>nu</i>	13	21	34
- <i>ča</i>	5	18	23
Total	43	53	96

Such distribution of these two meanings is not characteristic of the Even, Evenki and Udehe languages where a reciprocal and/or a sociative markers are sometimes registered in the meaning of the other but to a lesser degree than in Manchu. In this respect, typologically, Manchu is similar to Khalkha Mongol where the reciprocal suffix *-lda* and the sociative *-lca* are widely used instead of one another (see Nedjalkov et al., Ch. 29, §§4 and 7). One might possibly see the areal influence of Khalkha on Manchu in this similarity; it is noteworthy that the Manchus borrowed their alphabet from the Mongols at the end of the 16th century. Note also that, as just mentioned above, the Manchu reflexive pronoun *beje* coincides with the reflexive pronouns of the Mongolic languages and, lastly, Manchu lacks subject agreement like Khalkha and unlike other Tungusic languages. One might as well add that about one third of the vocabulary of Written Manchu are borrowings from Chinese.

On the whole, Manchu reciprocals seem to be much more lexicalized than in Evenki, which testifies to their considerable “aging”. This is probably interrelated with the loss of the clearcut meaning of each (reciprocal and sociative) suffix. It is significant in this respect that the sociative meaning ‘to sit down together’ on the verb *te-* ‘to sit down’ is marked by all the three main markers and their combinations: *te-če-/te-nu-/te-ndu-/te-če-nu-/te-če-ndu*.

15.2 Reciprocals

As shown in (92), the main reciprocal marker in Manchu is the suffix *-ndu* (see the list under (93a)). Less numerous are reciprocals in *-nu* (see (93b)). This suffix is probably genetically related to *-ndu* but it is hard to define the rules of the choice between them on the basis of our data. The variants *-nu*, *-du* (in two derivatives) and *-ntu* (in three derivatives) is due to the fact, according to Avrorin (2000: 183), that the written language borrowed respective derivatives from different dialects.

In the lists below, the meaning of the base verb is not always reflected in the translation of the derivatives in a straightforward way. The following types of semantic correspondences occur in the data:

(a) there is a standard semantic relationship between the base and the derivative, cf. *ajsila-* ‘to help’ → *ajsila-ndu-* ‘to help each other’, *wa-* ‘to kill’ → *wa-ndu-* ‘to kill each other’ and the like, including also chaining reciprocals like *daxa-* ‘to follow sb’ → *daxa-ndu-* ‘to follow one another’;

(b) along with the standard semantic relationship with the base, the meaning of a derivative may be slightly lexicalized in a typologically predictable way (thus it has two meanings); cf. *sa-* ‘to know, learn’ → *sa-ndu-* i. ‘to know each other’, ii. ‘to meet (see each

other), be friends', *žafa-* 'to grasp sb/sth' → *žafa-nu-* i. 'to grasp each other', ii. 'to wrestle', *gaj-* 'to take sth/sb' → *gaj-ndu-* 'to squabble', *jabu-* 'to walk' → *jabu-ndu-* lit. 'to go to each other', i.e. 'to visit each other', which generally implies the meaning 'to be acquainted';

(c) an individual though transparent change of meaning is possible, cf. *guja-* 'to rub against a tree before mating (of deer, etc.)' → *guja-ndu-* 'to play with each other before mating (of animals)', *sori-* 'to kick (of horses)' → *sori-ndu-* 'to push and trample each other in utter confusion', *žaža-* 'to carry on one's back' → *žaža-nu-* 'to crowd, push each other back to back';

(d) the meanings of the base and the derivative (more or less) coincide, if the base is a lexical reciprocal, cf. *xuwala-* ≈ *xuwala-ndu-* 'to be on good terms with each other' and *delxe-* ≈ *delxe-ndu-* 'to part from each other', *surte-* ≈ *surte-nu-* 'to race with each other', where the suffix seems to be used pleonastically;

(e) in two instances, a suffix seems to have the spatial meaning of joining: in one instance the suffix *-ndu* is used on an object-oriented reciprocal, probably pleonastically, the base verb being a lexical reciprocal, as in case (d) (*sire-* 'to spin threads together, tie ropes together' → *sire-ndu-* (same)), and in the other instance the suffix *-nu* occurs in a one-place verb of motion: *tokto-* 'to flow' → *tokto-nu-* 'to flow together (from different directions into one place, e.g. rivers into a lake)'; cf. 6.3;

(f) the base verb registered in the intransitive meaning(s) only which is not a lexical reciprocal (unlike (d)) in combination with a reciprocal suffix behaves as a transitive verb, cf. *somi-* 'to hide (oneself)' → *somi-ndu-* 'to cover, shield each other', *gajsila-* 'to be keen on sth' → *gajsila-ndu-* 'to allure each other', *jende-* 'to feel inspiration' → *jendu-nu-* 'to inspire each other'; cf also *algi-nda-* in (h) below. These instances are in a way analogous to passive formations from intransitives with the passive-causative suffix *-bu* like *inže-* 'to laugh' → *inže-bu-* 'to be laughed at' (and also 'to make sb laugh'; cf. (104b)).

There are a number of deviations from standard formal relations between bases and derivatives (they may be due to the insufficient material in the dictionary):

(g) the base verb is not registered in the dictionary (Z1) at all (cf. *dara-nu-* 'to treat each other to wine') or the stem occurs in a noun (e.g. *kimu-n* 'enmity, hatred' → *kimu-ndu-* 'to be mutual enemies'). The lexical reciprocals *karča-* 'to come together, to meet, to collide, to butt' (Z1. 213), *ača-* 'to gather, unite, meet' (Z1. 48) may also be included here if we find proof that their final component *-ča* is genetically related to the sociative-reciprocal *-ča*.

(h) There may be (i) a unique change of the reciprocal marker or (ii) slight changes of the base stem. The derivative *algi-nda-* 'to glorify, praise each other' (← *algi-* 'to be, become famous') (Z1. 36–7) belongs to the former case. This suffix is formally identical with a variant of the iterative-durative suffix *-nda/-nde/-ndo*; cf. *akža-* 'to thunder' → *akža-nda-* 'to thunder continuously' (A. 159–60). (For the variants *-ntu* and *-du* see 15.5.) With reservations, we may regard the derivative *žur-če-* 'to move one against another'(?), 'to oppose, resist' (← *žura-* 'to set out somewhere'; cf. *žura-nu-* in (97b) with the final vowel retained) as case (ii).

- (93) a. *afa-ndu-* 'to fight against each other' (Z2. 170)
ajsila-ndu- 'to help each other' (Z2. 170)

<i>ala-ndu-</i>	‘to say to each other’ (Z2. 179)
<i>bošo-ndu-</i>	‘to hurry each other’ (Z1. 514)
<i>daxa-ndu-</i>	‘to follow one another’ (Z1. 777)
<i>delxe-ndu-</i>	‘to part from each other’ (Z1. 806)
<i>gaj-ndu-</i>	‘to squabble’ (Z1. 299)
<i>gajsila-ndu-</i>	‘to allure each other’ (Z1. 299)
<i>guja-ndu-</i>	‘to play with each other before mating (about deer)’ (Z1. 347)
<i>jabu-ndu-</i>	‘to visit each other’ (Z1. 182)
<i>kimu-ndu-</i>	‘to be mutual enemies’ (Z1. 275)
<i>kundule-ndu-</i>	‘to show respect to each other’ (Z1. 288)
<i>leule-ndu-</i>	‘to converse with each other’ (A. 200)
<i>sa-ndu-</i>	‘to know each other, get acquainted, be friends’ (Z1. 555)
<i>sira-ndu-</i>	i. ‘to inherit from each other’, ii. ‘to be interrelated’ (Z1. 614–5)
<i>sire-ndu-</i>	‘to spin threads together’ (Z1. 617) (object-oriented)
<i>somi-ndu-</i>	‘to cover/shield each other’
<i>sori-ndu-</i>	‘to kick, trample each other in confusion’ (Z1. 629)
<i>ša-ndu-</i>	‘to meet, see each other’ (Z1. 664)
<i>temše-ndu-</i>	‘to argue with each other’ (O. 163)
<i>wa-ndu-</i>	‘to kill each other’ (O. 163)
<i>xuwal’a-ndu-</i>	[‘to be on good terms with each other’] (Z1. 445)
<i>xuweke-ndu-</i>	‘to encourage each other’ (Z2. 170)
<i>žabča-ndu-</i>	‘to accuse, reproach each other’ (A. 184)
<i>žoola-ndu-</i>	‘bow to each other with arms crossed on the chest’ (Z1.992)
b. <i>beču-nu-</i>	‘to enter into a fight with each other’ (Z1. 493)
<i>dara-nu-</i>	‘to treat each other to wine’ (Z1. 794)
<i>endu-nu-</i>	‘to inspire each other’ (O. 194)
<i>saj-nu-</i>	‘to bite each other’, ‘to fight’ (Z1. 554)
<i>sa-nu-</i>	‘to know each other’, ‘to get acquainted’ (Z1. 568)
<i>surte-nu-</i>	‘to race with each other’ (Z1. 649)
<i>ša-nu-</i>	‘to meet, see each other’ (Z1.665)
<i>tanta-nu-</i>	‘to hit each other’, ‘to start fighting’ (Z1. 696)
<i>tō-nu-</i>	‘to scold each other’ (Z1. 733)
<i>tokto-nu-</i>	‘flow together’ (from different directions into one place) (Z1. 737)
<i>wa-nu-</i>	[‘to kill each other’] (Z1. 1103)
<i>žafa-nu-</i>	‘to clutch each other’, ‘to wrestle’ (Z1. 973)
<i>žaza-nu-</i>	‘to crowd, push each other back to back’ (Z1. 970).

The set of verbs used with the suffix *-ča* (the main meaning is sociative) listed in (93c) does not seem accidental (we do not insist on including the derivative *žur-če-* here as it deviates from the pattern). The base verbs of the remaining four derivatives denote actions which, when performed together and simultaneously, normally involve reciprocal relations between the performers. Thus, if two or more persons share something together they share it between themselves; in other words, the situation described allows both a sociative and a reciprocal interpretation.

c. <i>dende-če-</i>	‘to share between oneself’ (Z1. 799)
<i>gisure-če-</i>	‘to talk between oneself, counsel’ (Z1. 332)
<i>ša-ča-</i>	‘to glance at each other’ (Z1. 665)

<i>žoola-ča-</i>	‘bow to each other with arms crossed on the chest’ (Z1. 992)
<i>žur-če-</i>	‘to oppose, resist each other’ (Z1. 1015).

Sentential examples:

- (94) a. *Morin de jalu-me leule-ndu-mbi.* (A. 200)
horse DAT ride-CONV converse-REC-PRES
‘(They) converse with each other riding (their) horses.’
- b. *Sa-nu-me gaj-su.* (Z1. 568)
know-REC-CONV take-IMP.2PL
lit. ‘Knowing each other, take!’
- c. ... *žur-če-nu-me xaxalža-mbi.* (Z1. 1015)
set.out-REC-REC-CONV mix.up-PRES
‘... (herds of horses, etc.) get mixed up.’
- d. ... *čuŋguša-me beču-nu-mbi.*
butt-CONV scold-REC-PRES
‘... (they) fight with foreheads, butt each other’ (rams and bulls) (Z1. 950).

Verbs in *-ndu* and *-nu* occur with the reciprocal meaning in the same contexts, which testifies to the absence of distinct differentiation of these suffixes:

- e. *Sikse suwe aj turgun de beču-nu-xa, aj žalin*
at.night you what reason DAT quarrel-REC-PAST what for
temše-ndu-xa. (O. 163)
argue-REC-PAST
‘In the evening, why did you quarrel, what did you argue about?’
- f. *Tejsu tejsu xuweke-ndu-me jendu-nu-me...* (O. 164)
each of the two be.keen.ON-REC-CONV feel.inspiration-REC-CONV
‘Both of them encouraging each other, inspiring each other ...’

15.3 The reciprocal adverb *isxunde* ‘mutually’

This adverb is descended from the word *is-xun* functioning as a noun, adjective and adverb in the meanings i. ‘turning one’s face to sth’, ii. ‘opposite, coming from the opposite direction’, iii. ‘face to face, facing each other’ (Z1. 101). The suffix *-xun* usually derives nouns from verbs; in *is-xun* the hypothetical verb stems may be *isa-* ‘to gather in one place’ or *ise-le-* ‘to oppose, resist, object, contradict, rival, compete’; cf. *wesi-* ‘to rise’ → *wesi-xun* ‘upper, top, upwards’. The suffix *-de* is the dative marker. The adverb *isxunde* has the following meanings: i. ‘opposite each other’, ii. ‘mutually’, iii. ‘between oneself’, iv. ‘in between’. It may be used singly as the only reciprocal marker and in combination with a reciprocal verb, cf. (95) and (96):

- (95) a. *Žuwe ergi isxunde sa-me gaj-kini.* (Z1. 568)
two side mutually know-CONV take-HORT.3SG
‘Knowing each other, take (it).’ (lit. ‘... let him take it’)
- b. ... *isxunde sa-nka goro aku.* (Z1. 101)
mutually stretch-PAST far NEG
‘... (they) are not far away from each other.’

- (96) a. *Isxunde kokira-me wa-ndu-me.* (O. 164)
mutually maim-CONV kill-REC-CONV
'By turns [they] exterminated each other.'
- b. *Muse isxunde kundule-ndu-mbi.* (A. 211)
we.INC mutually respect-REC-PRES
'We (you and I) respect each other.'
- c. *Guč se isxunde anaxunža-me leule-ndu-xe.* (A. 200)
friend PL mutually show.respect-CONV converse-REC-PAST
'The friends conversed with each other in a respectful manner.'

15.4 Sociatives; iteratives

The main sociative marker is the suffix *-ča/-če/-čo* (see (97a)). Less commonly sociative derivatives are attested with the suffixes *-ndu* and *-nu* (see (97b–c)) which, unlike *-ča*, are frequently used to mark reciprocity. With a few exceptions, all the attested derivatives involve intransitive bases. Sociatives are translated with the help of the adverb 'together' and the phrases 'at the same time', 'all', 'all the society', 'in a crowd', and thus they may contain an emotive colouring. The lexical meaning of some sociatives requires an inanimate subject, e.g. with the verbs meaning 'to dry up', 'to melt', 'to burst into blossom', etc. In comparison with the reciprocals, the semantic oppositions between the base verbs and sociative derivatives are more standard. Two derivatives are most likely object-oriented sociatives, with the meaning 'together' pertaining to the object, cf. *tučibu-nu-* and *ilere-če-* in (97b–c).

- (97) a. *baj-ndu-* 'to look for sth together' (Z1. 461)
da-ndu- 'to enter together' (A. 184)
fa-ndu- ['to dry up (of all) together'] (Z1. 1023)
gaj-ndu- 'to take sth in entirety together' (Z1. 299)
gajsila-ndu- 'to be keen on sth together' (Z1. 299)
inže-ndu- 'to laugh together' (A. 43)
kanna-ndu- 'to jump on sth together' (Z1. 251)
nime-ndu- 'to fall ill (of all) together' (Z1. 235)
jabu-ndu 'to walk together' (Z1. 182)
te-ndu- 'to sit down together' (Z1. 729)
ve-ndu- ['to melt together'] (Z1. 1117)
ža-ndu- ['to pray aloud together'] (Z1. 956)
že-ndu- 'to eat together'
žo-ndu- 'to cut straw together' (Z1. 992)
- b. *afa-nu-* 'to fight together against the enemy' (Z2. 168)
baj-nu- 'to look for sth together' (Z1. 461)
banža-nu- 'to live together (by necessity)' (Z1. 468)
bi-nu- i. 'to grow old together', ii. 'to live together'
bo-nu- 'to hollow, gouge sth together' (Z1. 511)
dosi-nu- '(of all) to enter together' (Z2. 168)
fue-nu- ['to bubble over together'] (Z1. 1068)
gene-nu- 'to set out together, at the same time' (Z1. 714)
inže-nu- 'to laugh together' (A. 43)

<i>kiče-nu-</i>	‘to try hard together’ (Z2. 168)
<i>saj-nu-</i>	‘to fall upon sb/sth together and gnaw’ (Z1. 554)
<i>sakda-nu-</i>	‘to grow old together’ (Z1. 558)
<i>te-nu-</i>	‘to sit down together’ (Z1. 729)
<i>tokto-nu-</i>	‘to stop together’ (Z1. 737)
<i>tuči-nu-</i>	‘to go out somewhere together’ (Z1. 761)
<i>tučibu-nu-</i>	‘to promote sb together with sb else’ (Z1.761)
<i>wene-nu-</i>	‘to melt together at the same time’ (Z1. 1116)
<i>žafa-nu-</i>	‘to catch, hold sth together’ (Z1. 972)
<i>že-nu-</i>	[‘to eat together’] (Z1. 974)
<i>žura-nu-</i>	‘to set out together’ (Z1. 1010)
<i>žuwe-nu-</i>	[‘to carry sth somewhere together’] (Z1. 1017)
c. <i>amga-ča-</i>	‘to sleep / fall asleep together’ (Z2. 168)
<i>dede-če-</i>	‘to lie together’ (Z1. 805)
<i>efi-če-</i>	‘to play together’ (Z1. 91)
<i>feku-če-</i>	‘to jump together’ (Z1. 1042)
<i>fifa-ča-</i>	‘(of all) to run away in fear in all directions’ (Z1. 1059)
<i>ila-ča-</i>	‘to burst into blossom together at the same time’ (Z1. 104)
<i>ile-če-</i>	‘to lick, skin sth together’ (Z1. 105)
<i>ilere-če-</i>	‘to tie (cattle) together to the same post’ (Z1. 105)
<i>ili-ča-</i>	‘to stop, stand together’ (Z1. 106)
<i>inže-če-</i>	‘(of all) to laugh together’ (Z1. 94)
<i>kanna-ča-</i>	‘to jump on sth together’ (Z1. 251)
<i>omi-ča-</i>	‘to drink together’ (Z1. 130)
<i>senjuve-če-</i>	‘to start (with fright) together’ (Z1. 578)
<i>soŋgo-čo-</i>	‘(of all) to cry together hugging each other’ (Z1. 624)
<i>ša-ča-</i>	‘to look at sth together’ (Z1. 665)
<i>te-če-</i>	‘to sit down together’ (Z1. 729)
<i>tuk’e-če-</i>	‘to lift sth together’ (Z1. 749)
<i>uka-ča-</i>	‘to run away together’ (Z1. 143).

The sociative suffix *-ča* may also mark an iterative or durative, sometimes an intensive sense, also attested on intransitive bases (see Z2. 166, 169; Avrorin (2000: 169) has counted that there are about 30 derivatives with the iterative meaning in Z1). In this particular case the iterative meaning is as prominent as the sociative, while in (100) the sociative and reciprocal derivatives in *-ta* and in *-ša* are occasional deviations from the main iterative meaning of these suffixes.

- (98) *baj-* ‘to look for sth’ → *bai-ča-* ‘to search for sb, interrogate’ (Z2. 166)
feku- ‘to jump (once)’ → *feku-če-* ‘to jump repeatedly’ (A. 169)
čžolxo- ‘to strain’ → *čžolxo-čo-* ‘to strain all the time (of horses)’ (Z2. 166)
šurge- ‘to tremble’ → *šurge-če-* ‘tremble intensely for a long time’ (A. 169).

15.5 Isolated derivatives with the suffixes *-ntu*, *-du*, *-ta*, and *-ša*

As mentioned above, only about ten derivatives with reciprocal or sociative meanings are registered with these four suffixes. The suffixes *-ntu* and *-du* (the former is registered in the reciprocal meaning and the latter in both) are genetically related to the suffix *-ndu*. The

B. Synonymy of the markers. Most of the bases are registered with one of the suffixes only. About 10 percent (12 items) of the bases occur in the same meaning with two suffixes alternately. Note that though the sociative derivatives are more numerous in our data, in (98) reciprocal derivatives are prevalent. (102) is a list of synonymous same stem derivatives already entered in the lists above. Both derivatives in *-du* have correlates with *-ndu*; out of four derivatives with *-ntu* three have correlates with *-ndu*; out of two derivative in *-ta/-te* one has a correlate in *-du*; as regards derivatives in *-nu* and *-ča*, they are very few here.

- (102) a. *delxe-ndu-/delxe-ntu-* ‘to part from each other’ (Z1. 806)
kimu-ndu-/kimu-ntu- ‘to be mutual enemies, be angry’ (Z1. 275)
sire-ndu-/sire-ntu- ‘to spin threads together’ ‘to weave a web, net’ (Z1. 617)
- b. *baj-ndu-/baj-nu-* ‘to look for sth together’ (Z1. 464, 461)
inže-ndu-/inže-nu- ‘to laugh together’ (A. 43)
wa-ndu-/wa-nu- ‘to kill each other’ (O. 163; Z1. 1103)
sa-ndu-/sa-nu- ‘to know each other, get acquainted’ (Z1. 665)
ša-ndu-/ša-nu- ‘to meet, see each other’ (Z. 170)
- c. *kanna-ndu-/kanna-ča-* ‘to jump on sth together’ (Z1. 251)
ša-ndu-/ša-ča- ‘to meet, see each other’ (Z. 170)
žoola-ndu-/žoola-ča- ‘to bow to each other with arms crossed on the chest’ (Z1.992)
- d. *baj-ndu-/baj-du-* ‘to look for sth together’ (Z1. 464, 461)
gaj-ndu-/gai-du- ‘to squabble’ (Z1. 299)
- e. *nime-ndu-/nime-te-* ‘(of all) to fall ill together’ (Z1. 235).

C. Derivatives with two reciprocal-sociative suffixes. Unlike derivatives with the reciprocal meaning, there are semantically sociative derivatives attested with two suffixes, the complex *-če-nu* being prevalent. In these combinations of suffixes the first one *-ča* is a marker with the prevalent sociative meaning and the second one is either predominantly reciprocal (cf. *-ndu*) or common enough as a reciprocal marker (cf. *-nu*). This combination of suffixes serves for stressing the sociative meaning (Zakharov 1879:170). Note that a similar arrangement of the suffixes (sociative + reciprocal) is observed in the Evenki combination *-lda-maat* which however expresses a reciprocal meaning (see Section 4 above).

- (103) e. *inže-če-nu-* ‘to chuckle/mock sb together’ (Z2. 170)
soŋgo-čo-nu- ‘(of many) to cry, bemoan sb together’ (Z1. 624; Z2. 170)
te-če-nu- ‘(of all, the entire crowd) to sit down together’ (Z1.729; Z2.170)
te-če-ndu- (same) (Z1. 729).

D. Causatives and passives derived from sociatives. It is probably accidental that there are only two causatives from reciprocals registered in our sources. In Manchu, the suffix *-bu* serves both as a causative and a passive marker, the syntactic structure indicating the meaning. Note that the passive may be derived not only from transitives, but also from intransitives by way of “sidestepping” their causativization (see translations (i) and (ii) in (104a); cf. also *wasi-* ‘to descend’ → *wasi-bu-* i. ‘to lower sth’ (causative), ii. ‘to be lowered’ (morphologically derived from *wasi-* but semantically relatable to *wasi-bu-* in its causative meaning)).

- (104) a. *te-* ‘to sit down’ → *te-če-* ‘to sit down together (of all)’ →
 → *te-če-bu-* i. ‘to seat all (the persons) together’
 ii. ‘to be seated together (of all) by sb’ (Z1. 729)
efi-če-bu- ‘to let everybody play’ (A. 185)
ili-ča-bu- ‘to make everybody stand up’ (A. 185)
songo-čo-bu- ‘to force everybody to cry’ (A. 185).

On causatives derived from sociatives in *-ča* the suffix *-bu* follows *-ča*, which is natural enough. But, curiously enough, on causatives from sociatives in *-nu*, as Zakharov (1879: 169) asserts, *-bu* may precede *-nu* (cf. the analogous situation with causatives from reciprocals in Evenki: see (44) and the text above it in 3.2).

- b. *dosi-* ‘to enter’ → *dosi-nu-* ‘to enter together’ →
 → *dosi-bu-nu-* ‘to order all (persons) to enter together’ (Z2. 169).

Thus these formations may coincide structurally with sociatives derived from causatives; cf. (104c) where the final derivative refers to a plurality of objects and thus is an object-oriented sociative, as in the preceding instances.

- c. *tuči-* ‘to appear, go out’
 → *tuči-bu-* ‘to promote sb’ (lit. ‘to make sb go out/ sth appear, take sb out’)
 → *tučibu-nu-* ‘to promote sb together with sb else’ (Z1.761).

In both registered causatives derived from reciprocals we observe the iconic arrangement of the suffixes:

- d. *beču-nu-bu-* ‘to make sb fight’ (O. 163)
žafu-nu-bu- ‘to make sb wrestle/fight with each other.’

A sentential example:

- (105) *Buku xuwaran i buku emgi žuru žuru i žafu-nu-bu!* (O. 164)
 wrestler court GEN wrestler together pair pair GEN wrestle-REC-CAUS
 ‘Let the wrestlers wrestle together with the court wrestlers in pairs.’

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Reciprocal and sociative constructions in Even

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1. Introductory

1.1 General information on Even

Even, also known as Lamut, belongs (together with Evenki) to the northern branch of Tungusic languages. Even (as well as Tungusic languages in general) is morphologically an agglutinating language, making use exclusively of suffixation; syntactically it is a nominative-accusative language with the basic word order SOV.

According to the census of population in 2002 the total number of Evens is 19,071 of whom the majority currently reside in the Yakut (Saha) Republic (about nine thousand) and in the Magadan region (about four thousand). Two major dialect groups of Even are the eastern and middle-western dialects, the latter strongly influenced by Yakut, one of the Turkic languages of Siberia. On the other hand, the Oxotsk dialect (cited in this paper), of the eastern dialect group, reveals interference from Evenki, a closely related Tungusic language.

1.2 Overview

In Even the reciprocal and the sociative meanings can be expressed morphologically by verbal forms in *-mat* and *-lda* respectively, and by other morphosyntactic means. Thus, (1b) provides an example of a verbal suffixed reciprocal with the “canonical” diathesis:

- (1) a. *Atikan-Ø etike-m žarga-n.*
 old.woman-NOM old.man-ACC berate-NFUT.3SG
 ‘The old woman berates the old man.’
 b. *Atikan-Ø etike-n’un žarga-mat-ta.*
 old.woman-NOM old.man-COM berate-REC-NFUT.3PL
 ‘The old woman and the old man berate each other (i.e. quarrel).’

Notably, the verbal reciprocal in Even productively marks cross-coreferentiality of the subject not only with the underlying object (as in (1b)), but also with the possessor within an object noun phrase; the “possessive” diathesis is exemplified in (2b).

- (2) a. *Etiken-Ø nimek-i turki-wa-n ailta-n.*
 old.man-NOM neighbour-REFL sleigh-ACC-his mend-NFUT.3SG
 ‘The old man mended his neighbour’s sleigh.’
 b. *Nimeke-l-Ø meer turki-l-Ø-bur ailta-mat-ta.*
 neighbour-PL-NOM selves’ sleigh-PL-NOM-REFL.PL mend-REC-NFUT.3PL
 ‘The neighbours mended each other’s sleighs.’

Of special typological interest is the nominal reciprocal suffix *-takan* which in some dialects marks the head of the possessive phrase within verbal reciprocal constructions with the “possessive” diathesis (see Section 5).

While the reciprocal suffix is the main means, the reciprocal pronouns *meen meen-ur* and *meen meen-ter* ‘each other’ are additional means of expressing the reciprocal meaning. Pronominal reciprocals as in (3b) are mostly restricted to cases when the corresponding verbal reciprocal is unavailable. Note that the reciprocal forms do not derive from motion verbs, such as *tut-* in (3); see 3.2.

- (3) a. *Hurken-Ø nöö-duk-i tut-te-n.*
 youth-NOM brother-ABL-REFL run-NFUT-3SG
 ‘The youth runs from his (younger) brother.’
 b. *Aknil-Ø meen meen-duk-ur tut-te.*
 brothers-NOM each other-ABL-REFL.PL run-NFUT.3PL
 ‘The brothers run from each other.’

However, reciprocal pronouns, such as *meen meendukur* ‘from each other’ in (3b), can be used – pleonastically – with suffixed reciprocals (see 4.3.2).

Finally, the verbal morphological sociative in Even is not fully differentiated from the reciprocal: a number of lexicalized sociative forms convey the reciprocal meaning along with the sociative one; cf. (4b) and (4c):

- (4) a. *Orolčimŋa-Ø n’amiča-m žaw-ra-n.*
 herdsman-NOM doe-ACC catch-NFUT.3SG
 ‘The reindeer-breeder caught the (reindeer) doe.’

- b. *Orolčimŋa-l-Ø n'amiča-m žawa-lda-r.*
 herdsman-PL-NOM doe-ACC catch-SOC-NFUT.3PL
 'The reindeer-breeders caught together the (reindeer) doe.'
- c. *Orolčimŋa-l-Ø žawa-lda-r.*
 herdsman-PL-NOM catch-SOC-NFUT.3PL
 'The reindeer-breeders shook hands' or 'The reindeer-breeders fought.'

Reciprocals in Even differ from those in genetically closely related Evenki (Nedjalkov & Nedjalkov, Ch. 38) in the following features:

- (1) availability of two-diathesis reciprocals (see 3.1.1.3 below);
- (2) higher productivity of "possessive" reciprocals (as in (2b));
- (3) valency constraints restricting derivation of suffixed reciprocals (see 3.2);
- 4) the nature of the polysemy of the verbal reciprocal suffix (see 3.3);
- 5) the set of pronominal reciprocal markers is both more elaborate and more specialized (i.e. the reflexive plural pronoun *meer-bur* '(them)selves' cannot acquire the reciprocal reading 'each other').

The verbal sociative in Even, in contrast to Evenki, displays a different type of polysemy (see 8.4) and cannot mark (except for one case) the object-oriented diathesis attested in Evenki dialects.

1.3 Data sources

The present description of reciprocals and sociatives in Even is primarily based on my field research on the western Tompo dialect. The data on the eastern Oxotsk dialect and the eastern Magadan dialect have been supplemented by my informants – Darja and Xristina M. Osenina (currently residents in Tompo region of Yakutia) and Vera S. Elrika (lecturer of Even at the State Teacher-training University, St. Petersburg), respectively. Further data have been obtained from dictionaries and literature (in particular, from Cincius & Rishes (1957), Novikova (1980) and Robbek (1984)), as well as from the published folklore texts (see Sources).

2. Grammar¹

2.1 Morphology

The alternations of (open) vowels of suffixes (cf., e.g., the reciprocal suffix *-mat/-met*) are due to vowel harmony. Consonant alternations are determined by the assimilation processes. Thus, initial /r/ within a number of suffixes is fully assimilated by the preceding stem-final consonant (cf. the nonfuture tense marker in *žaw-ra-n* 'washed' in (4a) and *tut-te-n* 'runs' in (3a)). Stem-final /n/ mostly undergoes deletion when followed by a suffix with an initial consonant (cf. *göön-* 'to say' and *göö-met-* 'to talk' in (9)).

1. For more information on Even grammar see, for instance, Benzing (1955) and Malchukov (1995).

2.2 Nominal morphology: Case, number, possessivity

The order of nominal inflectional markers is: number – case – possession. The number markers are \emptyset for the singular and *-l/-r* for the plural (cf. (3b)). The case system comprises the following cases, among others: the nominative (marks the subject or the direct object when the latter takes a reflexive possessive suffix as in (1a)) – \emptyset ;² the accusative case in *-w/-u/-m/-bu/-wa/-ma* (cf. (2a)); the dative in *-du/-tu* (cf. (26a)); allative in *-tki/-taki/-teki* (cf. (28a)); the locative in *-la/-le/-dula/-dule* (cf. (24a)); the ablative in *-duk/-tuk* (cf. (3a)); the instrumental in *-č/-ži* (cf. (23a)); the comitative in *-n'un* (see 3.2.1); the benefactive in *-ga/-ge/-ka/-ke/-ŋa/-ŋe*, always followed by possessive endings (cf. (6b)).

The possessive construction is patterned according to the “Turkic izafet” type: the possessive relation is marked on the head noun by means of possessive suffixes indicating person and number of the Possessor noun, whereas the latter remains unmarked (cf. *nimek-i turki-wa-n* <‘neighbour-REFL sleigh-ACC-his’> ‘the neighbour’s sleigh’ in (2a)). Postpositional phrases are patterned as possessive, taking the postpositional noun as the formal head; cf. *hurken žuu-la-n* <‘youth house-LOC-his’> ‘in the youth’s house’ and *žuu doo-la-n* <‘house inside-LOC-his’> ‘inside the house’.

The possessive markers fall into personal and reflexive markers (see (5a) and (5b) respectively); the latter are used to mark coreferentiality of the possessor with the clausal subject (see (2a)).

(5)	SG		PL	
a.	<i>-w/-u/-m/-bu</i>	‘my’	<i>-t/-ti</i>	‘our’
	<i>-s/-si</i>	‘your (SG)’	<i>-san/-sen</i>	‘your (PL)’
	<i>-n/-ni</i>	‘his/her/its’	<i>-tan/-ten</i>	‘their’
b.	<i>-i/-j/-mi/-bi</i>	‘my, your, his/her’	<i>wur/-ur/-mur/-bur</i>	‘our, your, their’.

Notably, the reflexive possessive markers may be used (along with the accusative form) to mark the direct object, provided that the possessor within this group is identical to the subject (1a). Still another option for marking the direct object is the benefactive case which is always followed by possessive endings. Semantically, the benefactive case is peculiar in that, when marking the direct object, it simultaneously assigns the semantic role of Beneficiary to the Possessor within its phrase; cf. the semantic interpretation of the Possessor noun within the accusative-marked direct object in (6a) and within the benefactive-marked direct object in (6b):

(6) a.	<i>Etiken bej turki-wa-n ga-d-ni.</i>
	old.man man sleigh-ACC-his take-NFUT-3SG
	‘The old man took the man’s sleigh.’
b.	<i>Etiken bej turki-ga-n ga-d-ni.</i>
	old.man man sleigh-BEN-his take-NFUT-3SG
	‘The old man took the sleigh for the man.’

2. Henceforth, the zero markers are normally omitted in glosses.

2.3 Verbal morphology. Tense/aspect system. Agreement

In the examples the finite verb forms take the following tense markers: *-ra/-re/-da/-de/-ta/-te/-a/-e* or \emptyset for nonfuture (cf. the paradigm in (7) where the nonfuture tense marker is missing in the 2nd and 3rd person forms), which refers to the past on telic verbs (cf. (2a)), and to the present on atelic verbs (cf. (3a)); and *-ži/-či* for the future tense (cf. (68b)).

In the nonfuture (and future) tense the verb (e.g., *haa-* ‘to know’) takes the following agreement endings:

(7)		SG	PL
	1st p.	<i>haa-ra-m</i>	<i>haa-ra-p</i>
	2nd p.	<i>haa-\emptyset-nri</i>	<i>haa-\emptyset-s</i>
	3rd p.	<i>haa-\emptyset-n</i>	<i>haa-\emptyset-r</i>

2.4 Voices (valency changing categories)

In traditional Even grammars the following voices are distinguished: causative in *-wkan/-ukan/-mkan*, middle (anticausative) in *-b/-p*, (adversative) passive in *-w/-m*, reciprocal in *-mat/-met/-mač/-meč* (in some dialects with the long vowel: *-maat*, etc.) and sociative in *-lda*.

1. *Valency-increasing categories.* The main means of valency increase is the causative suffix (cf., however, type 3 below). When derived from an intransitive the causative verb takes the causee as its direct object, when derived from transitives – as its indirect object in the dative case (as in (8a)) or less often (restricted to factitive contexts) as its direct object (as in (8b)):

- (8) a. *Bi etiken-du hölnež-u arča-mkan-am.*
 I old.man-DAT guest-ACC meet-CAUS-NFUT.1SG
 ‘I let/made the old man meet the guest.’
- b. *Bi etike-m hölnež-u arča-mkan-am.*
 I old.man-ACC guest-ACC meet-CAUS-NFUT.1SG
 ‘I made the old man meet the guest.’

2. *Valency-decreasing categories. The reciprocal form.* The function of valency decrease is performed by (a) the anticausative (cf. *aaŋa-* ‘to open’ (vt) and *aaŋa-p-* ‘to be opened; open’ (vi), *beri-* ‘to lose’ – *beri-p-* ‘to get lost’) and (b) the reciprocal suffix:

- (9) *maa-* ‘to kill’ → *maa-mat-* ‘to kill each other’
göön- ‘to say, tell’ → *göö-met-* ‘to say/tell each other’
ani- ‘to present with’ → *ani-mat-* ‘to present each other with.’

3. *“Ambivalent” categories.* The adversative passive in Even is an “ambivalent” category, since it may mark both increase and decrease of verbal valency. Thus, on intransitives, as in (10), it increases the verbal valency, and on transitives, as in (11), it usually decreases it. In the latter case the underlying subject (*nugde* ‘bear’ in (11)), if overtly expressed, is in the dative case.

- (10) *Etiken mura-m höre-w-re-n.*
 old.man horse-ACC go-PASS-NFUT-3SG
 ‘The old man lost (let go) the horse.’
- (11) *Bej nugde-du maa-w-ra-n.*
 man bear-DAT kill-NFUT-3SG
 ‘The man got killed by the bear.’

Since the morphosyntactic characteristics (combinability with the reciprocal marker, etc.) of the adversative passive used in the former function are similar to those of the causative and, when used in the latter function, to those of the anticausative, they are not considered in the present paper (for more information on the adversative passive in Even see Malchukov 1993).

4. *The sociative form.* In contrast to other voice markers, the sociative suffix normally does not change verbal valency (except for lexicalised forms used in the reciprocal meaning, see Section 9.1.2):

- (12) *köke-* ‘to die’ → *köke-lda-* ‘to die together’
tut- ‘to run’ → *tute-lda-* ‘to run together’
hepken- ‘to catch’ → *hepke-lda-* ‘to catch together (with sb).’

5. *On derivational valency-changing markers.* Besides the voice categories considered above there exist about a dozen derivational (non-productive) valency-changing markers most of which are restricted to just a few items. The most important among them is the suffix *-u* which is historically related to the (adversative) passive marker and like the latter is “ambivalent”. When used on intransitive verbs of motion (28 items) it performs the causative function (cf. *nen-* ‘to go’ → *nen-u-* ‘to lead’), whereas on transitive verbs (15 items) it performs the anticausative function (cf. *gul-* ‘to kindle, set on fire’ → *gul-u-* ‘to flame up’). Of special interest are the causative/anticausative markers on the closed set of onomatopoeic verbs of destruction (including 84 items), which enter into the equipollent opposition. These markers constitute a four-member set conveying, along with the transitive/intransitive meaning, the perfective/imperfective value: *-m* is intransitive imperfective, *-r* intransitive perfective, *-k* transitive imperfective, *-l* transitive perfective (cf. *teke-m-*, *teke-r-* ‘to tear’ (vi), *teke-k-*, *teke-l-* ‘to tear’ (vt)).

2.5 Co-occurrence of voice markers

For the present discussion of reciprocal and sociative constructions the following information on the mutual co-occurrence of voice markers is relevant.

2.5.1 Co-occurrence of the reciprocal and the sociative marker

Combinability of the reciprocal marker *-mat* with the sociative marker *-lda* in Even (as in Evenki) is restricted to cases when the reciprocal form is derived from the sociative; in other words, the combination *-lda-mat* is possible, while the combination **-mača-lda* is not. This restriction can be accounted for either by a more recent origin of the reciprocal in *-mat* in the Tungus-Manchu languages (it is absent in Manchu) or by the fact that

it is more specialized in meaning as compared to the sociative (the latter combining the sociative meaning with the reciprocal). Reciprocal forms derived from (morphological) sociatives are synonymous to the corresponding reciprocal forms, except for the fact that they allow only the simultaneous reading (see Section 7); cf. (13c) and (13d):

- (13) a. *maa-* 'to kill'
 b. *maa-lda-* 'to kill sb together (of a group)'
 c. *maa-lda-mat-* 'to kill each other (simultaneously)'
 d. *maa-mat-* 'to kill each other.'

Reciprocal-sociative forms derived from lexicalized reciprocals (see Section 9.1.2) are synonymous to the latter; cf. (14b) and (14c):

- (14) a. *žaw-* 'to catch'
 b. *žawa-lda-* 'to catch each other; fight'
 c. *žawa-lda-mat-* 'to catch each other; fight.'

2.5.2 *Combinability of the reciprocal and the sociative with the causative marker*

The reciprocal and the causative markers may co-occur freely within one word form (naturally, provided that they are compatible semantically). Cf. the causative-reciprocal form in (15c) and the reciprocal-causative form in (15e) derived from the verb *haa-* 'to know sb/sth':

- (15) a. *haa-* 'to know'
 b. *haa-mat-* 'to know each other/ be acquainted with each other'
 c. *haa-mač-ukan-* 'to introduce (= make know) to each other'
 d. *haa-wkan-* 'to let know (about sth), give a message'
 e. *haa-wka-mat-* 'to let each other know (about sth).'

In a similar fashion, the sociative marker *-lda* may both precede and follow the causative marker; cf. the sociative-causative form in (16c) and the causative-sociative form in (16e), derived from the verb *hör-* 'to go':

- (16) a. *hör-* 'to go'
 b. *hör-uken-* 'to make leave; take away'
 c. *hör-uke-ldē-* 'to take sb away together (of many subject referents)'
 d. *höre-ldē-* 'to jointly go'
 e. *höre-ldē-wken-* 'to make sb (a group of persons) leave jointly.'

2.5.3 *Combinability of the reciprocal and the sociative with the anticausative marker*

The reciprocal and the sociative markers do not combine with the anticausative.

2.6 Non-comitative and comitative marking of subject plurality

If the subject is a single noun-phrase its semantic plurality, i.e. plurality of its referents, can be marked either (a) by the plural marker *-l/-r* or (b) by a numeral expression, including a numeral or a quantifier (cf. (17)). In the latter case the (modified) noun is either singular, as in (69b), or plural, as in (17). If the subject consists of two noun phrases it is expressed

either by a coordinative construction with both constituents or the second constituent taking the enclitic *-da/-de* (cf. (21)) or by a nominal comitative construction (see below).

The form in *-n'un* is the main means³ of marking the (animate) second reciprocal actant (cf., for instance, (1b)). Since this comitative form does not combine with other case markers, it is traditionally defined as the comitative case.

Within reciprocal (as well as non-reciprocal) constructions the nominal in the comitative case may either belong to the subject group (simple reciprocal construction; see (24b)) or else surface as a “comitative object” (discontinuous reciprocal construction; see (92a)). In the latter case it does not trigger the verbal (plural) agreement.

The marking of the subject for semantic plurality within a reciprocal construction with a one-NP subject modified by a numeral expression is restricted in that the noun (and hence the predicate) must take the plural form:

- (17) *Žör etike-r (*etiken) ukčēn-met-te.*
 two old.man-PL old man tell-REC-NFUT.3PL
 ‘The two old men talked.’

3. Reciprocals with the suffix *-mat*

3.1 Diathesis types of suffixed reciprocals

Among the two basic diathesis types of reciprocals, viz. subject-oriented and object-oriented, the latter are marginal since they are restricted to causative-reciprocal constructions.

3.1.1 *Subject-oriented diathesis*

Subject-oriented reciprocals, in their turn, fall into two major subgroups of (a) argument reciprocals with the “canonical” diathesis, as in (1b), or with the “indirect” diathesis and (b) “possessive” reciprocals, marking cross-coreferentiality between the subject and the possessor within the object NP, as in (2b).

Derivation of the argument reciprocal constructions, in contrast to “possessive” reciprocal constructions, involves reduction of verbal valency: the underlying (non-reciprocal) construction loses the object cross-coreferential with the subject.

3. Other comitative forms attested in Even dialects are forms in *-čil*, *-gli* and *-lkan*. The comitative-reflexive form in *-čil* primarily marks kinship terms. This form combines neither with case nor with possessive markers, being synonymous to the comitative case form with the reflexive-possessive endings; cf. *hurken nōö-čil = hurken nōö-n'u-mi* ‘the youth with his younger brother’. The form in *-gli*, typical of eastern dialects, is restricted to proper nouns: *en'mu Marija-gli* ‘my mother and Mary’. Finally, the form in *-lkan*, whose primary function is to express possession (cf. *oro-lkan bej* ‘man with (having) reindeer’) may be used in the Oxotsk dialect as a comitative marker; cf. *etike-lken atikan* ‘old woman with the old man’.

3.1.1.1 “Canonical” reciprocals

1. *Derived from two-place transitives.* This is the most common diathesis type; it is formed from all transitives taking an animate direct object; cf.:

- (18) a. *Hurken nöö-j čor-ča.*
youth brother-REFL hit-PART
‘The youth hit (with the fist) the (younger) brother.’
b. *Akanur čor-mača-l-ča-l.* (L.118)
brothers hit-REC-INCH-PART-PL
‘The brothers fought (with fists).’

Below follows a representative list of the most common lexical groups of “canonical” reciprocals derived from verbs denoting (a) a physical action upon the patient, as in (19); (b) social relations, as in (20); (c) feelings and their manifestations, or sense perception, as in (21); and (d) certain motion verbs, as in (22); the base verbs are not cited since their lexical meaning is part of the meaning of the reciprocal derivatives:

- (19) *hepke-met-* ‘to catch each other’
guže-met- ‘to kiss each other’
itme-met- ‘to bite each other’ (see (82))
guj-mat- ‘to butt each other’
maa-mat- ‘to kill each other’ (see (87b))
čor-mat- ‘to struggle (fist-fight)’ (see (18b)).
- (20) *žarga-mat-* ‘to scold each other’ (see (1b))
ha-mat- ‘to know each other’
neji-met- ‘to reproach each other’
hojit-mat- ‘to interfere with each other.’
- (21) *it-met-* ‘to see each other’
dolda-mat- ‘to hear each other’
alit-mat- ‘to hate each other’
akma-mat- ‘to love each other (of brothers).’
- (22) *ie-sči-met-* ‘to try to go ahead of each other (i.e. to compete)’
žuuma-mat- ‘to visit each other’
höru-met- ‘to drive each other away.’

2. *Derived from two-place intransitives.* “Canonical” reciprocals are also derived from two-place intransitives of two lexical-semantic groups.

1. Verbs of emotion (cf. *as-mat-*, *tiku-mat-* ‘to be angry with each other’, *girbe-met-* ‘to be shy of each other’, *ηel-met-* ‘to be afraid of each other’, *ol-mat-* ‘to be frightened of each other’) taking an object in the allative or instrumental case:

- (23) a. *Bej beji-č jami ol-di-n?*
man man-INST why be.frightened-FUT-3SG
‘Why (should) a man be frightened of (another man)?’

- b. *Beji-l ol-mat-ta.*
 man-PL be.frightened-REC-NFUT.3PL
 ‘The men are frightened of each other.’

2. Verbs of “visiting” (cf. *nimeg-met-* ‘to go to visit each other’, *bii-wet-met-* ‘to be (=visit) at each other(’s places)’, *hölne-met-* ‘to go and visit each other (to distant places)’ in (24b)) taking an object in the allative or locative case:

- (24) a. *Köleŋe etiken-dule hölne-n.*
 bear old.man-LOC go.to.visit-NFUT.3SG
 ‘The bear went to visit the old man.’
 b. *Köleŋe etike-n’un hölne-met-te.*
 bear old.man-COM go.to.visit-REC-NFUT.3PL
 ‘The bear and the old man went to visit each other.’

3. *Derived from three-place transitives.* Reciprocals derived from three-place transitives retain the indirect object which does not take part in the reciprocal derivation; cf. the indirect object denoting Addressee (of speech) in (25b):

- (25) a. *Bi etiken-teki nimek-u göön-e-m.*
 I old.man-ALL neighbour-ACC say-NFUT.1SG
 ‘I told the old man about the neighbour.’
 b. *Bi nimek-n’un etiken-teki göö-met-te-p.*
 I neighbour-COM old.man-ALL say-REC-NFUT-1PL
 ‘I and the neighbour told the old man about each other.’

3.1.1.2 “Indirect” reciprocals. This diathesis type is formed from three-place transitives of three lexical-semantic groups:

1. Verbs of giving (cf. *böö-met-* ‘to give to each other’, *ani-mat-* ‘to present to each other’, *borit-mat-* ‘to divide’ in (26b)) taking the indirect object in the dative case:

- (26) a. *Oroč tara-w oro-m nimek-tu borit-ti-n.*
 even that-ACC reindeer-ACC neighbour-DAT give.a.share-PAST-3SG
 ‘The even gave that reindeer to the neighbour as his share.’
 b. *(Oroči-l) tara-w oro-r-bu meer doo-li.*
 even-PL that-ACC reindeer-PL-ACC among themselves
borit-mat-ti-tan. (N. 136)
 give.a.share-REC-PAST-3PL
 ‘Evens divided those reindeer among themselves.’

2. Verbs of taking away (cf. *gaa-mat-* ‘to take sth from each other’, *žormi-mat-* ‘to steal sth from each other’, *tie-sči-met-* ‘to deprive each other of sth’ in (30b)) taking the indirect object in the ablative case.

3. Verbs of speech (cf. *göö-met-* ‘to say/tell sth to each other’, *ukčen-met-* ‘to tell each other sth, talk’, *ulgimi-mat-* ‘to ask each other about sth’, *humket-met-* ‘to whisper sth to each other’) taking the indirect object in the allative case; cf. (25a) and (27):

- (27) *Bi etike-n'un nimek-u göö-met-te-p.*
 I old.man-COM neighbour-ACC tell-REC-NFUT-1PL
 'I and the old man talked to each other about the neighbour.'

3.1.1.3 *On two-diathesis reciprocals.* Reciprocals derived from a number of three-place transitives are ambiguous in that they can mark cross-coreferentiality of the subject either with the direct or the indirect object. The two-diathesis reciprocals are derived, for example, from verbs of speech, such as *göö-met-* 'to tell each other/about each other' considered above, which has the "canonical" diathesis in (25b) marking cross-coreferentiality with the accusative Topic-of-speech object, and the "indirect" diathesis in (27) marking cross-coreferentiality with the Addressee-of-speech object in the allative case. Another example of two-diathesis reciprocals is *urli-mat-* 'to be jealous to each other/of each other' which has the "canonical" diathesis in (28b) and the "indirect" diathesis in (28c):

- (28) a. *Bi nöö-tki-j asiŋ-i urli-ra-m.*
 I brother-ALL-REFL wife-REFL be.jealous-NFUT-1SG
 'I am jealous of my wife towards my (younger) brother.'
- b. *Mut asiŋ-n'u-mi nöö-tki-j urli-mat-ta-p.*
 we wife-COM-REFL brother-ALL-REFL be.jealous-REC-NFUT-1PL
 lit. 'I and my wife are jealous of each other towards my (younger) brother.'
- c. *Mut nöö-nu-mi asiŋa-l-bur urli-mat-ta-p.*
 we brother-COM-REFL wife-PL-REFL PL be.jealous-REC-NFUT-1PL
 lit. 'I and my (younger) brother are jealous of our wives towards each other.'

Three-place causatives (from transitives) are structurally ambiguous in a similar fashion. Thus, causative construction (29a) has two corresponding reciprocal constructions – one with the "canonical" diathesis in (29b) with the subject cross-referenced to the underlying Patient, and one with the "indirect" diathesis in (29c) with the subject cross-coreferenced to the Causee:

- (29) a. *Bi hurken-du Ende-w arča-mkan-am.*
 I youth-DAT A.-ACC meet-CAUS-NFUT.1SG
 'I let/made the youth meet Andrew.'
- b. *Mut Ende-n'un hurken-du arča-mka-mač-čot-ta-p.*
 we A.-COM youth-DAT meet-CAUS-REC-ITER-NFUT-1PL
 'I and Andrew usually send the youth to meet each other.' (i.e., 'I send the youth to meet Andrew, and Andrew sends the youth to meet me.')
- c. *Mut hurke-n'un Ende-w arča-mka-mat-ta-p.*
 I youth-COM A.-ACC meet-CAUS-REC-NFUT-1PL
 'I and the youth are sending each other to meet Andrew (e.g., quarrelling who must meet Andrew).'

Note that reciprocal construction (29c) with the retained accusative case object can, in contrast to (29b), also be interpreted as "canonical", that is as 'I and the youth are sending Andrew to meet each other' (cf. the meaning of reciprocal construction (29b)). In this case, the retained object is interpreted not as the Patient, but as the Causee in the accusative case (cf. (8b)). Two-diathesis reciprocal-causative constructions such as (29c) can be disambiguated by the use of reciprocal pronouns (see Section 4.3.2).

It should be emphasized that any reading of reciprocal-causative forms as in (29b, c) is subject- but not object-oriented. As will be demonstrated below (see 3.1.2), the object-oriented diathesis is based on causative-reciprocal forms (causative forms derived from reciprocals) rather than on reciprocal-causative forms (reciprocals derived from causatives). The former display a reverse ordering of the reciprocal and the causative markers which iconically “mirrors” the different ordering of the cycles of syntactic derivation.⁴

3.1.1.4 “Possessive” reciprocals. In “possessive” reciprocal constructions, first attested in Even by Robbek (1984: 131), the subject is cross-coreferential with the Possessor within an object NP; cf. (2b). In a reciprocal construction the Possessor is replaced by the reflexive possessive plural pronoun *meer* expressing coreferentiality of Possessor with the (semantically) plural subject, while the head noun (the Possessed) takes the corresponding reflexive possessive plural ending *-wur/-bur*. Derivation of “possessive” reciprocal constructions does not involve any further morphosyntactic changes, and the verbal valency is retained. Note, for example, that the “possessive” reciprocal *ajilta-mat* in (2b) is transitive, just as its non-reciprocal counterpart *ajilta-* in (2a).

1. Derived from transitives. “Benefactive” reciprocal constructions. The reciprocal form marks cross-coreferentiality between the subject and the Possessor within the direct object NP, as in (2b) and (30b):

- (30) a. *Noŋan asi deetle-we-n tie-sči-riži dege-l-re-n.*
 (s)he woman wing-ACC-her take-CON-CONV fly-INCH-NFUT-3SG
 ‘She took away the woman’s wings and flew away.’
 b. *Asa-l deetle-wur tie-sči-met-niken dege-l-re. (D. 38)*
 woman-PL wing-REFL.PL take-CON-REC-CONV fly-INCH-NFUT.3PL
 ‘The women flew away trying to take away each other’s wings.’

A special case of constructions of this type are “benefactive” reciprocal constructions with the direct object marked for the benefactive case; cf. (6b) and (31):

- (31) *Etiken hurken-de meer turki-ga-wur ga-mat-ta.*
 old.man youth-and selves’ sleigh-BEN-REFL.PL take-REC-NFUT.3PL
 ‘The old man and the youth took the(ir) sleigh(s) for each other.’

This type of “possessive” reciprocal constructions is peculiar in that the possessor nominal invariably performs the role of Beneficiary within the proposition, obviously, due to the semantics of the benefactive case, which can simultaneously mark two different semantic roles (see 2.3.2). If the direct object in the reciprocal construction is marked with a reflexive-possessive ending (corresponding to an accusatively marked direct object in the corresponding non-reciprocal construction; cf. (30a)), the possessor nominal does not

4. An interesting violation of the iconic “mirror principle” in derivation of verbal forms in Tungus-Manchu languages is attested in Manchu, where the sociative-causative form with the sociative marker *-nu-* has the object-oriented meaning; cf. *dosi-bu-nu-* <enter-CAUS-SOC-> ‘make all enter’ (Zakharov 1879:169; see also Zakharov 1875).

have an invariant semantic role within the proposition and its interpretation is mainly determined by the verbal semantics. Thus, within reciprocal constructions formed by verbs of creation and favourable activities, the possessor nominal can be interpreted as Beneficiary (cf. ‘to mend each other’s sleighs’ = ‘to mend sleighs for each other’ in (2b)), whereas in reciprocal constructions formed by verbs of taking it has the Source reading (cf. ‘to take each other’s wings’ = ‘to take wings from each other’ in (30b)).

2. *Derived from two-place intransitives.* The reciprocal form marks cross-coreferentiality between the subject and the Possessor within the oblique object NP:

- (32) a. *Bi etiken žuu-la-n bii-wet-te-m.*
I old.man house-LOC-his be-ITER-NFUT-1SG
‘I (usually) stay in the old man’s house.’
- b. *Mut etike-n’un meer žuu-l-dula-wur bii-wet-met-te-p.*
we old.man-COM selves’ house-PL-LOC-REFL.PL be-ITER-REC-NFUT-1PL
‘I and the old man (usually) stay in each other’s houses.’

3.1.1.5 “*Postpositional possessive*” diathesis. In view of the fact that postpositional phrases are patterned as possessive phrases (see Section 2.2), the reciprocal form can mark cross-coreferentiality between the subject and possessor nominal within the postpositional phrase as well. This diathesis type obtains in the reciprocal construction under (33b) with subject cross-coreferential with the possessor *atikan* in the phrase headed by the postpositional noun *žugu-* ‘with regard to; about’ in the prolicative case:

- (33) a. *Atikan gia atikan žugu-li-n ukčen-re-n.*
old.woman other old.woman about-PROL-her tell-NFUT-3SG
‘One old woman talks about another.’
- b. *Atika-r meer žugu-li-wur ukčen-met-te.*
old.woman-PL selves’ about-PROL-REFL.PL tell-REC-NFUT.3PL
‘Old women talk about each other’ (lit. each other’s about).

Although the same meaning ‘to talk about each other’ may also be rendered by two-diathesis reciprocals derived from verbs of speech (see *göö-met-* ‘to tell each other/about each other’ cited in 3.1.1.3), (33) above represents not an argument, but the “possessive” diathesis. Note, in particular, that the anaphoric pronoun *meer* acquires here the reciprocal interpretation (‘about each other’ rather than ‘about themselves’), available only within the scope of the “possessive” reciprocal.

Since other postpositions (such as *daali-...-n* ‘(in the) vicinity (of); near’ considered in 9.2.1) are restricted to locative constructions they cannot combine with verbal reciprocals (see restrictions on formation of verbal reciprocals from locative predicates in 3.2).

3.1.2 *Object-oriented reciprocals*

In Even, object-oriented reciprocals are available only within causative-reciprocal constructions, where the reciprocal actants are expressed by the object NP denoting the Causee. Compare the subject-oriented “canonical” reciprocal construction in (34b) and the causative-reciprocal construction in (34c) derived from it:

- (34) a. *ŋin (gia-w) ŋin-u itmen-ni.*
 dog other-ACC dog-ACC bite-NFUT.3SG
 ‘The dog bit another dog.’
- b. *ŋina-l itme-met-te.*
 dog-PL bite-REC-NFUT.3PL
 ‘The dogs bite each other.’
- c. *Žör hurke-r ŋina-l-bu itme-meč-uken-Ø.*
 two youth-PL dog-PL-ACC bite-REC-CAUS-NFUT.3PL
 ‘Two youths make the dogs bite each other (=dogs).’

The diathesis type of an object-oriented reciprocal (causative-reciprocal) construction is determined by the diathesis type (argument vs. “possessive” diathesis) of the corresponding source reciprocal construction. The causative-reciprocal form derived from an argument (“canonical” and “indirect”) reciprocal marks cross-coreferentiality of the agentive object (the Causee) with another object (the direct object in (34b)). The causative-reciprocal form derived from a “possessive” reciprocal marks cross-coreferentiality of the agentive object with the possessor within another object (the direct object in (2b) repeated here as (35a)). Note that within the causative-reciprocal construction (35b), in contrast to reciprocal construction (35a), the reflexive possessive plural pronoun *meer* ‘(our/your/their) own, each other’s’ has an object-oriented (object-bound) rather than a subject-oriented reading. This is marked on the possessed nominal *turki(l)* which takes the personal possessive ending *-ten* in (35b) instead of the reflexive possessive ending *-bur* in (35a).

- (35) a. *Noŋartan meer turki-l-bur ailta-mat-ta.*
 they selves’ sleigh-PL-REFL.PL mend-REC-NFUT.3PL
 ‘They mended each other’s sleighs.’
- b. *Bi noŋar-bu-tan meer turki-l-bu-tan ailta-mač-ukan-am.*
 I they-ACC-their selves’ sleigh-PL-ACC-their mend-REC-CAUS-NFUT.1SG
 ‘I made them mend each other’s sleighs.’

3.2 Restrictions on derivation

There are two major restrictions on the derivation of verbal suffixed reciprocals in contrast to pronominal reciprocals. The first restriction is semantic, or perhaps, lexical in nature: (non-lexicalized; cf. 3.3) verbal reciprocals cannot be derived from verbs of motion (or static location); cf. *hör-* ‘to go’ and **hör-met-* (intended meaning: ‘to go from each other’), *em-* ‘to come’ and **em-met-* (intended meaning: ‘to come to each other’).

The second restriction is syntactic and it is related to the valency (argument vs. adjunct) status of the cross-coreferenced NPs. The verbal reciprocal can mark cross-coreferentiality of the subject with an argument but not with an adjunct. Thus the initial non-reciprocal construction with the benefactive argument in (16a) has a corresponding reciprocal (cf. (16b)), whereas the construction with the benefactive adjunct (36a) does not. Note that in reciprocal construction (36c) the subject is cross-coreferential with the Source argument of (36b) and not with the benefactive adjunct of (36a):

- (36) a. *Etiken nimek-ti olra-w ga-wat-ta-n.*
 old.man neighbour-DAT.REFL fish-ACC take-ITER-NFUT-3SG
 ‘The old man usually takes fish for his neighbour.’
- b. *Etiken nimek-tuk-i olra-w ga-wat-ta-n.*
 old.man neighbour-ABL-REFL fish-ACC take-ITER-NFUT-3SG
 ‘The old man usually takes fish from his neighbour.’
- c. *Nimeke-l olra-w ga-mač-čot-ta.*
 neighbour-PL fish-ACC take-REC-ITER-NFUT.3PL
 ‘The neighbours usually take fish from each other’ (not: ‘for each other.’)

If the intended meaning is ‘The neighbours usually take fish for each other’ a corresponding pronominal reciprocal construction (cf. (62)) should be used (or else a benefactive possessive reciprocal, such as (31)).

The valency restrictions on constructions with suffixed reciprocals hold for the “possessive” diathesis as well: a verbal reciprocal can mark cross-coreferentiality of the subject with the possessor within an object NP (cf. the locative object in (32a)), but not with the possessor within an adjunct NP (cf. the locative adjunct in (37a)):

- (37) a. *N’ooka etiken žuu-la-n köke-n.*
 Yakut old.man house-LOC-his die-NFUT.3SG
 ‘The Yakut died (staying) in the old man’s house.’
- b. **N’ooka etike-n’un meer žuu-l-dula-wur köke-met-te.*
 Yakut old.man-COM selves’ house-LOC-REFL.PL die-REC-NFUT.3PL
 (intended meaning:) ‘The Yakut and the old man died (staying) in each other’s houses.’

In other words, the reflexive-possessive pronoun *meer* acquires a reciprocal meaning only within the scope of a reciprocal predicate.

3.3 Multiplicative meaning of the suffix *-mat*

A small group of verbs with the reciprocal suffix (formal reciprocals), including about a dozen verbs of motion, conveys the multiplicative-dispersive meaning,⁵ denoting a reiterated motion of a person/an object in different directions or in different locations. It is conceivable that the suffix *-mat* retains here its original meaning which has later given rise to the reciprocal meaning. These verbs are similar to semantic reciprocals in that they also denote several (homogeneous) actions. Cf. textual examples ((38b) is adopted from Robbek (1984:129)):

- (38) a. *Noŋan öhömiken köte-met-te-n, niŋgi-mat-ta-n.* (L. 123)
 (s)he even curve-REC-NFUT-3SG sway-REC-NFUT-3SG
 ‘She (the shaman-woman) even bent, swayed from side to side.’
- b. *Toog haanin-ni teerin-teki hiru-met-te-n.*
 fire smoke-its side-ALL sway-REC-NFUT-3SG
 ‘The smoke fire swayed from side to side.’

5. For these terms see Xrakovskij (1997).

On morphological grounds (depending on the type of opposition with non-reciprocal verbs) three classes of formal reciprocals can be distinguished:

1. Formal reciprocals derived from non-reciprocals; cf. (40), (43), (44), (47) below.
2. Formal reciprocals that enter with non-reciprocals into an equipotent opposition, their stems intersecting; cf. (39), (41), (42), (45), (48) below.
3. Formal reciprocals lacking corresponding non-reciprocal verbs; cf. (46), (49) below.

On semantic grounds, two groups of formal reciprocals can be distinguished:

(a) Formal reciprocals denoting a reiterated motion (often in different directions) of a person/object:

- (39) *deri-met-* ‘to flee here and there from sb’; cf. *deriŋči-* ‘to flee from sb.’
 (40) *želŋe-met-* ‘to jump repeatedly.’
 (41) *kewu-met-* ‘to swim here and there (of animals)’; cf. *kewuŋči-* ‘swim (of animals).’
 (42) *melu-met-* ‘to leap over sth repeatedly; jump repeatedly’; cf. *meluŋči-* ‘to leap (once) over sth/out of sth.’
 (43) *tia(n)-* ‘to swim’ → *tia-mat-* ‘to swim here and there.’
 (44) *hiru(n)-* ‘to glide, sway’ → *hiru-met-* ‘to glide, sway repeatedly.’

(b) Formal reciprocals denoting a reiterated motion by a body part or the like:

- (45) *bagat-mat-* ‘to slap with wings’; cf. *bagak-* ‘to slap.’
 (46) *denme-met-* ‘to move (one’s) ears.’
 (47) *kiawa(n)-* ‘to curve’ → *kiawa-mat-* ‘to curve, sway from side to side.’
 (48) *köte-met-* ‘to twist/bend repeatedly’; cf. *köteŋči-* ‘to twist/wriggle (e.g. of a baby).’
 (49) *niŋgi-mat-* ‘to swing, sway from side to side.’

4. Constructions with reciprocal pronouns

Reciprocal pronouns, such as *meen meen-ur* ‘each other’ considered in 4.2, can be employed to express the reciprocal meaning either independently or with morphological reciprocals. In the latter case, however, their use is optional (cf. 4.3.2). Since reciprocal pronouns are related both formally (derivationally) and functionally (cf. a similar expression of subject-/object-orientation of anaphoric pronouns) to reflexive pronouns, the latter will be briefly considered in Section 4.1 below.

4.1 Reflexive pronouns

Depending on the syntactic position of the reflexive pronoun the following can be distinguished: (a) “argument” reflexive pronouns, substituting for an NP in an argument/adjunct position and (b) possessive reflexive pronouns, substituting for the Possessor within an NP; cf. (50) and (51) respectively:

- (50) *Kuŋa meen-i aw-ra-n.*
 child (him)self-REFL wash-NFUT-3SG
 ‘The child washed himself.’
- (51) *Hurken meen nöö-j aw-ra-n.*
 youth self’s brother-REFL wash-NFUT-3SG
 ‘The youth washed his (younger) brother.’

On the other hand, depending on the syntactic position of the antecedent, the argument reflexive pronouns can be further subdivided into groups of (a) subject-oriented (subject-bound) pronouns, as in the examples above, and (b) object-oriented (non-subject-bound) pronouns (see Section 4.1.2).

4.1.1 Subject-oriented pronouns *meen-i* and *meer-bur*

The subject-oriented reflexive pronouns *meen-i* ‘(my/your/ him/her)self’ and *meer-bur* ‘(our/your/them)selves’ are derived from the (stems of) possessive reflexive pronouns (cf. 4.1.3) and differ in the number of their antecedent; cf. (50) with the singular subject and (52) with the plural subject:

- (52) *Kuŋa-l meer-bur aw-ra.*
 child-PL (them)selves-REFL.PL wash-NFUT.3PL
 ‘The children washed themselves.’

The pronoun *meen-i* is derived from the reflexive-possessive pronoun in the singular *meen* which takes the corresponding reflexive-possessive singular ending *-i*; the pronoun *meer-bur* is derived from the reflexive-possessive plural pronoun *meer*, taking the corresponding reflexive plural ending *-bur* (see (5b)). Here is a fragment of the case paradigm of subject-oriented reflexive pronouns; note that subject-oriented reflexive pronouns, like other nouns with the reflexive-possessive endings, lack the accusative case: in the latter function the unmarked (nominative) case is used:

(53)	SG	PL
NOM	<i>meen-Ø-i</i>	<i>meer-Ø-bur</i>
DAT	<i>meen-d-i</i>	<i>meer-du-r</i>
LOC	<i>meen-dule-j</i>	<i>meer-dule-wur</i>
ABL	<i>meen-duk-i</i>	<i>meer-duk-ur</i>

4.1.2 Object-oriented pronouns *meen-ni*, *meen-ten*, etc.

The difference in use between the subject-oriented pronoun (such as *meen-i* ‘himself’ in (54a)) and the object-oriented pronoun (such as *meen-ni* ‘he himself’ in (54b)), may be illustrated by the causative construction (54), where the former marks coreferentiality with the (surface) subject, while the latter marks coreferentiality with the agentive phrase denoting the Causee:

- (54) a. *Hurken₁ nöö-i₂ meen-i₁ aw-ukan-ni.*
 youth brother-REFL himself(REFL) wash-CAUS-NFUT.3SG
 ‘The youth made the (younger) brother wash himself (=the youth).’

- b. *Hurken₁ nöö-i₂ meen-me-n₂ aw-ukan-ni.*
 youth brother-REFL himself(ACC-3SG) wash-CAUS-NFUT-3SG
 ‘The youth made the (younger) brother wash.’ (lit. ‘wash himself (=the brother)’)

The object-oriented reflexive pronouns are derived from the stem of the reflexive-possessive singular pronoun *meen* with the help of personal possessive endings (rather than reflexive-possessive endings, as in the case of subject-oriented pronouns).⁶ Thus, the object-oriented pronouns, in contrast to the subject-oriented ones, have six different forms marked for the person and number of their antecedents: *meen-mu* ‘(I) myself’, *meen-si* ‘(you) yourself’, *meen-ni* ‘(he) himself, (she) herself’, *meen-ti* ‘(we) ourselves’, *meen-sen* ‘(you) yourselves’, *meen-ten* ‘(they) themselves’. Here is a fragment of the case paradigm of the 3rd person object-oriented pronouns:

(55)	SG	PL
NOM	<i>meen-Ø-ni</i>	<i>meen-Ø-ten</i>
ACC	<i>meen-me-n</i>	<i>meen-me-ten</i>
DAT	<i>meen-du-n</i>	<i>meen-du-ten</i>
LOC	<i>meen-dule-n</i>	<i>meen-dule-ten</i>

4.1.3 Reflexive-possessive pronouns *meen* and *meer*

The reflexive-possessive pronouns *meen* lit. ‘(my/your/his/her) own’ and *meer* lit. ‘(our/your/ their) own’ differ in the number of the antecedent; cf. (51) with a singular subject and (56) with a plural subject:

- (56) *Hurke-r meer nöö-wur aw-ra.*
 youth-PL selves’ brother-REFL.PL wash-NFUT.3PL
 ‘The youths washed their (younger) brother.’

The syntactic subject or non-subject status of the antecedent of the reflexive-possessive pronouns is not expressed in its form, which remains unchanged, but in the form of the head noun of the possessive construction. If the head noun takes a reflexive-possessive ending (cf. the reflexive singular ending *-j* on *niri-j* ‘his own back’ in (57a)), the reflexive-possessive pronoun has a subject-oriented reading, and if it takes a personal-possessive ending (cf. the 3rd person singular suffix *-n* on *niri-wa-n* ‘his back’ in (57b)), it has an object-oriented reading. Consequently, the pronoun *meen*, used in the causative construction, has a subject-oriented interpretation in (57a) and an object-oriented interpretation in (57b):

- (57) a. *Hurken₁ nöö-i₂ meen₁ niri-j aw-ukan-ni.*
 youth brother-REFL self’s back-REFL wash-CAUS-NFUT-3SG
 ‘The youth made the (younger) brother wash his (=the elder one’s) back.’

6. Due to the influence of Yakut object-oriented pronouns in some western dialects are derived from the pronominalized noun *bej* ‘man’ (rather than *meen*) taking the corresponding personal possessive endings: *bej-u* ‘(I) myself’, *beje-s* ‘(you) yourself’, etc.; cf. Yakut: *beye-m* ‘(I) myself’, etc.

- b. *Hurken*₁ *nöö-i*₂ *meen*₂ *niri-wa-n* *aw-ukan-ni*.
 youth brother-REFL self's back-ACC-his wash-CAUS-NFUT-3SG
 'The youth made his (younger) brother wash his (=the younger one's) back.'

In a similar fashion the reflexive-possessive pronoun *meer* has a subject-oriented reading within a causative-reciprocal construction with the “possessive” diathesis in (35a), but an object-oriented reading in (35b). The anaphoric pronoun *meer* allows for the reciprocal interpretation ‘each other’s’ only when used with a suffixed reciprocal (cf. (2b), also examples in 3.1.1.4 above), otherwise only the reflexive interpretation ‘(our/your/their) own’ is possible (cf., for instance, (56)).

4.2 Derivation of reciprocal pronouns

In contrast to reflexive pronouns, specialised reciprocal pronouns represent the “argument” (non-“possessive”) type. Recall that the function of “possessive” reciprocals is performed by the semantically ambiguous anaphoric plural pronoun *meer* having both the reflexive (‘their/... own’) and the reciprocal (‘each other’s’) reading.

Depending on the syntactic position of their antecedent, the reciprocal pronouns, just as the “argument” reflexive pronouns, can be further divided into subject-oriented and object-oriented pronouns.

4.2.1 Subject-oriented pronoun *meen meen-ur*

The morphological structure of this class of pronouns varies in different Even dialects (on the dialect base of this study see Section 1.1 above). In most Eastern dialects reciprocal pronouns are derived from the subject-oriented reflexive pronoun *meer-bur* ‘(our/your/them) selves’ by “infixation” of the marker *-teken*.⁷ In the Middle-Western dialects the subject-oriented reciprocal pronouns are derived by reduplication of the reflexive-possessive singular pronoun *meen* ‘(my/your/him)self’, the second stem taking the reflexive-possessive plural ending. A fragment of the case paradigm of subject-oriented reciprocal pronouns in the Eastern (Oxotsk) and Western (Tompo) dialects is given below:

	Eastern dialects	Western dialects	
NOM	<i>meer-tek-Ø-mur</i>	<i>meen meen-Ø-ur</i>	‘each other’
DAT	<i>meer-teken-du-r</i>	<i>meen meen-du-r</i>	‘to each other’
LOC	<i>meer-teken-dule-wur</i>	<i>meen meen-dule-wur</i>	‘by/to each other’
ABL	<i>meer-teken-duk-ur</i>	<i>meen meen-duk-ur</i>	‘from each other’

This class of reciprocal pronouns has a defective case paradigm since it lacks the benefactive and the accusative case, just like the subject-oriented reflexive pronouns, where the corresponding nominative case form is used in the latter function. Compare, for instance, the use of *meen meen-ur* in the direct object position in reciprocal construction (58):

7. In the (eastern) Ola dialect, the marker *-teken-* appears in the (plural) form *-teker-* (cf. *meer-teker-dur* ‘to each other’ in (62)), whereas in the (eastern) Magadan dialect reciprocal pronouns appear to be lost (V.S. Elrika, p.c.).

- (58) *ɲina-l meen meen-Ø-ur itmen-Ø.*
 dog-PL each other-NOM-REFL.PL bite-NFUT.3PL
 ‘The dogs bit each other.’

4.2.2 Object-oriented pronoun *meen meen-ten*, etc.

Object-oriented reciprocal pronouns are derived in a way similar to subject-oriented reciprocal pronouns except for the fact that they take personal possessive (instead of reflexive-possessive) plural markers; cf. the analogous contrast between subject-oriented and object-oriented reflexive pronouns. Thus the single possessive form of subject-oriented reciprocal pronouns corresponds to three different forms of object-oriented reciprocal pronouns. Compare formation of object-oriented reciprocal pronouns in the Eastern and Western dialects (exemplified below by the accusative forms in *-me*):

- | | | | |
|------|------------------------|-------------------------|-------------------------------------|
| (59) | Eastern dialects | Western dialects | |
| | <i>meer-tek-me-t</i> | <i>meen meen-me-t</i> | ‘one another (of us)’ |
| | <i>meer-tek-me-sen</i> | <i>meen meen-me-hen</i> | ‘one another (of you)’ |
| | <i>meer-tek-me-ten</i> | <i>meen meen-me-ten</i> | ‘one another (of them)’ (see (60b)) |

4.2.3 Diathesis types of constructions with reciprocal pronouns

By definition, reciprocal constructions with subject-oriented reciprocal pronouns have the subject-oriented diathesis, while reciprocal constructions with object-oriented reciprocal pronouns have the object-oriented diathesis. For example, in a causative construction the subject-oriented reciprocal pronoun in (60a) indicates coreferentiality with the (surface) subject, while the object-oriented reciprocal pronoun in (60b) indicates coreferentiality with the Causee (cf. the parallel use of subject-oriented and object-oriented reflexive pronouns in causative construction (54)).

- (60) a. *Žör hurke-r₁ ɲina-l-bu₂ meen meen-ur₁ itme-mken-Ø.*
 two youth-PL dog-PL-ACC each other-REFL bite-CAUS-NFUT.3PL
 ‘The two youths caused the dogs to bite each other (=youths) (i.e. hounded each other with dogs).’
- b. *Žör hurke-r₁ ɲina-l-bu₂ meen meen-me-ten₂ itme-mken-Ø.*
 two youth-PL dog-PL-ACC each other-ACC-3PL bite-CAUS-NFUT.3PL
 ‘The two youths caused the dogs to bite each other (=dogs).’

As shown by (60), the formation of pronominal reciprocal constructions does not involve reduction of the verbal valency. Another difference between pronominal and suffixed reciprocals lies in the fact that the former can mark cross-coreferentiality of the subject not only with a verbal object (direct object in the “canonical” reciprocal construction in (58) and indirect object in the “indirect” reciprocal construction in (61)), but also with an adjunct; cf. (36a) and (62) from Novikova (1980:209):

- (61) *Amarla maa-ča-wur olra-w meer-teker-dur böö-wet-te.*
 later kill-PART-REFL.PL fish-ACC each.other-DAT-REFL.PL give-ITER-NFUT.3PL
 ‘Later they used to give the fish they (had) killed to each other.’

- (62) *Amarla maa-ča-wur olra-w meer-teker-dur ga-wat-ta.*
 later kill-PART-REFL.PL fish-ACC each.OTHER-DAT.REFL.PL take-ITER-NFUT.3PL
 ‘Later they used to take the fish they (had) killed for each other.’

4.3 Relationship between suffixed and pronominal reciprocals

4.3.1 *Differences between suffixed and pronominal reciprocals*

As already mentioned, the primary means of expressing the reciprocal meaning in Even is the suffixed morphological reciprocal. The pronominal reciprocals, as compared to the verbal, represent a “marked” pattern in that (a) they are formally more complex; (b) they are less frequent in use (and therefore have not been previously mentioned in descriptive grammars of Even); (c) their structure shows dialectal variation.

Syntactically, suffixed reciprocals differ from pronominal ones in the type of syntactic derivation, as derivation of the former involves valency decrease and that of the latter does not, and in restrictions on their derivation. On the one hand, pronominal reciprocals do not have the “possessive” diathesis. On the other hand, suffixed reciprocals do not form the adverbial diathesis; cf. the pronominal reciprocal construction (62) with the subject cross-coreferential with the Benefactive adjunct and the verbal reciprocal construction (36c) lacking the corresponding interpretation.

It appears that the additional valency restrictions on the derivation of suffixed reciprocals (that run counter to the “markedness” relation between pronominal and suffixed reciprocals) have a functional explanation and are related to the possibility of recovering the semantic role of the second reciprocal actant within these two types of reciprocal constructions (cf. Givón (1990:650–1) on “case recoverability” strategies in derivation of relative clauses). As demonstrated above, in suffixed reciprocal constructions the single morphological reciprocal marker *-mat* can signal cross-coreferentiality between NPs with different semantic-syntactic (=case) roles that may result in ambiguity of these forms (cf. 3.1.3.4 on two-diathesis reciprocals). Within minimal contexts, the case role of the second reciprocal actant can be recovered solely by relating the reciprocal construction structure to the argument structure of the verb: the subject is interpreted as cross-coreferential with that constituent of the underlying construction which is lacking in the reciprocal construction. Since only the verbal arguments (=actants), being obligatory constituents, can be identified as lacking, but not its potential adjuncts, the latter cannot participate in the reciprocal derivation.

In pronominal reciprocal constructions, by contrast, the semantic-syntactic role of the second reciprocal actant (and, consequently, the diathesis type of reciprocal construction) is explicitly marked by the (case) form of the reciprocal pronoun. Therefore, pronominal reciprocal constructions do not show ambiguity and consequently are not subject to valency constraints.

4.3.2 Pleonastic use of reciprocal pronouns

When used pleonastically with suffixed reciprocals, reciprocal pronouns (just as in the case of their independent use) retain the case form of the noun they substitute for (cf. (58) and (63a)); less frequently, they take the comitative case form (as in (63b)):

- (63) a. *Žör ŋina-l meen meen-ur itme-met-te.*
 two dog-PL each other-REFL.PL bite-REC-NFUT.3PL
 ‘The two dogs bite each other.’
- b. *Žör ŋina-l meen meen-n’u-mur itme-met-te.*
 two dog-PL each other-COM-REFL.PL bite-REC-NFUT.3PL
 ‘The two dogs bite (lit. with) each other.’

With suffixed reciprocals, both subject-oriented and object-oriented reciprocal pronouns can be used. The diathesis type of the reciprocal construction in this case is determined by the diathesis of the suffixed reciprocal (which is, of course, only natural, given the optional character of reciprocal pronouns), so that the use of object-oriented reciprocal pronouns is restricted to causative-reciprocal constructions.

1. *The use of subject-oriented reciprocal pronouns.* These pronouns can be used within verbal reciprocal constructions of different diathesis types. While their use with suffixed reciprocals is normally pleonastic, they may be used as a means of disambiguation in two-diathesis reciprocal-causative constructions. As demonstrated above (see 3.1.1.3), reciprocal-causative constructions are often ambiguous; cf. (64) (and also (29c)), which can be interpreted either as “canonical” (cf. the (i) reading) or “indirect” (cf. the (ii) reading):

- (64) *Hurke-r hólnež-u arča-mka-mat-ta.*
 youth-PL guest-ACC meet-CAUS-REC-NFUT.1PL
- i. ‘The youths are sending the guest to meet each other (i.e. youth_i is sending the guest to meet youth_j, and youth_j is sending the guest to meet youth_i).’
- ii. ‘The youths are sending each other to meet the guest (for example, quarrelling who is to go and meet the guest).’

The reciprocal pronouns help to disambiguate these constructions. Thus the (i) meaning (subject cross-coreferential with the underlying Patient) is unambiguously rendered by (65) with the reciprocal pronoun in the direct object position:

- (65) *Hurke-r hólnež-u meen meen-ur arča-mka-mat-ta.*
 youth-PL guest-ACC each.other-REFL.PL meet-CAUS-REC-NFUT.3PL
 ‘The youths are sending the guest to meet each other (= each of them).’

The (ii) meaning (subject cross-coreferential with the Causee), on the contrary, is explicitly expressed by (66) with the reciprocal pronoun in the indirect object position:

- (66) *Hurke-r meen meen-du-r hólnež-u arča-mka-mat-ta.*
 youth-PL each other-DAT-REFL.PL guest-ACC meet-CAUS-REC-NFUT.3PL
 ‘The youths are sending each other to meet the guest.’

Reciprocal construction (65) is disambiguated with the help of word order: since the indirect object normally precedes the direct object, the reciprocal pronoun in the preverbal

position is interpreted as the direct object and the reciprocal construction, consequently, as having the “canonical” diathesis. Reciprocal construction (66) is additionally disambiguated with the help of the case-marking on the reciprocal pronoun: it takes the dative case and is, consequently, interpreted as the indirect object.

2. *The use of object-oriented reciprocal pronouns.* These pronouns can be used in causative reciprocal constructions and pleonastically mark cross-coreferentiality of the underlying object (object of the base verb) with the Causee; cf. (34b) and (67):

- (67) *Žör hurke-r₁ ŋina-l-bu₂ meen meen-me-ten₂ itme-meč-uken-Ø.*
 two youth-PL dog-PL-ACC each other-ACC-3PL bite-REC-CAUS-NFUT.3PL
 ‘Two youths make the dogs bite one another (that is, set one dog on the other).’

5. Nominal possessive-reciprocal suffix *-takan* ‘each other’s’ (Oxotsk dialect)

In the Oxotsk dialect, cross-coreferentiality between the subject and the Possessor in “possessive” reciprocal constructions can be additionally marked on the head of the possessive phrase with the suffix *-takan* ‘each other’s’ (also used to derive argument reciprocal pronouns in this dialect, see Section 4.2.1).

- (68) a. *Bej hooni-wa-n irič haa-ži-m?*
 man strength-ACC-his how know-FUT-1PL
 ‘How can we try the man’s strength?’
 b. *Honi-l beji-l, hooni-tak-mar irič haa-mat-či-p? (O. 138)*
 strong-PL man-PL strength-takan-REFL.PL how know-REC-FUT-1PL
 ‘Strong men, how can we try each other’s strength?’

In the “possessive” reciprocal construction under (68b) the head noun of the possessive phrase in the direct object position takes the marker *-takan* and has the form *hooni-tak-mar* instead of *hooni-l-bur* (strength-PL-REFL.PL) available in other dialects.

The suffix *-takan* can be used in “possessive” reciprocal constructions on different objects; cf. its use on the oblique object in (69b) formed by a two-place intransitive lexical reciprocal cited in (97b):

- (69) a. *Ömen n’ur gia n’ur hur-le-n naa-d-ni.*
 one arrow another arrow head-LOC-its collide-NFUT-3SG
 ‘One arrow hit another arrow’s head.’
 b. *Žör n’ur meer hure-tek-le-wer naa-lda-r. (O. 116)*
 two arrow selves’ head-takan-LOC-REFL.PL collide-SOC-NFUT.3PL
 ‘Two arrows hit each other’s heads.’

The morphological marking of the possessed nominal in “possessive” reciprocal constructions in the Oxotsk dialect can be attributed, apparently, to the general tendency of Even to “head-marking” within a possessive NP. This tendency is already attested in the “izafet” patterning of the possessive construction and is particularly obvious in constructions with the benefactive case, where the case form on the possessed assigns a special semantic role (that of Beneficiary) to its possessor nominal (see 2.2).

6. Reciprocal specifier *meer dooli(-wur)*

The reciprocal specifier *meer dooli(-wur)* ‘among themselves; (to) each other’ is mostly used pleonastically in combination with suffixed reciprocals. Examples (26b) above and (70b) below illustrate its use in “indirect” and “canonical” reciprocal construction respectively:

- (70) a. *Heejek gia-w heejek-u maa-n.*
 Yukaghir other-ACC Yukaghir-ACC kill-NFUT.3PL
 ‘One Yukaghir killed the other.’
- b. *Heejeke-l hil-žinadur meer dooli maa-mač-čot-ta.* (N. 133)
 Yukaghir-PL suffer-CONV among themselves kill-REC-ITER-NFUT.3PL
 ‘The Yukaghirs killed each other in order not to suffer (not to be tortured).’

Less typical is the use of this specifier as a single reciprocal marker in combination with non-reciprocal predicates. Thus, in (71b) it forms a “canonical” reciprocal construction (note that the first predicate *bejči-gre-r* in (71b) is non-reciprocal):

- (71) a. *Heejeke-l oroči-l-bu bejči-gre-r.*
 Yukaghir-PL Even-PL-ACC hunt-ITER-NFUT.3PL
 ‘Yukaghirs used to “hunt” Evens.’
- b. *(Heejeke-l oroči-l-n’un) meer dooli bejči-gre-r,*
 Yukaghir-PL Even-PL-COM among themselves hunt-ITER-NFUT.3PL
maa-mat-kara-r. (N. 132)
 kill-REC-ITER-3PL
 ‘Yukaghirs and Evens used to “hunt” and kill each other.’

As is shown here, the reciprocal specifier *meer dooli(-wur)* is predominantly used in reciprocal constructions that do not imply strict cross-coreference between any two participants and normally take a subject denoting a group of persons; cf. (70b) and (71b).

Historically, *meer dooli(-wur)* is a combination of the reflexive possessive plural pronoun *meer* with the postpositional noun *do-* ‘inside of’ in the prolocative case (in *-li*) and optionally taking the reflexive-possessive plural ending *-wur*. The use of *meer dooli(-wur)* as a reciprocal marker apparently takes its origin in its use in constructions with suffixed reciprocals with the “postpositional possessive” diathesis (cf. 3.1.1.5), as evidenced by the fact that it is still predominantly used in combination with suffixed reciprocals. Later, however, this phrase has undergone lexicalization, which reveals itself, semantically, in the semantic shift (‘inside/among one’s own (people)’ > ‘among themselves’ > ‘(to) each other’), morphologically in the optional use of the reflexive-possessive ending *-wur* (rather than the reflexive-possessive pronoun *meer*), and syntactically in the loss of the corresponding non-reciprocal construction.

7. Simultaneity and succession of reciprocal subevents

Interpretation of the actions denoted by a reciprocal construction as simultaneous or successive depends partly on the formal type of reciprocal. Thus, lexical reciprocals, both non-derived (see 9.1.1) and those with the suffix *-lda* (see 9.1.2), allow only a simultaneous reading (which in the latter case is determined by the semantics of the sociative marker). Pronominal reciprocals, by contrast, allow both interpretations: thus, such examples as (60a, b) allow the use of lexical-syntactic markers of either simultaneity (such as *ömettu* ‘together’) or succession (such as *ömetelži* ‘one after another’) of verbal actions.

Finally, in a verbal reciprocal construction, the temporal (axis) relations between reciprocal subevents seem to be largely determined by the verbal lexical meaning. Thus, the suffixed reciprocals *guže-met-* ‘to kiss (each other)’ or *čor-mat-* ‘to hit each other, fist-fight’ imply simultaneity of actions, whereas *duk-mat-* ‘to write to each other’ or *hölne-met-* ‘to visit each other’ in (24b) imply their succession, and *ga-mat-* ‘to take from each other’ in (36c) or *ma-mat-* ‘to kill each other’ in (70b) allow both interpretations. In the latter case simultaneity of the subevents can be marked (apart from lexical-syntactic means) morphologically – by a combination of the reciprocal with the sociative marker, cf. *ma-lda-mat-* ‘to kill each other (simultaneously)’ in (13c). Succession of subevents can also be marked morphologically – by a combination of the reciprocal marker with the iterative marker. Notably the iterative suffix in such cases may precede (contrary to the general ordering of voice and aspect suffixes) the reciprocal marker: cf *bii-wet-met-* ‘to visit each other (successively)’ in (32b).

8. Sociative constructions (suffix *-lda*)

8.1 Sociative meaning

The morphological sociative in *-lda/-lde* denotes that the verbal action performed by the referents of the subject NP occurs (a) at the same time and/or (b) in the same place. The first meaning is realized by the sociative forms derived from telic verbs (denoting that the action performed by different participants simultaneously achieves its inherent limit):

- (72) *Oro-r buteke-duk (*ömetelži) köke-lde-r.*
 reindeer-PL hoof.disease-ABL one after another die-SOC-NFUT.3PL
 ‘The reindeer died together (=at once) from the hoof disease (*one after another).’

As demonstrated by (72), the morphological sociative derived from the telic verb *köke-* ‘to die’ cannot combine with the distributive adverb *ömetelži* ‘one after another’ denoting a successive participation of the referents of the subject NP in the verbal action.

The second meaning is realized by the sociative form of verbs of location and motion:

- (73) *Beji-l unijek-tu ilača-lda-r.*
 man-PL shop-DAT stand-SOC-NFUT.3PL
 ‘The men stand by the shop together’ (e.g., in a queue).

Note that a morphological sociative from a locative verb, such as *ilat-* ‘to stand’ in (73), cannot combine with the reciprocal adverb *gora-lta* ‘at a distance’ (see (107b)), denoting distant location of several objects.

Morphological sociatives derived from telic verbs of motion realize both basic meanings; cf. *tute-lde-* in (12) ‘to run together (⇒ at the same time and in the same place)’.

The meaning of the (subject-oriented) sociative can also be rendered by means of the sociative adverb *ömettu* ‘together’ or by collective numerals in *-rižur/-nižur* (such as *žö-rižur* ‘two in number’, *il-nižur* ‘three in number’, etc.).

8.2 Diathesis types of sociatives

As mentioned above, the morphological sociative in Even is subject-oriented, i.e. it denotes joint action of the subject referents. The use of object-oriented sociatives is restricted to causative-sociative constructions (cf. the parallel distribution of subject and object-oriented reciprocals).

8.2.1 Subject-oriented sociatives

Subject-oriented sociatives are derived from verbs of different valency classes taking an animate subject; cf. the subject-oriented sociatives derived from a one-place intransitive in (72), from a two-place intransitive in (73) and from a two-place transitive in (5b), repeated here as (74a):

- (74) a. *Orolčimŋa-l n’amiča-m žawa-lđa-r.*
 herdsman-PL doe-ACC catch-SOC-NFUT.3PL
 ‘The reindeer-breeders caught together the (reindeer-)doe.’
- b. **Orolčimŋa n’amiča-r-bu žawa-lđa-n.*
 herdsman doe-PL-ACC catch-SOC-NFUT.3SG
 ‘The reindeer-breeder caught the (reindeer-)does being together.’

As demonstrated by (74), the morphological sociative from a transitive verb indicates joint participation of the subject referents, as in (74a), but not of the object referents, as in the ungrammatical (74b).

8.2.2 Object-oriented sociatives (causatives only)

The causative-sociative form (see Section 2.5.2) marks joint participation of referents of the Causee object; cf. the sociative subject-oriented construction in (72) and the causative-sociative object-oriented construction in (75):

- (75) *Hi oro-r-bu buteke-duk köke-lde-wken-i-s.*
 you reindeer-PL-ACC hoof.disease-ABL die-SOC-CAUS-PAST-2SG
 ‘You (have) let the reindeer die together (at once) from the hoof disease.’

8.3 Restrictions on derivation

For semantic reasons the sociative in *-lda* cannot be derived from zero-valent verbs (like *imanna-* ‘to snow’, etc.), nor can it be derived from atelic verbs, except those denoting localization (see Section 8.1); e.g.:

- (76) *buten-* ‘to be ill’ → **butene-lda-*.
 (77) *hoŋan-* ‘to weep’ → **hoŋana-lda-*.

8.4 Competitive meaning of the *-lda* form

The competitive meaning (i.e. the meaning ‘to compete in doing V’) of the *-lda* form has been attested by V.A. Robbek (1984:139) for the eastern dialect of Berjozovka (it is not clear from the cited examples to which extent this meaning is dependent on the context); cf.:

- (78) a. *hiru(n)-* ‘to ski’ → *hiru-lda-* ‘to compete in skiing’
 b. *duk-* ‘to write’ → *duka-lda-* ‘to compete in writing (e.g. of schoolchildren)’

8.5 Suffix *-lda* with lexical reciprocals

The formal sociatives derived from lexical reciprocals considered in 9.1.1 are synonymous to the base verbs (and their reciprocal forms):

- (79) a. *bulen-* ‘to be hostile to each other’
 b. *bule-lda-* (same)
 c. *bulen-met-* (same)
 (80) a. *geji(n)-* ‘to compete’
 b. *geji-lda-* (same)
 c. *geji-met-* (same)
 (81) a. *kusi-* ‘to fight’
 b. *kusi-lda-* (same)
 c. *kusi-met-* (same)
 (82) a. *hamu-* ‘to unite’
 b. *hamu-lda-* (same)
 c. *hamu-mat-* (same).

9. Lexical reciprocals

In this section two distinct types of lexical reciprocals are treated: verbs and spatial adverbs.

9.1 Verbs

In Even two major groups of verbal lexical reciprocals can be distinguished: (a) *reciproca tantum* and (b) lexicalized sociative forms in *-lda*.

9.1.1 *Reciproca tantum*

This group includes two small subgroups:

1. Formal reciprocals derived from nouns:

- (83) *dil-mat-* ‘to struggle’; cf. *dil* ‘head.’
 (84) *hön-met-* ‘to be hostile to each other’; cf. *hön* ‘enemy.’

2. Formally non-derived reciprocals:

- (85) *bulen-* ‘to be hostile to each other’
 (86) *gejin-* ‘to compete’
 (87) *kusi-* ‘to struggle’
 (88) *hamu-* ‘to join each other, unite’
 (89) *ukčen-* ‘to talk.’

Like morphological reciprocals, lexical reciprocals may be used in simple and discontinuous constructions, with the second symmetric actant taking a comitative form.

- (90) *Žörmie-tel bej dilmač-ča, ew-gič-te, ča-gič-ta.* (L. 121)
 twenty-DISTR man struggle-PERF this.side-ELAT-CONJ that.side-ELAT-CONJ
 ‘Twenty men struggled (by turns) from both sides.’
 (91) (*Udugan nöö-n*)... *Ömčeni akağan hut-n’un-ni dilmači-l-ča.* (L.121)
 shaman-woman brother-her Ö. elder child-COM-his struggle-INCH-PERF
 ‘The shaman-woman’s (younger) brother ... started to struggle with Omcheny’s elder son.’

The lexical reciprocals in (87) and (88) can also form an idiosyncratic (lexically determined) discontinuous construction with the second actant taking a non-comitative object position. Thus, the reciprocal *kusi-* ‘to struggle’ may take the second reciprocal actant in the accusative case, while *hamu-* ‘to join’ may form a regular discontinuous construction with a comitative object, as in (92a), or it may take the second reciprocal actant in the locative case, as in (92b):

- (92) a. *Ömčeni, hi-n’en hamu-ži-ndi mut-n’un?*
 Ö. you-EMPH join-FUT-2SG we-COM
 ‘Ömcheni, will you join us?’
 b. *Ömčeni, hi-n’en hamu-ži-ndi mut-tule?* (L. 116)
 Ö. you-EMPH join-FUT-2SG we-LOC
 ‘Ömcheni, will you join us?’.

9.1.2 *With the suffix -lda-*

A small group of formal sociatives, including about a dozen items, may express the reciprocal meaning along with the sociative, the form being disambiguated by the (syntactic)

context. Thus, *iči-lda-* under (94b) has two meanings: i. ‘to see sth together’ (sociative); ii. ‘to meet’ (reciprocal). Realization of the reciprocal meaning involves a semantic shift; sociative forms (b) either lack the corresponding reciprocal form (c) (see (99)) or are not entirely synonymous to the latter.

1. *Subject-oriented lexical reciprocals:*

- | | | | |
|-------|----|-------------------|---|
| (93) | a. | <i>bak-</i> | ‘to find’ |
| | b. | <i>baka-lda-</i> | ‘to meet’ |
| | c. | <i>bak-mat-</i> | ‘to find each other.’ |
| (94) | a. | <i>it-</i> | ‘to see’ |
| | b. | <i>iči-lda-</i> | ‘to meet’ |
| | c. | <i>it-met-</i> | ‘to see each other.’ |
| (95) | a. | <i>göön-</i> | ‘to say, tell’ |
| | b. | <i>göö-lda-</i> | ‘to come to agreement’ |
| | c. | <i>göö-met-</i> | ‘to talk.’ |
| (96) | a. | <i>žaw-</i> | ‘to take, catch’ |
| | b. | <i>žawa-lda-</i> | ‘to struggle; greet, shake hands’ |
| | c. | <i>žaw-mat-</i> | ‘to catch each other.’ |
| (97) | a. | <i>na-</i> | ‘to collide’ |
| | b. | <i>na-lda-</i> | ‘to come into contact, meet (of two rivers); fight’ |
| | c. | <i>na-mat-</i> | ‘to collide with each other.’ |
| (98) | a. | <i>hepken-</i> | ‘to catch’ |
| | b. | <i>hepke-lda-</i> | ‘to struggle, fight’ |
| | c. | <i>hepke-met-</i> | ‘to catch each other.’ |
| (99) | a. | <i>huje-</i> | ‘to turn, go aside’ |
| | b. | <i>huje-lda-</i> | ‘to part, go in different directions’ |
| | c. | * <i>huj-met-</i> | |
| (100) | a. | <i>emen-</i> | ‘to leave’ |
| | b. | <i>eme-lda-</i> | ‘to part, go in different directions’ |
| | c. | <i>eme-met-</i> | ‘to leave each other.’ |

2. *Object-oriented reciprocals:*

- | | | | |
|-------|----|-----------------|-------------------------------|
| (101) | a. | <i>uju-</i> | ‘to tie sth’ |
| | b. | <i>uju-lda-</i> | ‘to tie sth and sth together’ |
| | c. | <i>uj-met-</i> | ‘to tie each other.’ |

Notably, these lexicalized forms in reciprocal use still partially retain the sociative meaning (see Section 8.1) in that they also denote events occurring at the same time and in one place.

9.1.3 *Diathesis types of -lda reciprocals*

Lexical reciprocals of this group form the same diathesis types of reciprocal constructions (argument and “possessive”) as morphological reciprocals (see 3.1). The only exception in this respect is the lexical reciprocal under (101b) which is object-oriented in non-causative constructions, differing in this respect from morphological reciprocals.

9.1.3.1 “Canonical” diathesis. “Canonical” diathesis is displayed by lexical reciprocals under (93b), (94b), (95b), (96b), (98b), (100b) derived from transitives; cf.:

- (102) a. *Hurken ariŋka-w hepken-ni.*
youth devil-ACC catch-NFUT.3SG
‘The youth caught the devil.’
b. *Hurken ariŋka-n’un hepke-lde-r.*
youth devil-COM catch-SOC-NFUT.3PL
‘The youth (began to) struggle with the devil.’

as well as by lexical reciprocals under (97b), (99b) derived from intransitives:

- (103) a. *Ömčeni huten ariŋka-duk huj-re-n.*
O. child devil-ABL turn aside-NFUT-3SG
‘Omčeni’s son turned aside from the devil.’
b. *Ömčeni huten ariŋka-n’un olukadu huje-lde-hne.* (L.122)
O. child devil-COM suddenly turn aside-SOC-MOM.NFUT.3PL
‘Omčeni’s son and the devil suddenly parted (went away from each other).’

9.1.3.2 “Possessive” diathesis. Although virtually all lexical reciprocals may be used in appropriate contexts with “possessive” diathesis (see, e.g., *hure-tek-lewur naa-lda-r* ‘to hit each other’s heads’ in (69)), this diathesis is particularly typical of lexical reciprocal (96b):

- (104) a. *Asi gia asi ŋal-du-n žaw-ra-n.*
woman other woman hand-DAT-her take-NFUT-3SG
‘The woman took the other woman’s hand.’
b. *Asa-l ŋal-du-r žawa-lda-r.*
woman-PL hand-DAT-REFL PL take-SOC-NFUT.3PL
‘The women took each other’s hands.’

9.1.3.3 Object-oriented diathesis. This diathesis type is displayed by the single lexical reciprocal *uji-lde-* marking cross-coreferentiality of the (initial) direct object with the oblique object in the locative case. As mentioned earlier, this case is unique for Even in that it does not employ the causative marker to express object-orientation:

- (105) a. *Etiken mukuči-w mukuči-le uj-re-n.*
old.man log-ACC log-LOC tie-NFUT-3SG
‘The old man tied one log to another.’
b. *Etiken mukuči-l-bu [*öme-m mukuči-w] uji-lde-n.*
old.man log-PL-ACC one-ACC log-ACC tie-SOC-NFUT-3SG
‘The old man tied the logs [*one log] together.’

9.1.3.4 Valency-retaining construction. As in the case of underived lexical reciprocals from 9.1.1, the lexical reciprocal *baka-lda-* ‘to meet’ may form both a regular comitative discontinuous construction, as in (106b), and an idiosyncratic discontinuous construction (as in (106c)), with the second reciprocal actant retained in the direct object position:

- (106) a. *Bi etike-m bak-ra-m.*
 I old.man-ACC find-NFUT-3SG
 ‘I found the old man.’
- b. *Bi etike-n’un baka-lda-ra-m.*
 I old.man-COM find-SOC-NFUT-3SG
 ‘I met with the old man.’
- c. *Bi etike-m baka-lda-ra-m.*
 I old.man-ACC find-SOC-NFUT-3SG
 ‘I met the old man.’

9.2 Spatial adverbs

9.2.1 Derivation

Reciprocal adverbs are derived by means of the suffix *-lta/-lte* from stems of a restricted number of locative adverbs/postpositions,⁸ except for (108d) which is formally underived. The base adverbs may be either reciprocal or converse predicates. When derived from the former (see (107)), reciprocal adverbs form a reciprocal construction, and when derived from the latter (see (108)), they form a “chain” construction denoting a number of objects/persons located or moving in a row; cf. (109b) and (110b) respectively:

- (107) a. *bargi-n* ‘(on) the other riverbank’ → *bargi-lta* ‘(on) opposite riverbanks; opposite each other’
- b. *gor* ‘far (away)’ → *gora-lta* ‘far (away) from each other’
- c. *daa-li* ‘near’ → *daa-lta* ‘near each other’
- d. *deepki* ‘opposite’ → *deepki-lte* ‘opposite each other.’
- (108) a. *amari-n* ‘behind’ → *ama-lta* ‘one after another’
- b. *öji-n* ‘over’ → *öji-lte* ‘one over another’
- c. *hergi-n* ‘under’ → *hergi-lte* ‘one under another’
- d. *ulbu-lte* ‘in file’ (cf. the verb *ulbuŋ-či-* ‘to go in file’).

9.3 Diathesis type

Reciprocal adverbs are used only in combination with verbs of motion and localization. Therefore they do not combine with suffixed reciprocals that cannot be derived from these semantic classes of verbs (see 3.2). Since the reciprocal adverbs within the reciprocal constructions under (b) mark cross-coreference between the subject and the Possessor nominal within a (locative) postpositional phrase of the base constructions under (a), this diathesis type may be termed “adverbial-possessive”:

- (109) a. *Ömen žuu gia žuu daali-la-n ilat-ta-n.*
 one house other house near-LOC-its stand-NFUT-3SG
 ‘One house stands near the other.’

8. Spatial nominals in Even are polysemous, being used both as “relative nouns” (cf. *hergi* ‘bottom’), adverbs (cf. *hergi-le* <under-LOC> ‘underneath’) and postpositions (cf. *žuu hergi-le-n* <house under-LOC-its> ‘under the house’).

- b. *Žuu-l daa-lta ilat-ta.*
house-PL near-REC.ADV stand-NFUT.3PL
'The houses stand near each other.'
- (110) a. *Urukčēn-duk ömen kuṇa gia kuṇa amar.da-du-n hiruṇči-ri-n.*
hill-ABL one child other child behind-DAT-his go.by.sleigh-PAST-3SG
'One child went down the hill with sleighs after the other.'
- b. *Urukčēn-duk ilan kuṇa ama-lta hiruṇči-ri-ten.*
hill-ABL three child behind-REC.ADV go.by.sleigh-PAST-3PL
'Three children went with sleighs down the hill one after another.'

One peculiarity of constructions with reciprocal adverbs is that they lack semantic restrictions on the subject position: this slot can be filled by animate (see (110b)) as well as inanimate (see (109b)) nominals.

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Reciprocal constructions in Chukchi (with an appendix on Koryak)*

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* The text almost identical with that of this paper is published in Tsunoda & Kageyama (Nedjalkov 2006:217–46) under the title “Chukchi reciprocals (with an appendix on Koryak and Itelmen).”

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1. Introduction

1.1 The Chukchi language

Chukchi is a Paleosiberian language of the Chukotko-Kamchatkan language family spoken by about 15 thousand people in the Chukotka peninsula and adjacent territories in the Far North-East of Siberia (Tishkov 1994:408). The Chukchi language has two di-

alects, western (of the tundra nomads) and eastern (of the settled population of the seashore); dialectal variation is very slight and does not hinder mutual understanding. Written Chukchi (which exists since 1932) is based on the eastern dialect. Newspapers and books (both original and translations) are published in Chukchi, it is also used in education, but Standard Chukchi is still in the process of formation (Volodin & Skorik 1997:23).

The immediate neighbours of the Chukchis are Eskimos (Yupik) in the north-east of the Chukotka peninsula, Koryaks in the south, Yakuts in the west and Evens in the west and south-west, and also Yukaghirs in the north-west. A group of Evens live within the Chukchi territory, to the west of Anadyr. The main population in the Chukchi territories is Russian (Kämpfe & Volodin 1995:1).

The three major languages within the Chukotko-Kamchatkan family, whose genetic relatedness to any other language families remains so far speculative, are Chukchi, Koryak and Itelmen. Chukchi and Koryak are very close to one another, the differences between them amounting to differences between dialects of one language (see Comrie 1981:240–52). Koryak is spoken in the north of Kamchatka by about a half of the population of 9,200 (according to the 1989 census). It comprises about 11 dialects one of which is Alyutor (about 3 thousand individuals, usually included among Koryaks; see Zhukova 1997:52). There is also Kerek which is sometimes considered as a dialect of Koryak. Kereks were a small tribe and they have been assimilated by the Chukchis (in 1991, only three persons spoke Kerek; see Volodin 1997:53). Alyutor and Kerek are sometimes regarded as languages in their own right (see, for instance, Zhukova 1968:294–309; Skorik 1968:310–33; Volodin 1997:53–60).

The Itelmen language spoken by less than 100 people (out of about 3,500; see Tishkov 1994:164), south of Koryak in Kamchatka, differs drastically from the other languages of the family, and even its affiliation to this group is subject to doubt (see Comrie (1980:109–20) on the one hand, and Volodin (1997:60), on the other; see also Volodin, Ch. 43, §2.1).

1.2 Overview

There are two main types of reciprocal constructions in Chukchi.

1. Constructions with the monosemous reciprocal suffix *-waly* on the predicate:

- (1) a. *Eqel̄-e at̄l̄əy-ən pen̄rə-nen.*
 enemy-INST father-ABS attack-AOR.3SG+3SG
 ‘The enemy attacked father.’
- b. *Eqel̄-ən ən̄k̄l̄am at̄l̄əy-ən pen̄rə-waly-ə-γ̄lat.*
 enemy-ABS and father-ABS attack-REC-AOR.3PL
 ‘The enemy and father attacked each other.’

2. Constructions with the monosemous pronoun-like adverb *əryičyu* ‘they-each-other’ or ‘they-mutually’ which is marked for person. When a transitive verb occurs with this adverb it undergoes antipassivization; cf.:

- c. *Eqelł-ən ətləy-etə penrə-tko-γlə.*
 enemy-ABS father-DAT attack-APASS-AOR.3SG
 (same translation as in (1a)).
- d. *Eqelł-ən ənkɪam ətləy-ən penrə-tko-γlat əryičyu.*
 enemy-ABS and father-ABS attack-APASS-AOR.3PL they.mutually
 ‘The enemy and father attacked each other.’

There are also the following peripheral means of rendering reciprocity:

3. Constructions with a polysemous suffix *-čit/-čet* on the predicate; this suffix can express the meanings of competition, reciprocity, and succession (‘one after another’); cf.:

- (2) a. *ənan ətlon wanw-o-nen.*
 s/he.INST s/he.ABS place-take-AOR.3SG:3SG
 ‘He forced him out.’
- b. *ətri wanw-o-čet-γlat.*
 they.ABS place-take-čet-AOR.3PL
 ‘They forced each other out.’

4. *Antipassivization* may result in the reciprocal meaning by default; this is a case of lexically dependent reciprocity; it is a process of low productivity.

- (3) a. *ənan ətlon wejpə-nin.*
 s/he.INST s/he.ABS scratch-AOR.3SG:3SG
 ‘S/he scratched her/him.’
- b. *ətri wejpə-tku-γlət.*
 they.ABS scratch-APASS-AOR.3PL
 ‘They scratched each other.’

5. There are also *lexical reciprocals* used with or without the above listed markers of reciprocity (reading (ii) in (4) is less likely).

- (4) *ətri maraw-ə-rk-ət.*
 they.ABS fight-PRES.PROGR-3PL
 i. ‘They are fighting (with each other)’; ii. ‘They are fighting (with someone else).’

The following example illustrates the use of these devices in an original text:

- (5) *Tejkewə-lł-ət mal-ɪataw penrə-tko-wəly-ə-myo-γlat, naqam*
 wrestle-PART-ABS.PL seems-in.vain attack-APASS-REC-begin-AOR.3PL but
tan-ranɪaw əryičyu nə-twa-qenat ... Waj-əm neme ətri
 quite-equally they.mutually IMPF-be-3PL and-then again they
piri-tku-čit-γlət, ɪaqa-njanrɪaw-ə, kənur ləyen kəltə-wəly-ə-γlat. (OČ. 27)
 grasp-APASS-čit-AOR.3PL impossible-part as.if simply tie-REC-AOR.3PL
 ‘The wrestlers kind of began attacking *each other*, but (in fact) they were standing just facing *each other*... But then they seized *each other* again so that one could not separate them, as if they were tied *together* (lit. ‘as if they had tied *each other*’).’

A peculiarity of the Chukchi reciprocal suffix is its combinability not only with verbs but also with nouns, pronouns and adverbs.

1.3 Database

Most of the examples for this paper have been obtained from original Chukchi texts and also from translations from the Russian by native speakers of Chukchi. Examples without attribution belong to my informants, P.I. Inenlikej and V.G. Raxtilin. Unfortunately, the informants were consulted to a limited degree.

2. Grammatical notes

2.1 Morphophonemics

Chukchi displays a great variety of phonological and morphological processes that can make allomorphs unrecognizable. The most relevant changes are:

1. Numerous assimilations and dissimilations of consonants and also diachronic changes; the verbal root may undergo changes when preceded by other morphemes, cf. *təm-* in (6a) and *-nm-* in (6b–c), also *wut-/wun-/qwot-* ‘to tie sth to sth’ (*wut-ə-rkə-nin* ‘he ties it’ – *wun-nin* ‘he tied it’ – *ya-qwot-ə-twa-len* ‘it was tied’).

2. Vowel harmony; the (so-called “recessive”) vowels /i/, /u/, /e/ change into /e/, /o/ and /a/ respectively, under the influence of the (so-called “dominant”) vowels /e/, /o/ and /a/; cf. *milute-t* ‘hares’ – *ya-melota-ma* (< **γα-milute-ma*) ‘with a hare/hares’; vowel harmony may be historically determined (cf. *akka-γtə* and *ekək* in (6a–b) and (6c) respectively).

3. Insertion processes; the supershort vowel /ə/ (schwa) is inserted to break up some types of clusters, e.g. *n-ily-ə-qin* (< **n-ily-qin*) ‘white’; at morpheme boundaries the epenthetic /ə/ is not glossed in the sentential examples (if it is singled out, which is not always the case since it is irrelevant for our purposes).

4. Deletion processes; most noun stems and some suffixes lose the final vowel in word-final position (below, such vowels are bracketed), e.g. *wapaq* ‘a fly-agaric’, cf. *wapaqa-t* ‘fly-agarics’; in addition, of two adjacent vowels one is usually omitted, cf. *γ-it-lin* (< **γe-it-lin*) ‘he was’. (For details see Bogoras 1922:648–81; Skorik 1961:15–76; Kämpfe & Volodin 1995:15–21.)

It may be noted in passing that derivational processes may involve omission and replacement of suffixes.

2.2 Ergative sentence structure. Word order. Incorporation

The word order is free. The transitive subject is in the instrumental-ergative case (glossed as INST), the meaning of the case form being determined by the lexical meaning of the noun. The intransitive subject and also the direct object are in the absolutive case. The absolutive singular has several markers, including the zero marker and reduplication. The indirect object (see (6a) and (6b)) is marked by the dative-allative case (glossed as DAT). There are many types of incorporation, i.e. inclusion of one word in the structure of an-

other. An incorporated word may undergo morphological changes. Incorporation of a direct object results in intransitivization; cf. (6a) and (6b):

- (6) a. *ətłəy-e [akka-ytə] qora-ŋə təm-nen.*
 father-INST SON-DAT deer-ABS kill-AOR.3SG:3SG
 ‘Father killed a deer [for his son].’
- b. *ətłəy-ən [akka-ytə] qaa-nm-at-yʔe.*
 father-NOM SON-DAT deer-kill-APASS-AOR.3SG:3SG
 (same as (a)).
- c. *ətłəy-e ekək-Ø qaa-nmə-nen.*
 father-INST SON-ABS deer-kill-AOR.3SG:3SG
 (same as (a)), lit. ‘Father deer-killed (his) son.’

The ergative marking of the transitive subject may be absent if a conjoined subject contains the conjunction *əttri* ‘and’ (in fact, it is the absolutive form of the 3PL pronoun *əttri* ‘they’); cf.:

- d. *Rayt-ən əttri Rint-ən qora-ŋə na-nmə-n.*
 R.-ABS they/and R.-ABS deer-ABS 3PL-kill-3SG
 ‘Ragtin and Rintin killed a deer.’ (cf. Nedjalkov 1979b:249)

Chukchi makes wide use of participles and converbs in sentence structure. There are both prepositions and postpositions as well.

2.3 Case system

The Chukchi noun has nine cases. Nouns and pronouns may have different endings for the same case. Thus, for instance, the ergative case endings are *-e* for nouns (see (1a)) and *-nan* for pronouns (see (2a)). The Chukchi noun is usually marked for case, and sometimes for person and number. The absolutive case has several markers in complementary distribution, viz. various suffixes, zero marker or root reduplication. On common nouns, the absolutive case alone is marked for number (the plural suffixes are *-t*, *-tti*, *-nti* in complementary distribution), the other case forms having both a singular and a plural reading. Proper names have some case markers distinct from those of common nouns. Some of the case markers are confixes. Here is the case paradigm of the noun ‘child’ (the case markers have numerous allomorphs, e.g. INST/ERG *-e/-a*, *-te/-ta*; DAT/ALL *-ytə/-etə*; ABL *-jpə/-ypə// -yapə*; Orientative *-yjit/-yjet*; ESS *-u/-o*, *-nu/-no*):

(7)	ABS	<i>nenen-ə</i> (SG), <i>nenene-t</i> (PL)	DAT/ALL	<i>nanana-ytə</i>
	INST/ERG	<i>nenene-te</i>	ABL	<i>nanana-jpə</i>
	COM.1	<i>ye-nenene-te</i>	OR	<i>nenene-yjit</i>
	COM.2	<i>ya-nanana-ma</i>	ESS	<i>nenene-nu</i>
	LOC	<i>nenene-k</i>		

The meaning of the essive case needs some explanation: it names in what property or role the subject or object referent appears in sentences with meanings like ‘In the fog the stone looked like a *jaranga*’, ‘He used the rope as a *belt*’).

(For details see Skorik 1961: 171–2; Kämpfe & Volodin 1995: 80–5).

Note that in sentential examples the absolutive case marker is often not glossed in obvious cases.

2.4 Classes of verbs and agreement

In the *Chukchi-Russian Dictionary* (MI.), there are over 2,000 verb entries. About 1,100 are one- or two-place verbs used as intransitives only (*wʹi-* ‘to die’, *jet-* ‘to come’, *ikwiči-* ‘to drink water’, etc.); about 150 entries are two- and, less commonly, three-place transitives only which are not formed from intransitives by means of the causative suffix (*ʹlu-* ‘to see’, *pəl-* ‘to drink’, *jəl-* ‘to give’, *juu-* ‘to bite’, etc.); about 300 of the entries are labile verbs, i.e. verbs used both transitively and intransitively, with a corresponding change of meaning (e.g., *məle-* i. ‘to break in two’ (vi), ii. ‘to break sth in two’ (vt); *ʹənrit-* i. ‘to be engaged in guarding’ (vi), ii. ‘to guard sth’ (vt); etc.). The remaining 450 verbs are derived transitives with the causative confix (e.g., *rə-wʹi-ŋet-* ‘to ruin, destroy, kill’ ← *wʹi-* ‘to die’, etc.; cf. 2.7.1.1) (for details see Inenlikej & Nedjalkov 1967:246–58).

Intransitive verbs agree with the subject (they have six agreement forms), and transitive verbs agree with the subject and direct object in number and person. The agreement system is highly complicated, it is different for different tense/aspect and mood forms; transitive verbs have as many as 28 agreement forms (in Koryak, they have 42 forms, due to the dual number). Here is a fragment of the agreement paradigm for the verbs *ʹlu-* ‘to see’ and *wiri-* ‘to descend’ in the aorist and imperfect respectively (the translations reflect the meaning of the agreement markers only; the imperfect marker is the prefix *n-*) and the full agreement paradigm in the same tense forms for the intransitive verb *wiri-* ‘to descend’:

(8) a.	<i>ʹlu-nin</i>	‘he ... him’	f.	<i>ne-ʹlu-ʹəm</i>	‘they ... me’
b.	<i>ine-ʹlu-ʹi</i>	‘you.SG ... me’	g.	<i>ʹlu-tkə</i>	‘you.PL ... him/them’
c.	<i>ʹlu-tku-ʹi</i>	‘you.SG ... us’	h.	<i>ine-ʹlu-tək</i>	‘you.PL ... me’
d.	<i>ʹlu-tku-tək</i>	‘you.PL ... us’	i.	<i>ʹlu-ninet</i>	‘he ... them’
e.	<i>ʹlu-ʹen</i>	‘you.SG ... him’	j.	<i>ne-ʹlu-net</i>	‘they ... them’, etc.;
(9) a.	<i>n-ine-ʹlu-qin</i>	‘he ... him’	f.	<i>nə-ʹlu-ʹjəm</i>	‘they ... me’
b.	<i>n-ine-ʹlu-ʹjət</i>	‘you.SG ... me’	g.	<i>n-ine-ʹlu-turi</i>	‘you.PL ... him/them’
c.	<i>nə-ʹlu-tku-ʹjət</i>	‘you.SG ... us’	h.	<i>n-ine-ʹlu-turi</i>	‘you.PL ... me’
d.	<i>nə-ʹlu-tku-turi</i>	‘you.PL ... us’	i.	<i>n-ine-ʹlu-qinet</i>	‘he ... them’
e.	<i>n-ine-ʹlu-ʹjət</i>	‘you.SG ... him’	j.	<i>nə-ʹlu-qinet</i>	‘they ... them’, etc.
(9’) a.	<i>tə-wiri-ʹlɛk</i>	‘I ...’	(9”) g.	<i>nə-wiri-ʹj əm</i>	‘I ...’
b.	<i>wiri-ʹi</i>	‘you .SG ...’	h.	<i>nə-wiri-ʹj ət</i>	‘you.SG ...’
c.	<i>wiri-ʹi</i>	‘s/he ...’	i.	<i>nə-wiri-qin</i>	‘s/he ...’
d.	<i>mət-wiri-mək</i>	‘we ...’	j.	<i>nə-wiri-muri</i>	‘we ...’
e.	<i>wiri-tək</i>	‘you.PL ...’	k.	<i>nə-wiri-turi</i>	‘you.PL ...’
f.	<i>wiri-ʹlɛt</i>	‘they ...’	m.	<i>nə-wiri-qinet</i>	‘they ...’

(For details (also for Section 2.2), see Comrie 1979:219–40, 1980b:61–74, 1985:85–95; Nedjalkov 1979b:241–62).

2.5 Tense/aspect/mood system. Periphrastic verb forms

The verb has three moods, the indicative (no special marker), the imperative (special markers for each of the three persons) and the conditional (marked by the prefix *-ʔ*). After the negation words *qəʀəm* and *čamʔam*, the imperative form alone can be used. Imperfective forms are marked by the suffix *-rk/-rkən/-rkəni*; if a verb contains no other marker, this form has the present progressive meaning. The aorist has no marker of its own and is identified by the agreement markers (cf. (8) and (6)). The future tense marker is the prefix *re-*; the imperfect is marked by the prefix *n-* (cf. (9)) and a special agreement system (on intransitive verbs it entirely coincides with the agreement of predicative adjectives), and it may refer both to the past and to the present. The perfect marker is the prefix *ye-/ya-* in complex with an agreement system partly similar to that of the imperfect. (For details see Nedjalkov 1994: 278–354.)

Basically, all tense/aspect forms may have parallel periphrastic forms comprised of the invariable converbal form in *-e/-a*, *-te/-ta* of the lexical verb and an auxiliary different for transitives and intransitives and marked for tense, mood, and agreement. These forms serve to emphasize the meaning of the verb; cf. *jet-γʔi* ‘he came’ and *jet-e it-γʔi* (same, with emphasis), *təm-nen* ‘he killed him’ and *təm-a rən-nin* (same, with emphasis; cf. (79a)). Some negative forms are also periphrastic, e.g. *luŋ-jet-e it-γʔi* ‘he did not come’ (cf. (61a)).

2.6 Participles, converbs and infinitive

There are two participles in Chukchi, the active participle with the suffix *-ʔl* and the passive participle inflected for person/number and case. The active participle of intransitive verbs is formed by means of the suffix *-ʔl* alone (cf. *rayt-* ‘to return home’ → *raytə-ʔl-ən* ‘returning home (ABS.3SG)’, *raytə-ʔl-eyəm* ‘returning home (ABS.1SG)’), while on transitives it requires simultaneous use of the antipassive marker (cf. *təm-* ‘to kill’ → *ena-nmə-ʔl-ən* ‘(the one who is) killing/(has) killed’, *penr-* ‘to fall on sb’ → *penr-ə-tko-ʔl-ən* ‘(the one who is) attacking/(has) attacked’). The direct object of a transitive verb is transformed into a dative or locative or instrumental object with the active participle (as with antipassives; see 2.7.2.3), unless it is deleted. The passive participle (non-negative) marker is the suffix *-jo* (cf. *təm-jo* ‘(what is) killed, the catch’ (cf. (31))).

The markers of converbs mostly coincide with case markers:

1. On converbs of simultaneity the confix [*γ(a)-*]...*-ma* coincides with the COM.2 marker, and *-γtə/-etə* with the DAT/ALL marker.

2. On converbs of prior action, the suffix *-(ə)k* coincides with the LOC marker and it also serves as an infinitive marker.

3. The marker of converbs of cause and/or manner of action *-jpə/-γəpə/-epə* coincides with the ABL marker, and the second component of [*em-/am-*]... *-e/-a*; *-te/-ta* coincides with the INST/ERG marker; etc. (for more on converbs see Skorik 1977: 139–66).

2.7 Means of valency change

These devices are treated in detail in Nedjalkov (1976: 181–211).

2.7.1 Valency-increasing means

Provisionally, I have included here the cases in which the direction of derivation is not formally marked, but most of them are semantically adjacent to valency increase.

2.7.1.1 Causatives. The causative prefix has two forms, *r-/rə-* in the initial position and *n-/-nə-* if preceded by another morpheme. As a rule, this prefix appears as part of the confix whose second part may be the suffixes *-w/-ew/-aw*, *-t/-et/-at* and *-net/-nat* in complementary distribution. Most commonly, this suffix has a causative meaning though it may render a number of other meanings; in all the cases the base verb is transitivity, while transitive base verbs increase their valency; cf.:

- (10) a. *eret-γ̣i* ‘he/it fell.’ → *r-eren-nin* ‘he dropped it.’
 b. *p̣ʔa-γ̣i* ‘it dried.’ → *rə-p̣ʔa-w-nen* ‘he dried it.’
 c. *ḷu-nin* ‘he saw it/him.’ → *rə-ḷu-ηen (<net)-nin* ‘he showed it to sb.’
 d. *tejkewə-rkən* ‘he is wrestling.’ → *rə-tejkew-et-ə-rk-ənin* ‘he is wrestling with him.’
 (for more on causatives see Inenlikej et al. 1969: 260–9).

2.7.1.2 Change of agreement (labile verbs). Causativization by means of the confix changes subject agreement into subject-object agreement. But change of agreement alone may involve transitivity and a consequent change of meaning (since the direction of derivation is not marked in this case, it may be regarded as a valency decreasing operation as well); cf.:

- (11) a. *atənwat-γ̣i* ‘he hurt himself’ → *atənwən-nen* ‘he hurt him’
 b. *ləwawə-rkən* ‘he cannot + vi’ → *ləwawə-rk-ənən* ‘he cannot + vt.’

2.7.1.3 Secondary transitivity. This provisional term is used here to refer to a three-member derivational chain with the transitive base (a) incorporating a direct object or (b) undergoing antipassivization with the prefix *ine-/ena-* (and thus becoming intransitive in both cases) and then being transitivity by a change of agreement; cf. (6a) → (6b) → (6c) (see Nedjalkov 1979a: 266–8).

2.7.2 Valency-decreasing means

2.7.2.1 Reciprocal. The reciprocal meaning is coded by the suffix *-wəly* which has no other meanings (see Bogoras 1922: 805; Skorik 1977: 216–7; cf. (1b)).

2.7.2.2 Anticausative. There are only a few formations of this kind, anticausative being one of the functions of the polysemous suffixes *-tku/-tko* (see (19d)) and *-t/-et/-at*; e.g.:

- (12) *pela-nen* ‘he left him.’ → *pela-t-γ̣i* ‘he stayed (behind).’

2.7.2.3 Antipassive. This derivational process involves substitution of an absolutive construction for an ergative one, the direct object becoming indirect (dative or locative or instrumental) or being deleted. The antipassive markers are the prefix *ine-/ena-* and the suffix *-tku/-tko*, seldom the suffix *-t/-et/-at* (these suffixes may be combined with incorporation; see (6b)).

- (13) a. *atləy-e ekək penrə-nen.*
 father-INST SON.ABS fall.ON-AOR.3SG+3SG
 ‘Father fell on his son.’
 b. *atləy-ən [akka-γtə] penrə-tko-γtə.*
 father-ABS SON-DAT fall.ON-APASS-AOR.3SG
 (same translation).

(For more on antipassive see Kozinsky et al. 1988:651–706.)

2.7.2.4 Incorporation. See Section 2.2 and example (6b).

2.7.2.5 Resultative. The marker is the suffix *-twa* descended from the verb *wa-/twa-* ‘to be, live, exist’; e.g.:

- (14) *jime-nen* ‘he hung it’ → *jime-twa-γtə* ‘it hang for a while.’

(For more on the resultative see Nedjalkov et al. 1988:153–66.)

2.7.2.6 Passive-perfect. This meaning is expressed by perfect forms of transitive verbs if the latter do not have the subject-agreement marker. This is due to the fact that many perfect forms of transitive verbs often coincide with forms of intransitive perfect. For instance:

- (15) a. *Tətəl γ-eret-lin.* ‘The door fell.’
 b. *Tətəl γ-ejpə-lin.* i. ‘The door is/was closed’; ii. ‘The door is/was closed by sb.’

(For more on passive-perfect see Nedjalkov et al. 1988:162–66).

2.7.3 Verbs of psychological state

In this case alternation of a periphrastic transitive and a suffixed intransitive verb with the same root takes place. A periphrastic verb is comprised of an invariable notional component, as a rule in the essive case, and an auxiliary *ləŋ-/ly-* ‘to consider, take ...’ or *rətč-/tč-* ‘to do’, the latter used with the inceptive meaning. There are over 50 such oppositions in Chukchi. (For details see Inenlikej & Nedjalkov 1973:175–203).

- (16) a. *atləy-e ekək əly-u ləŋ-ə-rk-ənen.*
 father-INST SON.ABS love-ESS AUX-PRES.PROGR-3SG+3SG
 ‘Father loves (his) son.’
 b. *atləy-ən əly-ə-čtat-ərkən.* (suffix *-čtat* is frozen here and carries no meaning)
 ‘Father loves.’

2.8 Expression of reflexivity

This meaning can be inherent in the lexical meaning; cf. *atənw-at-γʔe* ‘he hurt himself’ derived from *atən(w)* ‘wound’ by means of the suffix *-at* (cf. (11a)). Sometimes, this meaning can be rendered by the suffix *-tku/-tko* (see also (19d)). A universal means of expressing reflexivity is the noun *uwik* ‘body’ which may be preceded by the adjective *činit(-kin)* ‘one’s own’ (for all persons), sometimes spelt as *činituwik*.

- (17) *ətʎə-e činitkin uwik əly-u ləŋə-rk-ənən.*
 ‘Father loves himself’, lit. ‘... his own body.’ (cf. (16a))

2.9 Verbal derivation with valency retention (iterativity, intensity, etc.)

In Chukchi, there is a number of suffixes expressing all kinds of iterativity (including frequentativity, multiplicativity, distributivity, etc.), durativity and, more generally, intensity of action. It is sometimes difficult to determine the meaning of these suffixes even in a context. There are no suffixes with the specialized meaning of sociativity. But in certain contexts some of the suffixes listed here may render the meaning ‘many (subject or object referents)’ which is adjacent to the sociative meaning. Some of these suffixes are sensitive to transitivity/intransitivity; thus, for instance, the suffixes *-rʔu/-rʔo*, *-llet/-llet* are used mostly on intransitives; *-j(i)w* is used on transitives only; the suffixes *-tku/-tko* (see 2.10), *-čit/-čet* (for details see Section 5), *-ča* (its only meaning is ‘many (subject referents with intransitives and object referents with transitives)’), etc. are used on both classes of verbs (see Nedjalkov et al. 1997: 310–28). In this paper, these suffixes are not glossed, as a rule. Not infrequently, two or more of these suffixes are used together, mostly for emphasis. Most frequent are combinations with *-tku/-tko* as the first component, e.g. *-tku-jwə*, *-tku-llet*, *-tku-rʔu*, *-tku-čit*, etc.

- (18) a. *ətri wakʔo-rʔo-γʔat.*
 they.ABS sit.down-rʔo-AOR.3PL
 ‘They sat down in great numbers.’ (B. 811)
- b. *ətʎa-ta ekke-t nə-te-pleŋ-ŋe-llet-qinet.*
 mother-INST son-ABS.PL IMPF-make-boot-make-llet-3PL
 ‘The mothers made many boots for (their) sons.’ (B. 806)
- c. *[ənan ətri] təm-ə-tko-nenat.*
 ‘He killed many/all of them.’ (B. 809) (B. 806)
- d. *Taŋ-əməʎo təm-ə-tko-jw-ə-nenat γənnik-γiniw.* (BL. 140)
 quite-all.ABS kill-tko-jw-AOR.3SG+3PL animal-many.ABS
 ‘He killed all the animals in great numbers.’
- e. *Luʔur pəkət-ča-γʔat ʔaqaʎə-mk-iŋ-ən.* (BL. 201)
 suddenly arrive-many-AOR.3PL enemy-many-INTS-ABS.SG
 ‘Suddenly very many enemies arrived.’

2.10 Unique polysemy of the suffix *-tku/-tko*

This suffix deserves special consideration not only due to its specific position in the system of Chukchi grammar and its role in the expression of the reciprocal meaning but also due to its typologically distinctive polyfunctionality. It is used to derive the following:

1. Denominal verbs (see (19a)).
2. Nouns with the meaning ‘few, some (things)’ (a very approximate definition; see (19b)).
3. Antipassive forms (see (13b)), along with the prefix *ine-/ena-*.
4. Active participles from transitive verbs, along with prefix *ine-/ena-* (see 2.6).
5. Agreement forms of transitive verbs with the meanings ‘you.SG ... us’, ‘you.PL ... us’ (see (8c, d), (9c, d)).
6. Iterative forms from both transitive and intransitive verbs (see (19c)).
7. In the process of intransitivization of verbs, it allows a reflexive, or reciprocal, or anticausative, or absolutive reading by default; see (19d). Some of the forms are polysemous and allow two or more readings; cf. *juu-tku-* in (19b) and (19d). Semantic relatedness of some of these functions is obvious, while for some of the functions it is established in diachrony.

- (19) a. *milyer* ‘rifle’ → *milyera-tku-* ‘to shoot’
wəlpə ‘spade’/ *wəlpə-t* ‘spades’ → *wəlpə-tko-* ‘to dig with a spade’
- b. *ilir* ‘island’ → *eler-etə* ‘to the island(s)’ → *elera-tko-γtə* ‘to a group of islands’
wəkwə-lyən ‘stone’ → *wəkwə-t* ‘stones’ → *wəkwə-tko-t* ‘a group of stones’
- c. *juu-nin* ‘he bit him (once)’ → *juu-tku-nin* ‘he bit him (several times)’
winret-γʔi ‘he helped sb (once)’ → *winret-ə-tku-γʔi* ‘he helped sb (several times)’
- d. *tewla-nen* ‘he shook it off’ → *tewla-tko-γʔe* ‘he shook himself’ (REFL)
ommačajpə-nen ‘he hugged him’ → *ommačajpə-tko-γʔat* ‘they hugged each other’
ejpə-nin ‘he closed it’ → *ejpə-tku-γʔi* ‘it (e.g. eyes) closed’ (ACAUS)
juu-nin (cf. (19c)) → *ʔəttʔ-ən nə-jyu-tku-qin* ‘the dog bites’ (ABS).

3. Reciprocals with the suffix *-wəly*

3.1 Subject-oriented constructions

3.1.1 “Canonical” reciprocals

This is the principal type of reciprocals with the suffix in question; there seem to be no non-trivial restrictions on this type. There are practically no reliable examples of “indirect” and “possessive” suffixed reciprocals at my disposal.

3.1.1.1 *Derived from two-place transitives.* The suffix *-wəly* intransitivizes verbs by itself and therefore it makes an antipassive marker redundant, in contrast to constructions with *əryičyu* (see (1c–d)). The suffix *-tku/-tko* which occurs in pre-position to *-wəly* in a number of examples, is mostly iterative in meaning or does not render any percepti-

ble meaning. Another antipassive marker, viz. the monosemous *ine-/ena-*, co-occurs with *-wəly*, too. The following illustrates these cases.

1. Reciprocals contain (a) the suffix *-wəly* alone or (b) *-wəly* with *-tku* in postposition (see (20a) and (20b) respectively) which indicates that the latter is not used in its antipassive function (because, as is mentioned above, *-wəly* intransitivizes verbs). The following forms have occurred in my corpus (the meaning of the base verb is clear from the translation):

- | | | |
|---------|--------------------------|------------------------------|
| (20) a. | <i>čiček-wəly-</i> | ‘to understand each other’ |
| | <i>kəltə-wəly-</i> | ‘to tie, bandage each other’ |
| | <i>lɫu-wəly-</i> | ‘to see/meet each other’ |
| | <i>ommačajpə-wəly-</i> | ‘to embrace each other’ |
| | <i>palomtel-wəly-</i> | ‘to listen to each other’ |
| | <i>penrə-wəly-</i> | ‘to attack each other’ |
| | <i>pənlə-wəly-</i> | ‘to ask each other’ |
| b. | <i>čičew-wəly-ə-tku-</i> | ‘to understand each other’ |
| | <i>ejmit-wəly-ə-tku-</i> | ‘to grasp each other’ |
| | <i>yite-wəly-ə-tku-</i> | ‘to glance at each other’ |
| | <i>lɫu-wəly-ə-tku-</i> | ‘to see/meet each other.’ |

The following examples illustrate the use of both subgroups of reciprocals:

- | | |
|---------|---|
| (21) a. | <i>əməllo... mač-wanewan nə-čiček-wəly-ə-net.</i> (ST. 49) |
| | all.ABS almost-NEG IMP.3-understand-REC-3PL |
| | ‘All [the people] practically did not understand each other.’ |
| b. | <i>ətri rəpet kačɫarawa ommačajpə-wəly-ɣlat.</i> (RO. 98) |
| | they.ABS even joyfully embrace-REC-AOR.3PL |
| | ‘They even embraced each other joyfully.’ |
| c. | <i>Ləyen taŋ-awjetkanka nə-penrə-wəly-ə-qenat.</i> (JN. 21) |
| | simply quite-silently IMPF-attack-REC-3PL |
| | ‘They simply attacked each other, in silence.’ |
| d. | <i>əməllo q-ejmit-wəly-ə-tku-tək!</i> (RO. 60) |
| | all IMP.2-grab-REC-tku-2PL |
| | ‘Everybody, catch hold of each other!’ |

When added to the reciprocal suffix, *-tku/-tko* stresses repetition but it is not obligatory and can be omitted without any significant change in meaning. An illustration of this is (22), where a reciprocal in *-wəly* is used in an iterative context first with *-tku/-tko* and then without it:

- | | |
|------|---|
| (22) | <i>Təyrat ənkɫam Təaju empetle nə-lɫu-wəly-ə-tku-qinet ewene-ma... ɣənniŋəttəl-ət</i> |
| | T. and T. soon IMPF-see-REC-tku-3PL hunt-CONV hunter-ABS.PL |
| | <i>lənyərit nə-lɫu-wəly-ə-qinet ɣel-ə-tkən-ək ʔir-wətyər-ək.</i> (Rə. 30–1) |
| | usually IMPF-see-REC-3PL ice-surface-LOC cross-middle-LOC |
| | ‘Tagrat and Taju often saw each other when hunting... The hunters usually saw each other (= met) on an ice-floe in the strait.’ |

2. Reciprocals contain the suffix *-tku/-tko* in pre-position to *-wəly*. As mentioned above, its meaning is most likely iterative:

- (23) *ʕejɲew-tku-wəly-* ‘to call each other’
ɣite-tku-wəly- ‘to glance at each other’
lewəɫ-tko-wəly- ‘to call each other waving one’s hand’
ommačajpə-tko-wəly- ‘to embrace each other’
piri-tku-wəly- ‘to grasp each other’
rəɾəme-tko-wəly- ‘to replace/stand in for each other’; e.g.:
- (24) a. *Nute-lejwə-lɪ-ət* *ləlepə-tku-wəly-ɣɪet.* (RI. 53)
 earth-wander-PART-ABS.PL look-*tku*-REC-AOR.3PL
 ‘The travellers exchanged glances between themselves.’
 b. ... *kapčacetə n-ʕejɲew-ə-tku-wəly-ə-qinet.* (TN. 14)
 ‘... (birds) were calling to each other with alarm.’
 c. *Muri... mət-lewal-ə-tko-wəly-ə-mək.* (RO. 119)
 ‘We waved to each other.’

The suffix *-wəly* can be used between two derivational suffixes (see (25a)). I have also encountered a case of the suffix *-tku/-tko* used twice, both before and after the reciprocal suffix: it denotes both iterativity and plurality (‘many’) of subject referents (see (25b)).

- (25) a. *ənɲin ɣeta-jwə-wəly-ə-tko-ɣtə* *ətɾi awjetkənkə nə-twa-qenat.* (GP. 72)
 so look-INTS-REC-ITER-CONV they silently IMPF-be-3PL
 ‘They were silent glancing at each other.’
 b. *Qənwer, təm-ə-tko-wəly-ə-tko-ɣɪat.* (TM. 141)
 ‘At least (they) killed each other’ (of many, repeatedly).

3. Reciprocals contain the antipassive prefix *ine-*. Characteristically, in both examples the reciprocals are formed from morphological causatives (*rənyiiw-* ‘to meet with sb’ → *rə-rənyiiw-* ‘to meet sb’; *pirkəl-et-* ‘to choke’ → *rə-pirkəl-ew-* ‘to strangle’).

- (26) a. *ətɾi neme ine-n-rənyiiw-wəly-əɣɪet.* (RO. 38)
 ‘They met again.’ (cf. (28c) with a reciprocal formed from a two-place vi)
 b. *Utt-ət ine-n-pirkəl-ew-wəly-ərkə-t.* (MP. 86)
 ‘The trees strangle one another.’

3.1.1.2 *Derived from two-place intransitives.* In this group the base verbs take an object in the dative or in the comitative case. Two subtypes can be distinguished, with base lexical reciprocals on which the reciprocal suffix may generally be omitted, and with other verbs on which it cannot be omitted.

1. With lexical reciprocals:

- (27) *ittil-wəly-* ‘to bump against each other’
məɲ-ajmet-wəly- ‘to shake hands with each other’
rənyiiw-wəly- ‘to meet each other’
ukwet-wəly- ‘to kiss each other’
wetyak-wəly- ‘to talk with each other.’
- (28) a. *ətɾi məɲ-ajmet-wəly-ə-ɣɪat.* (RO. 99)
 they.ABS hand-press-REC-AOR.3PL
 ‘They shook hands [with each other].’

- b. *Qora-t nə-lejw-ə-qinet, n-ittil-wəly-ə-qinet ... rənn-a.* (ST. 79)
 deer-ABS.PL IMPF-go-3PL IMPF-hit-REC-3PL horn-INST
 ‘The deer went hitting each other with their horns.’
- c. *Wopqə atri qora-ηə ye-rənyiw-wəly-ə-linet.* (JL. 28)
 ‘The elk and the deer met.’

2. With other verbs:

- (29) *iw-wəly-* ‘to exchange words’
ləlep-wəly- ‘to look at each other’
pəkir-wəly- ‘to come to each other(’s place)’
wejmen-ə-č̣et-wəly- ‘to respect each other’
winret-wəly- ‘to help each other’
ʔəlyə-č̣et-wəly- ‘to love each other’; e.g.:
- (30) a. ... *ənəḳit tumy-ət wejmen-ə-č̣et-wəly-e, winret-wəly-e*
 if comrade-PL respect-č̣et-REC-CONV help-REC-CONV
ra-twa-rkəne-ηət ... (RI. 52)
 FUT-live-IPFV-3PL
 ‘... if friends will live respecting each other and helping each other...’
- b. *atri pəkir-wəly-ə-γ̣et jara-k.* (BL. 145)
 they arrive-REC-AOR.3PL house-LOC
 ‘They met at home.’
- c. “... *ənəḳit turi ʔəlyə-č̣et-wəly-e ra-twa-rkəne-tək ...*” (RI. 27)
 if you.ABS.PL love-č̣et-REC-CONV FUT-live-IPFV-2PL
 ‘... if you will live loving each other.’

3.1.2 “Indirect” reciprocals

The following example, with a derivative based on a lexical reciprocal, may give an idea of this type of construction. There seems to be a tendency to avoid a direct object with suffixed reciprocals, at least I have found no examples of this kind. In (31b) the recovered object should be in the instrumental case (this is probably the reason why the suffix *-tku* is used). Another way of avoiding the use of a direct object is its incorporation (cf. (32) where *-wəly* is supplemented by the suffix *-č̣it* which also conveys reciprocity in a number of cases; see Section 5).

- (31) a. *Mət-tejwəη-γ̣en təm-jo.*
 1PL-divide-AOR.3SG kill-PASS.PART
 ‘We divided the catch.’
- b. *Mət-tejwəη-wəly-ə-tku[-mək] [təm-jo-ta].* (ST. 40)
 1PL-divide-REC-*tku*-1PL kill-PASS.PART-INST
 ‘We shared the catch between ourselves.’
- (32) a. *ətləy-e akka-γ̣tə keli-kel təηiw-nin.*
 father-INST son-DAT letter.ABS send-AOR.3SG+3SG
 ‘Father sent a letter to his son.’
- b. [*ətri*] *nə-keli-ηηiw-wəly-ə-č̣it-qinet.* (SČ. 4)
 they.ABS IMPF-letter-send-REC-č̣it-3PL
 ‘They send letters to each other’ (cf. (59)).

3.1.3 “Possessive” reciprocals

Following is the only example at my disposal, with the underlying construction. The example is not quite convincing because *činit-kine-t uwiki-t* ‘ones’ own bodies’ expresses a reflexive meaning (cf. 2.8):

- (33) a. *yəmnan yənin uwik tə-nəmček-wʔen.*
I.INST your body 1SG-break-AOR.3SG
lit. ‘I broke your body from a bad habit.’
- b. *yənan yəmnin uwik rəmček-wʔen.*
you.INST my body break-AOR.2SG:3SG
lit. ‘You broke my body from a bad habit.’
- c. *Weler [moryənan] činit-kine-t uwiki-t mət-ə-nəmček-wəly-ə-net!* (TČ. 12)
at.least we.INST self-POSS-PL body-ABS.PL 1PL-break-REC-AOR-3PL
‘At least we have broken *each other’s* bodies from a bad habit!’

3.2 Object-oriented constructions

There are two types of object-oriented constructions: with causatives from suffixed reciprocals and causatives from lexical reciprocals.

1. *Causatives of suffixed reciprocals.* (36c) is the only example I have found (the first component in *yən-əy-ηeekək* ‘your.sg daughter’ is the locative form *yən-ək* ‘at you (= your place)’ derived from *yət* ‘you.sg.abs’; a locative form may be used as a kind of attribute, with possible alternation *k > y*; cf. also (87)):

- (34) a. *yəmnan yən-əy-ηeekək tə-lʔu-yʔen.*
I.INST you-LOC-daughter.ABS 1SG-see-AOR.3SG
‘I saw your daughter.’
- b. *yəm ənklam yən-əy-ηeekək mət-lʔu-wəly-ə-mək.*
I.ABS and you-LOC.daughter.ABS 1PL-see-REC-AOR.1PL
‘I and your daughter saw each other.’
- c. *Qol ine-nt-ə-yʔi ine-n-lʔu-wəly-et-yʔi yənan*
one 1SG-AUX-AOR.3SG 1SG-CAUS-see-REC-CAUS-AOR.3SG you.INST
yən-əy-ηaakka-ytə. (ŠL. 109)
you-LOC-daughter-DAT
‘Once you brought me and your daughter *together*’, lit. ‘... you made me see *each other* to your daughter.’

2. *Causatives of lexical reciprocals.* In this case the reciprocal suffix may be optional (cf. (35b) and (35c)).

- (35) a. ... *pəlwəntə-tʔol-ə-mk-ən n-eretə-lʔet-qinet ənklam*
iron-piece-many-ABS.SG IMPF-fall-lʔet-3PL and
n-ittil-ə-tku-rʔu-qinet. (GP.28)
IMPF-bump-ITER-rʔu-3PL
‘Many pieces of iron fell to the ground banging against each other.’
- b. *Ejəçyi-te yila-tʔul-ti n-ine-n-ittil-wəly-ə-qinet.* (GP. 88)
wave-ERG ice-piece-ABS.PL IMPF-CAUS-bump-REC-3PL
‘The waves made the ice-floes bang against each other.’

- c. *Ejačyā-te yilā-tūl-ti nā-n-ittil-ew-qinet.* (RO. 90)
 wave-INST ice-piece-ABS.PL IMPF-CAUS-bump-CAUS-3PL
 ‘The waves made the ice-floes bang against each other.’ (reciprocal by default)

3.3 Discontinuous constructions

In simple constructions with suffixed reciprocals, the subject is necessarily plural, at least semantically, i.e. it may be a collective noun in the singular (cf. (47) though it contains the reciprocal adverb and not a suffixed reciprocal). In the discontinuous construction it may be singular, if one of the participants is expressed by an object with a comitative case marker (viz. the confix *γ[e/a]-...-e/-a, -te/-ta*) or by an object in the locative case with the postposition *reen* ‘with’ (unfortunately, it remains unknown whether there are any restrictions on the use of suffixed reciprocals in the discontinuous construction); cf.:

- (36) a. *ətlon ənkʔam enaalʔ-ən neme luur ʔu-wāly-ə-γʔet.*
 he.ABS and neighbour-ABS again suddenly see-REC-AOR.3PL
 ‘He and the neighbour suddenly met again.’
 b. *ətlon neme luur ʔu-wāly-ə-γʔet γ-eneelʔ-e.*
 ‘He suddenly met with the neighbour again.’
 c. *ətlon neme luur ʔu-wāly-ə-γʔet eneelʔ-ək reen.*
 (same as (b)).

3.4 Successive subevents

As in other languages, the meaning of succession or simultaneity of reciprocal subevents is determined by the lexical meaning of the base. Succession of subevents in a reciprocal situation may be indicated by the adverb *emrənyūite* ‘by turns’; cf.:

- (37) *Naqam emrənyūite palomtel-wāly-a n-it-qinet: evər ənnen nā-wetgaw-qen,*
 well by.turns listen-REC-INST IMPF-AUX-3PL when one IMPF-tell-3SG
qol-əm nā-palomtel-qen. (BL. 27)
 other-EMPF IMPF-listen-3SG
 ‘Well, they listened to each other by turns: when one talked the other listened.’

3.5 The suffix *-wāly* in combination with nouns, pronouns and adverbs

The reciprocal forms in question denote spatial proximity or contiguity of two or more entities.

1. Reciprocal nouns

- (38) *ətʀi... ʔəl-ra-čəko wəjanlan-ma n-atčə-qenat, činit uwik-wāly-ək*
 they.ABS snow-house-inside storm-CONV IMPF-hide-3PL self body-REC-LOC
n-omaw-qenat. (RO. 67)
 IMPF-warm-3PL
 ‘During the snow-storm they were hiding in the igloo, warming up with their own (lit. ‘mutual’) bodies.’ (i.e. ‘A warms himself with B’s body and B warms himself with A’s body.’)

2. Reciprocal pronouns

- (39) a. *ətri nə-le-qinat čik-wəlt-e, qəmek ər-ək-wəly-e*
 they IMPF-walk-3PL almost-tight-ADV almost they-LOC-REC-INST
ačyətə. (SM. 55)
 next.to
 ‘They walked very closely packed, they were almost in one row with each other.’
- b. *ənkə ətri čəkeek-wīet ənkʔam ər-ək-wəly-u*
 here they realize-AOR.3PL and they-LOC-REC-ESS
yeta-čet-ə-myo-γīat. (SM. 57)
 look-čet-begin-AOR
 ‘At that moment they came to their senses and began looking round each other.’

3. *Reciprocal adverbs*. In the examples at my disposal the reciprocal suffix is used on a lexical reciprocal; cf.:

- (40) a. *ηirek əryin-et ηelwəlʔ-ət čimče-wəly-e nə-twa-qenat*. (OČ. 88)
 two their-PL herd-NOM.PL near-REC-ADV IMPF-be-3PL
 ‘Their two herds were near each other.’
- b. *ətri čimče-wəly-e nə-twetča-twa-qenat*. (OČ. 90)
 they.ABS near-REC-ADV IMPF-stop-RES-3PL
 ‘They stood near each other.’

3.6 *Nomina actionis*

Suffixed reciprocals can be nominalized like any other verbs, by means of the suffix *-γəry* and the derivatives function as common nouns; cf.:

- (41) a. *ətri lʔu-wəly-ə-γīet*.
 ‘They met.’
- b. *Tintin n-unətm-īew n-ʔatča-qen lʔo-wəly-ə-γəry-ətə*. (RI. 133)
 T. ADV-quiet-ADV IMPF-wait-3SG see-REC-NR-DAT
 ‘Tintin was quietly awaiting the meeting.’

A few more nouns of action have occurred in the texts:

- (42) *lʔo-wəly-ə-tko-γəry-ən* ‘meeting’ (← *lʔu-* ‘to see’)
penrə-wəly-ə-γəry-ən ‘duel’ (← *penrə-* ‘to attack’)
wetyak-wəly-ə-γəry-ən ‘conversation’ (← *wetyaw-* ‘to talk’).
- (43) *ηawʔan-penrə-wəly-ən* (TM. 141)
 woman-attack-REC-place (*-ən/-ənw* is a partial homonym of *-ən* in *ətləg-ən* (6b))
 lit. ‘the place where women attacked each other’ (the name of a mountain).

3.7 Lexicalization

So far, we have found only one instance of lexicalization of a reciprocal verb, which may be evidence of the recent origin of the suffix *-wəly*. Both lexicalized meanings are predictable: they have parallels in other languages of the area. This verb retains its standard reciprocal meaning as well:

- (44) *lʉu-* ‘to see, find’ → *lʉu-wəly-* i. ‘to see each other’ (standard meaning)
 ii. ‘to meet’ (slight lexicalization)
 iii. ‘to fight (in order to measure swords with sb)’ (MI. 75).

4. Reciprocal constructions with the pronominal adverb *əryičyu* ‘they mutually’

4.1 Introduction

The semantic distinctions between suffixed reciprocals and those with the adverb *əryičyu* ‘they mutually’ are hard to formulate. Both of these reciprocal markers are used on the same verbs and they can also be used together pleonastically. Due to its adverbial status, the adverb cannot occupy the direct object position (thus it differs from the English pronoun *each other* which is employed as its translation equivalent). Therefore, when used with this adverb two-place transitive verbs necessarily undergo antipassivization. So far, I have encountered only subject-oriented “canonical” and “indirect” constructions with this adverb. In “canonical” constructions, it refers to the intransitive subject in the absolutive case, and in “indirect” constructions to the transitive subject unless a direct object is incorporated. As well as the suffix, this adverb does not render the sociative meaning. It has three personal forms:

- (45) *muryi-čyu* ‘we mutually’ (cf. (64))
turyi-čyu ‘you mutually’ (cf. (46) where it is replaced by the 3rd p. form))
əryi-čyu ‘they mutually’.

The 1st and 2nd person forms are very rare, and there seems to be a tendency to use the 3rd person form instead of them (some of our informants did not understand the 1st and 2nd person forms, and some did not understand even the 3rd person form). Here is an example of such usage:

- (46) “*Toryə-nan yemo, mikə-ne ipe əryičyu* [instead of *turyičyu*]
 you-INST not.know who-LOC really mutually you.mutually
nə-nju-tku-turi, ʎorawetlʉa-t qora-k qača ewətləm qaa-t
 IMPF-pasture-APASS-2PL man-ABS.PL deer-LOC near or deer-ABS.PL
ʎorawetlʉa-k qača?” (Rə. 184)
 man-LOC near

‘Do you really not know where (lit. ‘by whom’) you pasture each other, people next to the deer or the deer next to the people?’ (the situation: a jocular question to the Chukchis who follow the herds of semi-domestic reindeer).

The reciprocal adverb may take any position in the sentence structure, even between the notional part of a periphrastic predicate and the auxiliary; cf.:

- (47) *Remk-ən taŋ-am-maraw-a əryičyu re-nʉel-ə.* (TN.7)
 people-ABS.SG very-only-fight-ADV mutually FUT-become-3SG
 ‘The people will begin fighting with each other.’

4.2 “Canonical” constructions

4.2.1 *With two-place transitives*

There are constructions with two types of antipassives. In most of the examples at my disposal, antipassives are formed by means of the suffix *-tku/-tko*, and in one instance by the prefix *ine-/ena-* (these markers are generally absent on intransitives).

1. Reciprocal constructions with antipassives in *-tku/-tko*.

- (48) a. *Ajwanal̄-a ətri nə-γite-qinet.*
Eskimo-INST they.ABS IMPF-look-3PL
‘The Eskimos looked at them.’
- b. *Ajwanal̄-ət payçen-etə nə-γite-tku-qinet əryičyu.* (Rə. 118)
Eskimo-ABS.PL CURIOUS-ADV IMPF-look-APASS-3PL mutually
‘The Eskimos looked with curiosity at each other.’

Here is a list of reciprocals of this type that I have collected:

- (49) *əryičyu ejpə-tku-* ‘to cover each other’
əryičyu yite-tku- ‘to look at each other’
əryičyu ləyi ləηə-tku- ‘to know each other’
əryičyu ommačajpə-tko- ‘to embrace each other’
əryičyu pəηəlo-tko- ‘to ask each other’
əryičyu ru-tku- ‘to devour each other’
əryičyu rəəme-tko- ‘to relieve each other’
əryičyu upə-tku- ‘to push each other’; cf.:
- (50) a. *ʔətt̄l-ət əryičyu nə-nu-tku-qinet.* (Rə. 212)
‘The dogs devoured each other.’
- b. *γənrəretə-l̄-ət nə-nrəme-tko-qenat əryičyu.* (Rə. 43)
‘The watchers relieve each other.’
- c. *əryičyu naqam telenjep ten-ləyi ye-t̄ç-ə-tku-linet.* (KK. 6)
mutually but long.ago very-know PERF-AUX-APASS-3PL
‘But they have known each other very well for a long time.’

2. Reciprocal constructions with antipassives in *ine-/ena-*. Following is the only example of this type at my disposal. Characteristically, as in the cases with *-wəly* (see (26)), this reciprocal is derived from a morphological causative:

- (51) a. *Təjkewə-l̄-e ətlon rə-ŋəl-ew-nin.*
wrestle-PART-INST he.ABS CAUS-ache-CAUS-AOR.3SG:3SG
‘The wrestler caused him pain.’
- b. *Təjkewə-l̄-ət čama qəram əryičyu*
wrestle-PART-ABS.PL besides NEG they.mutually
ine-n-ŋəl-ew-ə-l̄-ə-lqəl-ti. (OČ. 27)
APASS-CAUS-ache-CAUS-PART-MUST-ABS.PL
‘Besides, the wrestlers should not cause pain to each other.’

4.2.2 With two-place intransitives

In these cases the antipassive marker is usually redundant, though possible in one of its other functions, e.g. in the iterative function. This case also covers reciprocals from labile verbs (see 2.7.1.2).

1. Examples with lexical reciprocals. Here belong the following verbs:

- (52) *əryičy enaylat-* 'to be alike'
əryičy janrʔat- 'to part from each other'
əryičy maraw- 'to fight, quarrel'
əryičy rʔečumket- 'to get entwined'
əryičy wetyaw- 'to talk with each other'; cf.:
- (53) a. *ətrʔeč quneče ətləy-ən ənklam ekək əryičy ɣa-janrʔat-lenat.* (TN. 46)
 true once father and son mutually PERF-part-3PL
 'And only once did the father and son part from each other.'
- b. *ətri qarəmena-t marawə-l-ə-lqəl-te əryičy.* (RO. 7)
 they NEG-PL fight-PART-must-PL mutually
 'They must not fight with each other.'
- c. *əttʔ-ət əryičy nə-rʔečumket-qinet, nə-kʔola-qenat.* (ST. 50)
 'The dogs were entangled [in their harness], whined.'

2. With other verbs, such as the following (*teyinŋet-* 'to kill a person' is intransitive!):

- (54) *əryičy čičə-llet* 'to understand each other'
əryičy ejmew- 'to approach each other'
əryičy ʔeqeliŋet- 'to be afraid of each other'
əryičy ɣənrəret- 'to guard each other'
əryičy ləlep- 'to glance at each other'
əryičy teyinŋet- 'to kill each other'
əryičy teŋəčʔet- 'to love each other'; cf.:
- (55) ... *naqam nə-čičə-llet-qinet əryičy, ləyen qonpə əryičy*
 but IMPF-guess-llet-3PL mutually simply always mutually
nə-ɣənrəret-qinet. (RO. 33)
 IMPF-keep.guard-3PL
 '(they did not speak to each other)... but (they) guessed mutually and simply guarded each other.'
- (56) *ətri əryičy ləy-ejmek-wʔet.* (RI. 107)
 they mutually very-approach-AOR.3PL
 'They approached each other.'

4.3 "Indirect" constructions

Two cases can be distinguished here. In both cases the antipassive marker is generally absent (see, however, (59), where *-tku* can also be interpreted as iterative), because the reciprocal adverb substitutes for a non-direct object.

1. The direct object is retained and an indirect object is replaced by the reciprocal adverb, the ergative construction being preserved:

- (57) a. *atləy-e akka-γtə nena-twə-qen marak-wəry-ən.*
 father-INST son-DAT IMPF-tell-3SG war-NR-ABS.SG
 ‘Father told his son about the war.’
- b. *atləy-e ənkʌm ekke-te əryičyu nə-twə-qen*
 father-INST and son-ERG mutually PERF-tell-3SG(OBJ)
marak-wəry-ən. (TN. 62)
 war-NR-ABS.SG
 ‘Father and son told each other about the war.’
- (58) a. *əryə-nan əryičyu keli-t ne-n-lu-ηet-ə-net.*
 they-INST mutually book-ABS.PL 3PL-CAUS-see-CAUS-3PL
 ‘They show books to each other.’
- b. *əryə-nan əryičyu ne-jəl-ə-rkə-net qaa-t.*
 ‘They give deer to each other.’

2. In this case antipassivization can be achieved by incorporation, the ergative structure being replaced by nominative:

- (59) a. see (32)
- b. *ətri γe-keli-nηiw-ə-tku-linet əryičyu.*
 they.ABS PERF-letter-send-APASS-3PL mutually
 ‘They sent letters to each other.’

4.4 Pleonastic use of *əryičyu* with suffixed reciprocals

Pleonastic use of the reciprocal adverb is not determined by the lexical meaning of the base.

- (60) a. *ətri nə-mηəlo-wəly-ə-qenat əryičyu.* lit. ‘They asked each other mutually.’
 b. *ətri əryičyu n-ukwet-wəly-ə-qinet.* lit. ‘They kissed each other mutually.’
 c. *ətri lələpə-tku-wəly-ə-γʷet əryičyu.* (RI.107) lit. ‘They exchanged glances mutually.’
 d. *Tʷerʷew mət-lu-wəly-ə əryičyu.* (Rə.277) ‘We met several times.’
- (61) a. ... *ətrʷeč-əm činit əryičyu lun-čičew-wəly-e*
 but-INTS themselves mutually NEG-understand-REC-CONV
n-it-qinet. (MN. 4)
 IMPF-AUX-3PL
 ‘... but they themselves did not understand each other.’
- b. *əryičyu ətri nə-teη-čičew-qinet.* (MN. 4)
 mutually they.ABS IMPF-well-understand-3PL
 ‘They understood each other very well.’

4.5 The adverb *əryičyu* in combination with nouns and adverbs

I have examples of its occurrence with nouns and adverbs – two-place lexical reciprocals only (cf. ‘A is the enemy of B’, ‘A is not far from B’). Note that in Section 3.5 adverbs with the suffix *-wəly* are also represented by lexical reciprocals, and they are also spatial in meaning.

1. *With nouns*; e.g.:

- (62) ... *tite emnuηə-l̄-ət əryičyu ʔeɣel?-u nə-nʔel-qinet.* (RI. 33)
 when tundra-PART-PL mutually enemy-ESS IMPF-become-3PL
 ‘...when the tundra Chukchis become enemies to each other.’

2. *With adverbs*; e.g.:

- (63) *ətri nə-twetča-twa-qenat əryičyu mač-əjaa.* (BL. 50)
 they IMPF-stand.up-RES-3PL mutually not.quite-far
 ‘They stood not quite far from each other.’

4.6 *Nomina actionis*

Deverbal nouns are formed by means of the suffix *-γəry*. It is usually preceded by the antipassive *-tku/-tko*; e.g.:

- (64) a. *Muri muryičyu mat-ə-n-rənyiiwə-tku-mək.*
 we we.mutually 1PL-CAUS-meet-APASS-AOR.1PL
 ‘We met each other.’
 b. *ətləy-e ketʔo-ηηo-nen muryičyu*
 father-INST remember-begin-AOR.3SG:3SG we.mutually
rə-rənyewə-tko-γəry-ən. (ST. 31)
 CAUS-meet-APASS-NR-ABS.SG
 ‘Father began to recollect our meeting’, lit. ‘... meeting mutually.’

5. *Reciprocals with the suffix -čit/-čət*5.1 *Introductory*

This suffix is peripheral in expressing reciprocity but it is of typological interest because it is polysemous (unlike the above two means, namely the suffix *-wəly* and the adverb *əryičyu*) and concerns certain semantic domains of reciprocity. Its reciprocal meaning is context-dependent and it is of low productivity. Its other meanings, more or less closely related to the reciprocal, are:

- competitive (including playing and struggling),
- iterative (including successivity),
- intensive.

Sometimes, it has a pejorative connotation, i.e. a negative evaluation of the action. Not infrequently, one or the other meaning is difficult to identify even in a context. On a number of verbs, it is lexicalized; some verbs are not used without this suffix. It does not possess an intransitivizing function; therefore, when used reciprocally on transitives, it co-occurs with the antipassive marker *-tku/-tko*. I have not found any occurrence of the suffix *-wəly* after the suffix *-čit/-čət*, while the reverse sequence occurs sometimes (see (32b) and (74b)). Below, we shall briefly consider all the main meanings of this

suffix, as a background for the reciprocal meaning in order to show what meanings are contiguous to it.

5.2 Reciprocal meaning

The verbs in *-čit/-čet* with this meaning are of the “canonical” and “indirect” types only, with no “possessive” type. All of them are subject-oriented; it is likely that object-oriented constructions can be derived from them but we have not found any instances.

5.2.1 “Canonical” reciprocals

5.2.1.1 *Derived from two-place transitives.* As well as in the cases with *arjičyu*, in the examples we have encountered the suffix *-čit/-čet* requires prior antipassivization, viz. the use of *-tku/-tko*. The examples at my disposal describe struggling, competing, ousting. This type also includes verbs used transitively only (i.e. labile verbs do not belong here), i.e. verbs on which the suffix *-tku/-tko* is added, most likely, together with the suffix *-čit/-čet* (cf. the use of *-tku/-tko* on transitives in combination with *arjičyu*; see 4.2.1) while verbs which are regular enough with *-tku/-tko* and are therefore labile, are included in the type considered in 5.2.1.2. The reciprocals in (65) are derived from the transitives *rätel-nen* ‘he pressed him down’ and *ʔelemqute-nen* ‘he pushed him’.

- (65) a. *ʔorawetʔa-t ... rätelä-tko-čet-ä-rkä-t.* (GP. 107)
 ‘People jostle each other (while there is so much room on earth).’
 b. ... *ämälʔo ... təneret-ti ... ʔelemqute-tku-čit-γʔet.* (MP. 85)
 all plant-ABS.PL OUST-APASS-čit-AOR.3PL
 ‘... all the plants ousted each other.’

5.2.1.2 *Derived from two-place intransitives.* Some of the underlying verbs are underived labile (transitive/intransitive) verbs (see 2.7.1.2). Therefore, contrary to the verbs in 5.2.1.1, they do not require antipassivization, though they may occur with the suffix *-tku/-tko* due to a kind of “antipassive inertia” (this concerns the verb *ukwet-* i. ‘to kiss sb’, ii. ‘to kiss each other’). About half of the underlying verbs are lexical reciprocals. They fall into the following lexical groups: (a) verbs of hostile actions, (b) verbs denoting communication; (c) denominal verbs with the suffix *-u/-o* with a broad meaning of obtaining or consuming (‘to get, kill, obtain, eat, etc.’). The suffix *-čit/-čet* is particularly frequent on some of all these verbs. Group (c) contains derived labile verbs with the suffix *-tku/-tko* (see 2.10) which are semantically close to the verbs of groups (a) and (b). The meaning of the underlying verbs is clear from that of the derivatives, excepting those which have no underlying verbs.

- (66) a. *ʔeqe-čit-* ‘to quarrel’ (*ʔeqe-* is a bound stem, cf. *ʔeqe-tku-* ‘to abuse each other’)
ʔetjiv-čit- ‘to berate each other, quarrel’
lewlew-čet- ‘to jeer at each other’
maraw-čet- ‘to squabble, fight with each other’
mənep-čit- ‘to jeer at each other’ (cf. *mənep-et-* ‘same’; MI. 80)
rənpä-čet- ‘to quarrel’ (*ʔrənpä-*) (MI. 119)

- | | | |
|----|------------------------|---|
| | <i>tejkew-čit-</i> | ‘to wrestle with each other, fight’ |
| | <i>utku-čit-</i> | ‘to fight, beat’ (cf. <i>utku-čit-ən</i> ‘trap’) |
| | <i>wetʔat-čēt-</i> | ‘to butt each other’ |
| b. | <i>ləlep-čit-</i> | ‘to look at each other’ |
| | <i>ukwet-čit-</i> | ‘to kiss each other’ |
| | <i>wetyaw-čēt-</i> | ‘to talk with each other’ |
| c. | <i>məml-u-čit-</i> | ‘to look for lice on each other’ |
| | <i>pont-o-čēt-</i> | ‘to eat each other’s liver’ |
| | <i>wanw-o-čēt-</i> | ‘to seize each other’s place, oust each other’ |
| d. | <i>γite-tku-čit-</i> | ‘to look at each other’ |
| | <i>jəŋo-tko-čēt-</i> | ‘to sniff each other’ (traditional greeting instead of kissing) |
| | <i>rərame-tko-čēt-</i> | ‘to relieve each other’ |
| | <i>ukwetə-tku-čit-</i> | ‘to kiss each other’ |
| | <i>upə-tku-čit-</i> | ‘to peck each other’ (cf. <i>up-</i> ‘to push’); cf.: |
- (67) a. *ətri γ-ɣetjiw-čit-linet.* (SM. 101)
‘They quarrelled.’
- b. ... *wəkwə-čy-ək reen nə-wetʔatə-čēt-ə-lʔat-qen.* (BL. 135)
stone-MGN-LOC with IMPF-butt-čit-lʔat-1SG
‘He (deer) always butted huge stones (training himself for fighting).’
- c. ... *briyada-k wanewan n-ɣeqe-čit-ə-net.* (ŠL. 55)
brigade-LOC NEG IMP.3-bad-čit-3PL
‘... in the brigade, they did not quarrel.’
- d. *Čaj-pan-ma nə-wetgaw-čēt-qenat.* (BL. 183)
tea-boil-CONV IMPF-talk-čit-3PL
‘While the tea was boiling they talked.’
- e. “*Amən iwke, mənə-ml-u-čit-ə-rkən!*” (BL. 79)
well IMP.1PL-louse-get-čit-IMPF
‘Well, let us look for lice on each other/by turns!’
- f. “... *ənrak-əm mən-pont-o-čēn-mək!*” (JL. 59)
well IMP.1PL-liver-eat-čit-PFV.1PL
‘... Well, let’s eat each other’s liver!’
- g. “*Mačəryənan ... nə-wanw-o-čēt-ə-rqə-net.*” (MP. 85)
let.them IMP.3-place-occupy-čit-IPFV-3PL
‘Let them take the place away from each other.’
- h. ... *ukwet-ə-tku-čit-ə-rkə-t ηewəsqet-ti.* (ŠL. 16)
‘... the women kissed each other.’

Some of the verbs listed above render the reciprocal meaning only when both (or all) the participants are named (in a simple or discontinuous construction; cf. (83)). Derivatives from lexical reciprocals, as well as their base verbs, often occur with a singular subject and thus describe a situation with one participant only, with or without an implication of co-participant (in this respect they differ from reciprocals in *-wəly* and *əryičy* which always require expression of both participants); cf.:

- (68) a. *ətri wetyaw-[čēt]-ə-rk-ət.*
‘They are talking’ (most likely, with each other).
- b. *ətlon wetyaw-[čēt]-ə-rkən.*
‘He is talking’ (only one participant, though co-participants are possible).

A textual example:

- (69) *Maraw-čēt-ə-ηηo-γīe neme reqokalyəqaj.* (BL. 92)
 ‘The polar fox began cursing again.’

5.2.2 “Indirect” reciprocals

These reciprocals are derived from three-place verbs with the lexical meaning of taking sth away from sb. Therefore they imply struggling, resistance. Two cases can be distinguished here. Two synonymous verbs are considered here with a reversed marking of the object arguments (cf. *itke-* ‘to snatch sth (ABS) from sb (ABL)’, *enewna-* ‘to take sth (INST) away from sb (ABS)’).

1. In the first case, the underlying direct object and ergative construction are retained, an indirect human object undergoing deletion.

- (70) a. *ənan ənəka-jpə avtomat n-in-itke-qin.* (-in- < -ine-)
 he.INST he-ABL machine.gun.ABS IMPF-snatch-3SG
 ‘He snatched the machine gun from him.’
 → b. *əryə-nan n-itke-čīt-qin avtomat, ləlep-wəly-ə-čīt-e.* (SM. 15)
 they-INST IMPF-snatch-čīt-3SG machine.gun.ABS look-REC-čīt-CONV
 ‘They tried to snatch the machine-gun from each other, looking at each other.’
- (71) *ʔatt?-e nelyə-tūl n-itke-čīt-qin.* (ST. 33)
 dog-INST skin-piece IMPF-snatch-čīt-3SG (OBJ)
 ‘The dogs tried to snatch a piece of deer-skin from each other.’

2. In the second case, antipassivization results in direct object demotion, which entails substitution of the nominative construction for ergative. As in the first case, demotion concerns a human object from whom sth is taken away. The indirect object of the same verb may be in the instrumental (see (72)) or locative case (see (73b)) or it may be omitted (see (73a)).

- (72) a. *ənan ətlon qaa-ta enewna-nen.*
 he.INST he-ABS deer-INST take.away-AOR.3SG:3SG
 ‘He took the deer away from him.’
 b. *ətri enewna-tko-čēt-γīat qaa-ta.*
 they.ABS take.away-APASS-čīt-AOR.3PL deer-INST
 ‘They took the deer away from each other.’
- (73) a. *əməlʔo jīajaq-ət n-enewna-tko-čīt-qenat.* (Rə. 247)
 ‘All the sea gulls snatch (sth) from each other.’
 b. *ətri qepl-ək enewna-tko-čēt-a n-it-qinet.* (OČ. 97)
 they.ABS ball-LOC snatch-APASS-čīt-INST IMPF-AUX-3PL
 ‘They tried to snatch the ball from each other.’

5.3 Pleonastic use of -čīt/-čēt

There are cases of the suffix *-čīt/-čēt* co-occurring with *-wəly* or *əryičy* on the same verb.

- (74) a. ... *naqam ləye-kač̣aretə əryič̣y nə-tlep-č̣it-qinet*. (RI. 14)
 but very-joyfully mutually IMPF-look-č̣it-3PL
 ‘... but they looked at each other with joy.’
 b. ... *ləlep-waly-ə-č̣it-e*. (SM. 15) (cf. (70b))
 look-REC-č̣it-CONV
 ‘... looking at each other.’ (cf. also (32b))

5.4 Verbs of competition. Derivatives from nouns and adjectives

I will consider here all the verbs with the lexical meanings of competition and playing, including those which have no base verbs (see (75b)). The meaning of competition is lexically dependent and these verbs comprise a closed set, most of them being lexicalized reciprocals. In (75a) all the derivatives are formed from verbs, some of them synonymous to the derivatives. In (75b) derivations from adjectives are listed (there are other verbal derivatives from these adjectives, too; e.g. *erme-w-* ‘to become strong’; *γatte-w-* ‘to become sly’). (75c) which contains three denominal verbs points to the productivity of the suffix *-č̣it/-č̣et* in the meaning of playing what is expressed by the base nominal stem (incidentally, none of these denominal verbs is registered in the dictionaries).

- (75) a. *yala-č̣et-* ‘compete in driving deer- (dog)-sledges’ (MI. 30) ← *yala-* ‘to overtake’
yala-tko-č̣et- (same as *yala-č̣et-*) (MI. 30) ← *yala-[tko-]* ‘to overtake’
ʔiret-č̣it- i. (same as *yala-č̣et-*), ii. ‘to run fast’ ← *ʔire-* (same)
piŋku-č̣it- i. ‘to jump repeatedly’, ii. ‘to compete in jumping’ ← *piŋku-* ‘to jump’
tiŋu-č̣it- ‘to compete in pulling a rope’ (MI. 131) ← *tiŋu-* (vt) ‘to pull’
up-č̣it- ‘to compete in weight-lifting’ (MI. 140) ← *up-* (vt) ‘to push’;
 b. *erme-č̣it-* ‘to compete in strength’ (cf. *n-erme-qin* ‘he [is] strong’)
erme-yite-tku-č̣it- (same as *erme-č̣it-*); *yite-* ‘to see’
γatte-č̣it- ‘to outwit each other’ (MI. 36) (cf. *nə-γatte-qin* ‘he [is] sly’)
mətlo-č̣et- ‘to be in training (for competitions)’ (cf. *mətlo-l̄-ən* ‘agile’)
qr̄a-č̣et- ‘to compete’ (cf. *qraq-at-* (same); MI. 66);
 c. *atč̣ə-č̣et-* ‘to play hide and seek’ (MI. 15) (cf. *atč̣ə-* ‘to hide’)
ʔelul̄-ə-č̣it- ‘to lasso a doll imitating saving sth/sb’ (cf. *ʔelul̄ə* ‘doll’)
kelle-č̣it- ‘to play devils’ (cf. *kələ* ‘devil’)
maraw-ə-l̄-ə-č̣et- ‘to play soldiers, war’ (cf. *maraw-ə-l̄-ən* ‘fighter’); cf.:
- (76) a. *ətri n-ʔiret-č̣it-qinet, nə-yala-č̣ettko-qenat*. (KK. 89) (*-č̣ettko* < *-č̣et-tko*)
 ‘They (dog-sledges) rushed forward competing, leaving each other behind.’
 b. *Pətqə-taŋ-əŋ-əm č̣imyʔu-te erme-č̣it-ək*. (ŠL. 80)
 even-well-CMPR-EMPH wit-INST strong-č̣it-INF
 ‘It is even better to compete in wit.’
 c. ... *tite qlawəl-te ətr̄eč̣ erme-yite-tku-č̣it-e ənkə n-it-qinet*. (RI. 84)
 when man-ABS.PL only strong-look-tku-č̣it-CONV then IMPF-AUX-3PL
 ‘... when the men were busy only competing in strength.’
 d. *ətri jep ŋinqej-u wa-ma nə-myo-qenat mətlo-č̣et-ək rač̣wəŋəllat-ək*.
 they yet child-ESS be-CONV IMPF-begin-3PL train-č̣it-INF race-INF
 ‘Even as they were children they started training and competing in racing.’ (OČ. 15)

- e. “*Kitaqun-am mən-γatte-čün-mək, eryatak neme qə-jet-γi.* (TČ. 38)
 hey-EMPH IMP.1PL-sly-čit-1PL tomorrow again IMP.2-come-2SG
 ‘Hey, let us try to outwit each other, come again tomorrow.’
- f. ... *ewər ənkə ətri owečwan-ma maraw-ə-l-ə-čət-ə-ηo-γlat*
 at.once they play-CONV fight-PART-čit-begin-AOR.3PL
kino-mel. (Rə. 331)
 film-as
 ‘... at once while playing they began playing war, as in films.’
- g. “*Mən-kelle-čün-mək. γəm kel?e-nu m-it-γlek.*” (JN. 18)
 IMP.1PL-devil-čit-1PL I.ABS devil-ESS IMP.1SG-AUX-1SG
 ‘Let us play devils. I shall be the devil.’

The use of a derivative from the verb with the meaning ‘to look’ in (76c) for the expression of the competitive meaning is not accidental here. Typologically similar usage occurs in other languages as well (see (109) in Nedjalkov et al., Ch. 29 on Buryat and Khalkha-Mongol and (129) in Kuular, Ch. 27 on Tuvan, also Ch. 42 on Ainu).

5.5 Intensive meaning

This meaning is not clearcut and it is often related to competition with an implication of overcoming some difficulties or resistance, sometimes a chaotic reckless action. Most of the examples are from colloquial speech.

- (77) a. “... *remkən moo-rkən qor-o-čət-ək.*” (BL. 209)
 people begin-PRES.PROGR.3SG deer-get-čit-INF
 ‘... the people are on the point of taking their deer from the (common) herd.’
- b. “*Ik, γamən iwke mən-itke-čit-ə-rkən ηelwəl!*” (BL. 210)
 well then IMP.1PL-seize-čit-IPFV.3SG herd.ABS
 ‘Well, it would be good to take more deer from the (common) herd.’
- c. “... *ənkγam mənə-tku-čit-ən γatyən...!*” (BL. 57)
 and IMP.1PL-make.empty-čit-3SG lake.ABS
 ‘... and let us scoop out (empty) the lake!’
- d. ... *ənrɪa ηan ne-piri-čit-γlen ənkə enmə-sq-ək ηewəsqet.* (BL. 108)
 at.once 3PL-seize-čit-AOR.3SG there rock-surface-LOC woman.ABS
 ‘... and at once they fell (as if pushing each other) on the woman on the rock.’
- e. *Ləyen pakerə-ηηo-l-ən na-penrə-čət-γlan, na-rkəpčewə-γlan.* (BL. 88)
 as come-begin-PART-ABS 3PL-attack-čit-AOR.3SG 3PL-beat-AOR.3SG
 ‘As soon as he came up (to them), they fell on him (as if pushing each other) and beat him.’
- f. ... *rəpet ətri γətγəjoča nə-ta-tko-čət-qenat.* (JL. 23)
 even they forward IMPF-pass.by-tko-čit-3PL
 ‘... even they passed forward (as if jostling each other).’

5.6 Unclear cases with the suffix *-čit/-čət*

To complete the picture, it may be useful to mention verbs on which the meaning of this suffix is not clear. The context of returning to the initial state, i.e. a kind of sinu-

soidal change, can be observed here: strong (people) > dying out > strong (people); strong (wind) > calming down > strong again. The last two examples under (78) seem to indicate a connection with the dispersive meaning ‘in many places’.

- (78) a. “... *rəpet əmə wʹi-tku-čit-ə-lʹ-ət warat-te arma-warat-o*
 even also die-ITER-čit-PART-ABS.PL people.ABS.PL strong-people-ESS
nə-nʹel-qinet.” (RO. 109)
 IMPF-become-3PL
 ‘... (it so happens that) even the peoples that are dying out may become strong.’
- b. *Kətəjy-ən nə-meč-untəməwə-čət-qin, ənko neme pətq-arma-η*
 wind-ABS.SG IMPF-slightly-abate-čit-3SG then again even-strong-CMPR
nə-nʹel-qin. (MP. 40)
 IMPF-become-3SG
 ‘The wind would calm down and then again become even stronger.’
- c. *E-qi-kə-lʹ-in tintin čənat-čət-ə-ηo-γʹe. Qənwər čənat-γʹe*
 NEG-thick-NEG-PART-POSS ice crack-čit-begin-AOR.3SG at.last crack-AOR.3SG
nə-mkə-qine-k wanw-ək. (KK. 104)
 ADJ-many-3-LOC place-LOC
 ‘The thin ice began cracking. At last it cracked in many places.’
- d. *əryine-t wankət-te ... γa-čyat-čət-lenat.* (Rə. 116)
 their-PL fang-ABS.PL PERF-crack-čit-3PL
 ‘Their (old walruses’) fangs are covered with cracks.’

6. Reciprocals with the suffix *-tku/-tko*

As was mentioned in 2.10, this is the most polysemous suffix in Chukchi. In case of antipassivization, it intransitivizes transitive verbs. As mentioned above (see 4.2.1), the use of *əryičy* with transitives requires their antipassivization. In the case of antipassivization proper, the meaning of the verb does not change, what changes is its case frame (see 2.7.2.3). Sometimes, however, intransitivization involves a change of meaning (it entails changes in a variety of ways also registered in other languages (cf. (19d)), sometimes expressing the reciprocal meaning by default.

- (79) a. *Otčoj-kena-more lun-lʹu-tku-te mət-in-mək.* (MP. 101)
 long.time-POSS-we NEG-see-APASS-CONV 1PL-AUX-AOR.1PL
 ‘We haven’t seen each other for a long time.’
- b. *Ten-tumγ-ət ommačəjpə-tko-γʹat.* (ČG. 49)
 bosom.friend-ABS.PL embrace-APASS-AOR.3PL
 ‘The bosom friends embraced each other.’
- c. *ətri wejpə-tku-rk-ət.*
 they.ABS scratch-APASS-PRES.PROGR-3PL
 ‘They are scratching each other.’

Some of the lexical reciprocals (which can express reciprocity in the simple construction without additional marking) acquire *-tku* without any change of meaning, under a kind

of momentum or for highlighting reciprocity (cf. the analogous use of the suffix *-wəly* and the adverb *əryičy* in (27b), (21d) and (60), (61a) respectively).

- (80) a. ... *ətri qlawəl-mel ukwet-ə-tku-γʔet*. (SM. 89)
 ‘They kissed each other as men do.’ (situation: ‘they kissed once only.’)
 b. *ətləy-ən ənkʔam ekək nə-məŋ-ajmet-ə-tko-qenat*. (Rə. 118)
 father-ABS and son IMPF-hand-press-*tko*-3PL
 ‘Father and son shake hands.’

7. Lexical reciprocals

Above, many lexical reciprocals are considered along with other reciprocals. In this section, they will be listed with brief comments.

1. *Lists of lexical reciprocals.* They are grouped according to the word-classes: (a) verbs, (b) actional nouns (not derived from verbs; from some of these nouns, verbs can be derived), (c) personal nouns, (d) adverbs. Lexical reciprocals seem to be especially frequent with the reciprocal markers (this is probably due to the “mutual attraction” of implicit lexical and explicit reciprocity; on the other hand, this may be due to their greater frequency). The numbers in brackets refer to the examples and lists where these bases and their derivatives are mentioned.

- (81) a. *enaylat-* ‘to resemble’ (52)
ʔetjiw- ‘to bicker, argue’ (82)
ittil- ‘to bump, collide’ (28b), (35)
janrʔat- ‘to part’ (53a)
maraw- ‘to fight, quarrel’ (4), (53b), (66a)
məŋ-ajmet- ‘to shake hands’ (28a), (80b)
rʔečumket- ‘to get entwined’ (53c)
rənyiiw- ‘to meet’ (vi) (28c), (64a)
tejkew- ‘to wrestle’ (66a)
tumy-ə-lʔet- ‘to be friends’ (82), (85b)
ukwet- i. ‘to kiss’(vt), ii. ‘to kiss’(vi) (27), (60b), (66b), (67h), (80a), (84)
uwičwet- ‘to play’
wetyaw- ‘to talk’ (27), (42), (52), (67d), (68), (82), (83);
 b. *ʔetjiw* ‘argument, debate’
maraw ‘a fight, quarrel, war’
wetyaw ‘conversation’
 c. *enaalʔ-ən* ‘neighbour’
ʔekelʔ-in ‘enemy’ (62)
tumyə-tum ‘comrade’ (85c, d)
 d. *ačyətə* ‘side by side, next to’ (39a)
čəmče ‘nearby, close by’ (40)
ranʔaw ‘equally’ (5)
əjaa ‘far away’ (63).

As well as in other cases, incorporation of reciprocal verbs is possible here:

- (82) ... *qol n-it-qinet nə-tomy-ə-lʔat-wetyaw-qenat, qol n-it-qinet*
 another IMPF-AUX-3PL IMPF-comrade-lʔat-talk-3PL another IMPF-AUX-3PL
n-ʔetjiw-qinet. (ST. 251)
 IMPF-quarrel-3PL (*qol it-* ‘once’ is a verb)
 ‘Sometimes they talked like friends, sometimes they quarrelled.’

2. *Discontinuous constructions*. The verbs listed in (81a) are two-place intransitives; some of them are labile. The object of these verbs varies in case form; e.g., *enaylat-* takes a dative object, *ittil-* a locative object, *janrʔat-* an ablative object, etc. Of special interest is the group of verbs with an absolutive object which require the causative confix (applicative use; the overall meaning of the verb undergoes a slight change; this concerns *maraw-*, *tejkew-*, *uwičwet-*, *wetyaw-*); e.g.:

- (83) a. *ətləy-ən ənkʔam ekək wetyaw-ə-rk-ət*. (cf. (68a))
 ‘Father and son are talking.’ (most likely, with each other)
 b. *ətləy-ən ɣ-ekke-te wetyaw-ə-rk-ət*.
 father-ABS COM-SON-COM talk-PRES.PROGR-3PL
 ‘Father is talking with his son.’ (other co-participants are possible though unlikely)
 c. *ətləy-ən ekk-ək reen wetyaw-ə-rkən*.
 father-ABS SON-LOC with talk-PRES.PROGR.3SG
 ‘Father is talking with [his] son.’ (other co-participants are ruled out)
 d. *ətləy-e ekək rə-wetyaw-at-ə-rk-ənen*.
 father-INST SON-ABS CAUS-talk-CAUS-PRES.PROGR-3SG+3SG
 ‘Father is talking to his son.’ (the son may be answering); cf. 3.3.

3. *Synonymy*. So far, different derivatives from the same base verbs have been considered. There occur various combinations of reciprocal markers on the same verb. Particularly numerous are derivatives from lexical reciprocals. The following examples illustrating this may differ in subtle nuances but they are very hard to formulate:

- (84) a. *ənan ukwen-nin ətlon*. (RT. 110) ‘He kissed her.’
 → b. *ətri n-ukwet-qinet*. (ŠL.101) ‘They kissed each other.’
 c. *ətri ukwet-ə-tku-ɣʔet*. (SM. 89) (same as (b)).
 d. *ətri ukwet-čit-ɣʔet*. (same as (b)).
 e. *ətri ukwet-ə-tku-čit-ɣʔet*. (ŠL. 16) (same as (b)).
 f. *ətri ukwet-wəly-ə-ɣʔet*. (same as (b)).
 g. *ətri əryičyu ukwet-ə-tku-ɣʔet*. (same as (b)); etc.

4. *The noun tumyətum ‘comrade’ and its derivatives*. Nouns with this meaning and their derivatives are often used to express reciprocity across languages. In Chukchi, this phenomenon has not developed entirely but there are instances worth mentioning. In (85a), this noun alone is used to express reciprocity (nouns with a reduplicated stem, like *tumy-ə-tum*, lose the last component of the stem when inflected) and in (85b) its derivative is used (see also (82) where it is incorporated in the predicate). More peculiar is the attributive use of *tumy-ə-tum* with a possessive marker in (85c) and so-called “relative” marker in (85d) in pre-position to the direct object denoting something possessed by or related to the subject referent (semantically, these sentences describe situations rendered by “possessive” reciprocals in some other languages).

- (85) a. *atri tumy-u nʔel-γʔet.* (MP. 100)
 they comrade-ESS become-AOR.3PL
 ‘They got acquainted.’
- b. *atlon nə-re-tumyə-lʔen-ηə-qin ən-əy-reen.* (MN. 4)
 he.ABS IMPF-DES-friend-lʔet-DES-3SG he-LOC-with
 ‘He wanted to become friends with him.’
- c. *əyə-nan nə-tulʔet-qinet tumy-in mʔem-it.* (FM. 16)
 they-INST IMPF-steal-3PL comrade-POSS cartridge-ABS.PL
 ‘They were stealing cartridges from each other’, lit. ‘... comrade’s cartridges.’
- d. *Moryə-nan ʔatkewma ʔəyi mət-ə-ly-ə-rkən tumy-ə-tku-r-kin*
 we-INST badly know 1PL-AUX-PRES.PROGR comrade-tku-PL-ADJ
nəmətwayəy-ən. (Rə. 121)
 life-ABS.SG
 ‘We know poorly each other’s life’, lit. ‘comrades’ life.’ (on this use of *-tku* see (19b))

8. Etymology of the reciprocal markers

1. *The suffix -wəly.* Skorik (1960: 147–8) argues that this suffix is descended from the verb *wəly-* with a broad meaning ‘to collide, meet, join, cross together’ (incorporating other verbs). He quotes a number of examples illustrating the use of this verb:

- (86) a. *γətya-k ʔaaček-ət wəly-ə-γʔet qʔʔa-čət-ə-nwə.*
 autumn-LOC youth-ABS.PL meet-AOR.3PL competition-for
 ‘In autumn, the youths gathered together for competitions.’

He also illustrates the use of denominal formations with this verb:

- b. *Ivini-lʔ-ət enm-ək qača orw-ə-wəly-ə-γʔat.*
 hunt-PART-ABS.PL rock-LOC next.to sled-collide-AOR.3PL
 ‘Near the rock, the hunters’ sleds collided.’ (lit. ‘... the hunters sled-collided.’)
- c. *atri pojy-ə-wəly-ə-γʔat.*
 ‘They crossed their spears.’ (lit. ‘They spear-crossed.’)

In present-day dictionaries of Chukchi this verb is not registered, and most of the informants I have consulted do not know it.

2. *The adverbs muryičyu ‘we mutually’, turyičyu ‘you mutually’ and əryičyu ‘they mutually’.* These adverbs can be analyzed into four components: the first component is the stem of the plural personal pronouns (see (87b)), the second component is probably descended from a voiced locative ending (see (87d) and the text above (34a)); the possessive form in (87c) is derived from that in (87d) by means of the possessive suffix *-in*), the fourth component is most likely the ending *-u/-o* of the essive case (see the text beneath (7)). The most difficult for identification is the third component *-čy-*. Among the suffixes of Chukchi, it can be materially compared with the magnifying suffix *-čy/-čəη*; cf.: *kuke-ηə* ‘pot’ → *koka-čy-ən* ‘big pot’ (Skorik 1961: 305). Note that the component *č* is contained in the suffix *-ča* ‘many’ (see (18e)). In (87) the reciprocal adverbs and the pronouns with

the same stems are listed (note a certain likeness between the morphological structure of *ər-yi-čy-u* and *ər-ək-wəly-u* in (39b)):

(87) a.	b.	c.	d.
<i>mur-yi-čy-u</i> ‘we mutually’	<i>muri</i> ‘we’	<i>mur-γ-in</i> ‘our’	<i>mur-ək</i> ‘at our’s’
<i>tur-yi-čy-u</i> ‘you mutually’	<i>turi</i> ‘you’	<i>tur-γ-in</i> ‘your’	<i>tur-ək</i> ‘at yours’
<i>ər-yi-čy-u</i> ‘they mutually’	<i>ətri/ərri</i> ‘they’	<i>ər-γ-in</i> ‘their’	<i>ər-ək</i> ‘at theirs’.

3. *The prefix -čit/-čet.* This suffix is indivisible in modern Chukchi, but historically its component *-t* may be compared with the materially identical verbal suffix *-t* one of whose functions is derivation of verbs from nouns. It is also present in a number of other verbal suffixes, e.g. *-l-at/-l-et*, *-čl-at/-čl-et*, *-čy-at*, etc. The origin of the component *-či/-če* is not clear. Judging by the existence of formations with *-čit/-čet* whose respective form without this suffix does not exist, this suffix must be very old. Among formations with *-wəly*, there are no such cases.

9. Appendix: Reciprocals in Koryak

9.1 Reciprocal suffixes

The Koryak language does not seem to possess a reciprocal means corresponding to the Chukchi adverb *əryičy* ‘mutually’, but it has two markers, namely, the suffixes *-vəlŋ* (see (88)) and *-čit/-čet* genetically related to the respective Chukchi suffixes. The latter suffix also has a reciprocal function in Koryak (see (89a)). It may also render the competitive meaning (see (89b)) and it also derives denominal verbs with the meaning ‘to play’ (see (89c)) (Zhukova 1972:208).

(88) <i>lʁu-</i> ‘to see’	→ <i>lʁu-vəlŋ-</i> ‘to see each other, meet’
(89) a. <i>ommačajp-</i> ‘to embrace’	→ <i>ommačajp-čet-</i> ‘to embrace each other’
<i>ŋot-av-</i> ‘to be angry’	→ <i>ŋot-čet-</i> ‘to be angry with each other’
<i>uwwa-</i> ‘to kiss’	→ <i>uwwa-čit-</i> ‘to kiss each other’
b. <i>ləv-</i> ‘to win’	→ <i>ləv-čet-</i> ‘to compete’
<i>ʁje-</i> ‘to take part in races’	→ <i>ʁje-čit-</i> ‘to compete in racing’
c. <i>qoja-ŋa</i> ‘deer’	→ <i>qoja-čet-</i> ‘to play deer’
<i>ʁyγ-u</i> ‘wolves’	→ <i>ʁyγ-čit-</i> ‘to play wolves.’

9.2 Reflexive-reciprocal pronoun

A peculiarity of Koryak in comparison with Chukchi is the employment of the reflexive pronoun *uvik* ‘self’ (< *uvik* ‘body’, stem *uviki-/oveke-*; on the use of this noun in Chukchi see (33c) and on its reflexive use see (17)) for marking reciprocity, in which case it is used in the dual or plural form, cf. *uviki-t* ‘each other’ (of two) and *uviki-w* ‘each other’ (of more than two). Koryak differs from Chukchi in that it possesses the dual and plural number on nouns and also dual inflection of verbs. When used in the reflexive sense

proper, this pronoun is inflected for cases (cf. *uviki-te* ‘self-INST’, *oveke-η* ‘self-DAT’, etc.) when used reciprocally it is not inflected for cases (Zhukova 1972: 192–3).

- (90) a. *Uviki-t γ-ommačajpə-lenat.*
self-DU PERF-embrace-3DU
‘[They two] embraced each other.’ (cf. (33c))
- b. *Tit ηano qoja-ta uviki-w jənn-a a-tənpə-ka...* (Zh1. 193)
in.order.to this deer-INST self-PL horn-INST NEG-stab-NEG
‘So that the deer would not butt each other with horns...’

There occur instances of parallel use of *-čit/-čət* and *uvik-iw* on the same verb in adjacent sentences of the same text (unfortunately, we do not know if these forms are interchangeable in this context):

- (91) *To wača pojy-a ko-ηvo-la-η tən’po-čət-ək. ʒataw aməll’oka-w*
and sometimes spear-INST PRES-begin-PL-PRES stab-čət-INF but adroit-PL
aktəka uviki-w pəče ən-tən’po-naw. (Zh2. 15)
impossible self-PL at.once IMP-stab-3PL
‘And sometimes, they begin to stab each other with spears. But if (they are) adroit enough, they cannot stab each other at once.’

In the closely related Aliutor language, simultaneous use of the pronoun *uvik* with a suffixed reciprocal *ir* registered, and this reciprocal has subject-object agreement like a transitive verb (cf. (88) where this verb is intransitive):

- (92) *Alla tita uviki-w a-laɣu-vəŋ-ka mətə-ntə-na.* (M. 166)
NEG when self-PL NEG-see-REC-NEG 1PL-AUX-3
‘We never saw each other’; lit. ‘We never saw each other ourselves.’

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Reciprocal constructions in Nivkh (Gilyak)

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Acknowledgments

Sources

References

1. Introduction

1.1 Nivkh

Nivkh (the native ethnonym *n'ivx*, lit. ‘person’), also known as Gilyak, is a language isolate with some interesting ethnolinguistic features (no genetic relations to other languages have been found). The language of Nivkhs is sharply different from the languages of the neighbouring peoples. It is the only surviving (historically attested) indigenous language of the Amur region and Sakhalin. Nivkh is currently spoken by a very small percentage of the 4,600 ethnic Nivkhs. It is on the verge of extinction, though there is a newspaper (*Nivx dif* ‘The Nivkh word’) published in Sakhalin (where many Amur Nivkhs have moved), and textbooks for elementary school are occasionally published. The tiny population of Nivkhs is scattered over huge territories (which have not changed considerably at least in the past three centuries) near the mouth of the River Amur and on Sakhalin Island in the Russian Far East. They differ anthropologically from the neighbouring peoples though for centuries they were in contact with the numerous Ainu and Tungusic tribes who pressed them from the south of Sakhalin and from the south and east of the Amur region respectively. Their social life has retained a number of traditional features as well; it may be interesting to mention that vestiges of group marriage existed until the beginning of the 20th century (Krejnovich 1973: 278–87), though most of Nivkhs lived in monogamy. There are two major dialects and about five subdialects. A major split is between the Amur dialect and the Eastern Sakhalin dialect which are mutually unintelligible. The Northern Sakhalin (Schmidt, after the name of the peninsula; see Krejnovich 1980: 133–44) and Western Sakhalin dialects occupy an intermediate position. The Eastern Sakhalin dialect is more archaic than the Amur (see Sternberg 1905; Taksami 1980: 196–210; Comrie 1981: 266–72, 276–7).

1.2 Overview

To mark reciprocity, Nivkh employs the prefix *v-/u-/o-* which combines with approximately 45 stems (verbs, nouns and postpositions) at the most, and thus it is an unproductive affix. Despite their limited number, Nivkh reciprocals describe many of the habitual reciprocal situations. They are rather homogeneous semantically, but they may also render a number of related meanings, as in some other languages with productive reciprocal

affixes. This marker is remarkable in that it is the only prefix in Nivkh, unless we count the reflexive morpheme $p'(i)$ - which enters into the system of personal pronouns (see Section 2.4 below) and occupies the same object position in the verb structure as the latter and the reciprocal prefix; cf. (on the use of the symbol “+” see 2.1; on the abbreviation “(T)” see 1.3):

- (1) a. *hə +n'ivx əndr i-γ-d'.¹*
 that person inadvertently him/her/it-kill-FIN
 ‘That man inadvertently killed him/her.’
 b. *hə +n'ivx əndr p'-ηafq +xu-d'.*
 that man inadvertently REFL-comrade kill-FIN
 ‘That man inadvertently killed his comrade.’
 c. *mer +ηafq-xu ərk sək u-x-kət-t'-γu. (T)*
 our comrade-PL already all REC-kill-ASP-FIN-PL
 ‘Our comrades have already killed one another.’

The common productive means of rendering the reciprocal sense is a reciprocal pronoun which has no other meanings. It is comprised of the reduplicated noun *ηafq* ‘comrade, friend’ and the prefixed reflexive marker p' -. It can replace the reciprocal prefix in practically all the cases; cf. (1d). It also expresses reciprocity with verbs that do not take the reciprocal prefix; cf. (2b) and (2c):

- d. *hə +n'ivx-gu ərk sək p'-ηafq-ηafq +xu-γət-t'-γu.*
 that person-PL already all REFL-comrade-comrade kill-ASP-FIN-PL
 ‘Those people have already killed one another.’
 (2) a. *Rum Not +ro-d'.*
 R. N. help-FIN
 ‘Rum helps Not.’
 b. *Rum-ge Not-ye p'-ηafq-ηafq +ro-d'-γu.*
 R.-COM.DU N.-COM.DU REFL-comrade-comrade help-FIN-PL
 ‘Rum and Not help each other.’
 c. **Rum-ge Not-ye u-ro-d'-γu.*
 (same intended meaning).

Henceforth, the reciprocal pronoun is glossed as REC only.

Prefixed reciprocals cannot take the reciprocal pronoun, because the latter and the reciprocal prefix occupy the position generally reserved for the direct object.

So far, Nivkh is one of the two languages in our list which have an unproductive reciprocal marker whose only meaning is reciprocal. The other language is Itelmen (about the reciprocal prefix *lu-/lo-* see Volodin 1976:210–11; also Volodin, Ch. 43). In another areally close language, viz. Ainu, the reciprocal marker (which is incidentally a prefix *u-*) is productive (see Shibatani 1990:47).

1. In the Nivkh examples, the letter *R* represents a voiced uvular fricative consonant, and χ a voiceless uvular fricative. The letter \check{c} is used instead of the more precise expression \check{c}' (as there is no non-aspirated counterpart).

1.3 Data sources

This chapter describes the Amur dialect of Nivkh which is the native language of the late Galina Otaina.² The examples in this paper are mostly from three sources:

- Most of them were compiled by G. Otaina; these examples are given without reference to a source.
- Many are taken from published texts or were collected by G. Otaina during her field trips; they are marked with (T).
- Some examples are borrowed from specialist literature and the *Nivkh-Russian Dictionary* (S): they are mostly attributed to the source.
- One example has been elicited from an informant.

2. Grammatical notes

2.1 Morphology

The most characteristic feature of Nivkh is initial consonant alternation analogous to mutations in the Celtic languages and Fula (see Jakobson 1958:273; Krejnovich 1937:26–86). In a group “direct object + transitive verb” with the components in contact position, the initial part of the transitive verb (unless it contains the sonants /n, n', ŋ, m, l/, rarely /v/ or other phonemes) has from two to four variants, depending on the final segment of the direct object (the latter forms a single phonetic word with the transitive verb; the vowel in transitives of the (3b) and (3g) type is generally much longer, sometimes twice as long as in (3c-f); see Bondarko & Zinder 1962:85). One of the variants is usually free (3a), i.e. intelligible to native speakers when used without an object; other variants (3b–d) are bound, i.e. they are unintelligible or misunderstood out of context; as a rule, one of the bound variants is materially identical with the free variant (cf. (3b) and (3e)). The subject does not require any alternation of the initial phoneme (3b); cf. also (3a) and (3c).

- (3) a. *ŋir təmz-d'* ‘The dish fell down’
 b. *ifrəmzu-d'* ‘He dropped sth’ (if there is no explicit DO, a 3sg object, like *if* ‘s/he, it/that’, is generally implied unless it is used as a citation form)
 c. *ifŋir+dəmzu-d'* ‘He dropped the dishes’
 d. *ifpaχ+təmzu-d'* ‘He dropped the stone’
 e. *iflep+rəmzu-d'* ‘He dropped the bread.’³

2. The authors began working on this paper in 1989, but for a number of reasons the work was discontinued. It was resumed in 1997 and completed after the untimely death of Galina Otaina (December 14, 1995). This accounts for possible omissions and shortcomings in the description of the Nivkh data.

3. In Proto-Nivkh, the 3sg pronoun had the form *i-* or *j-* before all transitive verbs if the latter occurred without a definite direct object. Verbs of a certain group have retained this form of the pronoun (see Group A in 2.3).

The same alternation rules apply to morpheme boundaries within a word, between nouns and postpositions and also to groups “attribute (= verbal stem or [pro]noun) + head noun” (cf. (3d) and (3f)); there are no adjectives in Nivkh: meanings like ‘big’, ‘thin’, etc. are rendered by qualitative verbs ‘to be big’, etc. Both types of word groups, namely “direct object + vt” and “attribute + noun”, are in fact phonetic words (Krejnovich (1958:21–33) interpretes them as incorporation); they are signalled by “+” between the components, for the reader’s convenience:

f. *ifpila +baχ +təmzu-d’*. ‘He dropped a big stone.’

When the subject or a direct object is emphasized it can be used with the free variant of a transitive verb; cf. (3c) and (3g):

g. *tə +ηir Rum rəmzu-d’?*
 this dish R. drop-FIN
 ‘Is it this dish that Rum dropped?’

Alongside alternations of the type illustrated in (3), there are also historically determined and individual alternations; cf.: *i-γ-/-k’u-/-xu-* ‘to kill’ (cf. (1)).

2.2 Sentence structure. Verb and noun morphology

Nivkh is a typically agglutinating suffixing language (with the exception of two prefixes, reciprocal and reflexive). The neutral word order is “subject (often dropped) – direct ob-

Verbs with initial sonants lost their pronominal marker. In other verbs (they began with plosives; there were no transitives with initial fricatives) the marker *i-* was also lost, but prior to this it had caused a change of the initial plosive into a voiced fricative of the free variant, i.e. the development followed the pattern (Jakobson 1958:255–81; Austerlitz 1977:18).

- (i) a. **t’osq-* i. ‘to break’ (vi); ii. ‘to break’ (vt)
 b. *t’osq-* ‘to break’ (vi) (preserved in current Nivkh)
 c. **i-t’osq-* ‘to break it’ (vt)
 → c’. **i-zosq-* (same)
 a. *zosq-* ‘to break it’ (in current Nivkh) /-t’osq-/-d’osq- (direct object +) ‘to break’.

Instances of the (i.c’) type are registered in specialist literature. G. Otaina considered such usages as unusual though she allowed their use in some dialects; cf.:

- (ii) *ki mrolv-γət-ηan n’əη i-vəkz-nə-d’*. (P.2. 70)
 footwear be.old-ASP-CONV we it-throw.away-FUT-FIN
 ‘When the shoes become old we shall throw them away.’

It should be noted that, judging by the dictionary data, sequences like *i-* + *fricative* + *vowel* (see (i.c’)) practically do not occur in Nivkh, except in some case forms of the pronoun *if* (see B2 in (110)) and a noun or two. A puzzling fact is that the possessive prefix *i-* is always followed by a plosive consonant and never by a fricative; in other words, it behaves like words ending in *-η*; cf.: *ki* ‘footwear’ → *n’-yi* ‘my footwear’, *n’əη-gi* ‘our footwear’, *i-gi* ‘his/her footwear’ (Krejnovich 1937:33, 39, 44). As it happens, this regularity is not observed in case forms of the pronoun *if*; cf. *i-ye* in (20b) and *i-yir* in (110e).

ject – predicate”; “attribute – head word”. A Nivkh sentence is ordinarily comprised of one finite verb form (marked mostly by the suffix *-d'*, or *-t'* after voiceless consonants; glossed as FIN) and any number of converbs (of which there are about 25 forms) (see Nedjalkov & Otaina 1987: 296–319). The verbal suffix *-d'/-t'* has three principal functions:

- It is the most common marker of the final predicate (cf. (1), etc.).
- It marks nominalized verbs, especially in embedded clauses; cf. *if j-uru-d' +sɣna-d'* ‘he does not like to read’.
- It also marks deverbal *nomina agentis*; cf. *j-uru-d'* i. ‘to read’, ii. ‘the one who reads’; see (56), (57), (58), (83).

The most widely used converbs agree with the subject and have two forms: in *-t* for 1SG and 1-3PL and in *-r* for 2SG and 3SG; this distribution has no pragmatic or semantic explanation (these suffixes can mark converbs by themselves or they may be a part of more complex markers); cf.:

- (4) a. *if oz-r* *vi-d'* b. *n'i oz-t* *vi-d'*
 he stand.up-CONV.3SG go-FIN I stand.up-CONV.1SG go-FIN
 ‘Having stood up, he went.’ ‘Having stood up, I went.’

The distribution of the verb coordinating suffixes *-ta* and *-ra* is the same as that of the converb markers *-t* and *-r* (see (26)).

There are only two tenses in Nivkh, non-future with zero marking (translated here mostly by the past tense) and future tense marked by the suffix *-nə-* (cf. (ii) in footnote 3). Desiderative is marked by the suffix *-inə-* (cf. (29)). Completeness, as well as distributivity and intensity, is marked by the suffix *-ɣət/-kət/-xət-*; cf.:

- (5) a. *veta-* ‘to get dressed’ → *if veta-ɣət-t'* ‘he finished getting dressed.’
 b. *vi-* ‘to leave’ → *imɣ vi-ɣət-t'* ‘everyone of them left.’

The noun is inflected for number (SG, PL), case (nine cases), comitative (dual comitative is marked by the suffix *-ke/-ye/-xe/-ge* and plural by *-kon/-yon/-xon/-gon*; see 3.2.1). The cases are:

1. Nominative with zero marking (it is the case of the subject and direct object and of a noun or pronoun used as an attribute).
2. Allative, with the ending *-roχ/-rχ/...*
3. Locative, with the ending *-uin/-in*.
4. Ablative (the ending *-ux/-x*).
5. Comparative (*-ək*).
6. Instrumental (*-ɣir/...*).
7. Terminative (*-t'əkə/...*).
8. Translative (*-uye/...*).
9. A specific feature of the Nivkh case system is the “causee” case – a special case for animate causees (and the noun *k'eŋ* ‘sun’) dependent on verbs with the causative suffix *-gu/-ku* (see *-aχ* in (12c, d), (19)).

Pronouns have the same system of case forms. The 3SG pronoun *if* cannot appear in direct object position, demonstrative pronouns (e.g. *had'* 'this', etc.) being used instead.

The suffix of plurality *-gu/-ku/-yu/-xu* (common for nouns and finite verbs) is optional; it is never used on predicates with the pronouns 'we' and 'you.PL' in subject position.

There are about 20 postpositions and no prepositions and conjunctions in Nivkh. (For details see Panfilov 1962).

2.3 Relations between intransitive and transitive verbs with the same stem

With a certain degree of simplification, all the Nivkh transitive verbs can be divided into three groups.

Verbs of Group A (at least 120 transitives) contain the pronominal 3SG object marker *j-*, *i-*, *e-*, or the locative noun *hur-* 'there, here' in their free form; as a rule, they do not have respective intransitive verbs with the same stem. The stems of the verbs with the marker *j-* (more than 80 items) are usually vowel-initial, and the stems of the verbs with the other two markers usually have an initial sonant or a voiced consonant; e.g.:

- | | |
|---|-------------------------------------|
| (6) <i>j-amχta-/amχta-</i> 'to praise' | <i>j-uru-/uru-</i> 'to read' |
| <i>e-zmu-/čmo-/smo-</i> 'to love' | <i>e-v-/vo-/bo-/po-</i> 'to take' |
| <i>i-γ-/k'u-/xu-</i> 'to kill' | <i>i-[n]də-/n'řə-</i> 'to see/find' |
| <i>hur-t'iv-/řiv-</i> 'to sit down on sth.' | |

For obscure reasons, only Group A transitives, though not all of them, take the reciprocal prefix. Thus, for instance, the following transitives (denoting emotional and mental states) whose meaning allows reciprocal use do not occur with the reciprocal prefix:

- | | |
|-----------------------------------|---------------------------------|
| (7) <i>j-auz-</i> 'to be jealous' | <i>j-an'u-</i> 'to hurt/offend' |
| <i>j-ax-</i> 'to trust' | <i>j-an'-</i> 'to envy', etc. |
| <i>j-azra-</i> 'to fear/avoid' | |

Verbs of Group B (80 transitives and 80 respective intransitives) do not contain any pronominal marker in their free form (a free form alone without an object implies a 3rd person object; see (3b)); these transitives enter into semantic causative oppositions with the respective intransitive verbs. Verbs in these pairs can formally be related in three ways:

1. By means of alternation of the fricative on a free transitive verb form with the initial plosive of the respective intransitive verb (see (8a)).

2. By means of the unproductive causative suffix *-u-* (on verbs with an initial sonant) (see (8b)).

3. By means of a combination of the first two means (see (8c)); this type is prevalent (about 45 transitive-intransitive pairs).

- | | | | |
|--------|---------------------------------|---|--|
| (8) a. | <i>t'osq-</i> 'to break' (vi) | ↔ | <i>zosq-/d'osq-/t'osq-</i> 'to break' (vt) |
| | <i>pəzk-</i> 'to get lost' (vi) | ↔ | <i>vəzk-/bəzk-/pəzk-</i> 'to lose' (vt) |
| | b. <i>ler-</i> 'to play' (vi) | → | <i>ler-u-</i> 'to amuse/entertain' (vt) |
| | <i>vaxt'-</i> 'to tear' (vi) | → | <i>vaxt'-u-</i> 'to tear (up)' (vt) |

- c. *pol-* ‘to fall’ (vi) → *vol-u-/bol-u-/pol-u-* ‘to knock down/make fall’ (vt)
t’oz- ‘to go out (of light)’ (vi) → *zoz-u-/d’oz-u-/t’oz-u* ‘to extinguish’ (vt)
 (see also Nedjalkov et al. 1995:60–80).

Verbs of Group C have free and bound variants of the Group B type, but they do not have non-causative intransitive counterparts, being in this respect similar to Group A verbs. Like many verbs of the above two groups they allow reflexive derivation (see (13a), (15), (17c) and (18)); e.g.:

- (9) a. *zu-/d’u-/t’u-* ‘to wash’ (vt) → b. *p’-su-* ‘to wash oneself’ (-s- < -z- after *p’-*).

Deverbal locative nouns are formed from free variants, e.g.:

- (10) a. *i-γ-* ‘to kill’ → *i-γ-f* ‘the place of killing’
 b. *i-də-/i-ndə-* ‘to see/find’ → *i-ndə-f* ‘the place where sth was found.’

If we disregard verbs with the initial sonants /n, n’, η, m, l/ and vowels, we may generalize that all intransitive verbs in Nivkh begin with plosives, and free variants of all transitives have initial fricatives (there are also a number of verbs, both intransitive and transitive, with the initial /v/). Nouns with initial voiceless plosives are related to intransitives with the same root in the same way as transitives; cf. *p’uf* ‘a saw’ vs. *fuf-* ‘to saw’ (Krejnovich 1937:65–6; Jakobson 1958:269). Concrete nouns derived from transitives change their initial fricative into a plosive; e.g.:

- (11) a. *vut’i-* ‘to sweep (the floor)’ → *put’i-s* ‘broom’ (the suffix -s derives instrumental nouns).

2.4 Means of valency change

By way of partially repeating ourselves, we shall name the principal means of valency change and show the place of the reciprocal marker among them. There are two means of valency increase:

1. The unproductive causative suffix *-u* which derives transitives with a direct object from intransitives; see (8b), (8c) and also (12b).

2. The highly productive causative suffix *-gu-/ku-* which derives causatives from both intransitives and transitives (including all kinds of derivatives); the causee is rendered by the causee case (marked by *-aχ*, as in (12c, d) and (19)) which is sometimes optional; see (12c)). But the noun denoting a causee does not form a single phonetic word (of the (3c–e) type) with a causative verb even if it is in the nominative case.

- (12) a. *ōla veta-d’.* ‘The child got dressed.’
 b. *əmək p’-ōla +veta-u-d’.* ‘Mother dressed her child.’
 c. *əmək p’-ōla[-aχ] veta-gu-d’.* ‘Mother told the child to get dressed.’
 d. *ətək əmək-aχ p’-ōla +veta-u-gu-d’.* ‘Father told mother to dress the child.’

(On causative derivation in Nivkh see Nedjalkov et al. 1995:60–81).

There are four means of valency decrease:

1. The reflexive prefix (about 140 derivatives; see Nedjalkov & Otaina 1981:185–220).
2. The reciprocal prefix (about 35 verbs).

3. The resultative suffix *-yəta-/kəta-/xəta-* (about 100 derivatives from transitives; derivatives from intransitives are not included here; see Nedjalkov & Otaina 1988: 135–51).

4. The anticausative suffix *-r-* (not more than two or three verbs); cf. respectively:

- | | | | | | |
|---------|--------------------|---------------------------|---|-------------------|-------------------------|
| (13) a. | <i>p'-ləv-</i> | 'to hide oneself' (vi) | ← | <i>ləv-</i> | 'to hide' (vt) |
| b. | <i>v-əz-</i> | 'to call each other' (vi) | ← | <i>j-əz-/əz-</i> | 'to call sb' (vt) |
| c. | <i>j-əlx-kəta-</i> | 'to be open' (vi) | ← | <i>j-əly-</i> | 'to open' (vt) |
| d. | <i>moq-r-</i> | 'to break in half' (vi) | ← | <i>e-mq-/moq-</i> | 'to break in half' (vt) |

2.5 Reflexive marker *p'i/p'* and pronominal object markers. Possessive relations

In the system of pronominal object markers, the 3SG marker is opposed to the remaining five forms as a citation form. In the plural form of transitive verbs, the object markers entirely coincide with the form of the respective pronouns used as subjects. The 1SG and 2SG markers coincide with the reduced form of the respective pronouns minus the vowel (excepting those cases when an object marker is followed by a cluster of two consonants). These cases are considered here as prefixation and therefore they are divided by a hyphen from the root. The 3rd person object marker is either zero or the pronominal prefix *j-/i-/e-* descended from the respective pronoun *if* 's/he' (see (6)). All the forms except (14c) are marked in a regular way. Here is a list of markers for all the six forms:

- | | | |
|---------|------------------------------|----------------------------|
| (14) a. | <i>if n'-ləv-d'</i> . | 'He hid me.' |
| b. | <i>n'i č-ləv-d'</i> . | 'I hid you (SG).' |
| c. | <i>či Ø-ləv-d'</i> . | 'You (SG) hid him/her/it.' |
| d. | <i>imŋ/ivŋ n'əŋ-ləv-d'</i> . | 'They hid us.' |
| e. | <i>n'əŋ čəŋ-ləv-d'</i> . | 'We hid you (PL).' |
| f. | <i>čəŋ imŋ-ləv-d'</i> . | 'You (PL) hid them.' |

In the Eastern Sakhalin dialect, the plural number is formed with the help of *-n* instead of *-ŋ*:

- | | | | | | |
|----|------------|------------|----|-----------------|------------|
| g. | <i>n'i</i> | 'I' | j. | <i>miŋn/min</i> | 'we' |
| h. | <i>či</i> | 'you (SG)' | k. | <i>čin</i> | 'you (PL)' |
| i. | <i>jaŋ</i> | 's/he' | l. | <i>iŋn/in</i> | 'they.' |

We will consider briefly constructions with the reflexive marker because, firstly, it is semantically close to the reciprocal and, secondly, it usually occupies the same position in the structure of a verb form as the reciprocal prefix, viz. the position of a direct object. The reflexive pronoun *p'i* may substitute for nouns and all personal pronouns; it may assume any case form, in which respect it is formally similar to the 1SG and 2SG pronouns in that it also drops the vowel when prefixed. Syntactically, this reflexive pronoun may be

- the subject (meaning 'self');
- an attribute (meaning 'my/your/his... / their own / for oneself');
- an object, in various case forms.

Let us consider these three principal usages.

Reflexive verbs are derived in a standard way by means of placing the reflexive marker in the position of a pronominal object marker; e.g.:

- (15) a. *if p^ʼ-ləv-dʼ.* 'He hid himself.'
 b. *nʼi p^ʼ-ləv-dʼ.* 'I hid myself', etc.

The same forms of both the personal pronouns and the reflexive marker are also used attributively and express possessive relations; the 3rd person marker has five variants: *v-* and *i-/e-* descended from *if* 's/he', and *vi-/ve-* which is possibly either pleonastic *v-* + *i-/e-* or a metathesis of *if*. The choice between *v-* and other variants is determined by the vowel or consonant initial of the noun it precedes, but this tendency is not always observed (cf. (16g)). The possessive marker forms a syllable not only in type (16d) and (16f) cases but also in prevocalic position, as in (16g):

- (16) a. *if nʼ-ōla +ləv-dʼ.* 'He hid my child.'
 b. *if p^ʼ-ōla +ləv-dʼ.* 'He_i hid his_i (own) child.'
 c. *if v-ōla +ləv-dʼ.* 'He_i hid his_k (not his own: someone else's) child.'
 d. *if i-bitɣə +ləv-dʼ.* 'He_i hid his_k books.'
 e. *if vi-nanak/i-nanak +ləv-dʼ.* 'He_i hid his_k elder sister.'
 f. *if e-qʼaχ +ləv-dʼ.* 'He_i hid his_k spear.'
 g. *if i-enʼ +ləv-dʼ.* 'He_i hid his_i skis.' (P.1. 158–60)

As has been mentioned above, out of approximately 400 transitive verbs at least 140 take the reflexive marker. Most of their meanings are to a greater or lesser degree connected with the reflexive meaning proper, though a number of verbs have deviated from it or undergone lexicalization:

- (17) a. *if p^ʼ-rəmk +ɣēsqo-dʼ.* 'He burnt his hand.'
 b. *?if p^ʼ-ŋafq +ɣēsqo-dʼ.* 'He burnt his friend.'
 c. *if p^ʼ-xēsqo-dʼ.* 'He burnt himself.'
 (18) a. *if nʼ-za-dʼ.* 'He struck me.' → *if p^ʼ-sa-dʼ.* 'He struck [against sth].'
 b. *if e-v-dʼ.* 'He took that.' → *if p^ʼ-ev-dʼ.* 'He disappeared.'

The reflexive pronoun *pʼi* is inflected for cases and it may serve as subject in a sentence.

- (19) *if nʼ-aχ kəɾ-gu-dʼ, pʼi toz-dʼ.*
 he I-CS leave-CAUS-FIN self.NOM CROSS-FIN
 'He left me, [and] himself rowed across [the river].'

3. Reciprocal constructions with the prefix *v-/u-/o-*

3.1 Introductory

The choice between the variants *v-* and *u-* is determined by the root-initial vowel or consonant, the former replacing the pronominal object marker *j-* and the latter the marker *i-*. The variant *o-* is accounted for, as some researchers suggest, by once existent vowel harmony (see Krejnovich 1937:87–102). It derives reciprocals from transitives with the

pronominal object marker *e-*. Formations with the reciprocal prefix are relics; no new items are formed with this prefix. Despite the limited number of preserved prefixed reciprocals, their semantic range as well as their semantic/syntactic combinability give a good idea of their functions in the period of their productivity. The reciprocal prefix can combine not only with verbs but also with nouns and postpositions.

3.2 Diathesis types of reciprocal constructions

3.2.1 *Expression of reciprocal arguments. Simple constructions only*

Reciprocal arguments are expressed in the same way as a plural subject in non-reciprocal constructions, viz., by a formally or semantically plural noun. As has been mentioned, expression of the plural number on nouns is optional in Nivkh, but there is a tendency to mark it in reciprocal constructions. In the case of separate expression of reciprocal arguments the following markers are used:

1. The particles *-hara...-hara*; in this case the arguments are represented as separate items; cf. (21a), (47).

2. The comitative suffixes *-ge...-ge* for two single participants and *-go[n]...-go[n]* for two plural participants, and their variants (*-xe/-ke/-ye* and *-xo[n]/-ko[n]/-yo[n]*); this marking shows that both argument referents act together; cf. (55), (57), (58c), (76c), (78)).

3. The comitative marker *-ge/-xe/-ke/-ye* on the second noun naming a single participant only (see (20b) and (21c, d)); the comitative marker *-go[n]/-xo[n]/-ko[n]/-yo[n]* on the second noun naming a plural participant (see (20a)).

In case 3 the comitative meaning ‘with’ is more emphasized than in the previous case, the first noun being more prominent pragmatically and the plural marker being optional on the verb (as is usual in other cases, too; cf. (20b), (25b), (28), (39d), (46)). In cases 1 and 2 the plural marker is (practically always) obligatory.

Contrary to (20a–b) where the comitative group functions as an object, a comitative group in a reciprocal construction is a part of the subject (see (21)):

- (20) a. *“namagur k’amlǝ-rot imŋ-gon va-ja!”* (T)
 well think-CONV they-COM.PL fight-IMP.2SG
 ‘Think well and then fight with them!’
- b. *“namagur k’amlǝ-rot i-ye va-ja!”*
 well think-CONV he-COM.DU fight-IMP.2SG
 ‘Think well and then fight with him!’
- (21) a. *ətək +hara əmək +hara v-ətŋu-d’-yu.*
 father and mother and REC-defend-FIN-PL
 ‘Both father and mother defend each other.’
- b. *ətək-xe əmək-xe v-ətŋu-d’-yu.*
 (same translation).
- c. *ətək əmək-xe v-ətŋu-d’-yu.*
 (same translation).
- d. *if p’-ōla-ge p’rǝ-d’.*
 s/he REFL-child-COM.DU come-FIN
 ‘He came with his son.’

3.2.2 “Canonical” reciprocals

As well as in other languages, this is the most numerous type of reciprocal constructions in Nivkh. The following is a complete list of attested “canonical” reciprocals (which are naturally intransitive) derived from transitive verbs with a human direct object, with sentential examples.

- (22) a. *v-yaya-* ‘to disturb each other’ ← *j-yaya-* ‘to disturb’
 b. *v-əz-* ‘to call to each other’ ← *j-əz-* ‘to call’
 c. *v-amχta-* ‘to praise each other’ ← *j-amχta-* ‘to praise’
 d. *v-ark-* ‘to argue’ (cf. (31b)) ← *j-ark-* ‘to contend (with)’
 e. *v-iz-* ‘to imitate each other’ ← *j-iz-/hiz-* ‘to imitate’
 f. *v-ələl-* ‘to tease each other’ ← *j-ələl-* ‘to tease’
 g. *v-ord-* ‘to meet each other’ ← *j-or-* ‘to meet sb’
 h. *v-alalt’u-* ‘to talk each other into sth’ ← *j-alalt’u-* ‘to talk sb into sth’
 i. *v-ətηu-* ‘to defend each other’ ← *j-ətηu-* ‘to defend sb’
 j. *v-əjm-* ‘to know each other’ ← *j-əim-/him-* ‘to know’
 k. *v-əv-* ‘to marry each other’ ← *j-əv-* ‘to marry sb’
 l. *v-əkr-* ‘to mistrust each other’ ← *j-əkr-* ‘to mistrust sb’
 m. *v-əskəm-* i. ‘to explain sth to each other’ ← *j-əskəm-* ‘to explain.’
 ii. ‘to have it out with each other’
- (23) *o-zmu-* ‘to love each other’ ← *e-zmu-/smo-/čmo-* i. ‘to love’, ii. ‘to rejoice.’
- (24) a. *u-γ-* ‘to kill each other’ ← *i-γ-/ku-/xu-* ‘to kill’
 b. *u-də-* ‘to see each other’ ← *i-[n]də-/n’řə-* ‘to see.’
- (25) a. *n’i t’əlgu +hemar +him-d’.*
 I fairytale old.man know-FIN
 ‘I know the old man narrator of fairytales.’
 b. *n’i t’əlgu +hemar-ke v-əjm-d’.*
 I fairytale old.man-COM.DU REC-know-FIN
 ‘The old man narrator of fairytales and I know each other.’
- (26) a. *hoRo-ηan ivη +ranř n’ivy +əv-ra ena +n’ivy +əv-ra.* (T)
 be.so-CONV they sister person marry-and.3SG other person marry-and.3SG
 ‘After that their sister married a man, married a stranger.’
 b. *hoRo-t v-if-ta ex-t vi-ta.* (T)
 be.so-CONV.3PL REC-marry-and.3PL go.home-CONV.3PL go-and.3PL
 ‘Then they got married and went home.’
 (both examples are from the Western Sakhalin dialect)
- (27) a. *mat’kilk ōla-gu +hiz-r teqteq-t’.*
 kiddy child-PL imitate-CONV.3SG jump.on.one.foot-FIN
 ‘The kid jumps on one foot imitating other children.’
 b. *ōla-gu v-iz-t teqteq-t’-yu.*
 child-PL REC-imitate-CONV.3PL jump.on.one.foot-FIN-PL
 ‘The children jump on one foot imitating each other.’
- (28) *n’əη p’-ηafq-xe taurla-t nan u-də-d’.*
 we REFL-comrade-COM.DU last-CONV.3PL only REC-see-FIN
 ‘My comrade and I met only after a rather long time.’

- (29) *ōla-gu zadača nə-inə-t v-əskəm-d'-yu.*
 child-PL sum do-DES-CONV.3PL REC-explain-FIN-PL
 'The children explain to each other how to do a sum.'

Locative nouns are derived in a regular way; cf.:

- (30) *j-or-* 'to meet sb' → *v-or-* 'to meet each other' → *v-or-f* '(usual) meeting place.'

3.2.3 "Indirect" reciprocals

Nivkh has preserved only two reciprocal verbs of this type:

- (31) a. *v-asqam-* 'to take away from each other' ← *j-asqam-* 'to take away'
 b. *v-ark-* 'to dispute over a possession of sth with each other' ← *j-ark-* 'to dispute the possession of sth' (cf. (22d), (32) and (33); see also P.2. 51).

Constructions with these verbs differ sharply from other constructions with a direct object. These reciprocals, like all other reciprocal verbs, are morphologically intransitive since the position of a direct object is occupied by the reciprocal prefix but despite this there is a direct object in the nominative case in these constructions which does not constitute a single phonetic word with the verb; cf. *t'aqo* 'knife' in (32a) and (32b):

- (32) a. *if p'-ŋafq-ux t'aqo +asqam-d'.*
 he REFL-comrade-ABL knife take.away-FIN
 'He took a knife away from his comrade.'
 b. *imŋ t'aqo v-asqam-d'-yu.*
 they knife REC-take.away-FIN-PL
 'They took a knife away from each other.'
 c. *joχ v-asqam-d'-yu.* (K.1. 298)
 '[They] were trying to take away the son's (younger brother's, etc.) wife from each other.'⁴
- (33) *imŋ mu v-ark-t'.* (S. 49)
 they boat REC-dispute.possession-FIN
 'They dispute the possession of the boat with each other.' (cf. (31b))

3.2.4 "Quasi-possessive" reciprocals

"Possessive" reciprocal verbs are not attested in Nivkh, but there are constructions semantically corresponding to "possessive" reciprocal constructions of some other languages. In these constructions the reciprocal suffix is attached to a noun in direct object position. Three nouns are registered that are used in this way, namely the words meaning 'hand', 'head' and 'armpit'. They assume a reduplicated form which is an iconic expression of (distributive) plurality. Compare:

- (34) *mat'kalk-xu u-dəmk +rəmk +zap-t ler-d'-yu.* (T)
 kiddy-PL REC-hand hand take.hand-CONV.3PL play-FIN-PL
 'Children play holding each other by the hand.'

4. Sentence (32c) describes a scene common in the traditional Nivkh society: the relatives of a married woman and the relatives of her husband try to take away from each other (by pulling) the woman who has run away from her husband who mistreated her (custom did not allow the Nivkhs to fight in this situation).

- (35) *həd³-γu u-lovr +lovr +čev-t haRa-t*
 this-PL REC-armpit armpit finger.poke-CONV.3PL laugh-CONV.3PL
qoju-d³-γu. (T)
 make.noise-FIN-PL
 ‘Those are laughing and making noise poking each other in the armpits.’
- (36) *imη čoxt-t u-d³oηr +t³oηr +mam-t va-d³-γu*
 they get.drunk-CONV.3PL REC-head head squeeze-CONV.3PL fight-FIN-PL
 ‘Being drunk, they fight pulling each other by the hair.’

3.3 Reciprocal prefix *v-/u-/o-* in combination with transitive lexical reciprocals denoting similarity

The following are the lists of verbs that belong here; the underlying verbs and their derivatives are synonymous but they are used in different constructions. It is interesting to note that there are verbs with the meaning ‘to be equal (with respect to one particular feature or another)’ but there is no verb with the general meaning ‘to be the same/equal’.

- (37) a. *u-ηali-* ‘to resemble/be like each other’ ← (*i-*)*ηali-* ‘to resemble/be like sb’
 b. *u-ηəzi-* ‘to be of the same size/height’ ← (*i-*)*ηəzi-* ‘be the same size as sb/sth’
 c. *u-ηəkə-* ‘to be of the same length’ ← (*i-*)*ηəkə-* ‘be the same length as sth’
 d. *u-ηətə-* ‘to be of the same age’ ← (*i-*)*ηətə-* ‘be of the same age as sb’
 e. *u-raRa-* ‘to be equally thick’ ← (*i-*)*raRa-* ‘be as thick as sb/sth.’

The verb under (37b) has a parallel compound with the same root containing *ut-* ‘body’ in the Western Sakhalin dialect:

- f. *ut +ηazi-* ‘to be of the same height’ (O. 116).

A special case is the following denominal derivative:

- g. *o-n³lami-* lit. ‘to be semi-alike’ ← *n³lami* ‘half’ (O. 123).
- (38) a. *v-əkə-* ‘to have the same tips/peaks’ ← *j-əkə-* ‘to have the same tip/peak as sth’
 b. *v-alkre-* ‘to be equal in volume’ ← *j-alkre-* ‘to be equal in volume to sth’
 c. *v-arū-* ‘to have the same quantity of sth as each other’ ← *j-arū-* ‘to have the same quantity of sth as sb’ (see Otaina 1978:30–1, 121).

The verbs that belong here may be used in discontinuous reciprocal constructions and if a nominal direct object is ellipted they take the object marker *i-* (five verbs of which four begin with *η-* and one with *r-*; cf. (39a) and (39b)) or *j-* (three verbs) but only the first five verbs are given in their citation form without an object marker (therefore *i-* is parenthesized in (37)). For this reason, the reciprocal prefix does not replace an object marker, as in 3.2.2 and 3.2.3, but is added to the root, as in 3.2.4. When used in the simple construction, all the lexical reciprocals require the reciprocal prefix and the plural suffix. As well as in other cases with lexical reciprocals, the underlying discontinuous construction and the derived simple one are synonymous; cf. (39c) and (39d), (40a) and (40b):

- (39) a. *əmək pandur-d³.*
 ‘Mother is beautiful.’

- b. *v-ōla i-ηali-dʹ*
his/her-child s/he-resemble-FIN
‘Her child resembles her.’
- c. *ōla pʹ-əmək +ηali-dʹ*
child REFL-mother resemble-FIN
‘The child resembles his mother.’
- d. *ōla pʹ-əmək-xe u-ηali-dʹ-yu*
child REFL-mother-COM.DU REC-resemble-FIN-PL
‘The child and his mother resemble each other.’

The reciprocal in (39e) differs from the above in the final vowel (*ηala-* instead of *ηali-*), which is probably accounted for by subdialectal features:

- e. *ōla-gu o-ηala+ηala-gut nə-dʹ-yu* (Kh.)
child-PL REC-be.alike+be.alike-CONV do-FIN-PL
‘The children imitate each other.’
- (40) a. *tə +menʹ əvnʹ +ηəkə-dʹ*
this rudder oar equal.in.length-FIN
‘This rudder equals the oar in length.’
- b. *tə +menʹ-yu u-ηəkə-dʹ-yu*
this rudder-PL REC-equal.in.length-FIN-PL
‘These rudders equal each other in length.’
- (41) *čuz +fitis-ku sək u-raRa-dʹ-yu*
‘All the new blankets are equally thick (equal each other in thickness).’
- (42) *tʹir-ku sək u-ηəzi-dʹ-yu*
‘All the logs are of the same size (equal each other in size).’
- (43) *nʹəη +als-ku v-arudʹ-yu*
lit. ‘Our berries are equal in quantity.’ (= ‘We have the same quantity of berries’).
- (44) *qʹaχ-ku v-əkə-dʹ-yu*
‘The spears have equal tips.’

There are two verbs of different origin with the initial *v-* which do not have any underlying transitive verbs, but they are semantically and syntactically similar to the verbs with the reciprocal prefix considered in this section; they occur in simple reciprocal constructions only and therefore they do not belong in this group, but it is expedient to cite them here as well because they may have obtained their meanings by analogy with the verbs mentioned. Here are these verbs:

- (45) a. *verke-* ‘to be of the same width’ ← *ver-* ‘to be wide’
b. *vulki-* ‘to be of the same height’ ← *ul-* ‘to be high.’

Compare the following sentences:

- (46) *haχtʹudʹ kəlmr-ke verke-dʹ*
little.table board-COM.DU be.same.width-FIN
‘The little table and the board are of the same width.’
- (47) *Vajr +bal +hara mer +bal +hara vulki-dʹ-yu*
V. hill and our hill and be.same.height-FIN-PL
‘The Vajr hill and our hill are of the same height.’

Comment 1. In connection with the verbs listed in (45) it may be expedient to point out that in the Northern Sakhalin dialect among the seven verbs that are semantically similar to those under (45) only one happens not to contain the initial *v*-:

- | | | | |
|---------|---|----|--|
| (48) a. | <i>vajnau</i> - ‘to be equal in strength’ | e. | <i>vašo</i> - ‘to be equal in quantity’ |
| b. | <i>vajer</i> - ‘to be unequal in strength’ | f. | <i>voťi</i> - ‘to be similar/alike’ |
| c. | <i>vaka</i> - ‘to be equal in the ends/peaks’ | g. | <i>rurŋu</i> - ‘to be the same in shape’ |
| d. | <i>vara</i> - ‘to be alike’ | | (K.I. 83, 471). |

Comment 2. There are another four transitive verbs that are lexical reciprocals: *j-or*- ‘to meet’; *j-əv*- i. ‘to marry’, ii. ‘to live with sb’; *j-ajyo*- ‘to sleep with sb’; and *i-yrə*- ‘to be with sb’. It is more convenient to discuss them in other sections (see 3.6.1).

3.4 Reciprocal prefix *v-/u-/o*- in combination with postpositions – mostly lexical reciprocals denoting spatial proximity

Postpositions descend from verbs or nouns. Out of about 20 postpositions eight are registered with the reciprocal prefix. The underlying postpositions derived from verbs govern a direct object. The postpositions derived from nouns are inflected for case. The reciprocal postpositions can appear in three formal variants relative to reduplication:

- without reduplication; see (49);
- with the reduplicated base only; see (50);
- with the entire reciprocal form reduplicated (see (51)):

- | | | | |
|---------|---|---|---|
| (49) a. | <i>u-laRa</i> ‘next to each other’ | ← | <i>-laRa</i> ‘nearby, next to’ |
| b. | <i>u-t’ara</i> ‘opposite each other’ | ← | <i>-řara/-t’ara</i> ‘opposite’ |
| c. | <i>u-laqv</i> ‘around each other’ | ← | <i>-laqv</i> ‘around’ |
| d. | <i>v-erq</i> ‘facing each other’ | ← | <i>-erq</i> ‘facing sth’ |
| e. | <i>v-osk-t</i> ‘[they] facing each other’ | ← | <i>j-osk-r</i> ‘[he] facing sb’ |
| f. | <i>v-or-doχ</i> ‘in the direction towards each other’ | ← | <i>j-or-doχ</i> ‘in his direction’ (cf. (22g)). |
- | | |
|---------|---|
| (50) a. | <i>u-t’ar+ t’ar</i> ‘pell-mell’, ‘mixed up’ |
| b. | <i>u-laχ+laχ</i> ‘for/about each other’ |
| c. | <i>u-laqv+laqv</i> ‘round each other.’ |
- | | | | |
|---------|---|---|----------------------------|
| (51) a. | <i>v-ink+v-ink</i> ‘preceding each other’, ‘(in) single file’ | ← | <i>ənk/ənki</i> ‘in front’ |
| b. | <i>v-əri+v-əri</i> ‘following each other’, ‘(in) single file’ | ← | <i>əri</i> ‘behind’ |
| c. | <i>v-erq+v-erq</i> ‘facing each other.’ | | |

The following sentences illustrate the use of the postpositions listed under (49):

- | | |
|---------|---|
| (52) a. | <i>if</i> <i>ətək</i> <i>+řara-in</i> <i>hur</i> <i>+t’iv-d’.</i> |
| | he father opposite-LOC there sit.down-FIN |
| | ‘He sat down opposite his father.’ |
| b. | <i>if</i> <i>ətək-xe</i> <i>u-t’ara-in</i> <i>hur</i> <i>+t’iv-d’-yu.</i> |
| | he father-COM.DU REC-opposite-LOC there sit.down-FIN-PL |
| | ‘He and [his] father sat down opposite each other.’ |

- (53) *ena +von-gu p'ra-t u-laRa +fi +t'ift'-yu +riv-d'. (T)*
 another villager-PL come-CONV.3PL REC-close.to be.situated chair-PL sit.down-FIN
 'The inhabitants of another village, having come, took seats on the chairs that stood next to each other.'
- (54) *hot nana pila +n'ivx-gu imη-aχ v-erq +xe-t hur +t'iv-gu-d'-yu. (T)*
 then only old person-PL they-CS REC-facing sit-CONV.3PL there sit-CAUS-FIN-PL
 'Then only the older people allowed them to sit facing each other.'

Reduplicated variants of the (50) type seem to be used mostly for emphasis, in the case of plural participants, etc.; e.g.:

- (55) *kinz n'ivx-gu +bo-r, utku-gon umgu-gon u-t'ar +t'ar*
 devil person-PL take-CONV.3SG man-COM.PL woman-COM.PL REC-opposite opposite
 +p'i-gu-d'. (T)
 be.situated-CAUS-FIN
 'The devil took the people (and) put men and women together anyhow.'
- (56) *vi-γət-t'-yon kər-γət-t'-yon u-laχ +laχ to-d'-yu.*
 go-ASP-t'-COM.PL stay-ASP-t'-COM.PL REC-about about cry-FIN-PL
 'Those who left and those who stayed cried for each other.'
- (57) *ōla-gon pilə-d'-yon u-laqv +laqv qama-d'-yu.*
 child-COM.PL be.adult-d'-COM.PL REC-round round run-FIN-PL
 'The children and adults ran round each other.'

The first two reciprocal postpositions under (51) descended from verbs (like some other postpositions) retain close semantic relations with the underlying verbs and can be used in constructions synonymous with a converb of the underlying verb (see Section 3.5). The base verbs are antonymous (cf. 'to precede' – 'to follow') and related as semantic converses (*I precede you = You follow me*), but these postpositions have become synonymous in the meaning '(in) single file', i.e. the antonymy of the underlying verbs is neutralized in them. These reciprocal postpositions function very much like adverbs and they denote situations with more than two participants (reduplication of the underlying postposition *əri* 'behind' also acquires the same meaning as the reciprocal form; see (58c)):

- (58) a. *ōla-gu pilə-d' +ənki vi-d'.*
 child-PL be.adult-d' be.in.front go-FIN
 'The children walk in front of the adults.'
- b. *ōla-gu pilə-d' +əri vi-d'.*
 child-PL be.adult-d' be.behind go-FIN
 'The children walk behind the adults.'
- c. *ōla-gon pilə-d'-yon v-ənki+v-ənki / v-əri+v-əri / əri+əri vi-d'-yu.*
 'The children and adults walk in single file.'
- (59) *hoRo-t v-erq +v-erq +p'i-t hur*
 be.so-CONV.3PL REC-opposite REC-opposite be.situated-CONV.3L there
 +t'iv-d'-yu. (P.2. 62)
 sit.down-FIN-PL
 'Then they sat down [being] opposite each other.'

3.5 Simultaneity vs. sequence of reciprocal actions

As well as in other languages, the temporal relationship between the acts within a reciprocal situation is determined by the lexical meaning of a verb. Nivkh has preserved two reciprocal verbs whose meaning presupposes non-simultaneity of the actions performed by the participants of a reciprocal situation (see (60b) and (61b)). In these verbs sequence pertains to the spatial position of the participants relative to each other, but it implies simultaneity of their motions, i.e. these verbs may be said to combine both simultaneity and sequential arrangement of acts. The fact of derivation of reciprocal verbs from the verbs meaning ‘to precede (when walking, running, etc.)’ is typologically interesting. It has been pointed out in specialist literature that this concept is not compatible with reciprocity (cf. English (?) *to precede each other*). Since a reciprocal action usually presupposes repetition, or iterativity, the reciprocal verbs in question are formally reduplicated items (cf. (58c) and the relevant text). The stems of reciprocals under (60b) and (61b) are used as adverbials meaning ‘(in) single file, one after another’ with verbs of motion (see also (58c)). Examples (on the pronominal component *j-* see Group A in 2.3):

- (60) a. *j-ənki-* ‘to leave him/her behind/overtake him/her’, ‘to precede’
 b. *v-ənki+v-ənki-* ‘to overtake each other’, lit. ‘to precede each other.’
- (61) a. *j-əri-* ‘to follow him/her’
 b. *v-əri-v-əri-* ‘to follow each other.’

Here also belongs the following reciprocal formed from a complex verb comprised of the components *j-əri-* ‘to follow’ and *o-řu-* ‘to pursue’:

- (62) a. *j-əri-řu-* ‘to catch up with him/her’
 b. *v-əri-řu-* ‘to catch up with each other’
 c. *v-əri+v-əri-řu-* ‘to catch up with each other.’

These reciprocals as well as their base verbs are most frequently used as converbs with verbs of motion; cf.:

- (63) a. *Rum Not +ənki-d’.*
 R. N. precede-FIN
 ‘Rum walked in front of Not.’
- b. *Rum j-ənki-r vi-d’.*
 R. him-precede-CONV.3SG go-FIN
 ‘Rum walked in front of him.’
- c. *Rum Not-ye v-ənki +v-ənki-t laq řu-d’-yu.*
 R. N.-COM.DU REC-precede REC-precede-CONV.3PL ski catch.up.with-FIN-PL
 ‘Rum and Not skied overtaking each other.’

3.6 Two isolated usages of the prefix *v-/u-/o-*

3.6.1 “Sociative”

A kind of sociative meaning can be discerned in the formal reciprocal under (64b), because eating from the same plate implies acting together. The reciprocal meaning of this form

would be ‘to eat each other’; the vestiges of this latter meaning are encountered in folklore in the noun under (64c). The prefix *u-* also occurs in the noun denoting dishes (from which people eat together):

- (64) a. *i-nʹ-* ‘to eat’
 b. *u-nʹ-* ‘to eat from the same plate’
 c. *u-nʹ-yr* ‘man-eater, ogre’
 d. *u-nʹ-s* ‘dish, plate’ (see also Panfilov 1965:50, 54).

We might as well include here three reciprocals derived from lexical comitatives (= discontinuous lexical reciprocals). They do not have a derived sociative meaning proper, because the meaning of joint action is inherent in the base verb and it is not marked by the reciprocal prefix, which is the case in (64b). In these verbs, the reciprocal prefix changes the underlying discontinuous lexical reciprocal construction into a simple lexical reciprocal construction.

- (65) a. *j-ajyo-* ‘to sleep with sb’
 b. *v-ajyo-* ‘to sleep together.’
 (66) a. *j-əv-* ‘to live with sb’
 b. *v-əv-* ‘to live together’ (in the meaning ‘to marry’ it is included in 3.2.2).
 (67) a. *i-yrə/-xrə/-kʹrə-* ‘to go/walk with sb’, ‘to be with/accompany sb’
 b. *u-yrə/-ū-rə-* ‘to go/walk together’, lit. ‘to be with/accompany each other’
 (the second form is a contraction of the first, with a compensatory long vowel).

Note that the adverb with the meaning ‘together’ is in fact a converbal form of the verb in (67b): *u-yrə-t* lit. ‘being with/accompanying each other’.

The following sentences illustrate the use of verbs (65) and (66):

- (68) a. *matʹkilk pʹ-əmək +ajyo-dʹ.*
 ‘The baby sleeps with his mother.’
 b. *v-əv +nʹivx-gu v-ajyo-dʹ-yu.*
 REC-marry person-PL REC-sleep.with-FIN-PL
 ‘Married people sleep together.’
 (69) a. *hə +vo-x nʹi pʹ-ηafq +əv-dʹ.*
 that village-ABL I REFL-comrade live.with-FIN
 ‘In that village I lived at my friend’s (place).’
 b. *hə +vo-x nʹəη pʹ-ηafq-xe v-əf-t hum-dʹ.*
 that village-ABL we REFL-comrade-COM.DU REC-live.with-CONV.1PL live-FIN
 ‘In that village I and my friend lived together.’

As a matter of fact, the first version the informant gave was *v-əv-dʹ-yu* but he corrected himself and replaced it by *v-əf-t hum-dʹ* explaining that the former would be more proper with the subject referring to a married couple (cf. (22k)).

3.6.2 Anticausative

The anticausative meaning is acquired by two derivatives from lexical reciprocals denoting conjoining (cross-linguistically, anticausatives with a reciprocal marker are most com-

monly derived from verbs with meanings like ‘to join’, ‘to collect/gather/assemble’). From (71b) in its turn a transitive verb is derived (by the causative suffix *-u-*) which is more or less close to (71a) in the meaning of joining some entities together; the respective member of derivational chain (70) is derived by means of the causative suffix *-gu-* (derivational chains of this type occur in other languages as well; see Nedjalkov & Nedjalkov, Ch. 26 on Yakut reciprocals, example (210)):

- (70) a. *j-opu-* ‘to collect/gather sth (seldom sb)’
 b. *v-opu-* ‘to come together, to gather/assemble’
 c. *v-opu-gu-* ‘to cause sb to come together/assemble.’
- (71) a. *j-ukr-* ‘to join sth with/to sth’
 b. *v-ukr-* ‘to be joined’ (O. 121)
 c. *v-ukr-u-* ‘to join together sth with/to sth’ (S. 58).
- (72) a. *if sobranie-roχ n’ivx-gu +opu-d’.*
 he meeting-ALL person-PL gather-FIN
 ‘He gathered the people for a meeting.’
 b. *n’ivx-gu klub-ux v-opu-d’-γu.*
 person-PL club-ABL REC-gather-FIN-PL
 ‘People gathered at the club.’

3.7 Lexicalization

In the case of lexicalization the standard semantic relationship between the base and the derived reciprocal is violated, though the derivative may have a reciprocal meaning as its only meaning or one of two or more (the reciprocal interpretation may be supported by the reciprocal pronoun, usually in the allative case; see (77)). So far, only three lexicalized reciprocals have been registered, and two of them contain the prefix *o-*, i.e. a variant of the reciprocal prefix which occurs in one more derivative only (see *o-zmu-* ‘to love each other’ in 3.2.2); cf.:

- (73) a. *e-ryop-/t’xop-/řxop-* ‘to annoy, bully’
 b. *o-ryop-* ‘to be enemies.’
- (74) a. *e-sqa-/q’ηa-/χηa-* ‘to reject/dislike’
 b. *o-sqa-* i. ‘to feel deeply offended’; ii. ‘be offended with each other.’
- (75) a. *j-aly-* ‘to reveal a secret, confide in sb’
 b. *v-aly-* ‘to sing love songs to each other’ (cf. *v-aly-lu* ‘love song’).

Compare the following examples:

- (76) a. *Not mangur e-ryop-t’.*
 N. very him/her-annoy-FIN
 ‘Not annoys him very much.’
 b. *Not Rum řxop-t’.*
 ‘Not annoys Rum.’
 c. *Not-γe Rum-ge o-ryop-t’.*
 N.-COM.DU R.-COM.DU REC-be.enemies-FIN
 ‘Not and Rum are enemies.’

- (77) *imŋ p'-ŋafq+ŋafq-doχ o-sqa-d'.*
 'They got offended with each other.'
- (78) *p'-at'ik-xon p'-nanak-xon e-zmu +bark*
 REFL-younger.brother-COM.PL REFL-elder.sister-COM.PL e-rejoice only
v-alχ-t hum-d'-yu. (P.2. 62)
 REC-reveal-CONV.3PL live-FIN-PL
 'The younger brother with his wife and the elder sister with her husband live only rejoicing and singing love songs to each other.'

3.8 Object-oriented reciprocal constructions

They are formed from reciprocals with the help of the causative suffix *-gu/-ku*; e.g.:

- (79) a. *if hə +n'ivy-gu +or-d'.*
 he this person-PL meet-FIN
 'He met these people.'
- b. *hə +n'ivy-gu v-or-d'-yu.*
 'These people met.'
- c. *if hə +n'ivy-gu-aχ v-or-gu-d'.*
 he this person-PL-CS REC-meet-CAUS-FIN
 'He arranged for these people to meet.'

4. Constructions with the reciprocal pronoun *p'-ŋafq+ŋafq* 'each other'

4.1 Introductory

While the prefix *v-/u-* always occupies the position of a direct object, the reciprocal pronoun may appear in any position a noun phrase can take, i.e. in the positions of verbal arguments and in the attributive position. But for pragmatic reasons it may not appear in all the case forms. The reciprocal pronoun is not attested in the form of the following cases: causee, comparative, instrumental and terminative. The reciprocal pronoun also combines with postpositions, like the reciprocal prefix.

- (80) a. *u-řara-in ...* 'opposite each other' (see (52b))
 b. *p'-ŋafq+ŋafq +t'ara-in ...* (same meaning).
- (81) a. *u-laRa +fi-t ...* 'being (situated) next to each other' (see (53))
 b. *p'-ŋafq+ŋafq +laRa +fi-t ...* (same meaning).

In specialist literature, forms with two reciprocal prefixes are also registered, namely *p'-ŋafq + p'-ŋafq*, and also the form *p'-ŋafq+ŋafq-xu* with a plural marker (see Panfilov 1965:63).

4.2 Diathesis types

The reciprocal pronoun may replace the prefix *v-/u-* in all the cases of its reciprocal use. This pronoun is an active productive means of expressing reciprocity and has no restrictions (apart from the most trivial ones) on its usage.

4.2.1 “Canonical” constructions

4.2.1.1 *With two-place transitives.* In this type of constructions, the reciprocal pronoun takes a direct object position. As has been mentioned above, it may be substituted for the reciprocal prefix, without any noticeable change of meaning, but they cannot co-occur because they fill the same slot (though it may sound strange, because one of them is a prefix and the other a pronoun); cf.:

- (82) a. *ōla-gu j-ayay-dʹ.*
 ‘The children annoy somebody (other than 1st or 2nd p.).’
 b. *ōla-gu pʹ-ətək +ayay-dʹ.*
 child-PL REFL-father annoy-FIN
 ‘Children annoy their father.’
 c. *ōla-gu v-ayay-dʹ-yu.*
 child-PL REC-annoy-FIN-PL
 ‘The children annoy each other.’
 d. *ōla-gu pʹ-ηafq+ηafq +ayay-dʹ-yu.*
 (same as (c)).

In (83), the comitative group with the suffix *-yon* is a component of the subject of the embedded clause, its first component being omitted to signal its generalized meaning:

- (83) *mrolf +nʹivx-gu pal-ux məy-ηan pʹovo təf +pʹi-dʹ-yon*
 ancient person-PL taiga-ABL descend-CONV at.once house be.situated-dʹ-COM.PL
pʹ-ηafq+ηafq +mot-tʹ uiy-gu-dʹ. (T)
 REC smell-FIN taboo-CAUS-FIN
 ‘Ancient Nivkhi considered (-*gu* = CAUS) it a sin to exchange kisses with those who had stayed at home, on immediate return from the taiga.’
 (84) *mlə-von-gu pʹ-ηafq+ηafq +bark +nʹřə-ta rolo*
 other.world-inhabitant-PL REC only see-and.3PL mutually
kʹespʹur-ta ha-dʹ-yu +pʹuru. (T)
 converse-and.3PL AUX-FIN-PL EVID
 ‘The inhabitants of the other world kind of see only each other and converse among themselves.’

4.2.1.2 *With two-place intransitives.* The following examples illustrate this type of reciprocals:

- (85) a. *if pʹ-ηafq-roχ um-dʹ.*
 he REFL-comrade-ALL be.angry-FIN
 ‘He is angry with his comrade.’

- b. *arti+arti p'-nafq+nafq-rox um-dox q'au-t pan'-d'-yu.* (T)
 always REC-ALL be.angry-ALL NEG-CONV.1PL grow-FIN-PL
 'We grew up without ever being angry with each other.'
- (86) *had'-yu u-t'ara-fi-t p'-nafq+nafq-rox vɔj +vɔj-d'-yu.*
 this-PL REC-opposite-be.situated-CONV.3PL REC-ALL smile smile-FIN-PL
 'Those, being opposite each other, smile at each other.'

4.2.2 "Indirect" constructions

Here are examples:

- (87) *imɨ p'-nafq+nafq-rox pityə +daju-d'-yu.*
 they REC-ALL letter write-FIN-PL
 'They write letters to each other.'
- (88) *ra +n'ivx-gu p'-nafq+nafq-uin čxa +ot'-t' muli-d'-yu.* (T)
 drink person-PL REC-LOC money ask-NR do.often-FIN-PL
 'Drinking people often ask each other for money.'

4.2.3 "Possessive" constructions

As well as in the case of verbs with the reciprocal prefix, the reciprocal pronoun is attached to a direct object denoting a body part. It functions as a syntactic attribute.

- (89) *p'-nafq+nafq +təmk +za-t čalrju-t haRa-t*
 REC hand clap-CONV.3PL make.noise-CONV.3PL laugh-CONV.3PL
e-zmu-d'-yu. (P.2. 63)
e-rejoice-FIN-PL
 lit. 'Clapping each other's hands, making noise, laughing, they rejoiced'; cf. 3.2.2.
- (90) *t'avda +mor p'-nafq+nafq +əng-yu +has-d'-yu.* (T)
 snake two REC mouth-PL bite-FIN-PL
 lit. 'Two snakes bit each other's mouths.'

5. Lexical reciprocals

Lexical reciprocals presuppose identical symmetrical actions of two or more agents/ patients. The following groups can be distinguished, partially overlapping with some material considered above (the lists are based on (S)).

1. *One-place intransitives.* These are the following verbs whose lexical meaning implies two or more identical or different entities expressed by the subject:

- (91) a. *vulki-* 'to be of the same height'
 b. *verke-* 'to be of the same width' (see also (45)–(48))
 c. *ena-* 'to be different/alien'
 d. *rurɨnu-* 'to be the same in shape' (O. 123); 'to look alike (of faces)' (S. 313).

2. *Two-place intransitives.* This group comprises verbs which imply two or more participants. They can be expressed either by a plural subject or by a subject and object, the latter in the allative or in the comitative case. These verbs denote communication, ag-

gressive actions, competition, etc. In the simple construction, they may combine with the reciprocal pronoun in the allative case or with reciprocal adverbs provided their lexical meaning allows it (see Section 6). Here is a list of these verbs:

- | | | |
|------|---|---|
| (92) | <i>čozju-</i> ‘to whisper to each other’ | <i>uymu-</i> ‘to fight/wrestle/compete’ |
| | <i>k’esp’ur-</i> ‘to converse’ | <i>va-</i> ‘to fight’ |
| | <i>ηe-</i> ‘to quarrel’ | <i>vayz+vayz-</i> ‘to divorce’ |
| | <i>orylau-</i> ‘to be enemies’ | <i>var-</i> ‘to compete in dog-sledge racing’ |
| | <i>osqe-</i> ‘to be enemies’ | <i>vukr+vukr-</i> ‘to be tied together (ropes, etc.)’ |
| | <i>p’al-</i> ‘to argue’ | <i>vamu-</i> ‘to consult/take counsel’ |
| | <i>rev-</i> ‘to copulate’ | <i>vask-</i> ‘to wrestle competing in strength’ |
| | <i>t’ox-t-</i> ‘to come to an agreement.’ | |
- (93) a. *atik amək-xe čozju-d’.* ‘Granny is whispering with mother.’
 b. *if p’-az-ge ηe-d’.* ‘He quarrelled with his boss.’

3. *Two-place transitives.* In the first place, here belong some of the verbs considered above when they are used in discontinuous constructions, i.e. when governing a direct object. Since they also occur in simple constructions, like other verbs that take the reciprocal prefix, they are dealt with in Section 3.3 under (37)–(38) and in footnote 3. They are included among lexical reciprocals because they can be used in the following diagnostic pair of synonymous constructions: (a) *atək amək +or-d’* ‘Father met mother’ = (b) *amək atək +or-d’* ‘Mother met father’. The following verbs also belong here:

- | | | |
|------|--|---|
| (94) | a. <i>j-op-/op-</i> | ‘to gather sth/sb’ |
| | b. <i>j-or-/or-</i> | ‘to meet sb’ |
| | c. <i>j-osk-/osk-</i> | ‘to meet sb face to face’ |
| | d. <i>lav-</i> | ‘to be beside/close to sth/sb’; cf.: |
| | e. <i>Väckən-ge Xevgun-ge laf-t nəη-d’-yu.</i> | ‘Vychkin and Xevgun walk side by side.’ |

4. *Three-place transitives.* This group covers three-place (object-oriented) transitive verbs denoting *joining* or *separating* of two or more entities. A number of these transitives have only one morphological variant and in some of them the initial *v-* alternates with other consonants; cf.:

- | | | |
|------|--------------------------------|------------------------------------|
| (95) | <i>loqrgu-</i> | ‘to join together’ |
| | <i>roz-/toz-/doz-</i> | ‘to distribute/divide’ |
| | <i>ulza-</i> | ‘to lay out/spread out/distribute’ |
| | <i>vayzu-/bayzu-/payzu-</i> | ‘to disconnect’ |
| | <i>varu-/baru-/paru-</i> | ‘to conjoin/connect’ |
| | <i>vazu-</i> | ‘to sew together/join/connect’ |
| | <i>vevu-</i> | ‘to separate’ |
| | <i>vorvor-/borvor-/porvor-</i> | ‘to alternate’ |
| | <i>valk-/balk-/palk-</i> | ‘to mix/stir together’ |
| | <i>vər-/bər-/pər-</i> | ‘to partition off’ |
| | <i>vəzy-/bəzy-/pəzy-</i> | ‘to mix/stir.’ |
- (96) a. *atək p’i i-x +čə uvu +uvu +lət-r vayzu-d’.*
 father REFL it-kill fish share share make-CONV.3SG divide-FIN
 ‘Father divided the fishes he had caught into shares.’

- b. *amək pos roj-gur torpas +pazu-dʹ.*
 mother material lack-CONV.3SG oversleeve sew.out.of.two.strips-FIN
 ‘Because she was short of material, mother made oversleeves out of two strips.’
- c. *if anʹv-ux tʹus + vevu-dʹ.* ‘He separated meat from the bones.’ (S. 50).
- d. *nʹi tʹir +moqs-ku loqrgu-dʹ.* ‘I joined together pieces of wood.’ (P.2. 16).

In sentences with verbs of conjoining, the postposition *tomsk/romsk* with the spatial reciprocal meaning ‘together’ may be added pleonastically; it seems to be used only in object-oriented constructions:

- (97) *i-tʹoŋr +ŋaur +po-ror, pʹ-ŋar-ke +romsk +vazy-dʹ.* (T)
 his-head brain take-CONV.3SG REFL-blood-COM.DU together mix-FIN
 ‘Taking the brain from his head, [he] mixed it together with his own blood.’

As we see, lexical reciprocals contain initial phonemes which are materially identical with the reciprocal prefix, and they do not occur without these phonemes (see also (48)). This may be due to the following reasons: (a) the underlying base verb has gone out of use (thus the complex base *-y-mu-* (see *uymu-* in (92)) composed of the verbs ‘to kill’ (see (1a)) and ‘to die’ is not used without the fossilized reciprocal prefix *u-*); (b) due to mutual semantic attraction the underlying lexical reciprocal began to be always used with the reciprocal prefix with the latter being desemantized, or, most likely, (c) accidental coincidence (thus, for instance, the verb *vaz-u-* ‘to sew two strips together (into a fishing net, etc.)’ is derived from the noun *pas* i. ‘fishing net strip’, ii. ‘long strip of material’ by means of the suffix *-u*; the latter noun is in its turn derived from the verb *va-* ‘to tie/bandage’; see Panfilov (1965:17).

6. Reciprocal adverbs *orχ+orχ* and *rolo* ‘mutually’

It has been claimed that the adverb *orχ+orχ* ‘mutually’ is comprised of two components, the allative case ending *-rχ* and the stem *o-* which is supposedly genetically related to the reciprocal prefix *u-/o-*. As well as in the case with *o-zmu-* ‘to love each other’, a shift analogous to *e-rχ < if +roχ* supposedly took place here (Panfilov 1965:63; see case 2 in Section 8 below). This adverb combines with two-place intransitives mostly denoting “negative” actions. In the list below, there are not only “negative” verbs but also some verbs with “positive” meanings; as the native speakers point out, the reciprocal adverb is most natural with verbs of negative actions. The expression of plurality is obligatory both on the subject and on the predicate; cf.:

- (98) a. *amək ətək-roχ tʹaxta-dʹ.*
 mother father-ALL get.angry-FIN
 ‘Mother got angry with Father.’
- b. *amək-xe ətək-xe orχ+orχ tʹaxta-dʹ-γu.*
 mother-COM.DU father-COM.DU mutually get.angry-FIN-PL
 ‘Mother and Father got angry with each other.’

The following list contains nearly all two-place intransitives that can take the reciprocal adverb. As we see, all of them denote emotional attitudes to persons. These verbs can also take the reciprocal pronoun (cf. (85b)):

- (99) *imη orχ+orχ bayr-d'-yu.* 'They are ashamed of each other.'
imη orχ+orχ t'axta-d'-yu. 'They got angry with each other.'
imη orχ+orχ kinnu-d'-yu. 'They are kind to each other.'
imη orχ+orχ k'evara-d'-yu. 'They are friendly with each other.'
imη orχ+orχ k'eγhaj-d'-yu. 'They feel shy before each other.'
imη orχ+orχ osqa-d'-yu. 'They are offended with each other.'
imη orχ+orχ qala-d'-yu. 'They hate each other.'
imη orχ+orχ san'-d'-yu. 'They are annoyed with each other.'
imη orχ+orχ um-d'-yu. 'They are angry with each other.'

Another adverb which is close in meaning to *orχ+orχ* is *rolo* 'mutually, among themselves'. It is similar to the former one in that it usually collocates with verbs denoting "negative" or at least neutral actions (see (84)), i.e. it does not occur with verbs meaning 'to be friendly' and the like. Neither of these adverbs can substitute for the reciprocal prefix or for the reciprocal pronoun in direct object position; cf.:

- (100) a. *imη rolo ηe-d'-yu / əuz-d'-yu.* (P. 1965:63)
 'They quarrel between themselves.'
 b. *imη rolo va-d'-yu.*
 'They fight with each other/between themselves.'
 c. *Rum-ge Not-ye rolo/p'-ηafq+ηafq-doχ osqa-d'-yu*
 'Rum and Not got mutually offended.'

7. Lexical means of expressing sociativity

Note that the words *orχ+orχ*, *rolo* and *tomsk/romsk* (see Section 6 and (97)) and the following three words with the sociative meaning, viz. *ron'*-, *ro-*, *ror-*, contain the syllable *ro-* or the vowel *-o-*. The first two of the latter are mostly used as converbs. The verb *ron'*- 'to do sth together' is used with three verbs which denote consuming: *i-n'*- 'to eat', *ra-/-ta-/-da-* 'to drink, to smoke', *tamx-ta-* 'to smoke' (a compound comprised of the noun *tamx-* 'tobacco' and the verb *ra-*); cf.:

- (101) *u-γrə-γət-t* *təvy-t* *ron'-t* *tamxta-ta*
 REC-accompany-ASP-CONV.3PL enter-CONV.3PL do.together-CONV.3PL smoke-and
k'esp'ur-ta. (T)
 converse-and
 'Having entered the house together, [they] smoked together and conversed.'
- (102) *p'-ōla-ke* *[ron'-t]* *čaj +ra-d'.*
 REFL-child-COM.DU do.together-CONV.3PL tea drink-FIN
 '[Somebody] with his/her child [together] drinks tea.'

The converbal form *ron*²-*t* emphasizes the comitative meaning in (102) which is also expressed by the comitative suffix *-ke*, therefore *ron*²-*t* can be easily omitted.

Another lexical means of expressing the sociative meaning is the verb *ro*-/*to*-/*do*- which otherwise renders the meaning ‘to help’: when used in converbal form it acquires the meaning ‘together’. In the literature this verb is treated as a postposition *ro-r/ro-t/...* ‘together with’. There is also a verb *ror*-/*tor*-/*dor*-: one of its meanings is ‘to invite for a joint action’. Cf.:

- (103) *megi mat'ka-ke ro-t ler-t pan*²-*d*. (T)
 we.DU be.little-COM.DU do.together-CONV.1PL play-CONV.1PL grow-FIN
 ‘You and I grew up since childhood playing together.’
- (104) *if p*²-*əkən +ro-r t*²*iyr +t*²*a-d*.
 he REFL-brother together-CONV.3SG firewood chop-FIN
 ‘He chops firewood together with his brother.’
- (105) *if p*²-*ηafq-xu dor-d*.
 ‘He invited his friends for some work together.’

8. The origin of the reciprocal markers

We have considered three reciprocal markers: the pronoun *p*²-*ηafq+ηafq*, the adverb *orχ+orχ* and the prefix *v*-/*u*-/*o*-. What follows is a tentative discussion of the possible origin of these markers.

1. The reciprocal pronoun *p*²-*ηafq+ηafq* ‘each other’. Its derivation corresponds to the common standard across languages: reduplication of a noun meaning ‘person’, ‘body’ or ‘body part’, or ‘comrade’ which is a lexical reciprocal. In Nivkh, reduplication is also employed to express the plural and also the distributive meaning. As is known, the latter meaning (‘each of a number considered separately’ as opposed to ‘all (members)’) can be subject-oriented (e.g. ‘each of them saw them’) and object-oriented (e.g. ‘they saw each of them’). The reciprocal pronoun may have developed according to the following pattern:

- (106) a. *urk* ‘night’ → *urk+urk* ‘each/every night’
 b. *n*²*in* ‘one’ → *n*²*in+n*²*in n*²*ivx* ‘each/every man’ (P.1. 25)
 c. *p*²*i* (NOM) ‘oneself’ → *p*²*i+fi* ‘each one (praises, etc.) his own self/himself’
 (K.2. 306)
 d. *en*² ‘skis’ → *p*²-*en*² ‘one’s own skis’ → *p*²-*en*²+*f-en*² ‘they (took, put on, etc.)
 their own skis each’ (P.1. 97)
 e. *ηafq* ‘comrade/friend’ → *p*²-*ηafq* ‘one’s own comrade’ → *p*²-*ηafq+ηafq*
 ‘each other.’

The prototypical reciprocal meaning is essentially “a sum” of reflexivity and a kind of subject- and object-oriented distributivity simultaneously: “*each agent_i sees each patient_k*”, and the reflexive *p*²- indicates coreferentiality of the agents and patients: “*each agent_i sees each patient_i*”.

2. The reciprocal adverb *orχ+orχ* ‘mutually’. The opinion that this adverb is composed of the reciprocal marker *o*- and the allative case marker *-toχ/-poχ/-doχ* (Panfilov 1965:63)

is not convincing, because prefixes, which do not function as separate words, are not likely to combine with suffixes. It is more likely that this adverb is related to the word *orχ/orq* ‘back, backwards’,⁵ probably not without the influence of the lexical reciprocal *j-or-* ‘to meet’. The possibility of a kind of contamination of these two words cannot be dismissed, it seems, because ‘to meet’ also includes the meaning of motion towards each other though in fact it is motion in opposite directions. It may be useful to list all the words with this root (the alternation *-q/-χ/-γ* is positional):

- (107) *orq-toχ* ‘back, backwards’
orχ-aχ ‘tide when the sea is ice-bound’, lit. ‘backward water’ (S. 247)
orq-ot- ‘to fall down from a tree/hill’ (i.e. in the direction opposite to the initial direction; *ot-* means ‘to move backwards’) (S. 246, 249)
ory-lau- ‘be enemies’, lit. ‘back[wards] + argue’; *lau+lau-* ‘to argue’ (S. 246)
orq ‘a bow used to shoot into the air at the “bear” celebration’ (S. 246) (if shot into the air, an arrow falls back on the ground)
orχ+orχ ‘mutually’ (lit. ‘backwards backwards’).

3. The reciprocal prefix *v-/u-/o-*. It is related to the pronominal direct object markers *j-/i-/e-* which are replaced by the three variants of the prefix respectively to express reciprocity (see 2.3 and (22)–(24), and also columns (a) and (b) under (108)). As has been mentioned, verbs without these object markers do not take the reciprocal prefix *v-/u-/o-*.

It has been claimed that the reciprocal prefix is descended from the pronoun *if* ‘s/he’ (in the nominative case; it is used to refer to humans only, including anthropomorphic use), since it is materially similar to the possessive marker *v-* (contained in *if*), as in *v-ətək* ‘his/her father’ (see Panfilov 1965:62). Let us consider this possibility. The pronoun *if* is composed of two components each occurring in two variants in various case forms (and subdialects?), *i-/j-* and *-f/-v*.⁶ The more archaic Eastern Sakhalin dialect uses the first component only (with one possible exception, see *avη* and *av-gun* below) which is followed by *-aη* in some of the case forms, e.g. in the nominative *j-aη* ‘s/he’. (The component *aη* has been preserved in the Amur dialect as a free interrogative pronoun meaning ‘who?’, ‘whom?’, ‘whose?’). The first component of these pronouns should be regarded as the most archaic in the function of the 3SG pronoun: it is preserved in the Northern Sakhalin di-

5. This reminds us of the fact that the term “reciprocal” is derived from the Latin *reciprocus* ‘reverse, back (motion), moving back and forth’.

6. The sounds in these pairs are similar enough and they are easily interchangeable in different positions. Thus [i] when followed by a vowel changes into the consonant [j] which, as instrumental investigations show, is sonorant to such a degree that it is practically indistinguishable from a vowel. The consonants [f] and [v] are labio-dental fricatives with weak dental articulation and therefore they produce an effect of bilabial fricatives, which makes [v] closer to the bilabial [w]. The alternant [u] of the reciprocal marker is phonetically close to the latter two consonants in that it is also pronounced without sharply protruding lips (Zinder & Matusevich 1937: 119, 123, 125; Rushchakov 1981:92, 115).

allect, as *i* 's/he'⁷ (it is also possible that the latter pronoun is a result of the loss of the second component).

A discussion of the origin of the reciprocal prefix requires taking into consideration the data of the following table which clearly shows, it seems, that this marker could not have developed from the 3SG pronoun *if* because in the Eastern Sakhalin dialect the second component of this pronoun does not occur in any of the forms of the 3SG pronoun. In the table below slashes indicate variants in complementary distribution, including tendencies (due to the position before the initial vowel or consonant, relics of vowel harmony, different case forms); semicolons divide free and/or subdialectal variants.

(108)	a. Reciprocal prefix	b. Direct object prefix	c. Pronominal root in case forms	d. Pronominal possessive suffix
Eastern Sakhalin dialect	<u>w-</u> / <u>u-</u> / <u>o-</u>	<i>j-</i> / <i>i-</i> / <i>e-</i>	<i>j-</i> / <i>j-aŋ-</i> / <i>e-</i>	<i>j-</i> / <i>ja-</i> ; <i>j-aŋ-</i>
Amur dialect	<u>v-</u> / <u>u-</u> / <u>o-</u>	<i>j-</i> / <i>i-</i> / <i>e-</i>	<i>j-</i> / <i>i-</i> / <i>e-</i> ; <u>if-</u> / <u>iv-</u>	<u>v-</u> / <i>i-</i> / <i>e-</i> ; <u>vi-</u> / <u>ve-</u>

Verbs illustrating columns (108a) and (108b) can be found under (6), (22)–(24). The Eastern Sakhalin dialect differs from the Amur in that the Eastern Sakhalin [w] corresponds to the Amur [v]. The Amur [v] is a merger of [v] and [w] (cf. the Amur *va*- i. 'to fight', ii. 'to bandage/bind' and the Eastern Sakhalin *wa*- 'to fight', *va*- 'to bandage/bind').⁸

Illustrations for the Amur dialect (108d) are given in (16).⁹ Here are illustrations for the Eastern Sakhalin (108d):

- (109) a. *j-af* 'his beard' (cf. Amur *v-əf* 'his beard')
 b. *ja-mu* 'his boat' (cf. Amur *i-mu* 'his boat')
 c. *ja-ruř* 'his meat' / *jaŋ-xəv+tuř* 'his bear meat' (cf. Amur *i-d'us* 'his meat').

(110) illustrates (108c). Column **A** contains a number of case forms for the Eastern Sakhalin dialect, and columns **B1** and **B2** contain the respective case forms from Amur subdialects. Column **B1** forms mostly coincide with those of column **A**, which most likely testifies to their being an older type. Column **B2** forms (unusual to G. Otaina) are a historically later type (like the 3SG possessive prefixes with the marker *v-*):

7. The addition of the morpheme *-aŋ* in the Western Sakhalin dialect and *-f-v* in the Amur dialect to the base marker **i* 's/he' is accounted for by "the unsuitability of the extremely short form for autonomous use" (Jakobson 1958: 271).

8. The shift [w > v] is facilitated by the phonetic proximity of the two sounds and by the isolated position of [w] in the system of phonemes: this is the only voiced consonant that has no voiceless counterpart.

9. There are two more forms of personal pronouns, with the same stems as the prefixes: the attributive form (suffix *-eo*) and the predicative form (suffix *-nə*); cf.:

- (i) a. *n'i* 'I' → *n'-eo* 'my', *n'i-nə* 'is mine'
 b. *if* 's/he' → *v-eo* 'his/her', *vi-nə/ i-nə* 'is his/hers.' (P.1. 258)

(110)		A	B1	B2
a.	Nominative	<i>j-aŋ</i>	<i>i-f</i>	<i>if</i>
b.	Causee	<i>j-aχ</i>	<i>j-aχ</i>	<i>iv-aχ</i>
c.	Ablative	<i>j-ux</i>	<i>j-ux</i>	<i>iv-ux</i>
d.	Allative	<i>e-rχ</i>	<i>e-rχ</i>	<i>if-toχ</i>
e.	Instrumental	<i>j-aŋ-gir</i>	<i>i-yir</i>	<i>if-kir</i> (S. 517–9).

These data seem to indicate, as we have just mentioned, that the reciprocal prefix is not descended from the (second component of the) pronoun *if* immediately nor from the possessive marker *v-* (despite its material identity with the latter). The data of the Eastern Sakhalin dialect support this conclusion: in this dialect the reciprocal suffix is identical with that of the Amur dialect and the component *v* occurs only in the honorific forms *avŋ* ‘s/he’ and *av-gun* ‘they’ (Krejnovich 1979: 305), but they could hardly be the source of the reciprocal prefix.

We propose the following solution which concerns, firstly, reconstruction of the reciprocal marker and, secondly, its possible semantic connections. It seems to follow that the reciprocal marker most likely evolved from a free (pronominal) base whose first component was most probably *u-* and the second component *-n*. The existence of this latter component is indicated by the character of the alternation of the consonant that follows the reciprocal prefix. Thus, the noun *təmk* ‘hand’ when preceded by an attribute with a final vowel must necessarily change its initial plosive into fricative *r*:

- (111) a. *təmk* ‘hand’
 b. *Batka+rəmk* ‘Batka’s hand’,

but when used with the reciprocal prefix (see (34)) this consonant alternates with the voiced plosive *d*, as in the cases with the preceding *n* or *ŋ* (in (111c) reduplication marks plural distributivity; alternation *təmk* > *rəmk* is determined by the preceding *k*):

- c. *u-dəmk+rəmk* ‘each other’s hands’ (← **un-dəmk+rəmk*)
 d. *imŋ+dəmk-xu* ‘their hands’.

This proves that once the reciprocal prefix contained the final *n* which was lost very much like *-aŋ* in the pronoun *jaŋ* (cf. (109), (111e), (6), and (7)). When followed by an initial vowel, the vowel *u-* changed into *w-* (and then into *v-* in the Amur dialect). It remains semantically unclear in what way historically the component *-f/-v* appeared in the pronoun *if* ‘s/he’ and how it came to be used as a possessive marker.

Note that the pronoun *if* ‘s/he’ when used attributively causes the same alternation as the reciprocal prefix, which indicates that this alternation developed when the pronoun had the same material form *jaŋ* ‘s/he’ as in the present-day Eastern Sakhalin dialect; cf.:

- e. *i-dəmk* ‘his hand’ (← **jaŋ-dəmk*).

The reciprocal prefix behaves in a similar manner when used with the postposition *t‘ara-/-žara-* ‘opposite’, viz. it retains the following plosive; cf.:

- (112) a. *t'ara-* 'opposite'
 b. *čolŋi+řara-in* 'opposite a deer' (-*in* is a locative case marker) (cf. (111b))
 c. *u-t'ara-in* 'opposite each other', cf. (111c); see also (49b), (50a), (52), (55)
 d. *imŋ+t'ara-in* 'opposite them', cf. (111d)
 e. *i-t'ara-in* 'opposite him', cf. (111e).

Above, in version 3 of Section 8, we have cited some arguments in favour of the reconstruction of the reciprocal pronoun which served as a source for the reciprocal prefix. The nature of the alternations allows to reconstruct two forms for this pronoun, **un* or **uŋ*. We prefer the first of these forms because it is this form that is materially identical with an affix whose meaning is close to the reciprocal.

There are grounds to assume that the root **un* was once related to the meaning of (collective) plurality: the component *-un* is a part of the plural suffix *-k-un* in the Eastern Sakhalin dialect (the marker *-n* serves as a plural marker in the personal pronouns in this dialect; see (14j-l)). The first component of this suffix, as *-k-/-g-/-γ-/-x-*, could function in this very meaning in the past (see Krejnovich 1979: 301) on its own and in all the dialects of present-day Nivkh it is a part of the suffixes of plurality and comitativity (cf. *-ke/-ge/-ye/-xe* for dual and *-kon/-gon/-yon/-xon* for plural comitativity; see (20) in 3.2.1). It occurs in numerous terms of kinship, e.g., *əmək* 'mother', *ətək* 'father', *atak/atk* 'grandfather', *ət'ik* 'grandmother', *at'ik* 'younger brother', *ninak* 'elder sister', etc. Its presence in these terms is accounted for by the fact that each of them denotes a class of individuals. Thus *əmək* (1) 'mother' also refers to (2) the wives of the father's brothers, (3) the sisters of the wives of the father's brothers, (4) the mother's sisters, and (5) the sisters of the father-in-law. Other kinship terms may possess analogous sets of meanings (material similarity of the marker of the kinship terms and the collective marker is also observed in a number of other languages). This suffix is also used in personal feminine names, e.g.: *Puzi-k* ← *puzi-* 'to bustle about'.

In the Amur dialect, the suffix of the plural number is *-ku/-gu/-yu/-xu*, while the Eastern Sakhalin dialect has preserved an older two-component form with the final *-n*: *-k-un/-g-un/-γ-un/-x-un* (cf. *təf* 'house' – *təf-ku* 'houses' and *taf* 'house' – *taf-kun* 'houses' respectively) as well as the suffix *-k, -kun/-gun/...* which is also used to derive personal names, but it forms masculine names (e.g.: *Pil-gun* ← *pil-* 'to be big'). Compounding of two or more semantically close affixes is common enough cross-linguistically. This final component was once present in the following two kinship terms derived from the nouns 'father' and 'mother' respectively (in (114b) *k > g* because of the preceding *-m-*):

- (113) a. *ə-t-ək* 'father, etc.'
 b. *u-t-k-u* 'man, husband, etc.'
 c. (< **u-t-k-un*)
- (114) a. *ə-m-ək* 'mother, etc.'
 b. *u-m-g-u* 'woman, wife, etc.'
 c. (< **u-m-g-un*).

The reconstructions under (113c) and (114c) are supported by the fact that (113b) and (114b), when used attributively, require the same alternation of initial consonants of the head noun as the reciprocal prefix *u-* (< **un-*) and nouns with the final *-n* or *-ŋ*; cf. (115) and (111b, c, d):

(115) *təm̩k* ‘hand’ → *utku +dəm̩k* ‘man’s hand’; *umgu +dəm̩k* ‘woman’s hand’.¹⁰

We see the above as arguments in favour of the hypothesis that (a) Proto-Nivkh possessed a reciprocal pronoun **un*, and (b) this word was genetically related to the marker of plurality.¹¹

Acknowledgments

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K.2. – Krejnovich (1979)

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O. – Otaina (1978)

P.1. – Panfilov (1962)

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10. This is probably a solution to the problem posed by Krejnovich (1937:44) concerning the reasons why *umgu*, *utku* and also the initial *i-* (and, we may add, the reciprocal *u-*) require an initial plosive instead of the expected fricative in the head noun it precedes.

11. In this connection, note the above mentioned (see 1.2) material similarity (which may be accidental) of the reciprocal prefixes in three languages which might have been geographically contiguous in the past (in any case, there seem to have been no other languages that might separate them from each other): Nivkh *v-/u-/o-*, Ainu *u-*, and Itelmen *lu-/lo-*.

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Authorized translation from Russian by E. Geniušienė

B. Verbal reciprocal marker only

Reciprocals and sociatives in Ainu*

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1. Introduction

1.1 The Ainu language

It is the language of the Ainu (the self-name meaning ‘person’), a people living on the island of Hokkaido in Northern Japan. The Ainu also occupied a considerable part of the island of Honshu (until the 19th century), the Kurile islands (until the beginning of the 20th century), the southern part of Sakhalin (until the middle of the 20th century), and the southern part of Kamchatka. Ainu was a spoken language until the 1960s. At present, there are only a few persons aged 80–90 on Hokkaido who remember their native language. The Ainu language is practically extinct now. All the Ainu speak Japanese. Attempts have been made to revive Ainu artificially (see Alpatov 1988: 29–30; Maher & Yashiro 1995: 103–24) but they have failed.

Once powerful and fearless warriors, the Ainu occupied a considerable part of the territory of the future Japan, but after long wars they were ousted from Honshu, and their numbers dwindled to a mere 16,000, but pure-blood Ainu probably number less than 1 percent of this figure (Shibatani 1990:3); the exact number of the Ainu is unknown because questions about nationality are not included in the Japanese censuses; there are other figures up to 35–40,000 (*Daily Yomiuri* 07.04.1985).

The Ainu, with their thick black beards, long heads with wide flat faces and other physical peculiarities, are sharply different from the neighbouring Mongoloid peoples. The mystery of their origin has been attracting the attention of anthropologists and lin-

guists for a long time. Some modern anthropologists regard the Ainu as descendants from the Neolithic Jomon people of Japan (some other scholars regard the Jomon people as one of the Austronesian peoples). The Ainu probably descend from the early stage of the Mongolian stock prior to its differentiation (Kozintsev 1993: 105).

The genetic relations of the Ainu language are not clear. It is unrelated to Japanese, and it is probably best described as a language isolate, although recently a relation with Altaic languages has been suggested. There are also some Ainu-Nivkh parallels including reciprocal prefixes: *v-/u-/o-* in Nivkh and *u-* in Ainu.

Many Ainu texts were written down by Japanese (Kyoosuke Kindaichi, Mashiho Chiri, Suzuko Tamura, Kyooko Murasaki, Hideo Kirikae, Tomomi Satoo, Hiroshi Nakagawa and others), English (J. Batchelor) and Russian (N.A. Nevskij, M.M. Dobrotvorskij, and B. Pilsudski, the latter one of Polish origin) and Polish (A. Majewicz) linguists. The Ainu folklore is extremely rich but Ainu was not a written language.

There were many dialects of Ainu with significant differences between them (at least 7 Sakhalin and 13 Hokkaido dialects), but the information about them is scanty. The main dialect groups are Southwestern Hokkaido (Saru, Horobetsu, Yakumo, Oshamambe dialects and others), Northeastern Hokkaido (Ishikari, Bihoro, Nayoro, Soya, Shizunai, etc.), Sakhalin (Raichishka dialect and others) and Kurile (see Majewicz 1984). There was also Epic Ainu with some peculiarities. In K. Murasaki's opinion, the distinctions between the Hokkaido and Sakhalin dialects are considerable. The differences between the dialectal groups concern mainly phonetics and lexicon but there are some grammatical ones. For instance, differentiation between inclusive and exclusive forms exists only in the dialects of Southern Hokkaido. There is no significant dialectal variation with regard to reciprocals (see 1.3).

The most exhaustive cross-dialectal comparison is to be found in Hattori (ed. 1964) and Asai (1974).

1.2 Overview

The reciprocal meaning is commonly expressed by the prefix *u-* (the glottal stop is obligatory in morpheme-initial vowels although it may disappear in intervocalic position; henceforth it is not marked). In most cases (except object-oriented and "indirect" reciprocals), reciprocal derivation involves intransitivization; cf.:

- | | | |
|-----|--|------|
| (1) | a'. <i>Kani anak huci ku-koyki</i> (OI.) | (vt) |
| | I TOP granny 1SG-bully | |
| | 'I bullied granny.' | |
| | a". <i>Huci [kani] en-koyki</i> (OI.) | (vt) |
| | granny me 1SG-bully | |
| | 'Granny bullied me.' | |
| → | b. <i>[Cokay] u-koyki-as</i> (OI.) | (vi) |
| | we.EXC REC-bully-1PL.EXC | |
| | 'We bullied each other.' | |

Sociative derivation does not involve any valency change (for a puzzling exception see 4.1.1.2). The sociative meaning has no specialized marker. It is commonly expressed by the reciprocal prefix *u-* in combination with the polysemous applicative prefix *ko-* both functioning as a single prefix. From a purely morphological viewpoint, sociatives are reciprocals derived from applicatives. It is tempting to treat generally all sociatives as reciprocals derived from comitative applicatives. (A kind of analogy to this phenomenon is the derivation of sociatives in Kabardian; see Kazenin, Ch. 17, §5). In nearly all cases, however, the combined prefix *uko-* (and less frequently *ue-*) functions, we repeat, as a single sociative morpheme, i.e. these derivations are semantically related immediately to the non-applicative base verb without the prefix *ko-* rather than to the formally intermediate applicative form in *ko-* (this latter form may be lacking). Thus, semantically, (2b) relates to (2a) rather than to (2c):

- | | | | | | |
|-----|-----|---------------|---|---|------|
| (2) | a. | <i>pakoat</i> | ‘to be accused of a crime’ (T4. 507; OI.) | (vi) | |
| | → | b. | <i>uko-pakoat</i> | ‘for everyone to be accused of crime together’ (T4. 760; OI.) | (vi) |
| | cf. | c. | <i>ko-pakoat</i> | ‘to get/become involved in sth’ (T4. 331) | (vt) |

The prefix *uko-* is also productive as a marker of object-oriented reciprocals (cf. *ninu* ‘to sew sth’ (T4. 419) → *uko-ninu* ‘to sew sth (two or more things) together’; T4. 759) (see 5.1.2).

Another means of expressing the sociative meaning is the reciprocal prefix in combination with the causative suffix, serving as a sociative marker; and in the Sakhalin dialects this combination also serves as a plural marker (see Section 7).

The reciprocal prefix combines with certain nouns as a marker of the dual number (cf. *u-tek* ‘both hands’; see Section 10). It is also used to denote family relations on both nouns and verbs (cf. *ona* ‘father’ → *u-ona-kor* ‘to be (related as) father and child’; see Section 11).

There are reciprocal forms from locative nouns and postpositions (cf. *sam* ‘proximity’ → *u-sam* ‘next to each other’, *tura* ‘with sb/sth’ → *u-tura* ‘with each other, together’; see Section 12).

There is an adverb *u-taspa* with the meaning ‘mutually, each other, by turns’ used with both prefixed and lexical reciprocal verbs (Section 13).

1.3 Database

This study is based on the data of various dialects, including the texts and dictionary of the Raichishka dialects published by Kyooko Murasaki (Mur) and the texts of one of the Southern Hokkaido dialects published by N.A. Nevskij (N.). We have included in this paper most of the verbs with the prefixes *u-* and *uko-* from the Ainu dictionary by Tamura (T4. 1996). The data from specialist literature are also used (see Sources), and they are from different dialects. The materials of the Saru dialect investigated by Tamura Suzuko are the best known (see P., D., T2). N.A. Nevskij described one of the Southern Hokkaido dialects similar to the Saru dialect. K. Refsing described the Shizunai dialect (this dialect is closer to the dialects of Northeastern Hokkaido, though territorially it is in the south

of Hokkaido). M. Shibatani used mostly Classical (folklore) Ainu texts. Most of the examples cited by A.A. Kholodovich (1979, 1993) are borrowed from Classical Ainu texts recorded by Kyoosuke Kindaichi. Most of the references to Dettmer (D.) also contain the name of the author of the primary source. We use all these materials because they do not differ with regard to reciprocal and sociative constructions. Some lexical and phonetic differences should be noted, however; thus, for instance, all the consonant stops in syllable final position of the Saru and other Hokkaido dialects are reflected as /h/ in Raichishka. The reference “not registered” means that the form in question is not found in any of the (eight to thirteen) Ainu dictionaries and is not accepted by our informant. But this does not of course mean that such a form was not possible in Ainu, though in most cases this description is not accidental. Explanations of the meanings of Ainu words in square brackets contain information missing in the Japanese translations, i.e. our own interpretation of the source. Round brackets are used as in the original.

Ito Oda (a pure blood 91 year old Ainu) who remembered her native language very well, was very helpful and provided invaluable information.¹

1.4 Note on abbreviations

In the lists of verbs below, the following syntactic characteristics are used: (a) the abbreviation *vi* signifies one-place (both underived and derived) intransitives, i.e. verbs with a subject valency and no direct object valency, a complement with a postposition being possible (this complement does not trigger agreement); (b) the abbreviation *vt* signifies a two-place transitive; (c) the abbreviation *vb* (bitransitive verb) refers to three-place transitive verbs.

2. Grammatical notes

2.1 Sentence structure. Case relations. Number. Possessivity

The basic word order is SOV (only a particle may be placed after the predicate). Attributes are prepositional. There is no case inflection in Ainu. The subject and direct object are distinguished by their position, the subject preceding the direct object. Other objects (and adverbials) may be marked by postpositions. Personal pronouns in object and subject position are often omitted. Note that most of the nouns cannot be used with a locative postposition only: in this case a locative noun (a special class of words) is added between the noun and postposition; cf. *cise or ta* ‘in the house’, *pet or ta* ‘in the river’ (T1. 40) where *or* means ‘place’ and *ta* ‘in’. Plural marking is optional and it is used only on human nouns

1. The late Ito Oda was born in 1908 in the village of Maoi, near Chitose (Hokkaido). Her native dialect was Chitose. They spoke Ainu in her family. She recorded all kinds of folk tales and stories in Ainu. Ito Oda and Nabe Sirasawa took part in a TV programme produced by NHK (Japanese Broadcasting Company) in 1991. In this programme, they spoke Ainu to each other. She died on 11 July 2000 at the age of 92.

and on the names of some animals; cf. *seta* ‘dog’, ‘dogs’ – *seta-utar* ‘dogs’. The attributive relation proper is expressed by simply placing the modifier (noun or nominalized verb or clause) before the head noun.

Possessive attributive relations are expressed by the *izafet* construction, the head noun being marked by the possessive suffix. Possessive inflection is the only category obligatorily marked on nouns. The majority of nouns have a neutral form (stem) and possessive forms marked for person and number of the possessor; there are combinations of the possessive suffix (consisting most commonly of the end-final vowel and epenthetic /h/ (e.g. *-he/-ha/-ho/...*) after a vowel or without /h/ after a consonant) and one of the prefixes marking person and number of the subject of transitive verbs (the 3rd person prefix is zero); cf.: *ona* ‘father’ – *Ø-ona-ha* ‘his/her/their father’, *ku-ona-ha* ‘my father’, *ku-ona-ha Ø-matapa-ha* ‘my father’s younger sister’. Some of the possessive markers coincide with personal verbal affixes; cf. *ku-itah* ‘I spoke’. Possessive-attributive relations can also be expressed by means of the verb *kor* ‘to have’ used as an attribute in pre-position to the head word; in this case this verb takes a personal verbal affix and the noun is left unmarked, e.g. *awunkur* ‘neighbour’, takes *kor* alone without the suffix *-he*, cf. *ku-kor awunkur* ‘my neighbour’, *ku-ona-ha kor awunkur* ‘my father’s neighbour’. A personal pronoun in object and subject position is often omitted, as in (1a”, b) (cf. (1a’) where the subject is retained). There are uninflected adverbs and particles.

Sentences usually contain a sentence-final marker; there are more than 10 such markers which have an evaluative force, e.g. assertive, evidential, interrogative, etc. In the examples below, the most common marker is the assertive sentence final *ruwe ne* of which the second component is a copula. Coordinated predicates are commonly linked by the conjunctions *wa* and *kor* with the meaning ‘and’; *kor* with the meaning ‘when/while’ is also used to conjoin clauses. The conjunction *wa* marks periphrastic aspectual forms.

2.2 Verbal system

The opposition of nouns and verbs is clear-cut (an exception are some forms of intransitive verbs which can also be interpreted as nouns; as a rule, intransitive stems can function as nouns without any change in the morphology; cf. *uwepeker* i. ‘to tell a folktale’ (T4. 808–9), ii. ‘folktale’ (T4. 808–9); *horipi* i. ‘to dance’ (T4. 201), ii. ‘dance’ (N. 116); *iku* i. ‘to drink alcohol’, ii. ‘a drinking party’ (Kir1. 63).

The verbal paradigm is complicated. Person and number are marked by prefixes and (more seldom) suffixes which vary depending on the dialect. Subject agreement prefixes always precede object agreement prefixes. The distinction between transitive and intransitive verbs is important for every dialect. They differ not only in their syntactic characteristics, but also morphologically. There are three main classes of person markers: one class of markers for the person and number of the subject of intransitive verbs (3), and two other classes of markers for the person and number of the subject (4a) and direct object (4b) of transitive verbs. But, besides, some Ainu dialects (Saru, Chitose) show several fusional markers in subject-object agreement of transitive verbs, and thus, in these particular cases, the agreement cannot be described as a simple sum of subject and ob-

ject markers. (See (5): 2SG+1SG *en-*, instead of **e-en-*; 2PL+1SG *un-*, instead of **e-un-*; 1SG+2SG / 1SG+2PL / 1PL+2SG / 1PL+2PL *eci-*, instead of **ku-e-/*ku-eci-/*ci-e-/*ci-eci-*).

The 3SG and 3PL of subject and object is always zero-marked; the 3PL of subject and object is either zero-marked. For the sake of convenience, we do not use here the symbol Ø- for the 3rd person but the zero-marking is implied.

The set of verbal agreement affixes (-*an* and *a(n)*- for the subject of vi and vt respectively and *i-* for an object) labelled as indefinite is attested in all Hokkaido dialects. Importantly, these affixes are used not only in their proper function to refer to a generalized subject or object, but also have a number of special usages in colloquial and folklore Ainu: 1PL inclusive, 2SG/PL honorific, 1SG/PL in quotation and 1SG/PL in folklore. The main difference between Southwestern and Northeastern Hokkaido dialects is that the latter lack the corresponding singular indefinite pronoun *asinuma* ‘one, someone’ (cf. (3) of the South Hokkaido Saru dialect); they use only the plural indefinite pronoun *a(n)oka(y)* ‘some people’ to refer to both singular and plural referent as well as the verbal stems in the plural.

The indefinite usage of these pronouns and agreement affixes labeled as “1SG in oral literature” is of great importance because it is very common in folktales of most genres: they are traditionally narrated from the protagonist’s point of view and an informant who recites a folktale uses the indefinite pronouns and affixes to refer to the protagonist-narrator within the story (whose real name or identity is usually revealed only in the very end of the story) and thus dissociate him/herself from the latter. It is customary to translate *asinuma* and the corresponding indefinite agreement affixes in the folktales by means of the 1SG pronoun, and we also follow this tradition, but we gloss the indefinite pronouns as INDEF and the indefinite agreement affixes as IND in the morphemic line of the examples, as it is accepted in Bugaeva (2004).

Here is a full paradigm of verbal agreement for an intransitive and transitive verbs in the Saru dialect.

Subject agreement of intransitive verbs in the Saru Dialect (T1. 10–11) (Personal pronouns are added from (T1. 19)):

(3) *mina* (vi) ‘to laugh.’

	SG		PL	
1st pers.	[<i>kani</i> ‘I’]	<i>ku-mina</i>	[<i>coka</i> ‘we’]	<i>mina-as</i> (EXC)
2nd pers.	[<i>eani</i> ‘you.sg’]	<i>e-mina</i>	[<i>ecioka</i> ‘you’]	<i>eci-mina</i>
3rd pers.	[<i>sinuma</i> ‘s/he’]	<i>mina</i>	[<i>oka</i> ‘they’]	<i>mina</i>
indef. pers.	[<i>asinuma</i>]	<i>mina-an</i>	[<i>aoka</i>]	<i>mina-an</i>

Subject agreement of transitive verbs in the Saru dialect (T1.14):

(4) a. *koyki* (vt) ‘to scold, bully sb’

	SG	PL
1st pers.	<i>ku-koyki</i>	<i>ci-koyki</i> (EXC)
2nd pers.	<i>e-koyki</i>	<i>eci-koyki</i>
3rd pers.	<i>koyki</i>	<i>koyki</i>
indef. pers.	<i>a-koyki</i>	<i>a-koyki</i>

Object agreement of transitive verbs in the Saru dialect (T1. 29):

b.	<i>nukar</i> (vt) 'to see sb'		
		SG	PL
	1st pers.	<i>en-nukar</i>	<i>un-nukar</i>
	2nd pers.	<i>e-nukar</i>	<i>eci-nukar</i>
	3rd pers.	<i>nukar</i>	<i>nukar</i>
	indef. pers.	<i>i-nukar</i>	<i>i-nukar</i>

Subject-Object Agreement of Transitive Verbs in the Saru Dialect:

(5) *nukar* (vt) 'to see sb' (T1. 32)

	O	1SG	1PL	2SG	2PL	3SG	3PL	indef.SG	indef.PL
S									
1SG				<i>eci-nukar</i>		<i>ku-nukar</i>		<i>ku-i-nukar</i>	
1PL						<i>ci-nukar</i>		<i>a-i-nukar</i>	
2SG		<i>en-nukar</i>	<i>un-nukar</i>			<i>e-nukar</i>		<i>en-nukar</i>	
2PL		<i>eci-en-nukar</i>	<i>eci-un-nukar</i>			<i>eci-nukar</i>		<i>eci-i-nukar</i>	
3SG		<i>en-nukar</i>	<i>un-nukar</i>	<i>e-nukar</i>	<i>eci-nukar</i>	<i>nukar</i>		<i>i-nukar</i>	
3PL									
ind.SG		<i>a-e-nukar</i>	<i>a-un-nukar</i>	<i>a-e-nukar</i>	<i>a-eci-nukar</i>	<i>a-nukar</i>		<i>a-i-nukar</i>	
ind.PL									

There are also prefixes and suffixes to mark different types of actant relations (valency-changing means; see 2.3). Tenses are absent; the relation of a situation to the past, present or future is determined lexically or contextually (the examples are mostly translated by the past tense). The verb has an extensive aspect system represented by suffixes and auxiliaries which express meanings such as perfective, progressive, incipient, etc. (see Shibatani 1990:79–80). There are no adjectives in Ainu, adjectival meanings being rendered by intransitive verbs. There are auxiliary verbs; they may agree in person and number with the subject and object but cannot combine with valency-changing affixes. The suffix *-pa* signifies plural subject referents when used on intransitives and plural object referents (less commonly many subjects) on transitives (see (6b)). In the lists below, verbs are cited both with and without this prefix depending on the way they are entered in the dictionaries; cf. *resu* 'to raise sb (SG)' and *res-pa* 'to raise sb (PL)'. The suffix *-pa* ousts the final vowel on verbs.

There is a number of verbs that have different stems for the singular and plural. In the case of intransitives this concerns the number of the subject, e.g. *arpa* 'to go', *an* 'to exist', *a* 'to sit', *as* 'stand up' require a singular subject, and *paye* / *oman* (depending on the dialect) 'to go', *oka* / *okay* (depending on the dialect) 'to exist', *rok* 'to sit', *roski* 'stand up' take a plural subject (T2. 18–19). In the case of transitives, this concerns the object, cf. *anu* 'to put down', *uk* 'to take', *rayke* 'to kill' with a singular object and *ari* / *are* (depending on the dialect) 'to put down', *uina* 'to take', *ronnu* 'to kill' with a plural object (T2. 19).

2.3 Valency-changing means

2.3.1 Valency-increasing means

There are two means of valency increase. If a valency-increasing marker is added to an intransitive verb the latter changes its paradigm and becomes transitive morphologically (the intransitive personal affixes are replaced by their transitive counterparts); when added to a transitive verb a valency-increasing marker changes its valency but not the paradigm.

2.3.1.1 Causative. There is a productive causative suffix represented by the allomorphs *-re/-e/-te* whose choice is determined by the preceding phoneme; it transitivizes verbs, and, as a result, intransitive personal affixes are replaced by transitive personal affixes. Derivatives from some intransitives contain two causative suffixes (see (6a)). To mark an unspecified causee, the suffix *-(y)ar* is used (see (6b); Tamura 2000: 213–5). There are also unproductive causative suffixes *-ke* and *-ka* which occur in a limited number of derivatives (cf. (6c)). See Shibatani (1990: 44–5).

- | | | | |
|--------|-----------------------|--|------|
| (6) a. | <i>aš</i> ‘to stand’ | (vi) → <i>aš-te</i> ‘to set up’ → <i>aš-te-re</i> ‘cause to set up’ (P. 144) | (vt) |
| | <i>e</i> ‘to eat’ | (vt) → <i>e-re</i> ‘to feed’ (P. 143) | (vb) |
| | <i>kor</i> ‘to have’ | (vt) → <i>kor-e</i> ‘to give’ (R. 189) | (vb) |
| | <i>nu</i> ‘to listen’ | (vt) → <i>nu-re</i> ‘to tell’ (R. 189) | (vb) |
| b. | <i>kor</i> ‘to have’ | (vt) → <i>kor-pa</i> ‘to have <i>many</i> things (for two and more people / two and more things)’ (T4. 337) | (vt) |
| | | → <i>kor-pa-re</i> ‘to give sth/sb to sb (for <i>two</i> and more people/to two and <i>more</i> people/ <i>two and more</i> people, things)’ (T4. 337) | (vb) |
| | | → <i>kor-pa-yar</i> ‘to cause sb (unspecified) to have <i>many</i> things’ | (vb) |
| c. | <i>ray</i> ‘to die’ | (vi) → <i>ray-ke</i> ‘to kill [sb]’ (R. 188) | (vt) |
| | <i>ahuy</i> ‘to burn’ | (vi) → <i>ahuy-ka</i> ‘to burn [sth]’ (R. 188) | (vt) |

2.3.1.2 Applicative. Applicatives are derived by means of the prefixes *ko-*, *e-*, *o-*. The latter prefix has the meanings ‘from’, ‘in(to)’, ‘on’, ‘at’. It is characteristic of Classical (folklore) Ainu. These prefixes increase valency: they transitivize verbs by introducing a new object and add a variety of meanings excepting the causative sense. It is a so-called Non-Agent-addition which shows contrast with Agent-addition of the causatives (Ooshima 1982: 214). An applicative prefix on transitive verbs introduces a second object. There seems to be no clear-cut semantic difference between the applicative prefixes. Sometimes, they are interchangeable. The prefix *ko-* is often combined with the reciprocal prefix *u-*, and so is the prefix *e-*, though much less commonly, it seems (see 3.1.1.2, 3.1.2.2, 3.1.3.1.2, 3.1.3.2.2, 3.2.2). Some meanings of the applicative prefixes can be paraphrased by collocation with the postpositional particles (which denote case relations with the exception of subject and direct object) whose meaning is dative, locative, ablative, instrumental, comitative, etc. Thus the most common meanings of the suffix *ko-* are

- i. ‘towards sth/sb’;
- ii. ‘together with sb’;
- iii. ‘in’, ‘on’, ‘at’;
- iv. ‘from’, ‘out of’ (T4. 314).

And the most common meanings of the prefix *e-* are

- i. 'by', 'with (the help of sth)';
- ii. 'with respect to';
- iii. 'about';
- iv. 'for (sb)';
- v. 'accompanied (by)';
- vi. 'in', 'on', 'at';
- vii. 'to', 'towards' (T4. 70).

In (7a), the suffix *-an* marks IND on an intransitive verb, while in (7b) the prefix *a-* marks IND on a transitive verb.

- (7) a. *A-kor kotan ta sirepa-an.*
 IND-have village to arrive-IND
 'I arrived at my village.' (Sh. 65)
- b. *A-kor kotan a-e-sirepa.*
 IND-have village IND-APPL-arrive
 (same translation). (Sh. 65)

The applicative prefix may refer to a previous situation: in a way, it "sums up" what has been said previously, thus in (101d) it means 'because of this' on both last verbs and indicates a situation described by the beginning of the sentence.

Formation of reciprocals from vowel-initial verbs, in particular from applicative forms in *e-*, often involves insertion of the epenthetic intervocalic /w/, e.g. *e-rankarap* 'to greet sb' → *u-w-e-rankarap* 'to greet each other'. As this epenthetic consonant is not regularly inserted, it is usually omitted in the examples below, to make it reader-friendly.

There seem to be no applicatives (at least standard ones) from three-place transitives, otherwise we would have four-place transitives, and they are not registered in Ainu.

2.3.2 Valency-decreasing means

They are used on two-place transitive verbs to intransitivize them or on three-place transitives to change them into two-place transitives. There are five such devices. The reflexive and the generalized object markers occupy the same slot in the morphological structure of a verb; they delete the object of the underlying verb. These prefixes may co-occur on a verb, in which case they are usually separated by an applicative prefix, i.e. they replace different objects.

2.3.2.1 Reciprocal. See Section 1.2.

2.3.2.2 Reflexive. The prefix *yay-* renders the reflexive meaning proper (see (8a)) and also some other meanings usually, as in many other languages, combined with it: reflexive-possessive (see (8b)), autocausative (see (8c)), etc., and it also occurs in lexicalized reflexives (see (8d)). Less commonly reflexivity is expressed by the prefix *si-* (cf. (120)).

- (8) a. *ko-itah* 'to talk to' (Mur. 170) (vt) → *yay-ko-itah* 'talk to oneself' (Mur. 232) (vi)
nuyna 'to conceal' (Mur. 183) (vt) → *yay-nuyna* 'to conceal oneself' (Mur. 232) (vi)
- b. *ko-yupu* 'to fasten sth to sth/sb' → *yay-ko-yupu* 'to fasten sth to oneself' (O. 76) (vb bound stem) (T4. 858) (vt)
- c. *osura* 'to throw sth/sb' (T4. 490) (vt) → *yay-osura* 'to throw oneself' (N. 93, 95, 97) (vi)
- d. *nu* 'to listen to sth' (T4. 437–38) (vt) → *yay-nu* 'to think' (Sh. 47) (vi)
tura 'to join sb' (O. 150) (vt) → *yay-tura* 'to be single/alone' (R. 180) (vi)
okay 'to be, exist' (PL) (Mur. 185) → *yay-okay* 'to be languid' (Mur 232) (vi) (vi)
omap 'to show affection to sb' → *yay-omap* 'to feel disappointed' (T4. 861) (T4. 467) (vt) (vi)

2.3.2.3 Anticausative. The marker of anticausative derivation is the suffix *-ke* which is found on a limited number of verbs (see Refsing 1986:188). This suffix may be genetically related to the causative suffix in (6c). In the oppositions in question one may see non-directed derivation because of the suffix alternation (see Shibatani 1990:44; Tamura 1988:68). But, since the intransitive members are marked regularly by means of *ke-* we prefer to regard these cases as anticausatization (see also 3.2.2.3):

- (9) *kom-o* 'to bend sth' → *kom-ke* 'to be bent' (T4. 325)
mak-a 'to open sth' → *mak-ke* 'to be opened' (T4. 376)
noy-e 'to wind/twist sth' → *noy-ke* 'to be wound/twisted' (T4. 436)
per-e 'to break/split/shatter sth' → *per-ke* 'to be broken/torn/shattered' (T4. 523)
sos-o 'to tear/peel sth off' → *sos-ke* 'to be peeled off' (T4. 677).

2.3.2.4 Generalized object. Derivatives with the prefix *i-* denote engagement in an activity without reference to any particular object (10) (the so-called absolutive meaning), or the latter may be implied, especially in cases of (slight) lexicalization (11):

- (10) a. *Ya a-[oske].* b. *I-[oske]-an.*
net IND-knit ABS-knit-IND
'I knit a fishing net.' 'I do knitting' (Sh. 46)
- (11) a. *ku* 'to drink sth' (T2. 67) (vt) → *i-ku* 'to drink sake.' (T2. 67) (vi)
b. *ri* 'to tear off sth' (Kir1. 63) (vt) → *i-ri* 'to skin an animal.' (Kir1. 63) (vi)

Note that this prefix *i-* is materially identical with indefinite object marker (cf. (12a)) and a genetic relationship between them is rather transparent.

2.3.2.5 Passive. The passive prefix *a-* is descended from the indefinite subject marker for transitive verbs and takes the same position in the morphemic structure of a verb, i.e. a verb retains its morphological transitivity (cf. *e* 'to eat' → *a-e* 'to be eaten' (P. 147)), though the underlying subject is either absent or, much less commonly, marked with the postposition *orowa* 'from' (i.e. it behaves in the same way as in a regular passive construction). As the direct object marker is retained on the verb, the direct object is not promoted to subject position and thus this construction may be regarded as impersonal rather than

passive (see, however, a different opinion in Shibatani 1990: 58–9). Typologically, the Ainu impersonal passive is somewhat atypical as, in contrast with impersonal passives in some other languages, e.g. in Finnish, the overt agent can be expressed (Satoo 1995: 1).

- (12) a. *Tane anakne wen kamuy i-e etokus.*
 now TOP bad demon IND-eat soon.AUX
 ‘Soon the malicious demon will eat me up.’
- b. *Tane anakne wen kamuy orowa a-i-e etokus.* (N. 169)
 now TOP bad demon by PASS-IND-eat soon.AUX
 ‘Soon I will be eaten up by the malicious demon.’

Note that there is a kind of parallelism between the passive marker (the indefinite subject marker) and the marker of the generalized object which is a kind of antipassive (the indefinite object marker). In the former instance the subject is commonly omitted, and in the latter it is the object that is obligatorily omitted.

2.3.2.6 Noun incorporation. Incorporation is more typical of Classical (folklore) Ainu than of colloquial Ainu. In colloquial Ainu, a few apparently lexicalized expressions are frequently encountered (Shibatani 1990: 61). Incorporation most commonly involves direct objects of transitive verbs (see (13); see also 3.1.3.2), and much less commonly the subject of intransitive verbs (see (14)) (in the latter case the incorporated noun retains a possessive marker; cf. Shibatani 1990: 60–4). Incorporation of the subject of a transitive verb is extremely rare (see (15)). The incorporated subject is inanimate (Satoo 1992: 193–201). An oblique object (typically instrumental or locative) can be incorporated, too, and this always involves the use of the applicative marker (as applicatives are usually transitive, these cases can also be regarded as direct object incorporation; cf. Shibatani 1990: 62, 67–71). Moreover, adverbs and locative nouns can also undergo incorporation. If an intransitive subject is incorporated, the underlying verb retains its intransitivity; in the remaining two cases incorporation results in intransitivity.

- (13) a. *Asir cise ci-kar.* (Sh. 197)
 new house 1PL.EXC-make
 ‘We made a new house.’
- b. *Ney ta cise-kar-as.*
 there at house-make-1PL.EXC
 ‘We made a house there.’ (Ishikari)
- (14) a. *Ku-tek-e ka pase.* (S. 197)
 1SG-hand-poss also heavy
 ‘And my hands are heavy.’
- b. *[Kani] ku-tek-e-pase.* (S. 197)
 I 1SG-hand-poss-heavy
 ‘My hands are heavy (= weak),’ lit. ‘I am hand-heavy.’ (Chitose)
- (15) a. *Nis en-reye-re.* (S. 197)
 cloud 1SG-crawl-CAUS
 ‘The clouds carry me [slowly].’

- b. [*Kani*] *ku-nis-reye-re*. (S. 197)
 I 1SG-cloud-crawl-CAUS
 ‘I am [slowly] carried by clouds’, lit. ‘I am cloud-carried.’ (Chitose)
 (the passive is used in the translation to render the original word order).

Incorporation may occur simultaneously with reciprocal (see 3.1.3.2.3) derivation. Reciprocal transitives may also incorporate a direct object, in which case they become intransitive; cf.:

- (16) a. [*Aoka*] *tek a-u-e-kik*. (OI.; *a-* is IND.S for vt; cf. also (45a))
 INDEF hand IND-REC-APPL-hit
 ‘We clapped hands.’
 b. [*Aoka*] *tek-u-e-kik-an*. (OI.; *-an* is IND.S for vi)
 INDEF hand-REC-APPL-hit-IND
 ‘We applauded.’
 c. [*Asinuma*] *kane a-u-omare*. (*a-* is IND.S for vt; cf. also (40g))
 INDEF money IND-REC-pick up
 ‘I’ll pick up the money.’ (Satoo T., p.c.)
 d. [*Asinuma*] *kon-kane-u-omare-an*. (*-an* is IND.S for vi)
 INDEF golden-money-REC-pick up-IND
 ‘I’ll pick up the golden coins.’ (Satoo T., p.c.)

2.3.3 Combinability of valency-changing means

According to Tamura (Fukuda 1956: 50–1), there are six slots in the verb structure; affixes of different slots can co-occur but affixes taking the same slot cannot.

- Slot 1 is reserved for the applicative prefixes *e-*, *ko-*.
- Slot 2 is for the reciprocal prefix *u-* or reflexive *yay-* or generalized object *i-*.
- Slot 3 is also reserved for the same prefixes *e-*, *ko-* which can be repeated.
- Slot 4 is for the root.
- Slot 5 for the suffixes of singularity, plurality, transitivity, intransitivity.
- Slot 6 is for the causative suffixes (Saru dialect).

Combinations of *u-* with other verbal affixes in the Saru dialect are treated by Tamura (Fukuda) Suzuko: *u-* can combine with all the causative suffixes but not with the other (valency-decreasing) affixes, viz. with *i-* and reflexive *yay-* (Fukuda 1956: 51). The latter rule, however, is violated if *u-* and *i-* or *yay-* are separated by an applicative prefix (see (17f)) or if they are fossilized (cf. *u-yay-uk-te* ‘to marry for love’ (T4. 818) where *-uk-* means ‘to get/receive’ and *-te* is a causative suffix; cf. also Tamura’s example *yay-ko-si-ram-suye* ‘to think/consider’ (vi) (Fukuda 1956: 51) with two reflexive prefixes (*ram* ‘heart’, *suye* ‘to shake’)). (See also Shibatani 1990: 76–7.)

- (17) a. *ruska* 'to be angry *because of sth*' (T4. 591; OI.) (vt)
 b. *ko-ruska* 'to be angry *with sb* because of sth' (Nak. 420) (vb)
 c. *yay-ko-ruska* 'to be angry *with oneself* because of sth' (Nak. 420) (vt)
 d. *i-ruska* 'to be angry' (Nak. 420) (vi)
 e. *ko-i-ruska* 'to be angry *with sb*' (K. 135; T4. 356; OI.) (vt)
 f. *u-ko-i-ruska* 'to be angry *with one another*' (B. 526; OI.) (vi)
 e. **u-ruska* (OI.) (ungrammatical because (17a) has no personal object).
- (18) a. *puntek* (not registered)
 b. *ko-puntek* 'to rejoice *at sth*' (Nak. 190) (vt)
 c. *yay-ko-puntek* 'to rejoice' (Nak. 190; OI.) (vi)
 d. *e-yay-ko-puntek* 'to rejoice *at sth*' (Nak. 190) (vt)
 e. *uko-yay-ko-puntek* 'to rejoice *together*' (OI.) (vi)
 f. *ue-yay-ko-puntek* (same meaning) (OI.) (vi)
 g. *ue-puntek* (same meaning) (OI.) (vi)
 h. *e-uko-yay-ko-puntek* '(for more than two persons) to rejoice *at sth together*' (vt)
 (T4. 146)
 g. **u-puntek* (OI.) (not registered).

Note that the applicative form (18h) is derived from an intransitive sociative; applicatives can also be formed from a small number of reciprocals (cf. (19e)). (Incidentally, verbs of speech with the component 'together' and even without it but used in the plural form usually imply conversation of participants between themselves (cf. (19e) where 'together' = 'each other').

- (19) a. *pinu-pinu* 'to whisper' (T4. 529) (vi)
 b. *e-pinu-pinu* 'to whisper *about sth*' (T4. 109) (vt)
 c. *ko-pinu-pinu* 'to whisper *to sb*' (OI.) (vt)
 d. *u-ko-pinu-pinu* 'to whisper *to each other*' (T4. 761) (vi)
 e. *e-u-ko-pinu-pinu* 'to whisper *to each other about sth*' (T4. 145) (vt)

3. Reciprocals with the prefix *u-*

We shall consider derivations from non-applicative and applicative bases separately, in view of the particular productivity of applicatives in Ainu. The point is that the reciprocal prefix *u-* often co-occurs with the applicative prefix *ko-* which follows it (Shibatani 1990: 47). Their frequent co-occurrence has resulted in the development of the single prefix *uko-* in which the second component does not retain the applicative meaning, as has been mentioned above. This is particularly clear when this complex prefix functions as a sociative marker. If it expresses a reciprocal meaning such semantic fusion does not occur. The prefix *ko-* increases valency by introducing a new participant (see 2.3.1.2). The reciprocal prefix *u-* deletes this valency.

3.1 Subject-oriented constructions

3.1.1 “Canonical” reciprocals

A distinctive feature of this diathesis type is omission of the direct object co-referential with the subject. The subject of such constructions is always semantically plural.

3.1.1.1 Derived from two-place non-applicative transitives. Most of the examples at our disposal are of this type, as in (1). Morphological reciprocals can also be formed from lexical reciprocals as well, some of them with an inanimate subject and object (these verbs have meanings ‘sth comes into contact with sth’, ‘sth sticks to sth’, ‘sb parts from sb’, ‘sb marries sb’). Judging by (20b, c), reciprocals can be formed from morphological causatives (note that the simultaneous use of the reciprocal and causative affixes may render a sociative meaning; see Section 7).

- (20) a. *Oha aynu u-siru.* (Mur. 10)
only people REC-jostle
‘Only people jostle each other.’
- b. *Tutano can kamuy u-sinoh-te.* (Kh. 421)
other smaller god REC-entertain-CAUS
‘The other, smaller gods, entertained each other.’
- c. *U-iku-re wa u-ipe-re wa ...* (Itadori dialect)
REC-drink-CAUS and REC-eat-CAUS and
‘Making each other drink and making each other eat, and ...’ (Sh. 49)
- d. *Ekay taciro ekay makiri u-tasa-tasa.* (N. 90)
round dagger round knife REC-go.towards-go.towards
‘Round daggers and round knives cross [each other].’

Verbs of this type:

- | | |
|--|---|
| (21) <i>cotca</i> ‘to shoot sb’ | → <i>u-cotca</i> ‘to shoot at each other’ (OI.) |
| <i>e</i> ‘to eat sth/sb’ | → <i>u-e</i> ‘to devour each other’ (Kay. 88, OI.) |
| <i>ekanraye</i> ‘to go to meet sb’ | → <i>u-ekanraye</i> ‘to go to meet each other’ (Mur. 221) |
| <i>ekap</i> ‘to salute/greet sb’ | → <i>u-ekap</i> ‘to salute/greet one another’ (P. 146; OI.) |
| <i>ekatayrotke</i> ‘to be on good terms with sb’ | → <i>u-ekatayrotke</i> ‘to be on mutually good terms’ (T4. 806) |
| <i>ekohopi</i> ‘to part/separate from sb/sth’ | → <i>u-ekohopi</i> ‘(for a road, a river) to be forked/divided’; <i>u-ekohop-pa</i> ‘to separate from each other, go separate ways’ (T4. 806) |
| <i>ekupa</i> ‘to bite sb’ | → <i>u-ekupa</i> ‘to bite each other’ (OI.) |
| <i>erasasu</i> ‘to like, love’ | → <i>u-erasasu</i> ‘love each other, sleep together’ (T4. 809) |
| <i>eramiskari</i> ‘to not know/remember sth/sb’ | → <i>u-eramiskari</i> ‘to not know/remember each other’ (OI.) |
| <i>etaye</i> ‘to pull sth/sb’ | → <i>u-etay-pa</i> ‘to pull each other’ (N. 86; OI.) |
| <i>etunankar</i> ‘to run into sb’ | → <i>u-etunankar</i> ‘to run into each other’ (T4. 811) |
| <i>hekote</i> ‘to marry sb’ | → <i>u-hekote</i> ‘to be married/live together’ (T4. 749) |
| <i>henkotpa</i> ‘to nod to sb’ | → <i>u-henkotpa</i> ‘to nod to each other’ (OI.) |
| <i>hotanukar</i> ‘to go to visit sb’ | → <i>u-hotanukar</i> ‘to go to visit each other’ (OI.) |

<i>iku-re</i> ‘to make sb drink’	→ <i>u-iku-re</i> ‘to make each other drink’ (Sh. 49)
<i>ipe-re</i> ‘to make sb eat’	→ <i>u-ipe-re</i> ‘to make each other eat’ (Sh. 49)
<i>kere</i> ‘[for sth] to come into contact with sth’	→ <i>u-kere</i> ‘come into contact with each other (about clothes)’ (T4. 754)
<i>kipniwkes</i> ‘to save sb’s life’	→ <i>u-kipniwkes</i> ‘help save each other’s (lives)’ (T4. 754)
<i>komuy</i> ‘to pick lice off sb’	→ <i>u-komuy</i> ‘to pick lice off each other’ (T4. 759)
<i>kor</i> ‘to possess/have sb/sth’	→ <i>u-kor-pa</i> i. ‘have each other (couples, friends, etc.)’ ii. ‘to get married’ (T4. 762; cf. N. 98)
<i>koramkor</i> ‘to confer/consult with sb’	→ <i>u-koramkor</i> ‘to confer/consult with each other’ (T4. 762)
<i>kotuk</i> ‘to stick to sth/sb’	→ <i>u-kotuk</i> ‘to stick to each other’ (T4. 765)
<i>koyki</i> ‘to bully, scold’	→ <i>u-koyki</i> ‘bully each other, quarrel, fight’ (T4.767; N. 88; OI.)
<i>nukar</i> ‘to see, look at, meet sb’	→ <i>u-nukar</i> ‘to look at each other, meet’ (T4. 774)
<i>omap</i> ‘to show affection for sb’	→ <i>u-omap</i> ‘show affection for each other’ (K. 303)
<i>oramkote</i> ‘to love sb (of a different sex)’	→ <i>u-oramkote</i> ‘to love each other (of a man and a woman)’ (T4. 815–16)
<i>osikkote</i> ‘to fall in love with sb (of a different sex)’	→ <i>u-osikkote</i> ‘to love each other’ (T4. 817)
<i>osura</i> ‘to throw sth/sb’	→ <i>u-osura</i> ‘to throw each other, get divorced’ (OI.)
<i>pahekote-re</i> ‘to complain about sb’	→ <i>u-pahekote-re</i> ‘to mutually complain about each other, abuse each other’ (T4. 775)
<i>piyekar</i> ‘to hit sb/sth (with a rock)’	→ <i>u-piyekar</i> ‘throw a rock-like sth (snowballs) at each other’ (T4. 776)
<i>rapokkari</i> ‘to give in’	→ <i>u-rapokkari</i> ‘give in to each other’ (N. 122; K. 297)
<i>sinoh-te</i> ‘to entertain sb.’	→ <i>u-sinoh-te</i> ‘to entertain each other’ (Kh. 421)
<i>siru</i> ‘to rub sth/sb’	→ <i>u-siru</i> ‘to rub each other’ (T4. 789)
<i>tasa-[tasa]</i> ‘to go towards sth/sb’	→ <i>u-tasa-tasa</i> ‘cross [each other]’ (N. 90, 91, 107)
<i>tom-osma</i> ‘to bump into sth/sb’	→ <i>u-tom-osma</i> ‘to bump into e. o.’ (T4. 796; OI.)
<i>tumam</i> ‘to sleep hugging sb’	→ <i>u-tumam</i> ‘to sleep/lie hugging each other’ (T4. 797)
<i>wante</i> ‘to know’	→ <i>u-wante</i> ‘to know each other’ (Mur. 227).

3.1.1.2 *Derived from applicatives in ko- and e-*. Some of the underlying verbs in the triplets below can in principle combine with a postpositional complement (i.e. they are (potentially) two-place intransitives). This complement does not trigger the verb agreement, and the reciprocal prefix can occupy the slot of the agreement marker only. The middle verb in each of these triplets is transitive and therefore allows reciprocal derivation. With the applicative form, the complement appears as a personal direct object (which may alternate with an inanimate object on some applicatives), or the verb contains reference to the antecedent (cf. 2.3.1.2). In the list under (21) above, some verbs with applicative prefixes are also entered, but they have no underlying non-applicative form or their semantic relation to the underlying form is non-standard; thus they can be regarded as non-derived units synchronically.

Reciprocals derived from applicatives in *ko-* are more numerous than reciprocals from applicatives in *e-*, which seems to reflect the productivity of the respective applicatives. This also accounts for the absence of reciprocals from applicatives with the prefix *o-* in our verb list.

1. Reciprocals derived from applicatives in *ko-*

(22)	a.	<i>apkas</i>	'to go' (T4. 19)	(vi)
	→	<i>ko-apkas</i>	'to go on a visit to sb' (T4. 315)	(vt)
	→	<i>u-ko-apkas</i>	'to visit each other' (Kay. 102)	(vi)
	b.	<i>corawki</i>	'to go on attack' (T4. 65)	(vi)
	→	<i>ko-corawki</i>	'to go to attack sb' (T4. 316)	(vt)
	→	<i>u-ko-corawki[-pa]</i>	'to attack each other' (T4. 755; OI.)	(vi)
	c.	<i>eraratki</i>	'to make love' (cf. N. 135)	(vi)
	→	<i>ko-eraratki</i>	'to love sb (of grown-up men and women)' (T4. 317)	(vt)
	→	<i>u-ko-eraratki</i>	'to love each other (of a man and a woman)' (T4. 756)	(vi)
	d.	<i>he-pen-pen-u</i>	'to nod' (T4. 183)	(vi)
	→	<i>ko-he-pen-pen-u</i>	'to nod to sb' (T4. 318)	(vt)
	→	<i>u-ko-he-pen-pen-u</i>	'to nod to each other' (T4. 756)	(vi)
	e.	<i>honoyse</i>	'(of a dog, cat) to growl, snarl' (T4. 197)	(vi)
	→	<i>ko-honoyse</i>	'to growl at sb' (OI.)	(vt)
	→	<i>u-ko-honoyse</i>	'to growl, snarl at each other' (T4. 756; OI.)	(vi)
	f.	<i>irenka-kor</i>	'to demand (the impossible)' (O. 51)	(vi)
	→	<i>ko-irenka-kor</i>	'to demand (the impossible) from sb' (O. 66)	(vt)
	→	<i>u-ko-irenka-kor</i>	'to dispute with each other (in court)' (T4.767)	(vi)
	g.	<i>i-ruska</i>	'to be angry' (T4. 245)	(vi)
	→	<i>ko-i-ruska</i>	'to be angry with sb' (T4. 356; OI.)	(vt)
	→	<i>u-ko-i-ruska</i>	'to be angry with one another' (B. 526; OI.)	(vi)
	h.	<i>isoytak</i>	'to tell tales, stories' (Nak. 34; OI.)	(vi)
	→	<i>ko-isoytak</i>	'to tell tales, stories to sb' (Nak. 34; OI.)	(vt)
	→	<i>u-ko-isoytak</i>	'to tell tales, stories to each other' (Nak. 34; OI.)	(vi)
	i.	<i>itak</i>	'to talk/speak' (T4. 250)	(vi)
	→	<i>ko-itak</i>	'to talk to sb' (T4. 357)	(vt)
	→	<i>u-ko-itak</i>	'to talk to/with each other' (T4. 767; OI.)	(vi)
	j.	<i>ocis</i>	'to be vexing' (Mur. 183)	(vi)
	→	<i>ko-ocis</i>	'to hate sb' (H. 165)	(vt)
	→	<i>u-ko-ocis</i>	'to hate each other' (Mur. 222)	(vi)
	k.	<i>payoka</i>	'to come and go (of two and more people)' (T4. 518)	(vi)
	→	<i>ko-payoka</i>	'to come and go somewhere/to sb' (OI.)	(vt)
	→	<i>u-ko-payoka</i>	'visit each other, keep coming and going to each other' (T4. 761, OI.)	
	l.	<i>pinu-pinu</i>	'to whisper' (T4. 529)	(vi)
	→	<i>ko-pinu-pinu</i>	'to whisper to sb' (Kay. 244)	(vt)
	→	<i>u-ko-pinu-pinu</i>	'to whisper to each other' (T4. 761)	(vi)
	m.	<i>ram-nukar</i>	'to test/try; to see through' (K. 218), lit. 'heart-test'	(vi)
	→	<i>ko-ram-nukar</i>	'to try to look gently at her [woman's] heart' (Kay. 249)	(vt)
	→	<i>u-ko-ram-nukar</i>	'to compare courage with each other' (T4. 762)	(vi)
	n.	<i>ram-u-pirka</i>	'to be gentle/good-tempered' (Mur. 198)	(vi)
	→	<i>ko-ram-u-pirka</i>	'to be on good terms with sb' (OI.)	(vt)

→	<i>u-ko-ram-u-pirka</i>	‘to be on good terms [with each other]’ (Mur. 223; OI)	(vi)
	o. <i>sinewe</i>	‘to go on a visit’ (Nak. 217)	(vi)
→	<i>ko-sinewe</i>	‘to go on a visit to sb’ (Nak.217)	(vt)
→	<i>u-ko-sinewe</i>	‘to go on a visit to each other’ (OI.)	(vi)
	p. <i>tetterke</i>	‘to stagger’ (Kin. 152)	(vi)
→	<i>ko-tetterke</i>	‘to stagger towards sb’ (Kin. 152)	(vt)
→	<i>u-ko-tetterke</i>	‘to stagger towards each other’ (Kin. 152)	(vi)
	q. <i>tumi-kor</i>	‘to make war’ (Mur. 219; OI.)	(vi)
→	<i>ko-tumi-kor</i>	‘to war/fight a battle with sb’ (B. 276; OI.)	(vt)
→	<i>u-ko-tumi-kor</i>	‘to fight a battle with each other’ (Mur. 223)	(vi)
	r. <i>uepeker</i>	‘to tell stories’ (cf. (115))	(vi)
→	<i>ko-uepeker</i>	‘to tell stories to sb’ (OI.)	(vt)
→	<i>u-ko-uepeker</i>	‘to tell stories to each other’ (OI.)	(vi)
	s. <i>wen</i>	‘to be bad’ (O. 167)	(vi)
→	<i>ko-wen</i>	‘to be bad/show bad attitude towards sb’ (O. 74)	(vt)
→	<i>u-ko-wen</i>	‘be bad/show bad attitude towards each other’(O. 159)	(vi)
	t. <i>yayapapu</i>	‘to apologize’ (T4. 844)	(vi)
→	<i>ko-yayapapu</i>	‘to apologize to sb’ (T4. 350)	(vt)
→	<i>u-ko-yayapapu</i>	‘to apologize to each other, make peace’ (T4. 766)	(vi)

A sentential example:

- (23) *Kestoankonno u-ko-uepeker-an.* (R. 185)
 every.day REC-APPL-tell.stories-IND
 ‘Every day we tell stories to each other.’

2. *Reciprocals derived from applicatives in e-*. Combinations of *u-* with the applicative prefix *e-* are also possible but they are less numerous than those with *ko-* though there exist fusions of both prefixes, namely, the prefix *w-ee-* in the Sakhalin dialect which is a phonetic development via the intermediate stage *u-w-e-* with an epenthetic consonant. A number of such derivatives with the initial *w-ee-* in the reciprocal meaning have been retained, for instance, *wee-ciw(ka)* ‘to gather’ (Mur. 228; see also (108b)), *wee-punteh* ‘to be mutually pleased’ (Mur. 228). In the registered examples, applicative verbs do not occur in the comitative sense either.

- (24) a. *mik* ‘to bark’ (Nak. 373; OI.) (vi)
 → *e-mik* ‘to bark at sb’ (Nak. 373; OI.) (vt)
 → *u-e-mik* ‘to bark at each other’ (OI.) (vi)
 b. *newsar* ‘to chat’ (Nak. 307) (vi)
 → *e-newsar* ‘to chat with sb’ (Nak. 307) (vt)
 → *u-e-newsar* ‘to chat with each other’ (Nak. 307) (vi)
 c. *nupetne* ‘to rejoice’ (Kir2. 270) (vi)
 → *e-nupetne* ‘to rejoice at meeting sb after a long time’ (T4. 103) (vt)
 → *u-e-nupetne* ‘to be mutually rejoiced in meeting after a long time’ (vi)
 (T4. 807)
 d. *rankarap* ‘to greet’ (T4. 559–60) (vi)
 → *e-rankarap* ‘to greet sb’ (T4. 117) (vt)
 → *u-e-rankarap* ‘to greet each other’ (T4. 809; OI.) (vi)

A sentential example:

- (25) *Kunne an kor u-e-newsar-an kor.* (OI.)
 night come when REC-APPL-CONVERSE-IND and
 ‘When night fell we began conversing.’

3.1.2 “Indirect” reciprocals

The base verbs are three-place transitives: they take two objects, direct and indirect, both unmarked. The latter object is deleted in a reciprocal construction while the direct object is retained. The term “indirect” is used here as a label to refer to reciprocals derived from these verbs. Characteristically, excepting one verb (26a), all the base bitransitives are derived verbs either with a causative suffix or an applicative prefix.

3.1.2.1 *Derived from three-place non-applicative transitives.* We have no textual examples of this type. Our informant Oda Ito produced sentences (27b) and (28), though she prefers to express the respective situations by two clauses like (27a).

(a) Derived from non-causative verbs:

- (26) a. *erusa* ‘to lend sth to sb’ (T4. 121) (vb)
 → *u-erusa* ‘to lend sth to each other’ (T4. 810) (vt)

(b) Derived from causative verbs:

- b. *kor* ‘to have/possess sth/sb’ (T4. 333) (vt)
 → *kor-e* ‘to give sth to sb’ (T4. 335) (vb)
 u-kor-e [SG] ‘to give sth to each other’ (OI.) (vt)
 → *u-kor-pa-re* [PL] ‘to give sth to each other’ (OI.) (cf. (38c)) (vt)
 c. *nu* ‘to listen to sb’ (T4. 438) (vt)
 → *nu-re* ‘to tell sth to sb’ (T4. 445) (vb)
 → *u-nu-re* ‘to tell each other sth’ (T4. 774) (vt)
 d. *nukar* ‘to see, look at sth/sb’ (T4. 439) (vt)
 → *nukar-e* ‘to show sth to sb’ (T4. 439) (vb)
 → *u-nukar-e* ‘to show [sth] to each other’ (B. 534) (vt)

Sentential examples:

- (27) a. *Anna ninup en-kor-e wa kusu ku-ninup Anna ku-kor-e.* (OI.)
 A. sewing 1SG-have-CAUS and because my-sewing A. 1SG-have-CAUS
 ‘As Anna gave me her sewing, I gave Anna my sewing.’
 b. *A-kor ninup Anna kor ninup a-u-kor-pa-re.* (OI.)
 1SG-have sewing A. have sewing 1PL.INC-REC-have-PL-CAUS
 ‘Anna and I gave each other our sewings.’
 (28) a. *Utaspa mip-ih i u-erusa.* (OI.)
 mutually clothing-POSS REC-lend
 ‘[They] lend each other their clothes.’
 b. *Anna huci matanpusi u-nukar-e.* (OI.)
 A. granny headband REC-see-CAUS
 ‘Anna and granny showed each other their headbands.’

3.1.2.2 *Derived from three-place applicative transitives in ko- and e-*. As in 3.1.1.2, reciprocals from applicatives in *ko-* are more numerous.

1. *Reciprocals derived from applicatives in ko-*. This prefix turns two-place transitives into three-place verbs by introducing the indirect addressee/goal/source object.

(29)	a.	<i>ani</i>	‘to hold/cradle sth/sb in one’s hands/arms’	(vt)
	→	<i>ko-ani</i>	‘to take/bring sth/sb to sth/sb’ (T4. 314)	(vb)
	→	<i>u-ko-ani</i>	‘to take/bring sth to each other’ (OI.)	(vt)
	b.	<i>ehunara</i>	‘to grudge to give sth’ (Nak. 96)	(vt)
	→	<i>ko-ehunara</i>	‘to grudge to give sth to sb’ (OI.)	(vb)
	→	<i>u-ko-ehunara</i>	‘to dispute possession of sth, take away from each other’ (OI.; N. 54)	(vt)
	c.	<i>kor</i>	‘to have/possess sth/sb’ (T4. 333)	(vt)
	→	<i>ko-kor</i>	‘to take away, receive sth from sb’ (T4. 323)	(vb)
	→	<i>u-ko-kor</i>	‘to struggle for sth with each other’ (T4. 758)	(vt)
	d.	<i>osura</i>	‘to throw sth’ (T4. 490)	(vt)
	→	<i>ko-osura</i>	‘to throw sth towards sb/sth’ (K. 19)	(vb)
	→	<i>u-ko-osura</i>	‘to throw sth to each other’ (N. 54; OI.)	(vt)
	e.	<i>soso</i>	‘to tear off/take off sth (the bark of a tree, the skin of a fish; OI: clothes)’ (Nak. 238; OI.)	(vt)
	→	<i>ko-soso</i>	‘to tear off/take off sth from sb/sth’ (Nak. 238; OI.)	(vb)
	→	<i>u-ko-soso</i>	‘to tear off/take off sth (clothes) from each other’ (OI.)	(vt)
	f.	<i>uyna</i>	‘to take/receive/rob sth/sb (two or more)’ (T4. 751, 819)	(vt)
	→	<i>ko-uyna</i>	‘to rob sb (two or more) of sth’ (T4. 349)	(vb)
	→	<i>u-ko-uyna</i>	‘to rob each other of sth (two or more)’ (T4. 766)	(vt)

Sentential examples:

- (30) a. *Ussi-utar tar ci-tanne tar u-ko-ehunara tar ci-takne tar*
 servant-PL rope PREF-long rope REC-APPL-grudge rope PREF-short rope
u-ko-osura sap ruwe ne. (N. 54)
 REC-APPL-throw descend.to.sea.PL ASS.FIN COP
 ‘The servants go down to the sea taking away from each other long ropes and throwing short ropes to each other.’
- b. *Keraan pe u-ko-ani.* (OI.)
 delicious thing REC-APPL-bring
 ‘(They) brought delicious things to each other.’

2. *Reciprocals derived from applicatives in e-*. This prefix changes two-place transitives into three-place by introducing an inanimate object. The reciprocal prefix reduces the valency by eliminating the animate object.

(31)	a.	<i>pakasnu</i>	‘to teach sb’ (T4. 506)	(vt)
	→	<i>e-pakasnu</i>	‘to teach sb sth’ (T4. 106)	(vb)
	→	<i>u-e-pakasnu</i>	‘to teach each other sth’ (T4. 808)	(vt)
	b.	<i>tusmak</i>	‘to overtake sb’ (TA4. 742)	(vt)
	→	<i>e-tusmak</i>	‘to overtake sb in sth’ (Kir2. 203)	(vb)
	→	<i>u-e-tusmak</i>	‘to compete with each other in sth’ (Kir2. 347)	(vt).

3.1.2.3 “Indirect” reciprocals – applicatives from “canonical” reciprocals. A peculiarity of Ainu is derivation of “indirect” reciprocals from “canonical” reciprocals by means of the applicative prefix *e-*. One of such instances is cited above under (19e): *e-u-ko-pinu-pinu* (vt) ‘to whisper sth to each other’ (T4. 145). Here are another examples:

(32)	a.	<i>asurani</i>	‘to warn/alert (of frosts, fire, sb’s death)’ (T4. 31; OI.)	(vi)
		<i>ko-asurani</i>	‘to warn/alert sb’ (T4. 315)	(vt)
		<i>u-ko-asurani</i>	‘to warn/alert each other’ (T4. 767)	(vi)
		<i>e-u-ko-asurani</i>	‘to warn/alert each other of sth’ (T4. 146; OI.)	(vt)
		cf. <i>e-asurani</i>	‘to warn, alert of sth’ (T. 76, OI.)	(vt)
	b.	<i>itak</i>	‘to talk/speak’ (T4. 250)	(vi)
		<i>ko-itak</i>	‘to talk/speak to sb’ (T4. 357)	(vt)
		<i>u-ko-itak</i>	‘to talk/speak to each other’ (OI.)	(vi)
		<i>e-u-ko-itak</i>	‘to talk to each other about sth’ (T4. 146; OI.)	(vt)
		cf. <i>e-itak</i>	‘to talk about sth’ (K. 160)	(vt)
	c.	<i>koramkor</i>	‘to confer/consult with sb’ (T4. 334)	(vt)
		<i>u-koramkor</i>	‘to confer/consult with each other’ (T4. 762)	(vi)
		<i>e-u-koramkor</i>	‘confer/consult with each other about sth’ (T3. 1, 247)	(vt)
		cf. <i>e-koramkor</i>	‘to confer/consult about sth’ (T. 92)	(vt)

Sentential examples:

- d. *Aynu opuspe hene a-e-u-ko-isoytak.* (T3. 1, 247)
 Ainu story also IND-APPL-REC-APPL-tell.stories
 ‘We were telling each other stories concerning the Ainu [life].’
- e. *Okikurumi Samayunkur nep ne yak-ka e-u-ko-asurani wa*
 O. S. something COP if-even APPL-REC-APPL-warn and
e-u-ko-itak wa neun paye yak-ka u-tura wa paye. (OI.)
 APPL-REC-APPL-tell and wherever go even-if REC-accompany and go
 ‘Okikurumi (Ainu God) [and] Samayunkur (Ainu hero) warned each other of every-
 thing and told each other about [everything] and wherever [they] went, they went
 together (lit. ‘accompanying each other’).’

Applicatives are also formed from sociatives; see, for instance, (18h), 6.1.1.3 and (101d).

3.1.3 “Possessive” reciprocals

“Possessive” reciprocals proper seem to be non-existent in Ainu. We have in mind constructions of the type *We test each other’s strength*; see (33c) which is ungrammatical in Ainu. But there are constructions with an incorporated object provisionally termed “quasi-possessive” which semantically correspond to “possessive” reciprocal constructions proper.

3.1.3.1 “Possessive” reciprocals proper. There is no data so far.

3.1.3.2 “Quasi-possessive” reciprocals with an incorporated object

3.1.3.2.1 *Derived from two-place non-applicative transitives.* The examples cited here are more or less lexicalized. These forms seem to lack synonymous correlates with a non-

<i>u-tek-ruy-ruy-e</i>	‘to stroke each other’s hands’ (OI.)
<i>u-tek-anpa</i>	‘to link/hold hands’ (T4. 795)
<i>u-tek-kamu-re</i>	‘to bring (lit. cover) each others’s hands together’ (T4. 795).

Sentential examples (in the first two sentences, the reciprocal verbs are nominalized without any special marking and occur with the verb *ki* ‘to do’ which functions as an auxiliary of a periphrastic verb form):

- (35) a. *tap e-ki ciki u-kiror-nukar a-ki kusu ne na.* (Kir2. 138)
 thus 2SG-do if REC-strength-see 1PL.INC-do INTENT COP FIN.PRTL
 ‘Since you behave so, let’s measure each other’s strength!’
- b. *Sonno he tapne e-hawan ciki, u-sinrit-pita a-ki kusu ne na.* (Kir2. 99)
 really PRTL thus 2SG-speak if REC-ancestor-guess IND-do INTENT COP
 FIN.PRTL
 ‘Since you are speaking in earnest, let’s guess each other’s ancestors.’
- c. *Anna Ito u-tek-kik.* (OI.)
 A. I. REC-hand-hit
 ‘Anna and Ito clapped each other on the palms.’
- d. *Anna ona-ha u-tek-nimpa wa paye.* (OI.)
 A. father-POSS REC-hand-lead and walk.PL
 ‘Anna and her father walk hand in hand’, lit. ‘...lead each other by the hand.’
- e. *Emkota u-tura wa u-tek-ama wa hosip-pa yan!*
 hurry REC-accompany and REC-hand-hold and return.home-PL IMP.POL
 ‘Hurry up and go home together holding hands!’ (R. 150)

Among the reciprocals under (34a), four lexicalized formations are included, with the meaning of the base verb being changed:

- (36) a. *u-kes-kor* (B. 524; Kay. 102)
 REC-edge-have
 ‘to succeed to one another’s inheritance; to inherit.’ (*kes* ‘edge, end’)
- b. *u-setur-ka-rar-pa* (Kir2. 354)
 REC-back-surface-press-PL (*ka* is a locative noun; see 12.1)
 ‘next to each other’, lit. ‘to press the surface of each other’s back.’
- c. *u-sampe-tusmak* (Kin. 151)
 REC-inside-overtake
 ‘to tear each other’s insides.’

3.1.3.2.2 *Derived from two-place applicatives in ko- and e-*. No data so far.

3.1.3.2.3 *Reciprocals of the type u-V-pakte* ‘to compete in V’. To complete the picture, we shall name another morphological type of derivatives which express reciprocity but are not “quasi-possessive”, since their meaning cannot be rendered by two constructions of the (33a–b) type, if only for the reason that the verbal stem *pakte* is not used alone. It is considered by Tamura as a bound transitive stem meaning ‘to compare’, ‘to compete’ used in the pattern “*u-...pakte*” (T4. 508). Unlike derivatives discussed in 3.1.3.2.1, these instances seem to involve incorporation of verbal stems also. But, since Ainu verbal stems

are never incorporated into other verbal stems, we assume that all of the incorporated verbal stems in (37a–d) undergo formal nominalization first, and only then incorporation takes place. As we have already shown in 2.2, intransitive stems (and all of the incorporated stems in (37a–d) are base intransitives) can function as nouns without any change in morphology. The only problem is that none of the corresponding nouns for incorporated stems in (37a–d) are actually registered in the dictionaries. This is why we treat this phenomenon as formal nominalization.

Some of the derivatives of the type mentioned are semantically contiguous to the derivatives under consideration here (cf. *u-kiror-nukar* ‘to compete in strength’ and (37e)). This fact justifies their being considered next to each other.

(a) A nominalized verbal stem is incorporated:

- (37) a. *u-nitan-pakte* (*nitan* ‘to run.fast’ (T4. 426))
 ‘to run a foot race’ (T4. 773)
 b. *u-nupur-pakte* (*nupur* ‘to be clairvoyant’ (T4. 444))
 ‘to compare each other’s strength of clairvoyance’ (K. 295; OI.)
 c. *u-terke-pakte* (*terke* ‘to jump’ (T4. 713))
 ‘to compete in the long jump’ (T4. 795).
 d. *u-yapkir-pakte* (*yapkir* ‘to throw’ (T4. 839))
 ‘to compete against one another in a throwing contest’ (T4. 818).

(b) A nominal stem is incorporated:

- e. *u-kiror-pakte* (*kiror* ‘strength’ (T4. 309))
 ‘to compete in strength’ (T4. 755)
 f. *u-par-pakte* (*par* ‘mouth’ (T4. 509))
 ‘to debate’ (T4. 775).

3.2 Object-oriented constructions

Unlike subject-oriented constructions, these may have a singular subject, while the object is as a rule plural semantically or it refers to an entity composed of some parts involved in the action.

3.2.1 Causatives derived from subject-oriented reciprocals

It seems that if there are no pragmatic restrictions, any subject-oriented reciprocal can be causativized. The following derivations illustrate this type (in (38a) lexicalization takes place):

- | | | | | |
|------|----|-------------------|---|------|
| (38) | a. | <i>as-te</i> | ‘to let/make stand’ (T4. 30) (< <i>as</i> ‘to stand’ (vi) T4. 26) | (vt) |
| | | <i>u-as-te</i> | ‘to breed, reproduce’ (T4. 801–2) | (vi) |
| | | <i>u-as-te-re</i> | ‘to make produce children and grandchildren’ (T4. 802) | (vt) |
| | b. | <i>koyki</i> | ‘to scold/ bully/attack sb’ (T4. 354) | (vt) |
| | → | <i>u-koyki</i> | ‘to bully each other’, ‘to quarrel’ (T4. 767; OI.) | (vi) |
| | → | <i>u-koyki-re</i> | ‘to make sb quarrel/fight with each other’ (T4. 767; OI.) | (vt) |

c.	<i>kor</i>	‘to have sb’ (T4. 333)	(vt)
→	<i>u-kor</i>	‘to have each other’ (couples, friends); ‘get married’ (T4. 762)	(vi)
→	<i>u-kor-e</i>	‘to let or make sb marry’ (T4. 762–3)	(vt)
d.	<i>kotuk</i>	‘to stick to sth’ (T4. 347)	(vt)
→	<i>u-kotuk</i>	‘to stick to each other’ (T4. 765)	(vi)
→	<i>u-kotuk-ka</i>	‘to stick sth to each other(with glue)’ (T4. 765) (see (39b))	(vt)
e.	<i>tom-osma</i>	‘to bump/run into sth/sb’ (T4. 720; OI.)	(vt)
→	<i>u-tom-osma</i>	‘to bump into/ meet each other’ (T4. 796; OI.)	(vi)
→	<i>u-tom-osma-re</i>	‘to make sth/sb bump into each other’ (T4. 796)	(vt)

In lists (21), (38) and (40) the verbs may recur. (38) is a list of causatives derived from “canonical” subject-oriented reciprocals, and list (40) contains reciprocals of three-place causatives; both derivational chains differ only in the second member, the first and also the third members being identical; cf. (38f) and (38g) respectively:

f.	Two-place	One-place	Two-place
	<i>kotuk</i> ‘to stick to sth’	→ <i>u-kotuk</i> ‘stick together’	→ <i>u-kotuk-ka</i> ‘stick sth to each other’ (cf. (38d))
g.	Two-place	Three-place	Two-place
	<i>kotuk</i> ‘to stick to sth’	→ <i>kotuk-ka</i> ‘stick sth to sth’	→ <i>u-kotuk-ka</i> ‘to stick sth together’ (cf. (40f)).

Sentential examples:

- (39) a. ... *kiwakusu e-kor yup-i-utar u-koyki-re-pa hine* ... (N. 96)
 therefore 2SG-have elder.brother-POSS-PL REC-quarrel-CAUS-PL and
 ‘... therefore (she) made your elder brothers quarrel with each other, and then ...’
- b. *Ku-kor toke at-uhu sos-ke kor an k-u-kotuk-ka easirki*,
 my watch band-POSS take.off-ACAUS and exist 1SG-REC-stick-CAUS must
somo yakun nani tuy. (T4. 765)
 not if soon break
 ‘My watch band came off. I must *stick* (them) *together*. If not, (it) will break soon.’
- c. *Wen okkayo okay-po menoko-po-utar u-koyki-re.* (OI.)
 bad man man-DIM woman-DIM-PL REC-quarrel-CAUS
 ‘A bad man is making a young man and a young woman quarrel with each other.’

3.2.2 Reciprocals with the meaning of joining sth/sb together

The reciprocals belonging here denote joining, mixing, comparing two or more entities together and the like (cf. (44a)). The object is always semantically plural (see (41), (46)) or it is expressed by two coordinated nouns (with or without a conjunction; see (44a) and (44d) respectively), or it denotes an entity or substance parts of which change position relative to each other (see (44b, c)). There are about 20 object-oriented reciprocals in our corpus and all of them (with three exceptions) are derived either from causatives (see 3.2.2.1) or applicatives (see 3.2.2.2). The registered examples of object-oriented reciprocals are typical cross-linguistically with respect to their lexical meaning, their base verbs being three-place lexical reciprocals with the meaning of joining in the broad sense (for instance, in Japanese there are more than 80 of them).

Note that the term ‘together’ in the translations of object-oriented reciprocals has a meaning different from that in the translations of sociatives, as it denotes joining.

3.2.2.1 *Derived from three-place non-applicative transitives.* Example (40b) needs some explanation. This reciprocal is not derived by means of the applicative prefix *o-* (cf. (45b)) but from a transitive with the homonymous prefix *o-* < *ho-* ‘bottom, lower part, back’. In the (40a) example the component *ko-* is not distinguished in any of the dictionaries, the reciprocal contains partial reduplication.

(a) Derived from non-causative verbs:

- | | | | | |
|------|----|----------------------|--|------|
| (40) | a. | <i>kotaci-[taci]</i> | ‘to stick sth (for sth sticky) to sth/sb; to smear/daub sth/sb with sth’ (T4. 342; U3. 30) | (vb) |
| | → | <i>u-kotaci-taci</i> | ‘jumble/[mix] up everything and anything [together]’ (T4. 764) | (vt) |
| | b. | <i>o-usi</i> | ‘to stick in’ (B. 373) (< <i>usi</i> ‘to attach/stick sth to sth’ (vb); T4. 788) | (vt) |
| | → | <i>u-o-usi</i> | ‘link/join sth (e.g. tie two short ropes into a long one)’ (T4. 818) | (vt) |
| | c. | <i>korototo</i> | ‘to break/crush sth into pieces’ (T. 337) | (vt) |
| | | <i>u-korototo</i> | ‘to break/crush sth [together] into pieces’ (UR. 154) | (vt) |

(b) Derived from causative verbs:

- | | | | | |
|--|----|-------------------|--|------|
| | d. | <i>kamu</i> | ‘to cover sth/sb’ (Kir2. 226) | (vt) |
| | → | <i>kamu-re</i> | ‘to cover sth/sb with sth’ (T4. 270) | (vb) |
| | → | <i>u-kamu-re</i> | ‘to lay one on top of another’ (T4. 752) | (vt) |
| | e. | <i>kasma</i> | ‘to put sth aside in abundance; to live sth undone’ (Nak. 141) | (vt) |
| | → | <i>kasma-re</i> | ‘to make sb put sth aside; to make sb live sth undone’ (OI.) | (vb) |
| | → | <i>u-kasma-re</i> | ‘to put aside small portions of sth (food, etc.)’ (T4. 753) | (vt) |
| | f. | <i>kor</i> | ‘to have/possess sth/sb’ (T4. 333) | (vt) |
| | → | <i>kor-e</i> | ‘to give sth/sb to sb’ (T4. 335) | (vb) |
| | → | <i>u-kor-e</i> | ‘to make/let sb [and sb] marry’ (T4. 763) lit. ‘to give sb [bride and bridegroom] to each other’ | (vt) |
| | g. | <i>kotuk</i> | ‘to stick to sth’ (T4. 347) | (vt) |
| | → | <i>kotuk-ka</i> | ‘to stick sth to sth’ (T4. 347) | (vb) |
| | → | <i>u-kotuk-ka</i> | ‘to stick sth to each other’ (T4. 765) | (vt) |
| | h. | <i>oma</i> | i. ‘enter/get in, reach sth’, ii. ‘be present somewhere’ (T4. 467) | (vt) |
| | → | <i>oma-re</i> | ‘to put sth/sb (one thing, one person) somewhere’ (T4. 467) | (vb) |
| | → | <i>u-oma-re</i> | ‘to bring sth/sb together, gather sth/sb’ (T4. 815) | (vt) |

A sentential example:

- (41) *Pon kaykuma u-oma-re wa ek.* (T4. 815)
 small twig REC-pick.up.and.pile-CAUS and AUX
 ‘He picked up and piled small twigs together.’

Example (42) probably describes a traditional situation of betrothing children to each other (one child to another); this reciprocal occurs in (N.) two more times in this meaning (see pp. 144, 145).

- (42) *E-pon hi wano [ecioka] a-eci-u-kor-e kun-ih i a-ye*
 2SG-little NR from YOU.PL 1PL.INC-2PL-REC-have-CAUS going.to-CMPL IND-speak
kor oka-an ruwe ne. (N. 135)
 and be-IND ASS.FIN COP
 ‘Since your childhood we agreed to give (you) [as bride and bridegroom] to each other, and so we live.’

3.2.2.2 Derived from three-place applicative transitives in *ko-* and *e-*. The first and the third member of a derivational chain there may be related as synonyms (see, for instance, (43e)). There seems to be a tendency to formally mark object-oriented reciprocity.

1. Reciprocals derived from applicatives in *ko-*. The applicative prefix changes a two-place transitive into a three-place transitive. The reciprocal prefix changes a three-place transitive into a two-place transitive; cf. (in (43a) there is no standard semantic relation):

- (43) a. *hoppa* ‘to leave sb behind’ (T4. 198–99) (vt)
 → *ko-hoppa* ‘to leave sb at sb’s place’ (T4. 319) (vb)
 → *uko-hoppa* ‘leave sb’ (e.g. the children alone, gathered together) (T2. 68) (vt)
 b. *kari* ‘to turn/spin sth/sb’ (T4. 281) (vt bound stem)
 → *ko-kar-kari* ‘to wrap sth round sth/sb (e.g. swaddling clothes round a baby) (vb) (OI; U4. 65)
 → *u-ko-kar-kari* ‘to wrap, roll sth up’ (T4. 757), ‘to roll up into a bundle’ (B. 526), (vt)
 kari ‘to roll up sth crumpling it’ (OI.)
 c. *nukar* ‘to see, look at sth/sb’ (Kin. 150) (vt)
 → *ko-nukar* ‘to compare sth with sth’ (Kin. 150) (vb)
 → *u-ko-nukar* ‘to examine sth by joining together’ = ‘to compare (two things)’ (vt) (D. 553, Kin. 150)
 d. *pop-te* ‘to cook/boil up sth’ (T4. 544) (vt)
 → *ko-pop-te* ‘to boil up sth together with sth’ (T4. 332) (vb)
 → *u-ko-pop-te* ‘to boil up sth together’ (OI.) (vt)
 e. *poye* ‘to mix sth’ (T4. 546; Kin. 150) (vt)
 → *ko-poye* ‘to mix sth with sth’ (T4. 546; Kin. 150) (vb)
 → *u-ko-poye* ‘to mix everything together’ (Kin. 150) (vt)
 f. *resu* ‘to raise/bring up sb (a child, an animal)’ (T4. 576) (vt)
 → *ko-resu* ‘to raise sb (as bride or bridegroom) for sb’ (Nak. 425) (vb)
 → *u-ko-res-pa* ‘to raise sb for each other (as future spouses)’ (OI.) (cf. (42), (77c), (91b)) (vt)
 g. *sina* ‘to bind, tie sth’ (T4. 636–7) (vt)
 → *ko-sina* ‘to bind/tie sth/sb with/to sth/sb’ (T4. 339; OI.) (vb)
 → *u-ko-sina* ‘to gather/bundle sth together’ (T4. 763; OI.) (vt)
 h. *su-pa* ‘to boil/cook (up) sth (for two people and more/two things and more)’ (T4. 685) (vt)
 → *ko-su-pa* ‘to cook/boil sth together with sth’ (T5. 56–7) (vb)
 → *u-ko-su-pa* ‘to boil (up) sth [more than two things] together’ (U2. 20) (vt)
 i. *tama* ‘to add sth’ (Kir2. 331) (vt)
 → *ko-tama* ‘to add sth to sth/somewhere’ (Kir2. 248) (vb)
 → *u-ko-tama* ‘to add everything together, join sth together’ (K. 292) (vt)

j.	<i>tata</i>	‘to beat/chop sth (fish, meat)’ (T4. 703)	(vt)
→	<i>ko-tata</i>	‘to chop sth together with sth’ (Nak. 245)	(vb)
→	<i>u-ko-tata</i>	‘to chop everything together’ (OI.)	(vt)
k.	<i>yupu</i>	‘to fasten sth’ (T4. 876)	(vt)
→	<i>ko-yupu</i>	‘to fasten sth to sth’ (O. 76)	(vb bound stem)
→	<i>u-ko-yupu</i>	‘to fasten sth (e.g. a piece of luggage on packing it)’ (T4. 767)	(vt)
	<i>u-ko-yup-pa</i>	‘to fasten sth (two or more things together)’ (T4. 767)	(vt)

Sentential examples:

- (44) a. [*Pewre-utar*] *kamtaci newa amam u-ko-poye.* (suggested by Takahashi Y.)
 young-people malt and rice REC-APPL-mix
 ‘The young men mixed up malt and rice.’
- b. [*Asinuma*] [*tumunci*] *citatap ne a-u-ko-tata.* (O2. 193)
 INDEF water-sprite dish.of.pounded.fish as IND-REC-APPL-chop
 ‘[I] chopped [the water-sprite] into small bits as (if I was making) a dish of pounded fish.’
- c. *A-kor ya an-u-ko-kar-kari an-upsor-kuste.* (O3. 248–9)
 IND-have net IND-REC-APPL-wrap IND-bosom-put.in
 ‘[I] wrapped up my net [together] and put [it] into [my] bosom.’
- d. *Kamuy haru yuk haru an-u-ko-suye.* (O3. 382)
 bear food deer food IND.REC-APPL-cook
 ‘[I] cooked a bear and a deer together.’

2. *Reciprocals derived from applicatives in e-*. In (45b) the reciprocal is derived from a transitive with the prefix *o-* < *ho-* ‘bottom, lower part, back’ (not the applicative prefix *o-*; cf. (40b)); the form *o-e-roski* (vt) is registered in the meaning ‘to perch somewhere (of a bird)’ (T4. 454) unrelated lexically to the reciprocal derivative).

- (45) a. *kik* ‘to hit/beat sth/sb’ (T4. 302) (vt)
 → *e-kik* ‘to hit sth against sth’ (T4. 89; O. 20) (vb)
 → *u-e-kik-kik* ‘to hit/strike sth [and sth] together’ (T4. 806; OI.) (vt)
- b. *roski* ‘to stand [up] sth (two things and more)’ (PL) (T4. 584) (vt)
 → *e-roski* ‘to stand up sth somewhere’ (K. 53) (vb)
 → *u-o-e-roski* i. ‘to pile sth one upon the other’; ii. ‘to join sth (a number of shorter things) together (to make sth longer)’ (T4. 813) (vt)

A sentential example:

- (46) *Tek u-e-kik-kik wa onkami.* (T4. 806)
 hand REC-APPL-hit-hit and worship
 ‘Having clapped their hands, they pray.’ (a rite at the Sintoist temples; cf. also (101d))

3.2.2.3 *Anticausative derivation from object-oriented reciprocals.* From some object-oriented reciprocals, of the type discussed in 3.2.2.2 (and also from the respective underlying applicatives; see (47a)) and of the type discussed in 5.1.2 (see (47b, d)), anticausatives can be derived by means of the suffix *ke-* (see 2.3.2.3). We have also included here one example (48c) of an anticausative reciprocal which lacks a corresponding object-oriented recipro-

cal. Anticausative reciprocals derived from object-oriented reciprocals can be lexicalized, but those examples are not considered here (see (112d); cf. (61a)).

- (47) a. *poye* 'to mix sth' (Kin. 150) (vt); cf. (43e); → **poy-ke* (not registered)
ko-poye 'to mix sth with sth' (Kin. 150) (vb)
 → *ko-poy-ke* 'to be mixed with sth' (T4. 332) (vt)
u-ko-poye 'to mix everything together' (Kin. 150) (vt)
 → *u-ko-poy-ke* 'to be mixed (to become homogeneous)' (T4. 761) (vi)
 b. *komo* 'to bend sth' (T4. 325) (vt) → *kom-ke* 'to be bend' (vi)
 (T4. 325)
uko-kom-kom-pa 'to bend sth [together]several times [over sth]' (T4. 758) (vt)
 → *uko-kom-ke* 'to become round/bent, to be bent from both sides' (vi)
 (K. 291, OI.)
 c. *moy-moye* 'to move/touch sth/sb' (T4. 397) (vt)
 → *moy-moy-ke* 'to move' (T4. 397) (vi);
moyoy-ke 'to move as swarms of maggots in putrified fish or meat' (vi)
 (B. 305)
 → *uko-moyoy-ke* '(of fishes, worms) to move in disorder when mixed up' (vi)
 (U3. 70; OI.)
 d. *noye* 'to wind/twist sth (e.g. a thread)' (T4. 437); cf. (61h) (vt)
 → *noy-ke* 'to be wound, twisted' (T4. 436) (vi)
 → *ko-noy-ke* 'to be twisted/wound around sth' (Nak. 188) (vt)
uko-noye 'to twist sth together' (T4. 759) (vt)
 → *u-ko-noy-ke* 'to be twisted/intertwined' (T4. 760) (vi)

Sentential examples:

- (48) a. ... *pet or ta ne yak-ka cep poronno uko-moyoy-ke wa*
 river place in COP if-even fish in.abundance REC-SWARM-ACAUS and
oka yakaye. (U3. 26)
 be(PL) it.is.said.that
 'It is said that in the river the fish is swarming [being mixed in disorder] in abundance.'
 b. *ku-soyne wa ku-inkar akus harikane u-ko-noy-ke*
 1SG-go.outside and 1SG-look when electric.wire REC-APPL-be.intertwined-ACAUS
wa an. (T4. 760)
 and be
 'When (I) went outside and looked around – the electric wires were intertwined
 together.'
 c. *setur-u hu ka uko-kom-ke ikkew-ehe ka uko-kom-ke.* (OI.)
 back-POSS also REC-bend-ACAUS lower.back-POSS also REC-bend-ACAUS
 'His (upper) back is bent, and his lower back is also bent.'

3.3 Simultaneity and succession

Judging by the material at our disposal, Ainu reciprocals display the same features as those of other languages in this respect, i.e. the meaning of simultaneity or succession or chaining (cf. *u-kamu-re*) is determined by the lexical meaning of the root. Thus, the following verbs clearly describe successive subevents:

- (49) *kamu-re* ‘to cover.with’ → *u-kamure* ‘to lay one on top of another’ (T4. 752)
kasuy ‘to help’ → *u-kasuy* ‘to help each other’ (T4. 753)
kes-an-pa ‘to chase/pursue’ → *u-kes-an-pa* ‘to chase/pursue each other’ (T4. 754)
keske ‘to persecute’ → *u-keske* ‘to persecute one another’ (P. 146)
pas-te ‘to make run, chase’ → *u-pas-te* ‘to chase one another’ (P. 146).

A sentential example:

- (50) ... *u-kes-an-pa kor oka ruwe ne* ... (N. 97)
 REC-chase-PL and live ASS.FIN COP
 ‘... they lived chasing each other’, lit. ‘...they chased each other, thus living.’

3.4 Expression of reciprocal arguments

There are two main devices, non-comitative and comitative. In the latter case the postposition *tura* ‘with’ is used. It is widely used in the comitative meaning with non-reciprocal verbs (see (51a–b)); as a rule, applicative forms do not have a comitative meaning and meanings like ‘I ate *together with him*’ are rendered by means of the comitative postposition only).

- (51) a. *Henke tura ipe an-ee*. (Mur. 89)
 old.man with food IND-eat
 ‘I ate the food with the old man.’
 b. *Nea cep pone tura a-kuykuy*.
 that fish bone with IND-bite
 ‘I bit this fish with its bones.’ (Sh. 68)

This postposition is descended from a transitive verb with the meaning ‘to accompany sb’ and agrees with a direct object, like a transitive verb (i.e. the forms under (51) can also be translated as ‘accompanying me, you, him, etc.’); cf. (51c) with (4b) (examples from the Saru dialect):

- c. *en-tura* ‘with me’ *un-tura* ‘with us’
e-tura ‘with you (SG)’ *eci-tura* ‘with you (PL)’
 \emptyset -*tura* ‘with him/her/it’ \emptyset -*tura* ‘with them.’

3.4.1 Non-comitative expression of reciprocal arguments

The expression of reciprocal arguments in non-comitative constructions does not differ from the expression of plural subject in non-reciprocal constructions. For instance, if the subject referents are clear from the previous context the reciprocal arguments are usually omitted, as in other cases (see (1b)). The coordination may be unmarked, in which case the subjects are simply juxtaposed (cf. *hapo mici* ‘mother and father’; D. 192–4) or in some dialects (Northeastern Hokkaido and Sakhalin) the marker may be placed between the coordinated nouns or follow each of them (cf. *hapo newa mici*, *hapo newa mici newa*, *hapo tura mici*). In (52) *tura* is a coordinating conjunction ‘and’; it is materially identical with the postposition ‘with’ (cf. the meanings of the Japanese *to* ‘and’ and ‘with’).

- (52) [*Ito newa / tura Anna*] *u-etay-pa kor okay.* (OI.)
 I. and and A. REC-pull-PL and be.PL
 ‘Ito and Anna were pulling each other.’

3.4.2 Comitative expression of a reciprocal argument. Postposition *tura(no)* ‘with’

If the referents of the reciprocal arguments are not equal pragmatically, the reciprocal construction differs from its non-reciprocal counterpart in agreement. A non-reciprocal construction may have singular (see *ku-sinot* in (53)) as well as plural (see *sinot-as*) agreement when containing a comitative group with the comitative postposition *tura/turano* ‘with’; cf.:

- (53) [*Kani anak*] *Ito tura ku-sinot / sinot-as.* (OI.)
 I TOP I. with 1SG-play play-1PL.EXC
 ‘I play with Ito.’

As mentioned above, there are no explicit agreement markers for the 3SG and 3PL (see (3)–(5)). Therefore the opposition under (53) is morphologically neutralized in this case. This is why in order to establish the existence/non-existence of a discontinuous construction (i.e. whether we may interpret the comitative group as an object rather than as part of the subject) we need sentences with one of the subject participants being expressed by the 1SG or 2SG pronouns. The relevant sentences reveal that there are no discontinuous reciprocal constructions: the predicate is always plural and thus agrees with both arguments, i.e. the form *u-etay-pa-as* cannot be replaced by **k[u]-u-etaye* (the same holds for syntactically analogous sociative constructions).

- (54) [*Kani anak Anna ku-ne wa*] *Ito tura u-etay-pa-as kor okay-as.* (OI.)
 I TOP A. 1SG-COP and I. with REC-pull-PL-1PL.EXC and be.PL-1PL.EXC
 ‘I am Anna, Ito and I (lit. ‘[I] together with Ito’) are pulling each other.’

This difference does not manifest itself if both participants are named by nouns or 3rd person pronouns, because, as has been mentioned, in this case the verbal agreement is zero marked and it is not clear whether the predicate agrees with the first coordinated subject and is singular, or with both. Note that the comitative argument cannot be commonly omitted (at least, our informant does not accept such examples), while the non-comitative argument can as a rule be omitted if it is clear from the context (as in a non-reciprocal construction). This can be accounted for by the fact that unlike a non-comitative argument, the comitative argument cannot have an antecedent in the preceding context. Cf.:

- (55) [*Ito*] *Anna tura u-etay-pa kor okay.* (OI.)
 I. A. with REC-pull-PL and be.PL
 ‘Ito and Anna were pulling each other.’

3.5 Nominalization

Nominalization of verbal forms with the prefix *u-* is possible and, like nominalization of other verbal forms, may be either marked by the nominalizer *p* on transitives (56e) or it

may be unmarked on intransitives (57). The auxiliary noun *p* ‘thing’ may nominalize even the passive form of reciprocals (see (56e)); cf.:

- (56) a. *sina* ‘to bind, tie’ (T4. 636–7) (vt)
 b. *ko-sina* ‘to bind, tie with/to sth/sb’ (T4. 339) (vb)
 c. *u-ko-sina* ‘to gather, bundle sth together’ (T4. 763) (vt)
 d. *cep a-u-ko-sina*.
 fish IND/PASS-APPL-REC-bind
 i. ‘We/I tied the fishes together.’ (active)
 ii. ‘The fishes are tied by somebody.’ (passive)
 e. *cep a-u-ko-sina p* (T4. 763)
 ‘a bunch of fish.’
- (57) *kasuy* ‘to help sb, to help with sth’ (T4. 287) (vt)
 → *u-kasuy* *u-kasuy* i. ‘to help each other’; ii. ‘mutual help’ (T4. 753).

Instances with the auxiliary verb *ki* ‘to do’, like those in (35a, b), are not nominalizations proper: most likely they are periphrastic verb forms; cf. *cis-an* ‘I cry’ and *cis a-ki* ‘I cry’, lit. ‘I do crying’.

3.6 Restrictions

Reciprocals do not derive from two-place intransitives, i.e. from verbs taking a complement with a postposition (not to mention one-place intransitives, which goes without saying). In order to express reciprocity, a two-place intransitive verb should first be transitivized by means of an applicative prefix (cf. 3.1.1.2). There are also a number of transitives which at first glance can be reciprocalized but in reality they are not used reciprocally, e.g. **u-ruska* ‘with the intended meaning ‘to be angry because of each other’. The reason is, its base verb *ruska* can take an inanimate object only. In such instances, in order to form a needed reciprocal, a number of preliminary operations analogous to a certain degree to those performed on two-place intransitives, should be performed (see (17e)), cf. *nu* ‘to listen to sth/*sb’ (vt) (T. 437–8) [→ **u-nu* (intended meaning: ‘to listen to each other’ (not registered and rejected by Oda Ito)] → *i-nu* ‘to hear, listen’ (vi) (T. 236) → *ko-i-nu* ‘to listen to sb’ (vt) (T. 355) → *u-ko-i-nu* ‘to listen to each other’ (OI.; cf. *u-ko-i-ruska* in (17f)). It goes without saying that these are not restrictions proper. As reciprocals in Ainu are highly productive, restrictions on transitives are likely to be of trivial nature, e.g. the inanimate subject of the base verb.

4. Sociatives with the prefix *u-*

4.1 Derived from non-applicatives

There are only a few verbs with the prefix *u-* at our disposal that have the sociative meaning. This type of sociative derivation does not seem to be productive.

4.1.1 *Subject-oriented sociatives*4.1.1.1 *Derived from one-place intransitives.* The only example at our disposal:

- | | | | |
|------|------------------------------|--|------|
| (58) | <i>pirasa</i> | ‘to spread, widen, open sth’ (Kay. 386; OI) | (vt) |
| → | <i>si-pirasa/si-piras-pa</i> | ‘to widen, enlarge’ (T4. 644; OI.) | (vi) |
| → | <i>u-si-piras-pa</i> | ‘for all to be spread out’ (T4. 789) (cf. (59h)) | (vi) |

4.1.1.2 *Derived from two-place transitives.* This group of derivatives is semantically heterogeneous and its content seems to be accidental, as it comprises verbs of active action (e.g. ‘to cry’, ‘to gather’, ‘to cross a river’) as well as of spontaneous processes or states (e.g. ‘to be spread out’, ‘to grow up’, ‘to multiply’, ‘to alternate’). Derivation of this small unique group of sociatives involves intransitivization of the base verb, though generally sociative derivation does not change verbal valency. Another peculiarity of this group of sociatives is a larger or lesser degree of lexicalization; in fact, they might be entered among lexicalized *u-* verbs in 8.2. As a rule, intransitivization also accompanies standard derivation of *reciprocals* from two-place transitives but in this case the meaning of the base verb is included in the meaning of the derived reciprocal. This is not the case with the sociatives discussed here: we observe a kind of non-standard decausativization, with the exception of (59c). The latter sociative requires explanation as the situation it describes is denotationally close to a reciprocal one. For instance, it may be used in the contexts both involving tears: ‘at first meeting, the women take each other by the hands and express mutual liking by tears of joy’ (this is an explanation in T4; in Kir2. 347; as well as in the meaning given by our informant Oda Ito), tears are also mentioned, but they are bitter tears: ‘to cry together on sb’s death’.

- | | | | | |
|------|----|--------------------------|---|------|
| (59) | a. | <i>as-te</i> | ‘to make/let sb stand’ (T4. 30) (<i>as</i> ‘to stand’ (T4. 26) (vi)) | (vt) |
| | → | <i>u-as-te</i> | ‘to spread (of plants), multiply (of people)’ (T4. 802) | (vi) |
| | b. | <i>cip-e-kusa</i> | ‘to take sth/sb across a river by boat’ (T4. 56) (<i>cip</i> ‘boat’) | (vt) |
| | → | <i>u-cip-e-kusa</i> | ‘to cross a river/sea together in a boat’ (T4. 748) | (vi) |
| | c. | <i>ciskar</i> | ‘to cry about sb/sth’ (T4. 62) | (vt) |
| | → | <i>u-ciskar-pa</i> | ‘to cry together’ (T4. 748) | (vi) |
| | d. | <i>hayok-ko-tur-pa</i> | ‘to arm sb (with weapons)’ (‘arms-APPL-straighten sth’) (OI.) | (vt) |
| | → | <i>u-hayok-ko-tur-pa</i> | ‘for everyone to be armed’ (T4. 749; OI.) | (vi) |
| | e. | <i>kusis</i> | ‘to brew [sth]’ (Kay. 214) | (vt) |
| | → | <i>u-kusis</i> | ‘to ferment’ (Kay. 101) | (vi) |
| | f. | <i>oma</i> | ‘to position sth, enter/get in/on’ (T4. 467) | (vt) |
| | → | <i>u-oma</i> | ‘for a lot of people to gather together’ (T4. 814),
‘for a lot of things to be gathered together’ (U4. 89) | (vi) |
| | g. | <i>o-mina-usi-usi</i> | ‘to laugh/rejoice at sth’ (OI.) (‘back-laughter-attach’) | (vt) |
| | | <i>u-o-mina-usi-usi</i> | ‘for everyone to laugh loudly’ (T4. 815) | (vi) |
| | h. | <i>pirasa</i> | ‘to spread, widen, open sth’ (Kay. 386; OI) | (vt) |
| | → | <i>u-piras-pa</i> | ‘for all to be spread out, dispersed’ (T4. 789) | (vi) |
| | i. | <i>resu</i> | ‘to raise/bring up (a child, animal)’ (T4. 576) | (vt) |
| | → | <i>u-res-pa</i> | ‘to grow up together’ (T4. 783; OI) | (vi) |

j.	<i>ronnu</i> (PL)	‘to kill (two people/animals and more)’ (T4. 583)	(vt)
→	<i>u-ronnu</i>	i. ‘for a lot of people to be killed/die’ (cf. ii. ‘to kill each other’) (T4. 783–84)	(vi)

4.1.2 Object-oriented sociatives

There is no data so far.

4.2 Derived from applicatives in *ko-* and *e-*

No data.

5. Reciprocals with the complex prefixes *uko-* and *ue-*

This section concerns derivations with the prefixes *uko-* and *ue-* interpreted as single complex affixes because the corresponding applicative forms in *ko-* and *e-* are not registered (and/or rejected by our informant), or not related to them semantically.

5.1 Derivatives in *uko-*

5.1.1 Subject-oriented reciprocals

It should be stressed that unlike object-oriented ones, subject-oriented reciprocals almost never occur with the prefix *uko-*. We have no convincing examples of this type. The only two examples (see (60a) and (60b)) at our disposal can be included here with reservations. In both cases the direct object is incorporated (cf. also 6.1.1.1.2), which entails intransitivization. In (60a) there is no base form, i.e. the form **situ-kor* lit. ‘to have a ridge’ (as well as the applicative **ko-situ-kor*) is non-existent, and it occurs only with the prefix *uko-*. In other words, (60a) may be regarded as a reciprocal *tantum*, but it is convenient to consider it here.

- (60) a. *uko-situ-kor* ‘for two mountain ridges to come together’ (T4. 764) (vi)

A special place belongs to the derivation under (60b): it is characterized by the simultaneous use of two devices on the collocation *seta ne*, namely, incorporation of the direct object and prefixation of *uko-*. As in (60a), there is no base form (i.e. **seta-ne* with the same intended meaning as *seta ne*) with incorporation. In other words, this is the same type of derivation as in 3.1.3.2.1. Note that the Ainu copula *ne* ‘to be sth/sb’ is a transitive verb, which is obvious from the agreement marker on the predicate in the sentence *seta a-ne* (not **seta ne-an*) ‘I am a dog’ (it may be noted in passing that the copula *mu* ‘to be sth/sb’ is also transitive in Nivkh).

- b. *seta ne* ‘to be a dog’ (vt!)
uko-seta-ne lit. ‘to be dogs together/with each other’ (vi)

A sentential example (the predicate is used figuratively; see also (N. 58)):

- c. *E-kor riyap e-kor tures-i uko-seta-ne.* (N. 55)
 your-POSS bear.cub your-POSS younger.sister-POSS soc-dog-be
 ‘Your bear cub and your younger.sister behave like dogs.’ (=copulate, according to context)

5.1.2 Object-oriented reciprocals. Verbs of joining objects together

This group comprises at least 20 derivatives. The origin of this usage of the prefix *uko-* with the central sociative meaning can be accounted for by re-interpretation of the complex *u-ko-* as a single morpheme for marking object-oriented reciprocals (see 3.2.2.2 and example (43)). A certain affinity of object-oriented sociatives and object-oriented reciprocals might also have played a role (see (93) and the text above it). The base verbs are two-place transitives, and so are the derivatives. But their object is either semantically plural or consists of (uniform) parts or components involved in the action. In some cases, the base and the derivative are nearly synonymous in meaning, which makes the former a lexical object-oriented reciprocal, the prefix serving to stress this meaning (cf. (61f, m, p, q, s)). Semantically, these reciprocals are contiguous to those considered in 3.2.2. Their meanings are partly determined by the meaning of the base verbs: they denote making or putting or twisting several things together into one. The use of the sociative prefix *uko-* for the derivation of object-oriented reciprocals can probably be accounted for by the influence of object-oriented sociatives: in both cases the subject may be singular and the object is necessarily (semantically) plural (see also 6.1.2). Note that ‘together’ in the English translations below does not express a joint action of subject referents but a joining of two or more object referents. Some of the base forms have derivatives with the applicative prefix *ko-* but the latter are not related semantically in a standard way to the meaning of the object-oriented reciprocals, though at some time they might have been related (cf. *ko-cupu-cupu* ‘to roll up sth/sb into sth’ (O. 64), *ko-muye* ‘to give as a keepsake, a memento’ (T5. 133), *ko-tak-tak-u* ‘to ram, put sth into a heap, lean sth to sth’ (T3. 2–111), *ko-niki* ‘to fold sth together’ (B. 264)). Some of the applicatives in *ko-* have occurred with an incorporated object only (cf. *tek-ko-noye* ‘to twist sth with hands’ (O. 143)).

- (61) a. *cupu* i. ‘to fold sth’, ii. ‘to hide sth’, iii. ‘to shut sth (eg. eyes)’ (O. 15)
 → *uko-cupu* ‘to fold sth [together]’ (O. 156; cf. (112d))
 b. *epanu* ‘to wrap sth (e.g. a head band) around one’s head’ (T4. 107)
 → *uko-epanu* ‘to wrap sth (two head bands) together around one’s head’ (T4. 756)
 c. *kap-kapa* ‘to crush/flatten sth’ (T4. 279)
 → *uko-kap-kapa* ‘to squash sth flat with both hands’ (T4. 757; OI.)
 d. *kekke* ‘to break sth (eg. firewood)’ (T4. 292)
 → *uko-kekke-kekke* ‘to break/tear to pieces sth (eg. meat and fish together in order to cook them in one pot) together’ (U4. 21)
 e. *kisma* ‘to catch/grasp/get hold of sb/sth’ (T4. 312)
 → *uko-kisma* ‘to hold sth/sb together’ (T4. 758)
 f. *kom-komo*(SG); ‘to bend/bow sth’ (K. 137)
kom-pa(PL)
 → *uko-kom-kom-pa* ‘to bend sth [together] several times [over sth]’ (T4. 758)

g.	<i>muye</i>	‘to bunch/bundle sth’ (T4. 401)
→	<i>uko-muye</i>	‘to bunch/bundle sth together’ (T4. 759)
h.	<i>niko/niki</i>	‘to fold up sth’ (K. 170; B. 320)
→	<i>uko-nike</i>	‘to fold (up) sth (clothes)’ (T4. 759)
	<i>uko-niko</i>	‘to fold (up) sth’ (B. 527)
i.	<i>ninu</i>	‘to stitch [sew] sth’ (T4. 419)
→	<i>uko-ninu</i>	‘to sew sth [and sth] together’ (T4. 759)
j.	<i>noye</i>	‘to wind/twist sth (e.g. a thread)’ (T4. 436)
→	<i>uko-noye</i>	‘to twist sth together’ (T4. 759)
k.	<i>nuya-nuya</i>	‘to rub, rumple sth’ (HY. 43; OI.)
→	<i>uko-nuya-nuya</i>	‘to rub sth and sth together’ (OI.)
l.	<i>par-o-rar-pa</i>	‘to press in [<i>rar-</i>] sth (food) into [<i>o</i> -APPL] the mouth [<i>par</i>]’ (K. 201)
→	<i>uko-par-o-rar-pa</i>	‘to eat anything, to fill up mouth with anything and everything [all together]’ (T4. 760–61)
m.	<i>pete</i>	‘to boil and eat sth (e.g. green vegetables) without seasoning’ (T4. 524)
→	<i>uko-pete</i>	‘to boil and eat together (green vegetables)’ (T4. 761)
n.	<i>ray-pa</i>	‘to move (in some direction) sth/sb (two or more)’ (T4. 569)
→	<i>uko-ray-pa</i>	‘to gather, clutch/grab sth/sb’ (T4. 763)
o.	<i>se</i>	‘to carry sth on one’s back’ (O. 125)
→	<i>uko-se</i>	‘to carry sth on one’s back having put it together’ (O. 158)
p.	<i>suke</i>	‘to boil/cook sth’ (Mur. 213)
→	<i>uko-suke</i>	‘to boil/cook sth together with sth’ (Mur. 223)
q.	<i>suppa-kar</i>	‘to bundle sth together and then tie up’ (T4. 686)
→	<i>uko-suppa-kar</i>	‘to pack sth together with a rope or cord so as to carry on one’s back’ (T4. 764)
r.	<i>tak</i>	‘to call sb’ (T4. 692; T2. 68)
→	<i>uko-tak</i>	‘to call sb (two people and more) together’ (T4. 764; T2. 68)
s.	<i>tak-taku</i>	‘to make sth round, press sth into a round shape’ (T4. 692)
→	<i>uko-tak-taku</i>	‘to press/make sth into a round shape or lump with both hands’ (T4. 764)
t.	<i>teskao</i>	‘to knit sth’ (T4. 714)
→	<i>uko-teskao</i>	‘to knit sth together’ (T4. 765)
u.	<i>unu</i>	‘put/fix sth somewhere’ (e.g. an arrow on a bow-string)’ (Nak. 66)
→	<i>uko-unu</i>	‘to put/fix sth on sth together’ (e.g. an arrow on a bow-string) (OI.) (see also 5.2.2).

Sentential examples (in (62a) the words preceding *cip* are its attribute (a relative clause); *uko-se* in (62c) may also be interpreted as an object-oriented sociative):

- (62) a. *Ita a-uko-teskao wa a-kar cip.* (T4. 765)
 board PASS-REC-fasten and PASS-make boat
 ‘The boat made (by) fastening boards together.’
- b. *Unma tus horikasi racitke-re wa uko-noye kor an.* (T4. 759)
 horse rope from.above hang-CAUS and REC-twist and be
 ‘(He) hung the horse ropes from above and twisted them together.’

- c. *Yuk ne yak-ka kamuy ne yak-ka a-uko-se.* (OI.)
 deer COP if-even bear COP if-even IND-REC-carry.on.one's.back
 'I carried on my back a deer and a bear together.'

5.2 Derivatives in *ue-*

As in the above cases, the forms in *uko-* are more numerous than those in *ue-* (cf. 3.1.1.2 and 3.1.2.2).

5.2.1 Subject-oriented reciprocals

No data so far.

5.2.2 Object-oriented reciprocals

We have only two reciprocals of this type at our disposal. The first one implies two non-symmetrical objects (an arrow and a bow) though it denotes their joining (it is not unlikely that these objects were thought of by traditional Ainu as uniform; cf. (78b), (93)), therefore this example is not an ideal one:

- (63) a. *unu* 'to put/fix sth somewhere' (e.g. an arrow on a bow- (vb)
 string) (Nak. 66)
 → *ue-unu* 'to put/fix sth somewhere (all) together' (e.g. an arrow (vb)
 on a bow-string) (Kir2. 347)
 b. *nuya-nuya* 'to rub, rumple sth' (HY. 43; OI) (vt)
 → *ue-nuya-nuya* 'to rub sth and sth together' (OI.) (vt)

The base and the reciprocal verb do not differ significantly in meaning (cf. (64a) and (64b)). It is noteworthy that our informant does not know the verb *unu*; she claims that in (64b) only *ue-unu* can be used and not the form *unu* (she regards *ue-unu* and *uko-unu*, and also *ue-nuya-nuya* and *uko-nuya-nuya* as synonymous; cf. (61k, u)). Thus there seems to be a tendency for the reciprocal to oust the underlying form (in this respect the following fact may also be indicative: in 13 texts of Chiri Yukie (Kirikae 1989:347) the form *ue-unu* occurs 7 times while the form *unu* does not occur at all). As has been mentioned above, there is a general tendency to replace the unmarked object-oriented (lexical) reciprocals with their marked reciprocal counterparts (cf. 3.2.2.2, and 5.1.2).

- (64) a. *A-kor ciros a-etaye hine ku a-unu hine ...* (Nak. 66)
 IND-have arrow IND-pull.out and bow IND-put and
 '[I] pulled out my arrow and put it in the bow and ...'
 b. *Nesko pon ku nesko pon ay ue-unu.* (Kir2. 135–36)
 walnut little bow walnut little arrow REC-put
 '[He] put a small walnut arrow in a small walnut bow.'

A sentential example:

- (65) *A-kor hapo kampi pukuru ue-nuya-nuya / uko-nuya-nuya.* (OI.)
 IND-have mother paper bag REC-APPL-rub REC-APPL-rub
 'My mother rubbed paper against the bag', lit. '... rubbed paper and the bag together.'

6. Sociatives with the complex prefixes *uko-* and *ue-*

6.1 Derivatives in *uko-*

The sociative function of this prefix is distinguished in (T4), where it is mentioned as the second meaning alongside one of the manifestations of the reciprocal meaning: *uko-* i. ‘to face, go towards one another’; ii. ‘to cooperate with one another’ (T4. 755). Judging by the data of Sections 3 and 4, the prefix *u-* is used as a productive marker of reciprocity and it is only on a very small group of unproductive derivatives that it marks the sociative meaning. The data cited in Sections 5 and 6 show that the principal meaning of the prefix *uko-* is sociative, and it is productive only on a small number of bases as a marker of object-oriented reciprocity. We cannot cite any restrictions on the sociative use of *uko-* (true, our informant has refused to form a sociative from the verb *usi* ‘to attach sth to sth’ (T4. 788) (vb)). It is semantically natural that there are no sociative forms from reciprocals and vice versa, i.e. derivatives with the prefixes **uko-u-* and **u-uko-*. As it is highly productive, the dictionaries do not register all the sociatives with *uko-*: in texts there occur numerous sociative formations not registered in the dictionaries.

6.1.1 Subject-oriented sociatives

6.1.1.1 Derived from intransitives. The prefix *uko-* derives sociatives both from base intransitives and derived intransitives, including those with an incorporated direct object. Sociatives are formed from verbs of various lexical types, denoting both controlled (like ‘to eat’, ‘to work’, ‘to dance’, etc.) and unwilling or spontaneous (e.g. ‘to be small’, ‘to grow old’, ‘to suffer’, etc.) actions and processes, including those with an inanimate subject (cf. ‘to burst open’, ‘to become stiff’, ‘to crackle (of a fire)’). The features of the presence/absence of the respective applicative form and retention/change of the applicative meaning in the sociative derivative distinguish three subgroups. In subgroup (a) the comitative object is usually predictable: in (66b) it is the host at whose place one is staying the night and in (66a) it is one of the spouses; thus it is lexically determined. In the derivations below, the base forms are omitted because their meaning is clear from that of the derivatives.

(a) The meaning of the applicative is included in that of the sociative:

- | | | | | |
|------|-----|--------------------|--|------|
| (66) | a. | <i>uko-onne-pa</i> | ‘for everyone to grow old together’ (T4. 760) | (vi) |
| | cf. | <i>ko-onne-pa</i> | ‘to grow old together with sb’ (T5. 131) | (vt) |
| | b. | <i>uko-rewsi</i> | ‘to stay the night together’ (O. 157; OI.) | (vi) |
| | cf. | <i>ko-rewsi</i> | ‘to stay the night with sb’ (Nak. 424; O. 70; OI.) | (vt) |

(b) The meaning of the applicative is not included in that of the sociative:

- | | | | | |
|--|-----|-----------------------|---|------|
| | c. | <i>uko-hokus</i> | ‘to turn/fall together (of all)’ (OI.) | (vi) |
| | cf. | <i>ko-hokus</i> | ‘to fall, turn with sth/*with sb’ (Kir2. 242) | (vt) |
| | d. | <i>uko-kar-kar-se</i> | ‘to roll over together’ (O. 156) | (vi) |
| | cf. | <i>ko-kar-kar-se</i> | ‘to roll over with sth/*with sb’ (O. 67) | (vt) |
| | e. | <i>uko-horippa</i> | ‘to dance together’ (OI.) | (vi) |
| | cf. | <i>ko-horippa</i> | ‘to dance for sb/*with sb’ (OI.) | (vt) |

- | | | | |
|-----|----------------------|---|------|
| f. | <i>uko-nepki</i> | ‘to work together’ (OI.) | (vi) |
| cf. | <i>ko-nepki</i> | ‘to work for/instead of sb’ (OI.) | (vt) |
| g. | <i>uko-pakoat</i> | ‘for everyone to be accused of crime together’ (T4. 760) | (vi) |
| cf. | <i>ko-pakoat</i> | ‘to get/become involved in sth’ (T4. 331) | (vt) |
| h. | <i>uko-simusiska</i> | ‘to cough together [at the doorway in order to inform a host of one’s arrival]’ (O. 158) | (vi) |
| cf. | <i>ko-simusiska</i> | ‘to cough in the direction of sb (when visiting sb’s house; giving an answer, etc.’ (T4. 331) | (vt) |

(c) There is no underlying applicative (its absence may be accidental):

- | | | |
|----|---------------------------|--|
| i. | <i>uko-cipattankenere</i> | ‘(for the cooking, e.g. cooked chestnuts) to be (split) open; for all to burst open’ (T4. 755) |
| j. | <i>uko-etorotur-pa</i> | ‘to snore together’ (HY. 69) |
| k. | <i>uko-ipe</i> | ‘to eat together’ (OI.) |
| l. | <i>uko-kimatek</i> | ‘to be surprised together’ (T4. 758) |
| m. | <i>uko-kirirse-pa</i> | ‘to scream together’ (HY. 43) |
| n. | <i>uko-kisattarara</i> | ‘to listen attentively/ heed together’ (O. 156) |
| o. | <i>uko-maratto-kor</i> | ‘to hold a party together with everyone’ (T4. 759) |
| p. | <i>uko-nitne</i> | ‘for one’s both feet/legs to become stiff’ (T4. 759) |
| q. | <i>uko-nokan-pa</i> | ‘for all/both to be small/young’ (T4. 759) |
| r. | <i>uko-nucaktek</i> | ‘for everyone to play together happily’ (T4. 760) |
| s. | <i>uko-pakakse</i> | ‘to crackle all together (about fire sparks, roasted beans)’ (T4. 760) (OI: about guns) |
| t. | <i>uko-parapararak-ta</i> | ‘to cry together in loud weeping voices’ (T4. 760) |
| u. | <i>uko-sikaske</i> | ‘(for everyone) to say they don’t know’ (O. 158) |
| v. | <i>uko-sirkirap</i> | ‘to suffer an inconvenient lifestyle together’ (T4. 763–4) |
| w. | <i>uko-suke</i> | ‘to cook together’ (OI.) (vi) (cf. (61p)) |
| x. | <i>uko-tanas-tanas</i> | ‘to be uneven (to stick out here and there)’ (T4. 764) |
| y. | <i>uko-tasaske</i> | i. ‘to sting /smart all over’ (T4. 764),
ii. ‘(of everyone) to feel pain’ (OI.) |
| z. | <i>uko-yay-ko-puntek</i> | ‘to rejoice together’ (cf. (18e)). |

Sentential examples:

- (67) a. *Inne utar-i tura-no uko-ipe-an wa yak-un po keraan*
 be.many people-POSS together-ADV SOC-eat-IND and if-EMP more be.delicious
pe ne. (OI.)
 ASS.FIN
 ‘When we eat together with many (other) people the food is much more delicious.’
- b. *Katkemat-utar uko-suke kor po keraan.* (OI.)
 women-PL SOC-cook if more be.delicious
 ‘If women cook together [the food] turns out to be even more delicious.’
- c. *Ainu-utar uko-horip-pa.* (OI.)
 Ainu-PL SOC-dance.PL
 ‘The Ainu danced together.’

6.1.1.1.1 *The meaning of intensity?* The meanings of plurality/sociativity and intensity are close to one another. The five sentences below (by which we shall try to illustrate the mean-

ing of intensity; with the sociative *uko-* and *ue-* forms of the verb *hopuni* ‘to get up, fly, jump (up)’) are probably related to the sociative meaning. In these sentences *the subject is inanimate*. The sociative sense seems to be weakened. The use of the sociative prefix is conditioned by a kind of “semantic agreement”: according to our informant, the use of *uko-* in (68a) is determined by the fact that there are two parties of participants *quarrelling* with each other, which follows from the meaning of the subject NP *sakayo* ‘quarrel’. This factor does not seem to obligatorily result in the use of the sociative marker; cf. (68c). Note however that in (68c), unlike in (68a, b), the intensifying attribute *wen* ‘angry, cruel, severe’ is absent; its possible correlation with the intensifying *uko-* is supported by examples (68d) and (68e) with the same subject: the former contains both *wen* and *ue-* (with an intensifying meaning as well, it seems; cf. also (74g)), and the latter contains neither. Omission of *uko-* in (68a) is considered by our informant as less acceptable. We regard the subject in (68a) as unmarked for plurality which is a prerequisite for the sociative meaning. Note that *sakayo* ‘quarrel’ in (68a) is a lexical reciprocal and presupposes at least two participants. The sociative marker probably serves as an intensifier here. In (68b) the meaning ‘together’ is absent: the battles did not take place simultaneously. The reason for *uko-* may be the plural meaning. Note that the subject is a lexical reciprocal.

- (68) a. *Wen sakayo uko-hopuni.* (N. 87)
angry quarrel(SG/PL?) soc-begin
‘An angry quarrel began (between them).’
- b. *Tuwan rorumpe wen rorumpe uko-hopuni.* (Nak. 361)
many battle cruel battle soc-happen
‘There happened many battles, cruel battles.’
- c. *Omayse-ka ta u-uk-rorumpe hopuni.* (Sh. 69)
floor-top on REC-grapple-fight arise
‘Rough-and-tumble fights started on the floor.’
(*u-uk* ‘to grapple with each other’ (O. 166) (vi), lit. ‘to get each other’; it is an incorporated attribute of *rorumpe* ‘fight’).
- d. *Rera ruy kor upun-patce, wen upun-cise ue-hopuni pekor*
wind strong when snow-fly.in.disorder angry snow-spray soc-fly as.if
siriki. (T4. 803–4)
become
‘When the wind is strong the snow is flying in disorder, it becomes as if a severe snow spray is flying in a swirl.’
- e. *Upun-cise hopuni.* (T4. 778)
snow spray fly
‘The snow spray flies.’

6.1.1.1.2 Sociatives with an incorporated object. Two-place transitives with an incorporated direct object are naturally intransitive (see 2.3.2.6), therefore they are considered in this section. Intransitive sociative constructions with an incorporated direct object have parallel transitive sociative constructions with same-stem verbs (cf. (70a) and (70b)). Particularly frequent in these cases is the verb *kor* ‘to have’; cf. *sake-kor* ‘to have/acquire sake’, *mat-kor* ‘to have a wife’, *po-kor* ‘to give birth to a child; become a parent’, etc. (see T4. 599,

380, 538). Therefore this component, along with some others, e.g. *ne* ‘to be/become’, can be regarded as a verbalizer (see Shibatani 1990:45), i.e. a kind of semi-suffix.

- (69) a. *Iwan nispa kotan kor wa an.* (OI.) (vt)
 six lord village possess and be
 ‘Six elders were governing the village.’
 → b. *Iwan nispa kotan uko-kor wa an.* (OI.) (vt)
 six lord village soc-possess and be
 (same meaning as (70b)).
- (70) a. *Iwan nispa kotan-kor.* (cf. T4. 343) (vt)
 (the common way of expressing the same meaning).
 → b. *Iwan nispa uko-kotan-kor, or-o ta an-an.* (N. 140) (vi)
 six lord soc-village-possess place-POSS at be-IND
 ‘Six elders governed the village together, and there I lived.’

The following two derivations seem to be of this type as well, though with a slight deviation from the sociative meaning proper (from *re kor* ‘to have a name’ and *po sak* ‘to not have a child’ respectively).

- (71) [*Taan aynu-utar*] *re uko-kor* (vt) / *uko-re-kor.* (Ch2. 96) (vi)
 these person-PL name soc-have soc-name-have
 ‘These men have the same name.’
- (72) [*Taan aynu-utar*] *po uko-sak* (vt) / *uko-po-sak.* (Ch2. 96) (vi)
 this person-PL child soc-not.have REC-child-not.have
 ‘These men have no children.’

6.1.1.2 Derived from transitives. As in 6.1.1.1, two subgroups can be distinguished here according to the presence/absence of a respective applicative form in *ko-*. The prefix *uko-* can be added to applicatives in *e-* (cf. *uko-e-oripak* in (73b), *uko-e-rew-pa* in (73c)); while applicatives in *ko-* do not take it, probably for phonetic reasons (cf. *uko-ko-*). In most cases, the meaning of the base verb constitutes a part of that of the derived sociative, therefore the base verb is omitted.

1. The meaning of the applicative is not included in that of the sociative.

- (73) a. *uko-cotca* ‘to shoot at sb together’ (OI.) (vt)
 cf. *ko-cotca* ‘to shoot with sth’ (vb bound stem); registered with an incorporated object:
mun-ko-tata ‘to shoot with garbage (*mun-*) (using it instead of an arrow)’ (vt)
 (U3.15)
- b. *e-oripak* ‘to respect/honour acting discreetly’ (T4. 105) (vt) ← *oripak* (vi)
 ‘to be polite acting discreetly (in the presence of a superior person or a God)’ (T4. 481)
 → *uko-e-oripak* ‘for everyone to have profound respect for sb acting discreetly’ (vt)
 (T4. 756)
- cf. *ko-oripak* ‘to respect/honour sb acting discreetly’ (T4. 330) (vt)
 c. *e-rew[si]* ‘[to stay the night somewhere]’ (K. 81) (vt) ← *rew[si]* ‘to stay (vi)
 the night’ (Nak. 424)

→	<i>uko-e-rew[si]-pa</i>	‘to stay for a night together [somewhere]’ (N. 153)	(vt)
cf.	<i>ko-rewsi</i>	‘to stay the night with sb/somewhere’ (Nak. 424; OI.)	(vt)
d.	<i>uko-kik(-kik)</i>	‘to strike, beat sb together (repeatedly)’ (Nak. 59)	(vt)
cf.	<i>ko-kik(-kik)</i>	‘to strike/hit sb somewhere/[against sth]’ (O. 67)	(vb bound stem)
(all the examples with an incorporated object only)			
e.	<i>uko-kor</i>	‘to have sth/sb (e.g. a child) together (of a couple)’ (T4. 758)	(vt)
cf.	<i>ko-kor</i>	i. ‘to take sth away, receive from sb’, ii. ‘to have [feel] sth [e.g. anger] against sb’ (T4. 323), iii. ‘*to have sth together with sb’ (not registered)	(vb)
f.	<i>uko-nu</i>	‘to listen to sth/sb together (of all)’ (Kin. 150–51)	(vt)
cf.	<i>ko-nu</i>	i. ‘to hear sth from sb’, ii. ‘to ask sb about sth’ (T4. 328)	(vb)
g.	<i>uko-onkami</i>	‘to worship together’ (T. 760), also ‘to pray together’ (OI)	(vi)
cf.	<i>ko-onkami</i>	‘to worship (in a certain manner), greet sb in a proper way’ (T. 330)	(vt)
h.	<i>uko-peka-peka</i>	‘for everyone together to take care of sb’ (U2. 121; O. 157)	(vt)
cf.	<i>ko-peka-peka</i>	‘to take care of sb concerning sth’ (O. 69)	(vb)
i.	<i>uko-pun-pa</i>	‘for everyone together to raise, hold up, lift sth/sb’ (T4. 762)	(vt)
cf.	<i>ko-pun-pa</i>	‘to give/offer sth (food) to sb’ (Nak. 190)	(vb)
j.	<i>uko-sitoma</i>	‘for everyone to be afraid of sb/sth’ (T4. 764)	(vt)
cf.	<i>ko-sitoma</i>	‘to be afraid of sth from sb’ (T4. 340)	(vb)

2. There is no respective applicative.

k.	<i>uko-enucisiske</i>	‘for everyone together to stare/glare at sb/sth’ (T4. 756)
l.	<i>uko-eramiskari</i>	‘to not know sth/sb together’ (HY. 19)
m.	<i>uko-kisma</i>	‘catch/grasp/grab/get hold of sth/sb together’ (O. 156) (cf. (61e))
n.	<i>uko-omonnure</i>	‘to praise sth/sb together’ (T4. 760)
o.	<i>uko-roski</i>	‘to stand/make sth (e.g. a noise) together’ (T4. 763)
p.	<i>uko-san-ke</i>	‘to utter sth together’ (OI.)
q.	<i>uko-sawot</i>	‘for everyone to run away, flee from sb’ (T4. 763)
r.	<i>uko-sik-e-roski</i>	‘for everyone to see/look at sb/sth’ (T4. 763) (<i>sik</i> ‘eye’).

Sentential examples:

- (74) a. *A-unu-hu ka a-ona-ha ka po-ho uko-omap kor*
 IND-mother-POSS and IND-father-POSS and child-POSS soc-take.care and
okay. (OI.)
 be.PL
 ‘My mother and my father are taking care of their child together.’
- b. *Paskur soyene a soyene a ayne ne yuk wen yuk*
 crow go/come.out and go/come.out and after.that this deer bad deer
uko-tok-pa-tok-pa. (UR. 1998:106–7)
 soc-peck-PL-peck-PL
 ‘Crows flew out and flew out, and after that (they) pecked all together at this deer, bad deer.’
- c. *Mintuci uko-kik-kik hine rayke ruwe ene an hi ne.* (Nak.155)
 water-sprite soc-hit-hit then kill ASS.NR so be NR COP
 ‘[Once] it happened that all of them together beat the water-sprite to death.’

- d. *Nispa-utar wen kamuy uko-cotca.* (OI.)
 lord-PL bad bear soc-shoot
 ‘The lords shot the malicious bear all together.’
- e. *Sinrit uko-kor.* (Ch2. 95)
 ancestor soc-have
 ‘They have common ancestors.’
- f. *Ren ne wa uko-e-rew-pa.* (N. 153)
 three.people be and soc-APPL-sleep-PL
 ‘Three of them stayed the night there together.’
- g. *Menoko-po topa wen mina-haw wen sinot-haw uko-roski.* (N. 117)
 woman-DIM crowd loud laugh-voice loud make.merry-voice soc-raise.PL
 ‘The crowd of women (all together) raised loud laughter and loud merry-making.’

6.1.1.3 Transitive sociatives – applicatives of intransitive sociatives. Thus, for instance, the intransitive sociative form in *uko-* with the meaning ‘to protect, govern together’ (76) is not a derivative from the transitive applicative in *ko-* ‘to protect sb, govern sth’ because sociative derivation does not change valency. If the *uko-* form were derived from the *ko-* form its meaning would be ‘to protect sb/sth together’, but the form with this meaning is derived from a sociative form by means of the applicative prefix *e-* (for analogous examples see (18d, h) and (101d), and for transitivity of “canonical” reciprocals see 3.1.2.3).

- (75) a. *kimatek* ‘to be surprised, panic’ (T4. 304) (vi)
 → b. *uko-kimatek* ‘to be surprised, panic together’ (T4. 758) (vi)
 → c. *e-uko-kimatek* ‘to be surprised at sth/sb together, panic about sth together’ (vt)
 (T4. 144) (cf. (104c))

The following example is an object-oriented construction and illustrates the use of an applicative derivative (from a sociative) which appears as an attribute dependent on the head-word *kur* ‘man’:

- (76) *Ainu mosir kamuy mosir e-uko-punkine kur a-ne ruwe*
 human-being country god country APPL-SOC-govern man IND-COP ASS.FIN
ne ... (N. 150)
 COP
 ‘I was the man who governed the country of the people and (lit. together with) the country of the gods.’

6.1.2 Object-oriented sociatives

The following sociatives are derived with the help of the complex prefix *uko-*. In constructions with these sociatives the object is necessarily semantically plural, while the subject may be singular. Sociatives of list (a) below have parallel applicatives in *ko-*. This list shows that the meaning of the “morphologically underlying” applicative is not contained in the sociative derivative. For the sociatives of list (b) the dictionaries do not register parallel applicatives in *ko-* (but this does not mean that all of the latter do not really exist).

1. Sociatives and parallel applicatives in *ko-*.

- (77) a. *ani* 'to hold/cradle/carry sth/sb in one's hands' (T4. 12–3) (vt)
 → *uko-ani* 'to hold/carry sth [and sth] together in one's hands' (vt)
 (T4. 755)
ko-ani 'to take/bring sth to some place' (T4. 314) (vb)
 b. *hoppa* 'to leave sb/sth behind' (T4. 198–99) (vt)
 → *uko-hoppa* 'to leave sb (children at home alone) behind together' (vt)
 (T4. 756)
ko-hoppa 'to leave sb/sth to sb/at sb's place' (T4. 319) (vb)
 c. *resu* 'to raise/bring up sb (a child/ an animal)' (T4. 576) (vt)
 → *uko-res-pa* 'to raise/bring up sb (e.g. one's own children) together'
 (cf. (43f)) (T2. 68) (vt)
ko-resu 'to raise sb (as bride or bridegroom) for sb' (Nak. 425) (vb)

2. Sociatives without parallel applicatives in *ko-*.

- d. *kik-kik* 'to hit/strike/beat sth/sb repeatedly' (T4. 303) (vt)
 → *uko-kik-kik-[pa]* 'hit/strike/beat sb (for two and more/two or more) at once' (vt)
 (T4. 757–78; OI.)
 e. *koeramewnin* 'to not pay attention to sth/sb' (Nak. 180) (vt)
 → *uko-koeramewnin* 'not pay attention to [all/both people together]' (T4. 758) (vt)
 f. *otke* 'to prick/stab sb/sth' (T4. 493) (vt)
 → *uko-otke* 'to stab/pierce two or more objects at once' (N. 101) (vt)
 g. *piski* 'to count sth/sb' (T4. 533) (vt)
 → *uko-piski* 'to count sth (e.g. days) one by one [together]' (Kir2. 348) (vt)
 h. *ronnu* (PL) 'to kill sb (two or more)' (T4. 583)
 → *uko-ronnu* 'to kill two or more at once' (N. 56)
 i. *rura* 'to carry/take/send off sb/sth' (T4. 590)
 → *uko-rura* 'to carry sth (two or more things) together' (OI.).

Sentential examples:

- (78) a. *e-uko-hoppa p* ... (N. 55)
 2SG-SOC-leave NR
 'you(SG) (have) left [them] together ...'
 b. *Ku hem ay hem uko-an-pa wa* ... (N. 83)
 bow and arrow and SOC-carry-PL and
 'They carried both bows and arrows together and ...'
 c. *Kor tures-i ka-eka kusu kanit e-sir-otke iwan*
 his sister-POSS thread-spin in.order shuttle APPL-land-pierce six
pokna mosir uko-otke wa ... (N. 101)
 underground country soc-pierce and
 '...his sister in order to make a rope pierced the land with a shuttle [in so doing she]
 pierced through six underground countries together.'
 d. *Ito enumitanne nesko uko-rura*. (OI.)
 I. honeysuckle walnut soc-carry
 'Ito carried honeysuckle and walnut together.'

Sociative verbs can be used in the passive form:

- (79) a. *Anna Hisao a-uko-kik.* (OI.)
 A. H. PASS-SOC-beat
 ‘Anna and Hisao were beaten [by some people] together.’
- b. *Nisatta anak a-i-uko-ronnu ki ...* (N. 56)
 tomorrow TOP PASS-IND-SOC-kill do
 ‘Tomorrow we shall be killed (= they will kill us) together..’
 (the sociative form is nominalized without marking and is dependent on the verb *ki*).

6.2 Derivatives in *ue-*. Synonymy of *ue-* and *uko-*

6.2.1 Subject-oriented sociatives

Sociative derivatives marked by the prefix *ue-* are extremely rare. (80a, b, c) are the only sociatives of this type in our corpus; note that they have parallel derivations with the prefix *uko-*, but the opposite is not always true (thus, there is *uko-e* ‘to eat sth together’ but there is no *ue-e* with the same meaning; cf. also (87) and (104d)). As we see, the applicatives in *e-* are not semantically related to the sociatives. As in the other cases with the prefix *e-*, synonymy of *ue-* and *uko-* is observed (cf. 5.2.2).

- (80) a. *hopun-pa* ‘(for two and more) to get up, stand up, fly’ (T4. 199) (vi)
 → *ue-hopun-pa* ‘for everyone to stand up together’ (T4. 804) (vi)
 cf. *uko-hopun-pa* (same meaning; OI.) (vi)
 cf. *e-hopun-pa* ‘to grow, appear somewhere (e.g. of mould)’ (T4. 82) (vt)
 b. *kirirse* ‘to scream, let out a screech’ (T. 309) (vi)
 → *ue-kirirse* ‘to scream together’ (OI.) (vi)
 cf. *uko-kirirse-pa* (same meaning; HY. 43) (vi)
 c. *pirka* ‘to be rich/happy’ (T4. 530) (vi)
 → *ue-pirka* ‘to be rich/happy together’ (T4. 809) (vi)
 cf. *e-pirka* ‘to make a profit from sth/sb’ (T4. 109) (vt)
 cf. *uko-pirka* ‘to be rich/happy together’ (OI.) (vi)
 d. *sirkirap* ‘to be troubled’ (T4. 199); ‘having no relatives, to live alone in (vi)
 difficulties’ (T4. 655)
 → *ue-sirkirap* ‘to be troubled together’ (O. 154) (vi)
 cf. *uko-sirkirap* ‘to suffer an inconvenient lifestyle together’ (T4. 763–64) (vi)
 cf. *e-sirkirap* ‘to be troubled, inconvenienced by sth’ (O. 27; T4. 125) (vt)

6.2.2 Object-oriented sociatives

The only examples at our disposal:

- (81) a. *kik-kik* ‘to hit/beat/strike sth/sb repeatedly’ (T4. 303)
 → *ue-kik-kik* ‘to hit/strike sth/sb [and sth/sb] [repeatedly] together’
 (T4. 806; OI.)
- cf. *uko-kik-kik* (same meaning; cf. (74c) and (86)) (T4. 757; OI.)
- cf. *e-kik-kik* ‘to hit/strike [repeatedly] sth/sb on/against sth’ (O. 20)
- b. *omap* ‘to take care of sb, show affection’ (T. 467)
- ue-omap* i. ‘to take care of two or more persons’ (OI.) (object-oriented)
 ii. ‘to take care together of sb’ (OI.) (subject-oriented)

6.3 Referential ambiguity. Homonymy *u-ko-* vs. *uko-*

This concerns the dual interpretation of the same sociative form as both subject-oriented and object-oriented, and also cases of material coincidence of sociative and reciprocal forms.

1. *Referential ambiguity: subject- or object-oriented sociative?* If a sociative is intransitive there is no problem: naturally, it can be subject-oriented only:

- (82) a. *corawki* 'to go on attack' (T4. 65) (vi) (cf. (87–88))
 → b. *uko-corawki* 'to go on attacking together' (OI.) (vi)

The problem arises with many transitive sociatives under certain conditions. If the subject is explicitly singular a sociative can be object-oriented only; cf.:

- (83) ... *e-uko-hoppa*. (N. 55)
 2SG-SOC-leave
 '... you(SG) (have) left [your bear cub and your sister] together.'

If the object is singular (explicitly or contextually) the sociative can be subject-oriented only:

- (84) *Kamuy opitta esaman-kamuy] uko-kik-kik*. (N. 108)
 God all otter-god soc-beat-beat
 'All the gods together beat and beat the otter god.'

Ambiguity arises if both the subject and object are plural or absent. In this case the ambiguity can be resolved by the context. (85) is an illustration of this: reading (i) corresponds to the broad context and (ii) is possible in a different context (the sociative form is nominalized without marking and is dependent on the verb *ki*).

- (85) *Nisatta anak a-i-uko-ronnu ki* ... (N. 56)
 tomorrow TOP PASS-IND-SOC-kill do
 i. 'Tomorrow we shall be killed (= they will kill us) *together*...'
 ii. '*Together* they will kill us tomorrow.'

The reciprocal forms derived from same stem transitives do not coincide materially with the respective sociatives; cf. (the English translation as well as the Ainu original allows both readings, subject- and object-oriented):

- (86) *uko-hoppa* 'to leave sb together' (vt) and *u-hoppa* 'to leave each other' (vi)
uko-kik-kik 'to beat sb together' (vt) and *u-kik-kik* 'to beat each other' (vi)
uko-ronnu 'to kill sb together' (vt) and *u-ronnu* 'to kill each other' (vi)
 (these forms have been cited above, therefore the sources are not supplied her).

2. *Homonymy: Reciprocal u-ko- or sociative uko-?* Here belong reciprocal derivatives from applicatives only. Materially identical forms with the prefixes *uko-* and *u-ko-* differ in their origin. The following three cases of homonymy can be distinguished; each of the cases is a two-member chain for sociatives and a three-member chain for reciprocals.

(i) A subject-oriented intransitive sociative and a "canonical" reciprocal are homonymous:

- (87) a. *corawki* 'to go on attacking' (T4. 65) (vi)
 → b. *uko-corawki* 'to go on attacking together' (OI.) (cf. (82)) (vi)
 cf. c. **ue-corawki* (same intended meaning) (OI.)
- (88) a. *corawki* 'to go on attacking' (T4. 65) (vi)
 → b. *ko-corawki* 'to go on attacking sb' (T4. 316) (vt)
 → c. *u-ko-corawki* 'to go on attacking each other' (T4. 755, OI.) (vi)

(ii) A subject- or object-oriented sociative is homonymous with an “indirect” reciprocal:

- (89) a. *ani* 'to hold/take/carry sth in one's hands' (T4. 12–3) (vt)
 → b. *uko-ani* i. 'together [with sb] take/hold/carry sth' (OI.) (subject-oriented sociative)
 ii. 'to have/hold/carry sth [and sth] together' (T4. 755) (vt) (object-oriented sociative)
- (90) a. *ani* 'to hold/take/carry sth in one's hands' (T4. 12–3) (vt)
 → b. *ko-ani* 'to bring sth/sb to sth/sb' (T4. 314) (applicative vb)
 → c. *u-ko-ani* 'to bring sth to each other' (OI.; cf. (30b)) (“indirect” vt)

(iii) A subject- or object-oriented sociative and an object-oriented reciprocal are homonymous:

- (91) a. *resu* 'to raise/bring up sb (a child/an animal)' (T4. 576) (vt)
 → b. *uko-res-pa* 'to raise/bring up sb together' (OI.) (vt)
 = i. 'two or more subjects together raise sb' (one or more); (subject-oriented sociative)
 ii. 'one subject raises two or more objects together'; (object-oriented sociative)
- (92) a. *resu* 'to raise/bring up sb (a child, an animal)' (T4. 576) (vt)
 = b. *ko-resu* 'to raise sb (as bride or bridegroom) for sb' (Nak. 425) (vb)
 = c. *u-ko-res-pa* 'to raise sb for each other (as future spouses)' (OI.) (vt) (cf. (43d))

Object-oriented sociatives derived from some of the verbs may be very close to object-oriented reciprocals; thus the following example can be interpreted in two ways: the meaning is object-oriented sociative if the two things are held together, and the meaning is reciprocal if bringing together of the two things is implied:

- (93) *Konkani pon ku konkani pon ay ci-uko-ani.* (Kir2. 115)
 gold small bow gold small arrow 1PL.EXC-SOC-HOLD
 'I (a god) took into my hands a small gold bow together with a small gold arrow.'
 (cf. also *uko-hoppa* under (77b) and *uko-resu* in (77c)).

7. Sociatives with the reciprocal-causative confix *u...-re*. The plural meaning

Almost all of these sociatives are derived from intransitive bases. This combination of affixes (verbs which mean literally 'to make each other do sth'; cf. 3.2.1) may also be used in the meaning 'all (together) [do sth] at once' (see Nakagawa 1995:51). Chiri (1973:510) defines this meaning as follows: 'all/many (persons) do sth together'. (A typological paral-

lel to this meaning of the reciprocal-causative confix is observed in Kabardian). Since the prefix *u-* can occupy the object agreement slot, an intransitive verb has to be transitivized first, by means of the applicative prefix or causative suffix. In the latter case, it seems, the sociative meaning contains an emotive colouring. There seems to be no direct semantic connection between causative and sociative forms; the latter form is more likely derived immediately from the intransitive base by simultaneously applying the confix *u...-re/-te/-e* (less common is the causative suffix *-ka*). This marker derives sociatives most frequently from intransitives ((96c), (101c) and (104e) are the only transitive sociatives at our disposal). It may be not accidental that our informant does not accept some parallel forms with the sociative prefix *uko-*, e.g. *uko-mina* and *uko-kira* with the intended meanings ‘to laugh together’ and ‘to run together’ respectively parallel to *u-mina-re* in (95c), (101d) and *u-kira-re* in (94c), (101b) which are probably more customary (the two latter forms are registered in the dictionaries and occur in texts). In other cases the informant accepts both sociative forms as correct. A special place belongs to the form *u-e-kira* ‘to run away together’, lit. ‘... with each other’ (vi) (mostly used in the meaning ‘to elope’, i.e. about two lovers; OI.; cf. (94d) and (94c)) derived from the applicative with the comitative meaning (which is rare in Ainu) *e-kira* ‘to run with sb/holding sth’ (vt); cf. (N. 170, 173). As we see, *u-e-kira* is a rare instance in Ainu when the reciprocal and the sociative meanings practically coincide due to the general rule that a reciprocal derived from a comitative form acquires a sociative (or very similar) meaning.

- | | | | | | |
|------|----|---------------|---|--|------|
| (94) | a. | <i>kira</i> | ‘to run away, flee’ (T4. 308) | (vi) | |
| | = | b. | <i>kira-re</i> | ‘to cause to run away, to chase’ (T4. 308) | (vt) |
| | | c. | <i>u-kira-re</i> | ‘for all to run away together’ (D. 549, T4. 755) | (vi) |
| | | d. | <i>okkay-po menoko-po u-e-kira neun ka paye wa isam.</i> (OI.) | | |
| | | | man-DIM woman-DIM REC-APPL-run where even go.PL and disappear | | |
| | | | ‘A young man and a young woman ran away together somewhere and (they) were gone.’ | | |
| (95) | a. | <i>mina</i> | ‘to laugh’ (T4. 389) | (vi) | |
| | = | b. | <i>mina-re</i> | ‘to cause to laugh’ (Kay. 426) | (vt) |
| | | c. | <i>u-mina-re</i> | ‘to laugh together’ (Kir2. 349) | (vi) |
| (96) | a. | <i>nukar</i> | ‘to see sth/sb’ (T4. 439) | (vt) | |
| | = | b. | <i>nukar-e</i> | ‘to show sth to sb’ (T4. 439) | (vb) |
| | | c. | <i>u-nukar-e</i> | ‘to see sth/sb together’ (T4. 778) | (vt) |
| | | | (for the “dative” reciprocal meaning see (26d)) | | |
| (97) | a. | <i>pirasa</i> | ‘to spread, widen’ (T4. 530) | (vt) | |
| | | b. | <i>si-pirasa</i> | ‘to widen, enlarge’ (T4. 644) | (vi) |
| | | c. | <i>u-si-piras-pa-re</i> | ‘for all to be spread out’ (T4. 789) | (vi) |

The form in question is homonymous and certain verbs may have two meanings, depending on the context. Thus (98c) has two meanings, both sociative (related to the intransitive base) and reciprocal (related to the causative form):

- (98) a. *kimatek* 'to be surprised, to panic' (T4. 304) (vi)
 b. *kimatek-ka* 'to surprise sb, to scare sb' (T4. 304) (vt)
 c. *u-kimatek-ka* i. 'to be very agitated (of all together)' (Nak. 157) (vi)
 ii. 'to surprise/scare each other' (K. 290).

Here are a few more sociative forms also registered in the dictionary T4:

- (99) *u-hopun-pa-re* 'to get/stand up together (for two or more people)' (T4. 750) (vi)
u-nisuwamne-re 'for all, everyone to become healthy, strong' (T4. 772) (vi)
u-paka-ne-re 'for everyone to be disgusted, amazed' (T4. 775) (vi)

One of the sociatives with this confix is lexicalized, as it is not related in a standard way to the base verb:

- (100) a. *itakniwkes* 'to be unable to talk'
 b. *u-itakniwkes-te* (T4. 751)
 soc-talk.leave.behind-soc
 '(for everyone) to not listen to what the other said; to not come to terms; to have a quarrel and break off relations', lit. 'to be unable to talk together/with each other.'

Sentential examples:

- (101) a. *Ainu u-si-pirasa-re.*
 people soc-REFL-spread-soc
 ('Many children will be born') 'People [become many and they] will spread.' (T4. 789)
 b. *Seta-utar u-kira-re-pa hawe a-nu* (N. 76)
 dog-PL soc-run.away-soc-PL voice IND-hear
 'I heard the noise [made by] the dogs rushing by together.'
 lit. 'I heard that) the dogs had chased each other away.' (K. Refsing, p.c.)
 c. [*Poro-sirar aynu*] *ek ki wa a-u-sitoma-re* (N. 75)
 large-rock man come do and IND-soc-fear-soc
 'A man like a huge rock comes and we, *all of us*, are afraid of him.'

From the sociative forms in question as well as from sociatives in *uko-* one may derive applicative forms, i.e. they may undergo transitivity (cf. 6.1.1.3).

- d. *Kamuy-tono hene use-tono-utar hene tek u-e-kik wa*
 God-lord and servant-lord-PL and hand REC-APPL-hit and
e-u-nupetne-re e-u-mina-re. (Ch2. 95)
 APPL-soc-amuse.oneself-soc APPL-soc-laugh-soc
 'Both the lord and the servants clapped hands and [*all of them*] amused themselves because of (this) and [*all of them*] laughed because of (this).'
- e. *Kotan-u utar yuk cikoykip uk wa yuk kam u-e-re pe ne.* (OI.)
 village-poss people deer beast get and deer meat soc-eat-soc NR COP
 'The fact is that the village people got a deer and ate the deer's meat.'

M. Chiri (Ch1. 510) points out that in the Sakhalin (Karafuto) dialect reciprocal-causative forms function as markers of the plain plural number (see (72)–(73)).

- (102) a. *mokor* 'to sleep' (Mur. 173)
 b. *mokon-te* 'to cause to sleep' (cf. *mokor-e* 'to put [sb] to sleep' (Hokkaido) (B. 301))
 c. *utara u-mokon-te* 'The people slept.' (Ch1. 510)
- (103) a. *arki* (PL) 'to come (for two or more)' (T4. 22–3)
 b. *arki-re* 'to cause to come sb (two or more)' (T4. 23)
 c. *u-arki-re* 'They came.' (Ch1. 510)

Sometimes, the dictionaries point out synonymy between sociatives in *u-...-re* and sociatives with the prefix *uko-* (note that both markers contain the reciprocal prefix *u-* which, however, cannot render this meaning on its own, with a few exceptions).

1. Derived from intransitives:

- (104) a. *hoyup-pa* '(for two or more) to run' (PL) (T4. 206) (vi)
 → *u-hoyup-pa-re* 'to run together' (Kir2. 347; OI.) (vi)
uko-hoyup-pa (same meaning) (Nak. 129; OI.) (vi)
 b. *nupetne* 'to rejoice' (B. 338) (vi)
 → *u-nupetne-re* 'to rejoice together' (Ch2. 95) (vi)
uko-nupetne 'to rejoice together' (B. 527) (vi)
 c. *kimatek* 'to be surprised, to panic' (T4. 304) (vi)
 → *u-kimatek-ka* 'to be very agitated (of all together)' (Nak. 157) (vi)
uko-kimatek 'to be surprised together', 'to panic together' (T4. 758) (vi)
 cf. *ue-kimatek* (same meaning) (OI.) (vi)
 d. *paraparak* 'to cry loudly' (O. 104) (vi)
 → *u-paraparak-ka* 'to cry loudly together' (O. 161) (vi)
uko-paraparak 'to cry loudly together' (O. 157) (vi)
 cf. **ue-paraparak* (same intended meaning) (OI.).

2. Derived from transitives:

- e. *sitoma* 'to fear sb/sth' (T4. 665) (vt)
 → *u-sitoma-re* 'for all to be scared of sb/sth' (N. 75) (vt)
uko-sitoma 'for everyone to be afraid of sb/sth' (T4. 764) (vt)
 [Cf. also *sitoma-re* 'to make sb fear sth/sb' (OI.) (vb)
u-sitoma 'to be afraid of each other' (OI.) (vi)
e-u-sitoma 'to be afraid of sth from each other' (vt)
ko-sitoma 'to be afraid of sth from sb' (vb)]

In the following instances the respective forms in *uko-* seem to be absent (in (105c) there is a slight lexicalization). The puzzling use of the reciprocal marker in (105a) and (105b) which is not reflected in the translation is probably accounted for by the idea of the number in the lexical meaning of the base verb.

- (105) a. *inne* 'for there to be a lot of/many people' (T4. 235)
 → *u-inne-re* i. 'for there to be a lot of/many people'
 ii. 'to have many children' (T4. 751)
 b. *moyo* 'to be few/not many (of people, animals)' (T4. 397)
 → *u-moyo-re* i. 'for there to be few people'; ii. 'to have few children' (T4. 768–69)

- c. *niwen* 'to be severe/harsh' (T4. 428)
 → *u-niwen-te* 'to threaten together (about men who drive away evil spirits by scaring them with furious dancing)' (T4. 773).

8. Lexicalization of verbs in *u-*, *uko-*, *u...-re* and *ue-/wee-*

Lexicalized derivations display meanings characteristic of analogous derivations in a number of other languages. Typical meanings are 'to meet', 'to fight', 'to quarrel', 'to have sexual intercourse', also meanings peripheral to reciprocity, like 'to gather' (vi), the meaning of plurality and meanings even more distanced from the reciprocal, like 'to crumble', 'here and there', and a number of others. We consider them as lexicalizations because each of the meanings is represented by few verbs: if these meanings occurred in a great enough number of derivatives (with a prefix whose meaning is distinguishable in the semantics of the derivative), we might have grounds to postulate polysemy of the prefixes *u-* and *uko-* (it is likely that they show a possible way of the development of the polysemy of the reciprocal and sociative markers). The degree of lexicalization may vary. Note that there is a small group of verbs whose alleged bases are intransitive (see (108a), (110 c, d), (113a, c)). The existence of a large number of lexicalized verbs with the prefixes *u-* and *uko-* reveals their ancient origin.

8.1 Reciprocal lexicalized meaning

Practically all the base verbs are two-place transitives and the lexicalized derivatives are intransitive, and the derivations from three-place transitives (cf. (106c)) are transitive. Derivations belonging here fall into two groups.

1. Reciprocals essentially retaining their standard relation to the base meaning (see translations (i)) along with the lexicalized meaning; cf. translations (ii) and also (iii)–(vi) in (107f). In (106c) the derivative is an object-oriented reciprocal and the other cases are subject-oriented "canonical" reciprocals.

- | | | | | |
|-------|----|-------------------|---|------|
| (106) | a. | <i>ekanraye</i> | 'to go to meet sb' (Mur. 128) | (vt) |
| | → | <i>u-ekanraye</i> | i. 'to go to meet each other', ii. 'to have a date' (Mur. 221) | (vi) |
| | b. | <i>nukar</i> | 'to see/meet sb' (T4. 439) | (vt) |
| | → | <i>u-nukar</i> | i. 'to see each other', ii. 'to hold a meeting' (Sh. 47) | (vi) |
| | c. | <i>oma-re</i> | 'put sth/sb (one thing/person) somewhere' (< <i>oma</i> ; see (108e)) | (vb) |
| | → | <i>u-oma-re</i> | i. 'to bring sth together, gather sth' (T4. 816; cf. (40h)),
ii. 'put sth (things scattered around) in order' (T4. 815; OI.) | (vt) |
| | d. | <i>rayke</i> | 'to kill sb (one person/animal)' (T4. 568) | (vt) |
| | → | <i>u-rayke</i> | i. 'to kill each other' ii. 'to fight/have a duel' (T4. 779) | (vi) |

2. Reciprocals with a lexicalized meaning only. Absence of expected standard reciprocal meanings can probably be often accounted for by the fact that the lexicalized meanings have ousted them as more common and frequent pragmatically or (as in (110b)) due to the presence of another widely used derivative or lexical reciprocal.

- (107) a. *ekot* 'to die because of sth/sb' (T4. 93) (vt)
 → *u-ekot* '(of lovers) to commit suicide together' [lit. 'because of each other'] (Ch2. 47) (vi)
- b. *kik* 'to hit/beat sb/sth' (T4. 302)
 → *u-kik* 'to run into each other' (T4. 754) (vi)
- c. *pop-ke* 'to be warm' (T. 543) (vi)
 → *uko-pop-ke* 'to hug each other' (OI.; cf. (43d)) (vi)
- d. *tamani* 'to show off, display a sword' (O. 141) (vi)
 → *ko-tamani* 'to show off, display a sword to sb' (O. 72) (vt)
 → *u-ko-tamani* 'to fight with swords' (O. 158) (vi)
- e. *ye* i. 'to say to sb', ii. 'to say sth' (T4. 870) (vt)
 → *u-ye* 'to quarrel' (T4. 818–9) (vi)
- f. *tasa* i. 'to exchange for sth' (T4. 701–2) (vt)
 → *u-tasa-tasa* i. 'to cross (of roads, etc.)' (K. 300), ii. 'to blink', iii. 'to miss e.o.' (OI.) iv. 'to visit [each other]', v. 'to exchange/trade with each other' vi. 'to be mixed up' (K. 300) (vi)
- g. *ko-terke* i. 'to jump, pounce, leap on sb' (Kay. 242; Nak. 186) (vt)
 also 'to attack sb' (OI.) (< *terke* 'to jump' (T4. 713))
 ii. 'to leap to [some place]' (B. 274), iii. 'to jump with sth [holding sth]' (Nak. 186)
 → *u-ko-terke* 'to grapple/wrestle with each other' (Nak. 106) (vi)
- cf. h. *Cape seta ko-terke, seta tura-no u-ko-terke.* (OI.)
 cat dog APPL-pounce dog with-ADV REC-APPL-jump
 'The cat jumped at the dog, and (the cat) with dog started fighting.'

A few derivations render the reciprocal meaning of joining/coming together ('together' = 'from different directions (in)to one place') along with the sociative (cf. 'a lot' = 'many, at least several') meaning. The component *wee-* is a fusion of the reciprocal *u-* and the following *e-* via *u-w-e-* with an epenthetic *-w-*. (108d) is an object-oriented reciprocal (cf. 5.1.2), the other instances being contiguous to subject-oriented "canonical" reciprocals, excepting (108a) with the intransitive base. (In (108a), *-se* is a verbal suffix.)

- (108) a. [*cur-ur-se*] ['to fall down (rustling)'] is not registered in our sources (vi)
tur-se 'to fall with a thud' (T4. 741) (probably contains the same stem) (vi)
 → *ue-cur-ur-se* 'to come together; gather (rustling)' [the example in (T4) describes rice grains pouring into one's palm] (T4. 803) (vi)
- b. *hayta* 'to be lacking; to lack intelligence' (T. 177) (vi)
 → *e-hayta* 'to miss, be wrong about sth/sb; lose sth/sb' (T. 81–2) (vt)
 → *wee-hayta* 'to get divorced' (H. 46) (vi)
- c. *ko-ciw* 'to stick into/pierce sth/sb' (B. 259) (< *ciw* (same); T4. 63) (vt)
 → *u-ko-ciw* 'to have sexual intercourse' (Kay. 105), lit. 'pierce each other' (vi)
- d. *kut-kor* 'to girdle oneself' (< *kut* 'belt', *kor* 'to have') (vi)
 → *e-kut-kor* 'to use sth as a belt/sash; fasten with sth (a belt)' (T4. 95) (vt)
 → *ko-e-kut-kor* 'to put sth [clothes] on and then fasten with a belt' (T4. 755–6) (vi)
- e. *oma* 'to enter, get in, be in/present somewhere' (T4. 467) (vt)
 → *u-oma* 'for a lot of people to gather and be present [stay] together; to be all collected, compose a set [for things]' (T4. 814) (vi)

8.2 Sociative lexicalized meaning

In (109a), the verb *raye* ‘to move, gather, grasp sth’ is used: it acquires the meaning ‘to drink’ in combination with the prefix *uko-* and the classifier *pa* (for cups, glasses of drinks). A similar change of meaning takes place in (109b). (Regular transitive sociatives are considered in 6.1.1.2.)

- (109) a. *Otu pa re pa a-uko-raye kor...* (N. 106)
 two CW three CW IND-SOC-move(vt) and
 ‘We drank (lit. ‘moved’) together two or three times ...’
- b. *Sisak tonoto a-uko-mak-tek-ka.* (N. 108–9; OI.)
 unusual wine IND-SOC-open(vi)-ASP-CAUS
 ‘We drank (lit. ‘opened’) the unusual wine together.’
- Cf. *uko-mak-tek-ka* ‘for everyone to hold (a feast) together.’ (T4. 758).

8.3 Non-reciprocal and non-sociative lexicalized meanings

Sometimes the meaning of a lexicalized derivative is not reciprocal, though it may display some connection with it; thus, in (110a, c, f, h) this reveals itself in the meaning of plurality implied by the lexical meaning of the base. An adjacent meaning is that of repetition (= plurality of actions) (see (110b)). In (110g) the lexicalized meaning implies a response action of the object referent. Note that the prefix *u-* in (110c) is attached to an intransitive base, which is a very rare occurrence.

- (110) a. *as-te* ‘to make/let stand’ (T4. 30) (vt)
 → *u-as-te* ‘to breed, reproduce’ (T4. 801–2) (vi)
- b. *ciw-re* [‘to prick/stab sth/sb’] (T4. 64), [‘to overlap/pile sth’ in certain (vt) expressions only] (T4. 495)
 → *u-ciw-pa-re* ‘to repeat sth (a dance) over and over again’ (T4. 748) (vt)
- c. *hayta* i. ‘to be lacking’, ii. ‘to lack intelligence’ (T4. 177; OI.) (vi)
 → *u-hayta* i. ‘to be lacking/insufficient (for a number of sth that is expected to be)’ (T4. 749; T2. 67; OI.) (vi)
 ii. ‘to be dislocated’ (Mur. 222) (vi)
- d. *inkar* ‘to see/watch/look’ (T4. 234) (vi)
 → *ue-inkar* ‘to see through, foresee’ (T4. 804; Nak. 52)] (vi)
- e. *nukar* ‘to see, look at sth/sb, meet sb; test’ (T4. 439) (vt)
 → *u-nukar-e* ‘to peep at sb’ (T4. 774) (cf. (106b)) (vt)
- f. *oma* ‘to enter, get in, be in, present somewhere’ (T4. 467) (vt)
 → *u-oma* ‘to be in safety’ (K. 303; N. 149, 153); cf. (108d) (vi)
- g. *paskuma* ‘to tell, transmit stories about ancestors, human origins, history, traditions to sb’ (T4. 514) (vt)
 → *u-paskuma* ‘to transmit teachings, legends’ (T4. 776) (vi)
- h. *sak* ‘not to have sth, have lost sth’ (T4. 597) (vt)
 → *u-sak* ‘for sth/sb to be missing, not to be together with the other members of the group’ (T4. 785) (vi)

A sentential example:

- (111) a. *Urepec-i u-hayta.* (T4. 749)
toe-POSS REC-be.lacking
'Some toes are lacking on his foot.'
- b. *E-kotan-u u-oma kuni p samo tap-an na.* (N. 149, 153)
2SG-village-POSS REC-enter should NR not this-be FIN.PRTL
'Won't your village be in safety.'

In (112a, b, g) the meaning 'to crumble' involves diminishing in size and falling into parts which may be viewed as contiguous to the meaning of plurality as well (it is not accidental that in a number of languages verbs with this meaning are also reciprocal in form; cf. Nedjalkov, Ch. 28 on Kirghiz, §10.1.3). Below are examples with the prefixes *u-* and *uko-* respectively. In (112d, e) the meaning 'to wither' is denotatively related to the meaning 'to crumble'. The meaning 'to be wrinkled' of the derivative under (112f) is denotatively contiguous to the meaning 'to be broken' (if this is really the base verb, note that it is intransitive). The prefix *uko-* probably has an intensifying meaning which, as mentioned above, is contiguous to the sociative meaning. Note that all the underlying verbs below, as well as their derivatives, are intransitive. (In (112d) the base and the derivative contain partial reduplication of *cupu* + anticausative suffix. See 3.2.2.3.)

- (112) a. *munin* 'to rot' (Mur. 174; OI.) (vi)
→ *uko-munin* 'to rot and *crumble* into pieces/fall into tatters' (Mur. 222) (vi)
cf. *ko-munin* 'to rot together with sth' (Kir2. 79) (registered only with the incorporated object: *toy-ko-munin* 'to rot together with the soil' (*toy-* 'soil'); Tamura (T4) regards *toyko-* as a verbal prefix with the meaning 'badly, completely', but in this particular case she accepts both interpretations: 'to fall to the ground and rot; to rot completely' (T4. 729)) (vt bound stem)
- b. **tuwa-teh* (not registered)
kotuwa-tuwak 'mangy, thin, poor, soft' (B. 276) (probably the same stem) (vi)
→ *u-kotuwa-teh* 'to rot and *crumble* into pieces/fall into tatters' (Mur. 223) (vi)
(*-teh* is a verbal suffix)
- c. *yom-om-ke* 'to be *wrinkled*/scarred' (T4. 871) (vi)
→ *uko-yom-om-ke* 'to be *wrinkled*/scarred all over the surface' (T4. 767) (vi)
- d. *cup-up-ke* 'to become narrow, to taper' (T. 83) (< *cupu* 'to crum- (vi)
ple/fold/shut sth'; T4. 68)
→ *uko-cup-up-ke* '(of flowers) to close, *wither*' (T. 83) (cf. (61a)) (vi)
- e. *ci* i. 'to ripen', ii. 'to *wither*', 'to be cooked' (T4. 47) (vi)
→ *uko-ci* 'for everything to ripen, *wither*' (T4. 755) (vi)
- f. *kay* 'to be broken' (T4. 290) (vi)
→ *u-kay* 'to be *wrinkled*' (T4. 754, 290) (vi)
- g. *pene* 'to be watery, mushy; to become thin' (T4. 521) (vi)
→ *u-pene* 'to become pulpy, mushy, jelly [nearly *falling into pieces*]' (vi)
(U3. 17)

The meaning 'here and there, all around' is contained in the following derivatives. The alleged base verb for the reciprocal under (113c) is reduplicated. In (113a, c) the base

verbs are intransitive. In (113a) *ko-* is a verbal prefix with an unclear meaning, but it is definitely not an applicative one, since the verb itself is intransitive.

- | | | | | |
|-------|----|------------------------------|---|------|
| (113) | a. | <i>ko-sepepatki</i> | ‘to sound loudly’ (B. 442), ‘to sound/ring’ (T4. 339, (vi) 617) (< <i>sepepatki</i> (same meaning) (T4. 617)) | |
| | → | <i>u-ko-sepepatki</i> | ‘to sound all around (here and there)’ (OI.) | |
| | b. | <i>ciw</i> | ‘to sting/smart, stab/stick/pierce sth/sb’ (T4. 63) | (vt) |
| | → | <i>u-ciw-ciw/u-ciw-u-ciw</i> | ‘to move about here and there’ (T4. 748) | |
| | c. | <i>heuwe-uwe</i> | ‘to shudder/shiver/tremble’ (Ch. 553) | (vi) |
| | → | <i>u-hewe</i> | ‘to move/go up and down lightly’ (T4. 749) | |
| | d. | <i>tanas</i> | ‘to project, stick out’ (T4. 695) | |
| | | <i>uko-tanas-tanas</i> | ‘to project, stick out here and there’ (T4. 77) | (vi) |

Sentential examples:

- | | | | |
|-------|----|--|--|
| (114) | a. | <i>Kanna kamuy uko-sepepatki.</i> (OI.) | |
| | | upper god soc-sound.loudly | |
| | | ‘It is thundering on both sides (= here and there).’ | |
| | b. | <i>Rayoci uko-tewnin(-tewnin).</i> (OI.) | |
| | | rainbow soc-shine-shine | |
| | | ‘The rainbow is shining here and there.’ | |

The reciprocal prefix can appear twice in the same cluster of prefixes when the underlying reciprocal verb is lexicalized (Refsing 1986:282). In (115) the second reciprocal prefix follows the applicative prefix.

- | | | | |
|-------|--------------|--------------------------------|---|
| (115) | <i>peker</i> | ‘to be bright/light’ (T4. 520) | (vi) |
| | → | <i>e-peker</i> | (not registered) (vt) |
| | → | <i>u-e-peker</i> | ‘to tell a folktale’ (T4. 808) (vi) |
| | → | <i>ko-u-e-peker</i> | ‘to tell a folktale to sb’ (cf. B. 276: ‘to report to sb’) (OI.) (vt) |
| | → | <i>u-ko-u-e-peker</i> | ‘to tell stories[folktales] to each other’ (R. 185; OI.) (vi) |

8.4 Retention of meaning

A number of derivatives in *u-* and *uko-* are very close in meaning to their base verbs; some of them undergo valency decrease (see *u-paskuma* in (110g) where the direct object is deleted) or no valency change takes place (see (116a) and (116b)). It is not clear why the prefixes *u-* and *uko-* are used in these cases.

- | | | | | |
|-------|----|-------------------|--|------|
| (116) | a. | <i>pis-te</i> | ‘to arrange, put in order’ (Nak. 329) | (vt) |
| | → | <i>uko-pis-te</i> | ‘to arrange, put in order’ (Nak. 67) | (vt) |
| | b. | <i>isam</i> | ‘to be lacking, disappear, die’ (Mur. 155) | (vi) |
| | → | <i>uko-isam</i> | ‘to be gone, disappear’ (Mur. 222) | (vi) |

9. *Reciproca tantum*

9.1 *Reciproca tantum* proper

These are lexical reciprocals with the initial *u-* materially identical with the reciprocal prefix. Contrary to regular reciprocals, they have no counterparts without this initial phoneme. We can only surmise that the base form did exist once but has gone out of use. Here is a list of verbs (117a) and non-verbs (117b) that can be viewed as *reciproca tantum*:

1. Verbs (all of them except *usaraye* are intransitive):

(117) a.	<i>uepe</i>	‘to have close, friendly relations’ (Ch2. 79)
	<i>uesopki</i>	‘to sit facing one another’ (T4. 810–11; U1. 73)
	<i>uonnere</i>	‘to get acquainted’ (OI.)
	<i>uorun</i>	i. ‘to stand one upon another’ (OI.), ii. ‘to be placed one inside another’ (N. 112)
	<i>unankote</i>	‘to kiss (mouth to mouth)’ (Mur. 224)
	<i>unupure</i>	‘to copulate (of animals, insects, etc.)’ (T4. 774)
	<i>umu</i>	‘to hug each other’ (K. 293)
	<i>umurek</i>	‘to be husband and wife’ (T4. 769)
	<i>upaekoiki</i>	‘to quarrel’ (K. 295)
	<i>upaore</i>	‘to squabble’ (N. 140), ‘to dispute/argue/quarrel/scold’ (B. 536)
	<i>uramkarpare</i>	‘to sympathize with each other’ (T4. 779); cf. (138c)
	<i>uramtetukka</i>	‘to agree in opinion with each other’ (Nak. 69)
	<i>uranup</i>	‘to copulate (of animals, insects, etc.)’ (T4. 779)
	<i>usaraye</i>	‘to divide sth’ (R. 282) (cf. (142))
	<i>uymam</i>	‘to trade/exchange’ (T4. 819; OI.).

2. Nouns, adverbs, etc.:

b.	<i>umurek</i>	‘husband and wife’ (T4. 769)
	<i>umusa</i>	traditional way of greeting (in the case of mutual affection) (Kay. 117)
	<i>upaore</i>	‘quarrel’ (K. 295)
	<i>upipi</i>	‘one after another, in succession’ (Nak. 67)
	<i>upopo</i>	‘singing a round’ (T4. 777; U1. 73)
	<i>uren</i>	‘both’ (H. 268) (cf. <i>ren</i> ‘three persons’; T4. 572)
	<i>uturen</i>	‘both sides’ (H. 236) (cf. <i>tura</i> ‘with’ (T4. 738))
	<i>utur</i>	‘between’ (T4. 798)
	<i>utar</i>	‘relatives, people of the same tribe/village/group’ (T4. 792–3)
	<i>utar</i>	plural marker (T4. 792)
	<i>uymam</i>	‘trade’ (T4. 819; OI.).

9.2 The base form is a bound stem

With reservations, we shall name here the miscellaneous units with the initial *u-* whose “base form”, unlike those in 9.1, occurs without it, but in this case the position of *u-* has to be taken by another component – a derivational prefix or root, i.e. in these units *u-* combines with bound stems.

The verbs *kohopi* and *kopas* are not registered, but they occur with the applicative prefix as well as with *u-*; the two derivatives under (118a, b) are semantically related in a standard way; cf. (21), (22) and (24). Similarly, the form *-ok* does not occur separately – its reciprocal form has occurred in the texts as an incorporated component.

(118) a.	<i>-kohopi</i>	—	
	<i>e-kohopi</i>	‘to part/separate from sb/sth’ (T4. 91)	(vt)
	<i>u-kohopi</i>	‘to be divided/forked (of a road, river)’ (T4. 756)	(vi)
	<i>u-e-kohop-pa</i>	‘to separate from each other (of people)’ (T4. 806)	(vi)
b.	<i>-kopas</i>	—	
	<i>e-kopas</i>	‘to lean on/against sth/sb’ (T4. 91; OI.)	(vt)
	<i>e-kopas-te</i>	‘to lean sth/sb against sth/sb’ (Nak. 82)	(vb)
	<i>u-kopas-te</i>	‘to lean on each other’ (T4. 761)	(vi)
c.	<i>-ok</i>	—	
	<i>i-ok-te</i>	‘to hook in, to get with a hook sth/sb’ (T4. 261)	(vt)
	<i>e-ok-ok-te</i>	‘to get caught, hooked on sth’ (T4. 104)	(vt)
	<i>u-e-ok-ok-te</i>	i. ‘to get (en)tangled with each other, get tangled (about a thread)’	(vt)
		ii. ‘to be entangled in an affair [with each other] (about a man and a woman), get involved with another woman while being married’ (T4. 104)	
		(note that ii. is a reciprocal lexicalized meaning)	
	<i>u-ok-punkar</i>	‘intertwined lianas’ (N. 86)	
	<i>u-ok</i>	i. ‘to cling to each other, intertwine’, ii. ‘to fight/wrestle’ (H. 176) (note that ii. is a reciprocal lexicalized meaning).	(vi)

10. The prefix *u-* on body-part nouns: The *u-tek* ‘both hands’ type

When used on a body part noun, the prefix *u-* acquires the meaning ‘both’; the six examples at our disposal name twin objects (‘feet’, ‘eyes’, ‘hands’, etc.) M. Chiri (1974:34) claims that these cases are vestiges of the dual number (it is not fortuitous that the only numeral which contains the vowel /u/ is *tu* ‘two’). The idea of duality is also more or less implied in the derivations in Section 11. Most likely, it is not the dual number of the referents that is essential here but a symmetrical or converse relation between these two entities. In this usage, the prefix *uko-* does not occur in our corpus.

(119)	<i>kema</i> ‘foot’	→	<i>u-kema</i> ‘both feet’ (Ch2. 34)
	<i>kir</i> ‘leg’	→	<i>u-kir</i> ‘both legs’ (T4. 755)
	<i>kisar</i> ‘ear’	→	<i>u-kisar</i> ‘both ears’ (OI.)
	<i>sik</i> ‘eye’	→	<i>u-sik</i> ‘both eyes’ (Ch2. 34)
	<i>tap</i> ‘shoulder’	→	<i>u-tap</i> ‘both shoulders’ (N. 116)
	<i>tek</i> ‘hand’	→	<i>u-tek</i> ‘both hands’ (Ch2. 34).

As a rule, these derivatives do not occur as free units; they are usually incorporated in other words. In the following example illustrating this usage, the verb *horipi* ‘to dance’ is nominalized without any marker and takes the slot of a direct object, which is indicated by

the applicative prefix *e-* on the word that follows it, and the latter word in its turn is a direct object which is indicated by the applicative prefix *o-* on the word that follows it. But the formation with the reciprocal marker can also be interpreted as an element incorporated in the verb that follows it (i.e. *e-u-tap-kur-ka-o-si-kiru* is a formation with an incorporated component). An entire clause under (120) is nominalized and is subordinated to a verb ‘to see’. The verb in (120b) is lexicalized:

- (120) a. *Okay-po topa menoko-po topa niwen horipi*
 youth-DIM crowd girl-DIM crowd furious(vi) dance
e-u-tap-kurka o-si-kiru hi ... (N. 116)
 APPL-REC-shoulder-surface APPL-REFL-turn.to NR
 ‘(He saw) a crowd of youths and a crowd of girls who danced wildly (each) twisting and wriggling both shoulders ...’
- b. *u-kir-os-o-re* (T4. 755)
 REC-leg-behind-put-CAUS
 ‘to sit cross-legged (of men)’ (T4.755), lit. ‘cause both legs [to be] put behind.’

However, the meaning ‘both’ is more frequently expressed by *uturen*, *uren* than by *u-*; cf.:

- (121) *uren-tek* ‘both hands/arms’ (T4. 782)
uren-piskan ‘both sides of sth’ (T4. 781)
uturen-kisar ‘both ears’ (OI).

11. Derivatives from kinship terms

11.1 Verbs

11.1.1 *The u-ona-kor ‘to be related as father and child’ type*

Reciprocal markers are used to denote kinship relations in a number of languages. This is accounted for by converse (less commonly reciprocal) relations between the nouns denoting relatives (‘if you are my elder brother I am your younger brother’, ‘if you are my relative I am your relative’, etc.). The dictionaries register numerous verbs in *u-* formed from nouns by compounding with the verb *kor* ‘to have’ (cf. (26b)). This verb easily incorporates direct objects of various lexical types; and there seem to be no visible restrictions on syntactic collocations with the direct object of the *ona kor* ‘to have a father’ type (see 6.1.1.1.2; cf. also (60a)). But for the verbs in question there are no correlates without *u-* with an incorporated kinship term in the dictionaries; e.g. we find *u-ona-kor* and no *ona-kor*, and even if the latter form did exist it would not be semantically related to the reciprocal derivative in a standard way (cf. *X newa Y u-ona-kor* ‘X and Y are related as father and child’ and *X *ona-kor* ‘X has a father’ which does not render the converse meaning ‘Y has a child’). There are also no nouns like **u-ona* with this prefix. Thus the derivations in question may be regarded as formed according to a pattern similar to the one considered in 3.1.3.2.3. The kinship term is incorporated in the possessive form (hence *u-aki-kor* instead of *u-ak-kor*; cf. also *sut* ‘grandmother’ and *suc-i* ‘the grandmother of sb’) which sometimes coincides with the base form. Note that seemingly analogous derivatives

with other than kinship terms have correlates without the prefix *u-* (cf. a derivative with an incorporated lexical reciprocal: *tokuy/tokuy-e* (*-e* = POSS) ‘close, intimate friend’ → *tokuy-e-kor* ‘to be close to sb’ (T4. 719) (vt) → *u-tokuy-e-kor* ‘to become mutually close friends’; T4. 795–6) (vi).

(122) (a) ‘(Grand)child-(grand)parent relatedness’:

- a. *matnepo* ‘daughter’ (T4. 381) → *u-matnepo-kor* ‘to have a daughter-parent relationship (to be [related as] daughter and father, daughter and mother, daughter and both parents)’ (T4. 768)
- b. *po* ‘son, child’ (T4. 535) → *u-po-kor* ‘to have a son-parent relationship (son and father, son and mother, son and both parents)’ (T4. 776; KK. 67)
- c. *ona* ‘father’ (T4. 469) → *u-ona-kor* ‘to have a father-child relationship (father and children, father and son)’ (T4. 815)
- d. *unu* ‘mother’ (T4. 774) → *u-unu-kor* ‘to have a mother-child relationship (to be mother and children, mother and son, mother and daughter)’ (T4. 800)
- e. *sut* ‘grandmother or female relatives of similar age’ (T4. 687) → *u-suc-i-kor* ‘to have a grandmother – grandchild relationship’ (T4. 791; OI)
- f. *ekas* ‘grandfather or male relatives of similar age’ (T4. 87) → *u-ekas-i-kor* ‘to be related as grandfather and grandchild(ren)’ (OI.).

(b) ‘Sister-brother relatedness’:

- g. *yup* ‘older brother’ (T4. 874) → *u-yup-i-kor* ‘to have an older brother – younger brother or older brother – younger sister relationship’ (T4. 820)
- h. *sa* ‘older sister’ (T4. 597) → *u-sa-kor* ‘to have an older sister – younger sister or older sister – younger brother relationship’ (T4. 785–6)
- i. *ak* ‘younger brother’ (T4. 6) → *u-ak-i-kor* ‘to have a younger brother – older brother or younger brother – older sister relationship’ (T4. 801)
- j. *matak* ‘younger sister (for an older sister)’ (T4. 379) → *u-matak-i-kor* ‘to have a sister (younger sister – older sister) relationship’ (T4. 768)
- k. *matapa* ‘younger sister (for an older brother)’ (T4. 379) → *u-matapa-kor* ‘to have a younger sister – older brother relationship’ (T4. 768)
- l. *tures* ‘younger sister (for an older brother)’ (T4. 739) → *u-tures-kor* ‘to have a younger sister – older brother relationship’ (sometimes ‘a younger sister – older sister relationship’) (T4. 798)
- m. *irwak* ‘brothers and sisters, siblings (including cousins and other relatives of similar age)’ (T4. 246) → *u-irwak-i-kor* ‘to be brothers/sisters, brothers and sisters, siblings’ (T4. 751; OI.).

(c) Other types of relations:

- n. *utar-i(hi)* ‘of the same tribe/family/village, group’ (T4. 792–3) → *u-utar-i-kor* ‘to have relative relations [to be relatives]’ (T4. 800–1).

As a rule, these verbs occur as dependent predicates or in attributive constructions with *utar* ‘people’, *pe* ‘thing(s), person(s)’ (NR), due to the pragmatically trivial informative load.

- (123) a. *Tane u-ona-kor wa u-pakno oka.* (T4. 775)
 already REC-father.POSS-have and REC-same be(come).PL
 ‘Being father and son, they became practically the same (in height).’

- h. *-ir* 'one line; brothers and sisters' (bound noun stem) (T4. 241; K.105)
 → *u-ir* 'to be brothers and/or sisters, siblings' (T4. 751) (vi)

A sentential example (note: *anun-ne* 'to be (act as) strangers'; **u-anun-ne* (OI.)):

- (125) *U-ko-payeka p u-ir utar ne na. Itekke*
 REC-APPL-visit NR REC-be.brothers people COP FIN.PRTL NEG.IMP
u-anun-ne-re ... (O.)
 REC-stranger-COP-CAUS
 'People who visit each other are brothers. Don't behave as strangers!'

11.2 Nouns

The fossilized prefix *u-* is contained in the noun *irwak* < *ir-u-ak* 'elder and younger brothers' (K.105). The use of the reciprocal prefix on the noun *anun* 'stranger' which is not a kinship term is probably accounted for by the fact that this noun is semantically related as a kind of antonym to the kinship terms.

- (126) *anun* 'stranger' (T4. 15) → *u-anun* 'mutual strangers' (T4. 801)
irwak 'brother' (T4.246) → *u-irwak* 'both brothers' (Ch2. 34)
tokoy 'friend' (M. 470) → *u-tokoy* 'friend' (M. 507)
tus 'mistress' (T4. 740), → *u-tus-mat* 'mistress and wife' (T2. 67)
mat 'wife' (T4. 379)
utar-i 'people of the same tribe/family' (T4. 792–93) → *u-utari* 'the same tribe, family relations' (T4. 800).

In the noun *utokoy* 'friend' registered in the Sakhalin dialect the reciprocal prefix is attached to the lexical reciprocal noun *tokoy* with the same meaning 'friend', which may be explained by a mutual attraction of the grammatical and lexical meanings of reciprocity resulting in a kind of pleonasm.

12. Reciprocal locatives, postpositions and adverbs

The reciprocal prefix is used on words of these classes because they are two-place, e.g. 'something is the *top* of something', 'someone is acting *with* someone'. The base words of these reciprocals denote, most frequently, converse relations (which are very close to reciprocal relations); thus, for instance, 'top' associates with 'bottom', 'front' with 'back', 'different' with 'same', the space 'between' implies the space 'in the middle', etc. It is but natural that the derivatives may undergo a degree of lexicalization and modification of meaning. Some of the derivatives function as adverbs only, while others may also take the position of a direct object or locative complement (this is a cover term for locative objects and locative adverbials). The meaning of these reciprocals may be proper reciprocal ('with each other' – reciprocal from comitative), or chaining (spatial, as 'in front of each other',

or temporal, as ‘one after another’), or dispersive (‘here and there’), or distributive (‘each (a half of sth)’); see (128f).

12.1 Derived from locatives

The term “locative” (= “locative noun”, “locational noun”) is used here to refer to a group of nouns with locative meanings non-existent in European languages. All these locatives, like ordinary nouns, function as (direct) objects and adverbials. Some of these locatives may be used with possessive markers (127c) and may take an object agreement marker (127b). Most frequently, they are postposed to other nouns and denote direction of motion or position. Like ordinary nouns, they combine with postpositions (see *ta* in (127d) with a reciprocal locative) and may take a direct object (127c). Compare:

- (127) a. *tom* ‘the middle of a surface’ (T4. 719)
 b. *en-tom* ‘at/on me (e.g., as in ‘the sun light is falling on me’)’ (T4. 719) (cf. (4b))
 c. *Sutketusi tom-o tar usi.* (Nak. 289)
 chest.with.dowry middle-POSS rope tie(vb)
 ‘He tied the middle of the chest with the dowry with a rope.’
 d. *Ainu-utar menoko-utar u-tom ta terke kane u-kira-re.* (Ch2. 95)
 man-PL woman-PL REC-middle in jump and soc-run-soc
 ‘Men and women having mixed in disorder (lit. ‘in the middle of each other’) run all together in a hurry.’

About 20 locatives combine with the reciprocal prefix. Reciprocal locatives (though not all of them) may retain the characteristics of the underlying locatives. Almost all of the reciprocal locatives may function as adverbials in which respect they do not differ from adverbs. About half of them may appear as direct objects (cf. (128a, b), (129c)) and locative complements (cf. (127d), (129b)). They may be incorporated occupying the place of an incorporated direct object in the verb structure and intransitivizing it (see (128c, d, e), (129d, e)). One or two of them occur only as incorporated components on transitive verbs (cf. *u-kotca* in (128e)). Several of the derivatives are adverbs proper (cf. *u-atce-ta* in (130b)). With one or two exceptions (see (128b)), reciprocal locatives have no possessive form. The possessive form is found on the reciprocal locative *uko-utar* (see (128b)), i.e. the only derivative with *uko-* instead of *u-*. The difference between *utar* ‘distance/space/time between sth and sth’ (the initial *u-* is probably genetically related to the reciprocal prefix; see (117b)) and *uko-utar* seems to be minimal. The prefix *uko-* is probably used instead of *u-* for intensifying or due to the difficulty of distinguishing it in the sequence *u-utar*.

- (128) a. *A-ikkew-ehe kay ki wa u-oyak osma.* (N. 69)
 IND-small.of.the.back-POSS be.broken do and REC-other.side enter
 ‘The small of my back cracked and broke into two parts.’
 b. *Cise uko-utar-u kus.* (T4. 766)
 house REC-between-POSS pass.through (vt)
 ‘[He] passed between the houses.’

- c. *Otu san-tuka o-u-ka-uyru.* (N. 61)
many jut-hilt bottom.PRF-REC-top-lie (vt)
'Many jutting (sword) hilts lie there one upon another.'
- d. *u-or-unu* (T4. 816)
REC-place-put(.on)
'to wear sth (two layers of clothing) one upon another.'
- e. *U-kotca-e-sunke.* (T4. 765)
REC-before-APPL-lie(vi)
'[They] boast about their family.'
- f. *U-arke / u-emko a-e ro.* (T4. 806)
REC-half REC-half IND-eat IMP
'Let's eat half (of an apple/maize, etc.) each.'

The following examples with the locative *u-sam* 'place next to each other' illustrate various usages of reciprocal locatives (in (129c) the applicative *e-* indicates place of action).

- (129) a. [*Aoka*] *hotke-an.* (-*an* = 1PL.INC for vi) (OI.)
'We sleep.'
- b. [*Aoka*] *u-sam ta hotke-an.* (*ta* 'in/at' = postposition) (O. #2030501)
'We slept next to each other.'
- c. [*Aoka*] *u-sam a-e-hotke.* (OI.) (*a-* = 1PL.INC for vt) (OI.)
(same meaning).
- d. [*Aoka*] *u-sam-e-hotke-an.* (O3. 302.)
(same meaning).
- e. [*Ecioka*] *eci-u-sam-e-hotke.* (OI.) (*eci-* = 2PL for vi and vt)
'You slept next to each other.'

Here is a list of reciprocal locatives:

- (130) a. *arke* 'half, one part (of an apple, etc.), one side' (T4. 22)
→ *u-arke* 'half (of sth round, a lump) for each' (T4. 801)
- b. *atce* 'another person's house' (T4. 32)
→ *u-atce-ta* 'separately, (to live) in different houses' (Nak. 51)
- c. *eepak* 'next (place, matter, thing); edge, tip (of sth long)' (T4. 80)
→ *u-eepak-ta* 'gradually' (T4. 803) (cf. 'one after another')
- d. *emko* 'a half (of one thing, for a line, long things, time) (T4. 96)
→ *u-emko* 'half each (of sth long and thin)' (T4. 806; it can be incorporated);
u-emko-ani 'to carry half each' (OI.) (vi)
u-emko-uk 'to join in a song' (mainly with *upopo*; see (117b); *uk* 'receive'; OI.)
- e. *enka* 'upper part (without a contact); above' (T4. 100–1)
→ *u-enka* 'one above another' (T4. 807)
- f. *imak* 'the place opposite/behind/after sth/sb' (T4. 229)
→ *u-imak-ta* 'over many generation', ['one after another, successively'], 'from generation to generation' (T4. 750)
- g. *ka* 'top of sth (with a contact)', 'a visible side of sth' (T4. 267)
→ *u-ka* 'one on top of another' (T4. 758)
- h. *kotca* '(spatially) place before, in front of sth/sb moveless' (T4. 343)
→ *u-kotca* 'in front of each other' (T4. 765) (only incorporated)

i.	<i>mon-pok</i>	‘place nealy below (a place visible if one just looks down)’ (T4. 393)
→	<i>u-mon-pok</i>	‘each other’s bottom, mutually below’ (T4. 768)
j.	<i>noski</i>	‘the middle/centre of sth (for a line, surface, time)’ (T4. 433)
→	<i>u-pak-noski</i>	‘the exact middle (of [between] two places)’ (T4. 775; TS. 3–330) (<i>pak</i> ‘just, about’ (T4. 505))
k.	<i>or</i>	‘place’ (T4. 477)
→	<i>u-or</i>	‘each other’s/everyone’s place’ (O. 161)
l.	<i>oyak</i>	‘another, different place’ (T4. 499)
→	<i>u-oyak</i>	‘each in/at a different place’ (T4. 818)
m.	<i>piskan</i>	‘place around, in the area of’ (T4. 533)
→	<i>u-piskan</i>	‘here and there’ (T4. 776)
n.	<i>sam</i>	‘place in proximity, near’ (T4. 601)
→	<i>u-sam</i>	‘place next to each other’ (T4. 786)
o.	<i>soy</i>	‘the place outside/outdoors/near one’s house’ (T4. 679)
→	<i>u-soy</i>	‘just outside of each other’s houses (nearby)’ (O. 164)
p.	<i>tek-sam</i>	‘place at the side, next to’ (T4. 708–9)
→	<i>u-tek-sam</i>	‘next to each other’ (<i>tek</i> ‘hand’) (T4. 795)
q.	<i>tom</i>	‘the middle of a surface’ (T4. 719)
→	<i>u-tom-o</i>	‘in the direction of each other’ [lit. ‘in the middle of’]
r.	<i>tukari</i>	‘just in front of sth/sb’ (T4. 732)
→	<i>u-tukari</i>	‘just in front of each other’; ‘frequently, many times’ (T4. 797)
s.	<i>utur</i>	‘space between (for space, time)’ (T4. 798)
→	<i>uko-utur-(u)</i>	‘space between (two things/people/places)’ (T4. 766).

Some of the reciprocal locatives may undergo further change and become adverbs. As the adverbs contain to a lesser or greater degree fossilized postpositions (cf. *u-ka-un* ‘one after another, in succession’; T5. 135). The borderline between them and locative complements is not clearcut. The adverbs are more distinct in case of lexicalization or/and reduplication (cf. *u-sam-ta u-sam-ta* ‘next to each other’, *u-soy-ta u-soy-ta* ‘side by side’). Compare:

- (131) a. *U-tom-ta u-koramkor.* (T4. 796)
 REC-middle-in REC-discuss
 ‘They discuss sth directly with each other (without a mediator).’
- b. *Aynu ... u-imak-ta u-imak-ta u-as-te.* (TS. 3, 311)
 man REC-after-at REC-after-at REC-stand-CAUS
 ‘People will multiply from generation to generation.’

12.2 Derived from postpositions and verbs

The derivatives concerned function as adverbs. The adverb *u-tura* ‘together’ is particularly frequent in texts. Its base *tura* ‘with sb’ is comitative in meaning and the adverb acquires a sociative meaning as a result of derivation. This adverb co-occurs with both non-reciprocal and reciprocal verbs (see (132a) and (132b) respectively).

- (132) a. ... *ayne, oroepak-an hine, u-tura oka-an.* (R. 180)
 and.then.finally sleep.together-IND and REC-with be.PL-IND
 ‘... and then finally we slept together, and lived with each other.’

- b. *U-tura u-koyki-hci manu.* (Kh. 421) (the Sakhalin Dialect)
 REC-with REC-fight.with-PL it.is.said
 'It is said [that they] fought with each other.'

The adverb *u-tura* is related both to the postposition *tura* 'with sb' (T4. 738) and the transitive verb *tura* 'to go with sb, accompany sb; to take, bring sb together with oneself' (Nak. 282) (see 3.4 above). Other adverbs in question are related either to a postposition or to a verb, or to both. Here is a list of these adverbs (*-no* is an adverb-marking suffix, sometimes optional).

1. Reciprocal adverbs related to both a postposition and a transitive verb.

- (133) a. *ekohopi* i. 'separately from sth/sb'; ii. 'to part/separate from sth/sb' (T4. 91)
 → *u-ekohopi* 'separately from each other, in opposite directions'; ii. 'for a road, river to be forked, divided' (T4. 806)
- b. *hekote* i. 'towards sth/sb'; ii. 'to turn face towards sth/sb; marry sb' (T4. 179–80)
 → *u-hekote* 'mutually, facing each other', 'to be married, live together' (T4. 749)
- c. *kasu(no)* i. 'more than, over, above sth', ii. *kasu* 'to exceed sth/sb' (T4. 286)
 → *ue-kas-kasu-no* 'to stick out one after another' (T4. 805–6)
- d. *kattuyma(-no)* i. 'far from sth/sb'; ii. 'to be far from sth/sb' (vt) (T4. 288)
 → *u-kattuyma-no* 'far from each other; once in a while, for a long time' (T4. 753)
- e. *mosma* i. 'separately from sb' (O. 83); ii. 'to separate from sb' (O. 83)
 → *u-mosma(-no)* 'separately, each, individually' (T4. 768)
- g. *okari* i. 'instead of sth/sb, in place of sth/sb' (HAT. 306)
 ii. 'to take turns with sb, to do [work] instead of sb' (T4. 461)
 → *u-okar-pa* i. 'in turns', ii. 'to take turns with each other' (T4. 813)
- h. *sinna[-no]* i. 'different, differently' (Nak. 228), ii. 'to be different' (T4. 639–40)
 → *u-sinna[-no]* 'mutually different, each different' (T4. 789; OI.)
- i. *tasa* i. 'towards, against sth/sb', ii. 'to alternate with sb/sth', iii. 'in turn, by turns with sb' (T4. 701)
 → *u-tas(-pa)* 'mutually', 'in turn, by turns with each other' (T4. 794)
- j. *tura* i. 'together, with sb'; ii. 'to accompany sb' (T4. 738)
 → *u-tura* i. 'together, with each other, accompanying each other', ii. 'to be with each other, accompany each other' (T4. 798).

2. Related to postpositions only.

- k. *ekari* 'facing sth/sb' (T4. 86)
 → *u-ekari* 'from both [sides]' (T4. 805)
- l. *ehosi(no)* '[different from sth/sb], unlike sth/sb, deviating from sth[a position]' (T4. 83)
 → *u-ehosi(no)* 'mutually different/opposite' (T4. 804)
- m. *kokusisi* 'together with sb' (T4. 323–4)
 → *u-kokusisi(pa)* 'everyone together' (T4. 758)
- n. *os* 'after/following sth/sb, behind sth/sb' (T4. 484)
 → *u-os* 'continually/repeatedly, one after another' (T4. 817)
- o. *peka* 'along sth, following sth/sb, across sth/sb' (K. 290)
 → *u-peka* 'opposite each other' (K. 296).

3. Related to verbs only.

- p. *etunankar* i. 'to meet sb (come across sb)' (T4. 136–7)
 → *u-etunankar* i. 'from both directions, sides'; ii. 'to meet/come across each other' (T4. 811)
- q. *kari* 'to turn/spin sth' (T4. 281) (vt bound stem)
 → *u-kari-no* (adv) 'for everyone to take turns' (T4. 753)
- r. *u-oma* 'for a lot of people to gather and be present [stay] together, to be all collected/compose a set (for things)' (T4. 814) (< *oma*; see (110f))
 → *u-oma-no* 'all of them together, every single one' (T4. 814).

Sentential examples:

- (134) a. *Umurek ne korka u-ehosi-no hotke.* (T4. 804)
 spouses COP however REC-different-ADV sleep
 'They are spouses, however, sleep back to back.'
- b. *...amun-ihī tun ne hine u-etunankar kisma.* (T4. 811)
 arm-POSS two COP and REC-on.both.sides grasp
 '...the two of them grasped their hands on both sides.'
- c. *Iwan rametok u-peka rok wa oka.* (O4. 194)
 six brave.man REC-face sit(PL) and be.PL
 'Six brave men were sitting opposite each other.'
- d. *E-kor sa-po kor-pa kuni u-okar-pa ye-pa yakka*
 2SG-POSS sister-DIM have-PL CMPL REC-exchange.with.sb-PL say-PL but
e-kor sa-po kopan ruwe ne. (N. 164)
 2SG-have sister-DIM refuse ASS.FIN COP
 'They were saying by turns that would have your sister, but she refused.'

In the following instance the adverb is sociative in meaning, which is determined by the reciprocal prefix on a postposition with a comitative meaning, similar cases having occurred above as well. The stem *kusis* is not registered as a free word.

- e. *U-kokusis a-uko-kik-kik.* (HY. 43)
 REC-together.with IND-SOC-hit-hit
 'I have beaten all of them together.'

12.3 Derived from adverbs; residual cases

What follows are reciprocal adverbs (a) derived from adverbs, (b) residual diverse cases.

1. Derived from adverbs:

- (135) a. *eirpak* 'together with sb/sth'; 'at the same time as sth' (T4. 84)
 → *u-eirpak* '(for two people and more) together with each other (at the same time)' (T4. 804)
- b. *koraci* 'as, like sth/sb, just like sth/sb' (T4. 334)
 → *u-koraci* 'the same, equal' (H. 154), lit. 'the same with each other'
- c. *ne-no* 'alike, the same as sth/sb' (T4. 410)
 → *u-ne-no* '(for two and more) like each other' (T4. 772)
- d. *otutanu* 'after, next' (also attr. 'next, following') (T4. 495, 743–4)
 → *u-otutanu* 'in order, one by one' (T4. 817)

- e. *pak[-no]* 'until; roughly', 'as far as' (T4. 505, 507)
 → *u-pak[-no]* 'for all, both to be roughly the same' (T4. 775).

The following examples contain the base and the derived adverbs:

- (136) a. *A-epakasnu wa neno i-karkar kor okay ruwe ne.* (Nak. 308)
 PASS-teach and this.way ABS-embroider and be.PL ASS.FIN COP
 '(They) are embroidering in the way (they) were taught.'
 b. *Kutcama u-neno an.* (T4. 772)
 voice REC-same.as be
 '[Their] voices are alike.'

2. Residual diverse cases:

- (137) a. *-sa* 'front side' (bound stem) (T4. 597)
 → *u-sa-ta* 'from generation to generation' (T4. 786)
 b. *sim* 'the next day' (bound noun stem) (T4. 635, 789)
 → *u-sim-ne* 'from day to day' (T4. 789)
 c. *uko-oman* 'to go together' (< *oman* 'to go'; H. 64)
 → *uko-oman-no* 'one after another, successively without intervals' (T4. 760)
 d. *usa [usa]* 'various, each' (T4. 785)
 → *u-usa u-usa* (same translation) (T4. 800).

13. Constructions with the adverb *u-tas-pa* 'mutually, each other, by turns'

This adverb can be segmented into the reciprocal prefix *u-*, the stem of the verb *tasa* 'to change' and the plural marker *pa*. This adverb seems to be used optionally with reciprocal verbs only, probably to emphasize the reciprocal sense (cf. (138a, b)), and also less frequently with lexical reciprocals (cf. (138c)). When used with other verbs, the adverb *u-tas-pa* has the meaning 'by turns' (see (138d)).

- (138) a. *Tu okkayo u-tas-pa u-nukar hine ...* (HY.57)
 two man mutually REC-look and
 'Two men looked at each other and ...'
 b. *U-tas-pa u-ko-apkas-an wa ...* (Nak. 63)
 mutually REC-APPL-go-IND and
 'We visit each other and ...'
 c. *Uramkarkare itak u-tas-pa ye.* (T4. 794)
 sympathize.with.each.other word mutually speak
 'They express sympathy with each other.'
 d. *U-tas-pa suke-an.* (OI.)
 mutually cook-IND
 'We were cooking by turns.'

Our informant Oda Ito does not accept sentences with *utaspa* 'mutually' and non-reciprocal verbs.

14. Note on lexical reciprocals

Numerous lexical reciprocals have been mentioned in the body of this paper. Some of them yield reciprocal verbs like ordinary, non-reciprocal verbs. Thus, for instance, the verbs *hekote* ‘to marry sb’ take a reciprocal marker to form “canonical” subject-oriented reciprocals of the type discussed in 3.1.1.2, cf. *hekote* ‘to marry sb’ → *u-hekote* ‘to marry each other’ (incidentally, the Japanese verbs with the meanings ‘to marry’ and ‘to fight’ do not take a reciprocal marker). From a number of lexical reciprocals prefixed object-oriented reciprocals may be formed, in which case the reciprocal marker is sometimes pleonastic, cf. *niko* ‘to fold sth up’ (K. 170) → *uko-nike*, *uko-niko* (same translation) (T4. 759; B. 527). In the latter case, as well as in a number of other cases, the lexical reciprocal has a tendency to be used with an explicit marker of reciprocity.

Another instance of this tendency is the lexical reciprocal *tasa* with the meaning ‘to change/exchange for sth/[sth]’ whose marking may have parallels in other languages. Its reciprocal meaning manifests itself in the following: if two persons exchange an apple for a pear they at the same time exchange a pear for an apple. This non-derived verb *tasa* is used very rarely, though it is registered in the dictionaries; cf.:

- (139) *Nina kor mur tasa wa ...* (T4. 701)
 firewood have rice.bran exchange and
 ‘[He] exchanged rice-bran for firewood.’
 lit. ‘[He] had firewood, exchanged for rice-bran.’

Our informant does not understand this sentence and uses the causative form *tasa-re* or the reciprocal-causative from *u-tasa-re* instead. For instance:

- (140) *Anna katkemat tura-no Ito ninkari u-tasa-re wa ...* (OI.)
 A. mrs. with-ADV I. ear.ring REC-exchange-CAUS and
 ‘Mrs. Anna and Ito (lit. ‘Ito with Mrs. Anna’) exchanged their ear-rings.’

There is a difference between Ainu dialects in expressing the meaning of the verb *tasa* ‘to change/exchange for sth/[sth]’. Some of the dialects use one of the four forms only, others use as many as three. Hattori (1965:152) shows the distribution of these derivatives in eight dialects:

- (141) a. *tasa* – 0 c. *i-tasa-[pa]-re* – 5
 b. *u-tasa-[pa]-re* – 7 d. *uko-u-tasa-re* – 1.

Note that the unmarked form *tasa* is not registered in the *Ainu Dialect Dictionary* (H.), the prevalent form among them being the reciprocal-causative *u-tasa-re*. The form *i-tasa-re* (*i-* is a generalized object marker; cf. 2.3.2.4) is probably used without an object absolutely, in the sense of performing an exchange regardless of the things exchanged (most probably, it does not compete with the (b) form). Of special interest is the form *uko-u-tasa-re* in which the sociative prefix co-occurs with the reciprocal one; this seems to testify to the fact that the prefix *u-* is fossilized here and is not interpreted as a reciprocal marker. The fossilized reciprocal prefix can probably be distinguished in another more object-oriented reciprocal, viz. *usaraye* (**saraye*) ‘to share, divide sth’ entered in

Section 9.1 among *reciproca tantum*. There is an opinion, however, that this verb is segmentable into *usa + raye* lit. ‘separately + move’ (see T4. 786). For the same reason, in the opinion of Refsing (1986:282), the applicative form of this verb may take the “second” reciprocal marker:

- (142) *Taan cep an-u-ko-usaraye wa an-e.* (R. 184)
 this fish IND-REC-APPL-share and IND-eat
 ‘We share this fish with each other and eat.’

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Authorized translation from Russian by Emma Geniušienė

Reciprocals in Itelmen (Kamchadal)

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1. Introduction

1.1 The Itelmen language

The Itelmens (Kamchadals) are aboriginals of the Kamchatka Peninsula. According to the latest census of 1989 they numbered about 2,500 (Tishkov 1994: 164, 167), but the real number is more likely to be 1,500 (Volodin 1995). At present, the Itelmen language is on the verge of extinction. But in the 1960s and 1970s there were some bilingual people who spoke Itelmen. The Itelmens' neighbours are Koryaks (in the north) and Evens (in the east), and they share their territories with Russians. In the past, the Itelmens occupied large territories on the Kamchatka and were divided into three territorial groups: western (the Oxotsk coast), eastern (the coast of the Bering Sea and the Pacific Ocean, the valley of the Kamchatka river), and southern; the latter group was in contact with the Ainus. At the beginning of the 18th century they numbered about 12–15 thousand, but a great many Itelmens (6 out of 7) died of pox in the middle of the 18th century (1768–1769); by the beginning of the 19th century their number was about 1,500–2,000 and it never increased. The southern and the eastern languages became extinct by the beginning of the 20th century, and the western Itelmen language alone has survived until our days (cf. Worth 1969): the texts at our disposal are written in this dialect and all grammatical descriptions are based on it.

The Itelmen language is traditionally ascribed to the Chukotko-Kamchatkan language family (Bogoras 1922; Skorik 1958: 534–46, 1979: 230–63); this opinion is shared by Comrie (1980: 109–20). In fact, the grammar and lexicon of the Itelmen language display a number of features that make it close to Chukchi and Koryak. But there is an alternative point of view which regards all the common features of these languages as a result of areal proximity rather than genetic relatedness, Itelmen borrowing from Chukchi-Koryak languages (Volodin 1979: 33–8; Georg & Volodin 1999: 237–9). The data of reciprocal constructions do not support the hypothesis of the genetic relatedness of Itelmen to Chukchi and Koryak.

1.2 Overview

In the Itelmen material at my disposal, there is only one means of reciprocal formation, viz. the monosemous prefix *lu-/lo-*. The alternation of the two allomorphs is grammatical: *lo-* occurs on non-finite verb forms and nominal derivatives, and *lu-* on finite forms (see Georg & Volodin 1999: 189). Compare (the forms given are infinitives in *-s*; on the suffix *-ka* used, with few exceptions, on intransitive verbs see section 3.1):

- | | | | |
|--------|---|---|--|
| (1) a. | <i>tnele-s</i> 'to push sb' | → | <i>lo-tneł-ka-s</i> 'to push each other' |
| b. | <i>pens-ka-s</i> 'to throw oneself at sb' | → | <i>lo-pens-ka-s</i> 'throw oneself at each other' |
| c. | <i>txzo-ka-s</i> 'to stand' | → | <i>lo-txzo-ka-s</i> 'to stand next to each other.' |

Note that the reciprocal and the causative prefixes (the latter within a confix) are the only derivational prefixes in Itelmen. The reciprocal prefix alone has no genetically related counterpart in Chukchi and Koryak.

1.3 Database

Reciprocals in *lu-/lo-* were first identified and described in Volodin (1976:210–11). Initially they were found in the texts collected by W. Jochelson (see Worth 1961:35, 38, 165, 166) where verbs with this prefix occur a number of times. During my field work in the 1960s on Kamchatka, my informants confirmed these reciprocal forms. In this paper, all the reciprocal verbs I have found so far are listed. This list is unlikely ever to be enlarged.

1.4 Transcription

The following needs clarification: the letter *l̥* stands for a voiceless /l/; the letter *f* stands for a voiceless /w/; the symbol /ʔ/ signifies glottal stop (as in /k, t, p, q, čʔ/), /ʲ/ denotes palatalization and /°/ signifies labialization of the entire word.

2. Grammatical notes

2.1 Similarities and differences in comparison with Chukchi and Koryak

1. Similarities: (a) verb agreement, (b) imperative prefixes, (c) locative case markers, (d) antipassive marking.

2. Differences: (a) absence of ergative sentence structure, (b) absence of incorporation, (c) the existence of the category of version; (d) phonetic differences, e.g. absence of vowel harmony, consonant density, e.g. possibility of clusters of seven consonants in word-initial position (e.g. *kstkʲlknan* ‘he jumped off’) and of four consonants in word-final position (e.g. *qtimplx* ‘bring this’), and labialization (see Asinovsky & Volodin 1987:362–4; Georg & Volodin 1999:38ff.).

2.2 Sentence structure

The word order in original texts is SOV (it is free in Chukchi and Koryak). The intransitive and transitive subject and direct object are zero marked. The predicate is inflected for persons. Cf.:

- | | | | |
|-----|----|-----------------------------|--------------------------------|
| (2) | a. | <i>Isx °k-ŋiksini-knen.</i> | ‘Father fell asleep.’ |
| | b. | <i>Isx pʲeč anʲčp-nen.</i> | ‘Father taught (his) son.’ |
| | c. | <i>Pʲeč isx anʲčp-nen.</i> | ‘The son taught (his) father.’ |

2.3 Case system

In Itelmen, twelve cases are distinguished (Volodin 1976:139ff.). The syntactic cases are the zero-marked absolutive, instrumental in *-l*, and locative in *-k*. The other case forms function as oblique objects and adverbials. The forms of personal pronouns with the marker *-°lwin* (the 3SG form is suppletive) once regarded as ergative case forms (see Bogoras 1922:720–1; Stebnickij 1934:92) are in fact emphatic-reflexive forms of the pronouns, cf. *kamma* ‘I – °*kmi-lwin* ‘I myself’, *anna* ‘he’ – °*fnewa* ‘he himself’, etc. These pronouns function like absolutive case forms and they have no other case forms.

2.4 Verb agreement

Intransitive verbs agree with the subject and transitive verbs agree with the subject and direct object. The subject agreement on an intransitive verb is marked with circumfixes in the 1st person and with suffixes in the 2nd and 3rd person:

- | | | | | |
|-----|---------------------|---------------|---------------------|---------------|
| (3) | <i>t-k'ol-kičen</i> | ‘I came’ | <i>n-k'ol-kičen</i> | ‘we came’ |
| | <i>k'ol-č</i> | ‘you.SG came’ | <i>k'ol-sx</i> | ‘you.PL came’ |
| | <i>k'ol-en</i> | ‘he came’ | <i>k'ol-eʔn</i> | ‘they came.’ |

The 1st person forms with a prefixed marker are a result of the Chukchi-Koryak influence.

The following illustrates a fragment of the agreement paradigm of a transitive verb:

- | | | | | |
|-----|----|------------------------|----|------------------------|
| (4) | a. | <i>t-anja-čen.</i> | c. | <i>n-anja-čen.</i> |
| | | 1SG.SBJ-praise-3SG.OBJ | | 1PL.SBJ-praise-3SG.OBJ |
| | | ‘I praised him.’ | | ‘we praised him.’ |
| | b. | <i>anja-miŋ-Ø.</i> | d. | <i>anja-miŋ-sx.</i> |
| | | praise-1SG.OBJ-2SG.SBJ | | praise-1SG.OBJ-2PL.SBJ |
| | | ‘you praised me.’ | | ‘you praised me.’ |
| | c. | <i>Ø-anja-wommen.</i> | e. | <i>n-anja-wommen.</i> |
| | | 3SG.SBJ-praise-1SG.OBJ | | 3PL.SBJ-praise-1PL.OBJ |
| | | ‘he praised me.’ | | ‘they praised me.’ |

2.5 The category of version

It expresses possessive and benefactive relations. It may also render direction of motion (see Volodin 1976:256–61); cf. sentences (a) and (b) containing the same verb without and with the marker of version (in bold type) in (5)–(9) respectively:

- | | | |
|-----|----|--|
| (5) | a. | <i>Xk'ič kəmman / kəmman-nk st'awaŋə-z-en.</i> |
| | | hand my at.me-LOC ache-PRES-3SG |
| | | ‘My hand aches.’ |
| | b. | <i>Xk'ič st'awaŋə-s-kinen.</i> |
| | | hand ache-PRES-at.him |
| | | ‘His hand aches.’ |

- (6) a. *ənnan kon' twajt-wen.*
his horse jump-3SG
'His horse jumped.'
- b. *Kon' twajt-kenan.*
horse jump-on.him
'His horse jumped.'
- (7) a. *i-s-en.*
go-PRES-3SG
'he goes.'
- b. *i-s-kineŋ / kipnen / kisxen.*
go-PRES-to.him to.them to.you
'he goes to him / to them / to you.'
- (8) a. *Q-la-s-sxik.*
IMP.2SG-tell-PRES-3SG.OBJ
'Tell this (immediately).'
- b. *Q-la-s-kenan / kipnen.*
IMP.2SG-PRES-to.him to.them
'Tell this to him /to them.'
- (9) a. *Tχaltχal əntxla-s-kičen.*
meat cart-PRES-3SG.OBJ
'He carries meat.'
- b. *Tχaltχal əntxla-s-kinen.*
meat cart-PRES-to.him
'He takes meat to him.'

2.6 Tense/aspect system

There are two aspects, imperfective with the suffix *-qzu* and its allomorphs and perfective which is zero marked. There are three tenses: zero-marked past, present (moment of utterance) with the suffix *-s/-z*, and future marked by the suffix *-al/-a*. Thus there are six tense/aspect forms all in all.

2.7 Means of valency change

2.7.1 Valency-increasing means

The main valency-increasing means is the causative confix with the initials *len-*, *ən-* and finals *-ŋ*, *-w* and *-Ø*; its principal meaning is causative, and it may also code a number of other meanings, including the applicative meaning (5c). A small group of verbs forms causative derivatives by means of the prefix *-t* (5d). Cf.:

- (10) a. *čefe-ka-s* 'to be in a hurry' → *ən-čefe-Ø-s* 'to make sb hurry'
b. *qetet-ka-s* 'to freeze' (vi) → *ən-qetet-we-s* 'to freeze' (vt)
c. *maja-ka-s* 'to tell lies' → *len-maja-ŋe-s* 'to deceive'
d. *nas-ka-s* 'to go down' → *t-nase-Ø-s* 'to lower'

2.7.2 Valency-decreasing means

There are antipassive forms, with the detransitivizing prefix *en-/an-* (a Chukchi-Koryak borrowing *ine-/ena-*) in combination with the the suffix *-ʔ* or alone:

- (11) a. *ənk'zo-s* 'to help sb' → *en-ənk'zo-ʔ-ka-s* 'to give help, be a helper'
 b. *pəle-s* 'to bite sb' → *am-pəle-ʔ-ka-s* 'to bite' (absolute)

2.8 Expression of reflexivity

Reflexivity is expressed either by underived intransitive verbs or by transitive verbs with the noun *uwik* 'self' (< 'body') in direct object position, i.e. in the same way as in Chukchi and Koryak; cf.:

- (12) a. *laχsχ kuma-z-en, tlazo-z-en.*
 mother wash-PRES-3SG comb-PRES-3SG
 'Mother washes and combs [herself].'
 b. *fnewa uwik k-ən-klā-l-ʔan.*
 he.himself self 1.INF.3SG+3SG-CAUS-drown-CAUS-1.INF.3SG+3SG
 'He drowned himself', lit. 'He-himself drowned-he-him himself'

2.9 Infinitives

In Itelmen, there are 6 so-called infinitives – this term is applied broadly to forms not used in predicate position. In this paper, when listed separately, the verbs are cited in the form of infinitive I (it is more similar to the infinitive of European languages than the other so-called infinitives). This form is marked with the suffix *-s* on all the verbs. All the intransitive verbs and 23 transitive verbs contain the suffix *-ka/-ki/-k/-e*. In some cases this suffix serves to distinguish verbal stems from nominal; cf. *maʔle-s* 'game, play' – *maʔl-ka-s* 'to play', *son'le-s* 'life' – *son'l-ka-s* 'to live'.

3. Reciprocals with the prefix *lu-/lo-*

3.1 Introductory

In the lists below the reciprocals are cited in the infinitive form. The suffix *-ke/-ka* preceding the infinitive marker *-s* indicates intransitivity, as a rule; an exception are 23 transitive verbs with this suffix. A specific feature of some reciprocal verbs derived from intransitives is the meaning 'next to'. As to other semantic oppositions of reciprocals with their base verbs, they commonly correlate with those of other languages. Only subject-oriented reciprocals have been registered. Characteristically, the number of reciprocals from one-place or (potentially) two-place intransitives exceeds that of reciprocals from transitives. In the lists below, reciprocals are subdivided according to the transitivity/intransitivity of the base verbs and also according to the character of the semantic opposition with the latter.

The allomorph *lu-* is used in finite forms and in infinitive III; cf.:

- (13) a. *lo-ʔəlfčə-ka-s* ‘to agree with each other’
 k-lu-ʔəlfčə-knan ‘they agreed with each other’ (3.INF)
 cf.: b. *mən-lu-ʔəlfčə-k.* ‘let’s agree.’

The following passage is from W. Jochelson’s collection of Itelmen texts (Worth 1961). It contains three reciprocals derived from two-place transitives and two reciprocals from two-place intransitives, and three lexical reciprocals with the initial component *l-* which may be related genetically to the reciprocal prefix:

- (14) “The battle of two Kutxs” (JW. 224)
- a. *K-sunʔ-qzu-knen* *anma-n* *Kutq,* *kaxa-n* *Kutq* *Kaxa-n*
 3.INF-live-IPFV-3.INF sea-POSS K. river.mouth-POSS K. river.mouth-POSS
Kutq *k-sxezi-knen* *anm-anke.* *Anma-n* *Kutq* *k-sxezi-knen*
 K. 3.INF-set.out-3.INF sea-ALL sea-POSS K. 3.INF-set.out-3.INF
kax-anke. *Kənnen-k* *k-luʔ-enf-knen.* *Qnaŋ* *k-lo-pens-knan*
 to-river.mouth middle-LOC 3.INF-REC-meet-3.INF at.once 3.INF-REC-throw-3.INF
k-ʔiti-qzu-knen, *qaʔm* *k’e* *ən’čəča-q.* *Halč* *jaq* *tewut*
 3.INF-struggle-IPFV-3.INF NEG who win-NEG PRTL PRTL PRTL
k-luʔ’xe-qzu-knen, *k-lu-k’ulečič-ʔ-qzu-knen,* *tewut*
 3.INF-fight-IPFV-3.INF 3.INF-REC-scratch-IPFV-3.INF PRTL
k-lo-pəʔ-sxen-qzo-knan. *Tewut* *k-tekej-knen,*
 3.INF-REC-bite-DISPERS-IPFV-3.INF PRTL 3.INF-get.up-3.INF
k-lo-kskozowa-knan, *k-sxezi-knen* *tχi-ʔin* *atno-ke* *ilwizil.*
 3.INF-REC-be.ashamed-3.INF 3.INF-set.out-3.INF they-POSS home-ALL back
 ‘There lived Kutx of the sea and Kutx of the river. Kutx of the river set out to sea. Kutx of the sea set out to the river mouth. Half-way they *met each other*. At once they *fell upon each other* (and) *began to struggle*. Neither could win. Well, then again (they) *started fighting*, (they) *began scratching each other*, (they) again *started biting each other all over*. Then (they) got up, *became ashamed of each other*, (and) set out back home.’

A few more sentential examples:

- (15) *Sxle* *tχi-ʔin* *lu-ʔl-k* *k’-atxsa-knan* *Jesus* *χiq* *k-təl-knen,*
 then they-POSS eye-PL-LOC 3.INF-become.light-3.INF J. PRTL 3.INF-be-3.INF
əna *jaq* *qaʔm* *lčku-kinkin* *k’-le-knen* *K-lu-χine-knen* *qula*
 He PRTL NEG see-NEG 3.INF-become-3.INF 3.INF-REC-say-3.INF other
qula-nke: *Qeʔsx* *mizwin* *liŋe-ʔn* *qaʔm* *lu-kilaʔn* *l-kaq* *it’e* °*Fnewa*
 other-ALL how our heart-PL NEG burn-2.INF.PL be-NEG when he.himself
muza *əʔič-ʔ-qzu-mičŋ* *ktxas-kit.* (Luke, 24: 31–32)
 we instruct-IPFV-1.PL.OBJ road-about
 ‘And their eyes were opened and they recognized Jesus; and He vanished from their sight. And they said to one another: “Were not our hearts burning within us while He was speaking to us on the road (...)?”’
- (16) *Miti-ga* *mən-kelit-kas* *massu-ʔn* *ləle-z-eʔn* *stowal-ank.* *Halč* *jaqg*
 M.-VOC IMP.1PL-shout-1.INF bear-PL walk-PRES-3PL cedar.wood-LOC PRTL PRTL
k-lu-kelit-qzu-knen. (Jochelson 35)
 3.INF-REC-shout-IPFV-3.INF

‘Miti, let us shout: “There are bears in the cedar wood.” Well, they began to shout to each other.’

- (17) *Azosl q’-it-sx stowal-anke qčex lilixl*
 tomorrow IMP.2-go-PL cedar.wood-LOC together sister
q-lo-oč’zo-qzo-sx. (Jochelson 38)
 IMP.2-REC-call-IPFV-PL
 ‘Go to the cedar-wood tomorrow together with (your?) sister, call each other.’

3.2 Reciprocals derived from two-place transitives

Derivation of these reciprocals involves intransitivization. The marker of intransitivization is the suffix *-ka* which is not added to those transitives that already have it. In a number of cases, a reciprocal form also contains the intransitivizing prefix *an-/en-/in-/na-* (*an-* > *am-* before *-p*; cf. *lo-ʔam-pəl-sxena-ʔt-ka-s* in (19)). It remains unclear in these cases whether the reciprocal is formed immediately (a) from a transitive verb by means of the confix *an-...-ʔt*, or (b) from an intransitive which in its turn is derived from the base transitive. Here is a list of these reciprocals.

- (18) a. *lčko-s* ‘to see sb’ → *lo-lčko-ka-s* ‘to see each other’
lʔtate-s ‘to love sb’ → *lo-lʔtat-ka-s* ‘to love each other’
pilk’ate-s ‘to stroke sb’ → *lo-pilk’at-ka-s* ‘to stroke each other’
ʔtazo-s ‘to wash sb’ → *lo-ʔtazo-ka-s* ‘to wash each other’
tnete-s ‘to push sb’ → *lo-tnet-ka-s* ‘to push each other’
t’xle-s ‘to beat sb’ → *lo-t’lxe-ka-s* ‘to fight’
təllate-s ‘to touch with hands’ → *lo-təllat-ka-s* ‘to touch each other with hands’
təmzo-s ‘to lick sb/sth’ → *lo-təmzo-ka-s* ‘to lick each other’
- b. *aluptk’a-s* ‘to whisper sth’
 → *aluptk’a-ʔt-ka-s* ‘to whisper’ (vi)
 → *lo-aluptk’a-ʔt-ka-s* ‘to whisper to each other’
an’čpa-s ‘to teach sb’
 → *an-e-čpa-ʔt-ka-s* ‘to teach’ (vi)
 → *lo-ʔan-e-čpa-ʔt-ka-s* ‘to teach each other, learn from each other’
epsto-s ‘to splash at sb’
 → *epsto-ʔt-ka-s* ‘to splash water’ (vi)
 → *lo-ʔepsto-ʔt-ka-s* ‘to splash at each other’
oč’e-s ‘to call sb’
 → *oč-zo-s* ‘to call repeatedly’
 → *lo-ʔoč-zo-ka-s* ‘to call each other repeatedly’
owa-s ‘to kiss sb’
 → *owa-ʔt-ka-s* ‘to kiss’ (vi)
 → *lo-ʔowa-ʔt-ka-s* ‘to kiss each other’
ənč’ajə-s ‘to tease sb’
 → *na-nč’ajə-ʔt-ka-s* ‘to tease’ (vi)
 → *lo-na-nč’ajə-ʔt-ka-s* ‘to tease each other’
ənk’zo-s ‘to help sb’
 → *en-ənk’zo-ʔt-ka-s* ‘to give help’ (vi)
 → *lo-ʔen-ənk’zo-ʔt-ka-s* ‘to help each other.’

- (19) a. *čawa-ka-s* ‘to meet sb’ → *lo-čawa-ka-s* ‘to meet each other’
čel-ka-s ‘to choose sb’ → *lo-čel-ka-s* ‘to choose each other’
čke-ka-s ‘to find sb’ → *lo-čke-ka-s* ‘to find each other’
enf-ka-s ‘to meet sb by chance’ → *lo-wne-ka-s* ‘to meet each other by chance’
k’ze-ka-s ‘grasp by the back of the neck’ → *lo-k’ze-ka-s* ‘to grasp each other’
maja-ka-s ‘to deceive sb’ → *lo-maja-ka-s* ‘to deceive each other’
xeneka-s ‘to say’ → *lo-xeneka-s* ‘to say to each other’
xiq tel-ka-s ‘to recognize sb’ → *xiq lo-tel-ka-s* ‘to recognize each other’
- b. *pəl-ka-s* ‘to bite sb’
→ *pəl-sxen-ka-s* ‘to bite repeatedly’
→ *am-pəl-sxena-ʔl-ka-s* ‘to bite’ (vi)
→ *lo-ʔam-pəl-sxena-ʔl-ka-s* ‘to bite each other repeatedly’
tawol-ka-s ‘to embrace sb’
→ *tawola-ʔl-ka-s* ‘to embrace’ (vi)
→ *lo-tawola-ʔl-ka-s* ‘to embrace each other.’

3.3 Derived from one-place and (potentially) two-place intransitives

Here is a list of this type of derivatives.

- (20) *anse-ʔl-ka-s* ‘to learn, study’ → *lo-ʔanse-ʔl-ka-s* ‘to learn from each other’
čχmal-ka-s ‘to swear’ → *lo-čχmal-ka-s* ‘to swear at each other, squabble’
enmesen-ka-s ‘to disturb’ → *lo-ʔenmesen-ka-s* ‘to disturb each other’
estel-ka-s ‘to dance’ → *lo-estel-ka-s* ‘to dance with each other/together’
kele-ʔl-ka-s ‘to write’ → *lo-kele-ʔl-ka-s* ‘to correspond, exchange letters’
kel-ka-s ‘to shout’ → *lo-kel-ka-s* ‘to shout to each other’
krweʔxat-ka-s ‘to talk’ → *lo-krweʔxat-ka-s* ‘to talk to each other’
ksko-ʔl-ka-s ‘to be ashamed’ → *lo-ksko-ʔl-ka-s* ‘be ashamed of each other’
k’ule-ʔl-ka-s ‘to scratch’ → *lo-k’ule-ʔl-ka-s* ‘to scratch each other’
laxdet-ka-s ‘to look at sb’ → *lo-laxdet-ka-s* ‘look at each other, exchange glances’
tenk’ol-ka-s ‘to smile’ → *lo-tenk’ol-ka-s* ‘to smile at each other’
lete-ka-s ‘to fight’ → *lo-lete-ka-s* ‘to fight with each other’
ʔjeze-ka-s ‘to laugh’ → *lo-ʔjeze-ka-s* ‘to laugh at each other’
ʔqze-ka-s ‘to follow’ → *lo-ʔqze-ka-s* ‘to follow/spy on each other’
ma-ʔl-ka-s ‘to play’ → *lo-ma-ʔl-ka-s* ‘to play with each other’
melwe-ʔl-ka-s ‘to hope’ → *lo-melwe-ʔl-ka-s* ‘to rely on each other’
neske-ʔl-ka-s ‘smell/sniff at sth’ → *lo-neske-ʔl-ka-s* ‘to sniff at each other’
pens-ka-s ‘to fling oneself at sb’ → *lo-pens-ka-s* ‘fling oneself at each other’
qaʔm-ka-s ‘to take offence’ → *lo-qaʔm-ka-s* ‘to take offence at each other’
qelk’ele-ka-s ‘to complain’ → *lo-qelk’ele-ka-s* ‘to complain of each other’
qoneŋe-ka-s ‘to join’ (vi) → *lo-qoneŋe-ka-s* ‘to join each other’
rewat-ka-s ‘to rejoice’ → *lo-rewat-ka-s* ‘to rejoice at each other’
telxʔ-ka-s ‘to get scared’ → *lo-telxʔ-ka-s* ‘to get scared by/at each other’
tmalsa-ka-s ‘to approach’ → *lo-tmalsa-ka-s* ‘to approach each other’
tməlat-ka-s ‘press oneself to sth’ → *lo-tməlat-ka-s* ‘to huddle to each other’
twestew-ka-s ‘to watch, spy’ → *lo-twestew-ka-s* ‘to watch/spy on each other’
xaqanʔ-ka-s ‘to be angry, hate’ → *lo-xaqanʔ-ka-s* ‘to be angry at each other’

- xe?luče-?l-ka-s* 'to play dolls' → *lo-xe?luče-?l-ka-s* 'play dolls with each other'
əlfča-ka-s 'to consent, agree' → *lo-?əlfča-ka-s* 'to agree with each other'
əmč'k'ele-ka-s 'to bother, bore' → *lo-?əmč'k'ele-ka-s* 'to bother, bore each other.'

An indication of the productivity of this derivational pattern are reciprocal forms from Russian borrowings; cf.:

- (21) *torova-?l-ka-s* 'to greet sb' → *lo-torova-?l-ka-s* 'to greet each other'
zavidova-?l-ka-s 'to envy' → *lo-zavidova-?l-ka-s* 'to envy each other.'

3.4 Reciprocals denoting successive subevents

Five reciprocals with this meaning are attested and all of them are derived from intransitives. The same two subgroups can be distinguished here as above.

1. Derived from transitives:

- (22) a. *ən'čxča-s* 'to overcome sb'
 → *an-ən'čxča-?l-ka-s* 'to win' (vi)
 → *lo-?an-ən'čxča-?l-ka-s* 'to overcome each other (by turns)'
əmtxla-s 'to comb sb'
 → *əmtxla-ka-s* 'to comb oneself'
 → *lo-?əmtxla-ka-s* 'to comb each other'
ənkse-s 'to let sb out'
 → *lo-?ənkse-ka-s* 'to let each other out'
 b. *en'ł-ka-s* 'to pay sb' → *lo-?en'ł-ka-s* 'to pay each other'
ənk-ka-s 'to (try to) catch sb' → *lo-?ənk-ka-s* 'to (try to) catch each other.'

2. Derived from intransitives:

- (23) *etxel-ka-s* 'to be a guest' → *lo-?etxel-ka-s* 'to visit each other'
łale-ka-s 'to walk' → *lo-łale-ka-s* 'to go to each other.'

3.5 Reciprocals with the meaning 'next to each other'

All the reciprocals of this group are derived from verbs of motion or position.

- (24) *ełč-ka-s* 'to lie down' → *lo-?ełč-ka-s* 'to lie down next to each other'
°sol-ka-s 'to lie' → *°lo-sol-ka-s* 'to lie next to each other'
ła-ka-s 'to sit' → *lo-ła-ka-s* 'to sit next to each other'
tekej-ka-s 'to stand up' → *lo-tekej-ka-s* 'to stand up next to each other'
tχzo-ka-s 'to stand' → *lo-tχzo-ka-s* 'to stand in front of each other.'

3.6 Diversative

This case is represented by one derivative from an intransitive verb. It is not unlikely that this is a remnant of the past polysemy of the reciprocal prefix.

- (25) a. *seη-ka-s* 'to fly' → *lo-seη-et-ka-s* 'to fly from place to place.'

This verb describes a flock of birds (geese or ducks) flying over a lake in disorder, in all directions as if they were exchanging places – this latter implication is in fact a reciprocal meaning. Compare:

- b. *qs-əʔn lu-sijit-əz-əʔn.* (VX. 48)
 goose-PL REC-fly-PRES-3PL
 ‘The geese fly around from one place to another.’

Sources

- JW – Worth (1961). The text is rewritten in the transcription suggested in Georg & Volodin (1999) (the mistakes made by D.S. Worth are corrected).
 VX – Volodin, A.P. & K.N. Xalojmova. 1989. *Slovar' itel'mensko-russkij i russko-itel'mnskij* [Itelmen-Russian and Russian-Itelmen Dictionary]. Leningrad: Prosveshchenie (about 4 000 entries).

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Reciprocals in Yukaghir languages

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1. Introduction

1.1 The Yukaghir languages

The Yukaghir languages are spoken in several little villages in the Yakut Republic, in the basin of the Kolyma river. These languages are considered either an isolated group or a sub-family of the Uralic-Yukaghir family. There are now approximately 150 native speakers of Tundra (Northern) Yukaghir, and less than 50 speakers of Kolyma (Southern) Yukaghir. Since the reciprocal constructions in Tundra Yukaghir have been described elsewhere (Krejnovich 1958: 120; Maslova 1989), the present paper is mainly concerned with the Kolyma Yukaghir data. However, all the significant differences between these languages are summarized in section 8, so as to give the whole picture of the Yukaghir reciprocals.

For the last several centuries the area of the Kolyma river basin has been characterized by extensive language contacts and almost obligatory polylingualism; now only the eldest generation of Yukaghir is polylingual (most of them speak Yukaghir, Even, Yakut, and Russian). The lingua franca was Yakut till the middle of the last century. Now it is Russian. Kolyma Yukaghir is presently not spoken by people under sixty, with only few exceptions. Spontaneous Yukaghir speech contains numerous instances of interference from Russian and Yakut and “code-switches”, some specific Yukaghir grammatical patterns being regu-

larly replaced by loan-translations from Russian, hence there are considerable difficulties in collecting reliable data.

The present study is based mainly on a collection of texts (Nikolaeva 1989) and on texts recorded by Nicholaj Vakhtin and myself on field trips in 1987 and 1992. Some additional data were provided by my informants in response to a questionnaire on reciprocals.¹

1.2 The reciprocal marker

The Yukaghir languages have a preverbal reciprocal marker *n'(e)-* (Tundra *n'i(η)-*). This marker is highly specialized, i.e., with a few exceptions (see 6.3, 6.4), it never expresses any non-reciprocal meanings. It occupies the same linear position within the verb form as the reflexive marker *met-*, so that these morphemes cannot be combined within one verb form. Thus, the reciprocal and reflexive meanings are treated by the Yukaghir grammar as opposed members of one category, but are not expressed by the same formal marker (which is a typologically frequent case), cf.:

- (1) a. *met tudel juö.*
 I he see.1SG.TR
 'I saw him.'
- b. *mit n'e-juö-ji:l'i.*
 we REC-see-1PL.INTR
 'We saw each other.'
- c. *tudel met-juö-j.*
 he REFL-see-3SG.INTR
 'He is looking at himself.'

Both the reciprocal and the reflexive decrease verb valency, which in the vast majority of cases results in formal shift from the transitive agreement pattern to the intransitive one (see 2.1).

This morpheme is the only means of expressing the reciprocal meaning in the Yukaghir languages; there are no pronominal expressions like *each other* or any other derivational or inflectional means. In some cases, however, this prefix is attached to postpositional stems, and the resulting words function as free syntactic reciprocal markers.

1. It is a pleasure to acknowledge my deepest debt to my informants from Nelemnoye (for Kolyma Yukaghir) and Andryshkino (for Tundra Yukaghir) for their help and patience in answering my questions. Particular thanks are due to a friend and colleague of mine, Nickolaj Vakhtin, whose help during the first field trip in my life (where most of the data for this paper comes from) is hardly possible to overestimate.

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Table 1. Verb agreement markers

Subject person/number	Intransitive verbs		Transitive verbs	
	neutral	subject-focus	neutral	object-focus
1SG	-je	-l	-∅	-me
2SG	-jek	-l	-mek	-me
3SG	-j	-l	-m	-mele
1PL	-ji:l'i/-i:l'i	-l	-i	-l
2PL	-jemet	-l	-met	-met
3PL	-ŋi	-ŋil	-ŋa:	-ŋile

2. Grammatical notes

2.1 Syntax

Yukaghir is an SOXV language, yet the word order is rather flexible. “Pro-drop” and verb-deranking procedures are widely employed in text formation, so that a Yukaghir sentence generally looks like a chain of clauses, with only one finite verb in the end of the sentences, and often without explicit subjects and objects; non-final verb forms contain switch-reference indicators. The most extraordinary feature of the Yukaghir syntax is its focus-marking system, which involves both noun and verb inflection; in Kolyma Yukaghir only intransitive subjects and direct objects can receive grammatical focus marking (in Tundra Yukaghir, transitive subjects are involved in this system as well).

Verbs fall into two main classes, transitives and intransitives, which take different sets of agreement markers. The choice of an agreement marker is also involved in the focus marking system, as shown in Table 1.

The case marking is basically accusative, but with some important deviations from the “prototypical” accusative system: first, 3rd person direct objects have the basic (nominative) case form if the subject of the sentence is 1st or 2nd person (1st and 2nd person pronouns have a special accusative form which is employed for encoding direct objects only in clauses with 1st or 2nd person subject). Secondly, the focus case marker is assigned according to an ergative-like rule (to intransitive subjects and direct objects only). There are also dative, instrumental, comitative and a set of locative case forms; in addition, there is a set of postpositions employed mainly for marking locative relations.

2.2 Verb morphology

2.2.1 General notes

Yukaghir is a highly synthetic and essentially agglutinative language; suffixation prevails. The number of prefixes amounts to five (two prefixes of polarity, the reflexive and the reciprocal, and a prefix of irrealis); these morphemes are characterized by a looser connection with the stem than the suffixes, so that the boundary between a prefix and its stem may be described as internal open juncture. For example, clustering of vowels on

morpheme boundaries is prohibited within the postfixal part of a word, but possible on a “preverbal” boundary, cf. *n'e-aji-* ‘to shoot each other’. The prefixes thus may be viewed as a somewhat intermediate case between bound morphemes proper and free preverbs.

2.2.2 *Valence-changing means*

Yukaghir has the following valence-changing means:

1. Valence-increasing suffixes:

- a) several causative suffixes, cf. *a-* ‘to make’ → *a:-š-* ‘to cause sb to make’;
- b) a non-productive applicative suffix *-re-/ri-*, cf. *jaqte-* ‘to sing’ → *jaqte-ri-* ‘to sing about sth/sb’.

2. Valence-decreasing affixes:

- a) a productive object-oriented resultative suffix *-o:(l)*, cf. *ide-* ‘to sew’ → *id-o:(l)-* ‘to be sewn’;
- b) a few non-productive detransitive suffixes, cf. *juö-* “to see” (vt) → *juö-de-* ‘to look’ (vi).
- c) the reciprocal and the reflexive prefixes (see 1.2).

2.2.3 *Aspect and tense*

The tense/aspect system is characterized by domination of aspect. Yukaghir has an elaborate system of various aspect/aspectoidal suffixes (ingressive, continuative, a few iterative markers with slightly different meanings, semelfactive, etc.). As for grammatical tense, only future vs. non-future opposition is expressed morphologically (the interpretation of non-future forms depends on the aspectual meaning of the stem); past tense may be marked either by periphrastic forms or by means of an evidential marker *-l'el-* ‘V appears to have happened, or is said to have happened’.

3. Constructions with the preverbal reciprocal marker

3.1 “Canonical” reciprocal constructions

3.1.1 *Reciprocal constructions with underlying transitive verbs*²

3.1.1.1 *With underlying genuine transitives.* The main formal type of reciprocal constructions is illustrated by the following examples:

- (2) a. *tudel met-kele kigiji:-m.*
 he I-ACC jab-3SG.TR
 ‘He is jabbing me.’

2. The status of the preverbal reciprocal marker within Yukaghir morphosyntax seems controversial; to be more precise, it is not clear whether or not this morpheme should be considered as a part of verbal derivation. All the facts which could help to resolve this problem on a theory-specific basis are described in the present paper,

- b. *uöre-p-tie juöde-t n'e-kigiji:-ŋi.*
 child-PL-DIM play-SS REC-jab-3PL.INTR
 'Children are playing and jabbing each other.'
- (3) a. *tudel met-kele šešpedaŋil'-ge totčoš-um.*
 he I-ACC door-LOC press-3SG.TR
 'He pressed me to the door.'
- b. *mit n'e-totčoš-i:l'i šešpedaŋil'-ge.*
 we REC-press-1PL.INTR door-LOC
 'We pressed each other to the door.'

Here the reciprocal prefix marks cross-coreference between the subject and the direct object of a transitive verb. The verb gets an intransitive agreement marker (in most cases, plural, cf. 5.3). This type of reciprocal transformation is absolutely productive and regular, i.e., a reciprocal construction with a given verb is possible whenever the lexical meaning of this verb allows for a reasonable reciprocal interpretation.

3.1.1.2 *With underlying applicatives.* Reciprocal derivation from applicatives can be viewed as a way to combine the reciprocal meaning with an intransitive verb (cf. 3.1.2, 4.2.1): a verb is first transitivity by means of the applicative suffix *-re-/-ri-*, and then the reciprocal construction is derived according to the canonical model described in 3.1.1.1, cf. the following example:

- (4) a. *tudel jaqte-j.*
 he sing-3SG.INTR
 'He is singing.'
- b. *tudel met-kele jaqte-ri-m.*
 he I-ACC sing-APPL-3SG.TR
 'He is singing about me.'
- c. *tiŋ šoromo-pul n'e-jaqte-ri-ŋi.*
 this man-PL REC-sing-APPL-3PL.INTR
 'These men are singing about each other.'

The exact meaning of the applicative marker, i.e. the semantic role of the resulting direct object, is determined lexically, by the initial verb stem, cf. some other examples: *aja-* 'to be glad, rejoice' → *aja-re-* 'to be glad to see sb, rejoice at sb' → *n'e-aja-re-ji:l'i* 'we rejoice at each other, we are glad to see each other'; *kimdan'e-* 'to lie, tell lies' → *kimdan'e-ri-* 'to deceive sb' → *n'e-kimdan'e-ri-ŋi* 'they are deceiving each other'.

yet at the present stage of analysis it seems more important to highlight the somewhat "intermediate" status of the morpheme under discussion than to suggest one or another theory-dependent decision. That is why I have tried to avoid (whenever possible) the terms implying that the combination of a verb and the reciprocal preverb constitutes another (reciprocal) verb; terms like "underlying verb" (although theoretically not quite clear) are thus used in order to avoid terms like "basic verb", which would entail such interpretation, without any other theoretical connotations.

There exists one reciprocal verb containing the applicative suffix for which there is no basic applicative verb, i.e. the applicative functions just as a means for deriving the reciprocal, cf.:

- (5) *n'e-kebie-rej-nu-l'el-ŋi* *kin qaduonge modo-lo:l mieste-ge.*
 REC-leave-APPL-ITER-EVID-3PL [who where live-RES place-LOC]
 'They used to leave each other and go each to his own place.'

The initial intransitive is *keb(ej)-* 'to leave'; although the resulting reciprocal verb seems to have a dispersive meaning like 'to disperse, to part', it may be taken as a "canonical" reciprocal, on the assumption that the applicative suffix promotes the participant being left by the Actor to the direct object position (**kebie-re-* 'to leave sb' → *n'e-kebie-re-* 'to leave each other').³

The reciprocal constructions with underlying applicative verbs often contain an additional syntactic reciprocal marker (see 4.2.2 for examples and discussion).

3.1.2 Reciprocal constructions with underlying two-place intransitives

The reciprocal marker is easily compatible with intransitive verbs, but the resulting construction almost obligatorily involves a syntactic reciprocal marker derived from a postpositional stem; this construction type is discussed in Section 4. There is only one reliable example of the reciprocal construction derived from an intransitive verb without this additional marker,⁴ cf.:

- (6) *tamun-pe n'e-erd'i-t n'e-juö-din erd'i-t mon-nu-l'el-ŋi.*
 [this-PL REC-wish-ss] REC-see-INF wish-ss say-ITER-EVID-3PL.INTR
 'Since they wanted each other, wanted to see each other. . . they used to say:..'

The first clause contains a formally intransitive verb with the reciprocal marker, but no syntactic reciprocal marker, yet the reciprocal relation is further specified in the next clause by the use of the reciprocal infinitive *n'e-juö-din* 'to see each other' (← *juθ-* 'to see') as a complement of the same verb. This example seems to show that a syntactic reciprocal marker is not formally obligatory with reciprocals derived from intransitives: what seems to be essential is just an additional specification of the semantic relation that undergoes the reciprocal transformation. Another sort of evidence in favor of this claim is given by the fact that the reciprocal prefix easily combines with intransitive lexical reciprocals without any additional marking (see 6.1): it implies that the reciprocal constructions under discussion are not ruled out by the grammar, but rather avoided because of their ambiguity (see 4.2.1 for further discussion and examples).

3. Cf. a similar situation in West Greenlandic Eskimo (Fortescue, Ch. 19), where a semantically vague applicative suffix may be employed for reciprocal derivation from intransitives.

4. My informants sometimes say that such a sentence might be possible, but that it would be "better" to insert a syntactic marker.

3.1.3 Reciprocal constructions with underlying bitransitive verbs

The canonical reciprocal constructions derived from bitransitive verbs are almost absent from existing Yukaghir texts. However, this seems to be due simply to the fact that direct objects of such verbs are usually inanimate; thus, there are natural pragmatic restrictions on reciprocal referential situations, and, consequently, on reciprocal transformation. If, however, a speaker of Yukaghir is able to imagine a reciprocal situation, (s)he easily derives the corresponding reciprocal construction, which usually involves a slight shift in the lexical meaning of the verb. As demonstrated by the following set of examples with the verb *tadi-* ‘to give (sth to sb)’, a similar semantic shift occurs in the corresponding reflexive construction, cf.:

- (7) a. *met tud-in met legul tadi.*
 I he-DAT my food give-(1SG.TR)
 ‘I gave my food to him.’
- b. *jen šoromo-pul nuk-telle n’e-tad-ij-a:-nu-ni.*
 [other man-PL meet-SS.PFV] REC-give-MULT-INGR-ITER-3PL.INTR
 ‘When they meet other men, they usually begin to give each other (up), to betray each other.’
- c. *šukedie ta:t eskeri-l’ie-l’el-um tamun-ge oqill’a:*
 pike then attack-INGR-EVID-3SG.TR this-LOC perch
el-met-tadi-l’el.
 NEG-REFL-give-EVID(3SG.INTR)
 ‘Then the pike attacked. The perch did not give up.’

Another example of a referentially rare situation which makes the reciprocal interpretation of a bitransitive verb possible is given in (8); cf.:

- (8) *ataqlo:-t n’e-kes’i-ni.*
 be-two-SS REC-bring-3PL.INTR
 ‘The two of them brought each other (if, for example, one of them was blind and the other lame).’

These examples demonstrate that the restrictions on this diathesis type are semantic (or pragmatic), but not formal. Thus, the initial direct object may be involved in reciprocal transformation whenever the corresponding reciprocal situation can take place, independently of any other features of the valence pattern of the initial verb.

3.2 “Indirect” reciprocal constructions

The bitransitive verbs allow the reciprocal transformation involving subject and indirect object, as in the following example:

- (9) a. *tude legul-get met-in qarte-m.*
 his food-ABL I-DAT share-3SG.TR
 ‘He shared his food with me (= he gave me some of his food).’
- b. *legul-e n’e-qarte-ni-k.*
 food-INST REC-share-PL-IMP
 ‘Share your food with each other!’

In this construction type, the initial direct object retains its syntactic status, so that the resulting construction is syntactically transitive. As for the formal marking of (in)transitivity, i.e. the choice of an agreement marker, both variants proved to be possible, cf. the following examples:

- (10) a. *legul-ek n'e-kes'i-l.*
 food-FOC REC-bring-1PL.OF
 'We have brought food to each other.'
- b. *mit nier-pe n'e-kes'i-ji:l'i.*
 our clothes-PL REC-bring-1PL.INTR
 'We brought our clothes to each other.'

In (10a) the verb is marked for 1PL of the subject by means of the object-focus (hence transitive) suffix, while in (10b) the intransitive agreement marker is chosen. A tentative explanation of these variations may be as follows: the canonical reciprocal (see 3.1.1), representing the main and most productive diathesis type of the reciprocal constructions, does entail an obligatory shift from the transitive agreement paradigm to the intransitive one, and this general rule appears to be able to “override” the real syntactic transitivity in the more marginal construction type discussed here.

The transformation under discussion often involves causative verbs (with the indirect object representing the Causee), cf.:

- (11) a. *met tud-in los'il-ek čine-š-me.*
 I he-DAT firewood-FOC chop-CAUS-1SG.OF
 'I asked him to chop firewood, and he chopped firewood for me.'
- b. *mit los'il-ek n'e-čine-š-ul.*
 we firewood-FOC REC-chop-CAUS-1PL.OF
 'We chopped firewood for each other, according to each other's request.'

As illustrated by the translation of (11), a benefactive interpretation of the causative situation ('A asked B to do something' > 'B did something for A') usually prevails in the meaning of the corresponding reciprocal construction, so that my informants always preferred a translation like 'A and B did something for each other', rather than 'A and B did something according to each other's request/order.'

3.3 “Possessive” reciprocal constructions

3.3.1 *Reciprocal constructions with possessive pronouns*

There are only few examples which can be assigned to the possessive-reciprocal type in my data. These examples fall into two formally completely different groups. In one group of such sentences the transitive verb has the reciprocal marker, while the direct object is represented by an NP with a possessive pronoun coreferent with the subject, cf.:

5. Note that the 3rd person possessive pronouns *tude* 'his/her' and *titte* 'their' are employed only if the possessor is coreferential with the subject (otherwise the 3rd person possessor is expressed by means of a possessive suffix).

- (12) a. *tude nier čumu šašahat-um.*
 his clothes all tear-3SG.TR
 ‘He has torn all his clothes.’
 b. *titte nier n’e-šašahat-ŋile.*
 their clothes(FOC) REC-tear-3PL.OF
 ‘They have torn each other’s clothes.’⁵

The resulting sentences are transitive both syntactically and formally (cf. the transitive (object-focus) agreement markers in (12)).

3.3.2 Direct object included within the scope of the reciprocal marker

There are also two examples where the nominal stem representing the initial direct object is inserted between the reciprocal marker and the verbal stem, cf.:

- (13) *zooparke-ge ob’ez’ana-pul n’e-n’as’in modo-t n’e-pöme-aŋs’i-ŋi.*
 zoo-LOC monkey-PL REC-to.face sit-SS REC-louse-search-3PL.INTR
 ‘In the Zoo monkeys are sitting face to face and looking for each other’s lice.’
 (← *aŋs’i*:- ‘to search, to look for’ (vt))
- (14) *taŋ odu-pe taŋ kukujerd’i:-pe n’e-ažu-medi:-nunnu-l’el-ŋi*
 that Yukaghir-PL that Even-PL REC-word-perceive-HAB-EVID-3PL.INTR
n’e-ažu-medi:-t n’e-qamie-ŋi.
 REC-word-perceive-SS REC-help-3PL.INTR
 ‘Those Yukaghirs and those Evens understood each other’s language; since they understood each other’s language, they helped each other.’ (← *medi*:- ‘to hear, perceive, understand’ (vt))

It should be stressed that these sentences cannot be described as resulting from attaching the reciprocal suffix to the direct object, since the nominal stems involved lack the accusative marker (which is obligatory with a 3rd person subject, see 2.1), and the verbs get intransitive agreement markers. Thus, formally these examples represent an incorporation-like phenomenon (otherwise not characteristic of Yukaghir).

The compound form *n’e-pöme-aŋs’i-jejl’i* ‘we are looking for each other’s lice’ (← *aŋs’i*:- ‘to look for’) is found in the texts collected by Jochelson (1900: 47), but this is the only example of this type of his data. The correctness of this compound was confirmed by my informants in 1987 (cf. (13)). The second example is taken from a text written down by myself in 1992, but I have not managed to get any other instances of this phenomenon during my field work. It thus remains unclear whether there are strong lexical restrictions on this phenomenon, or it is a rare (perhaps marginal), but free (with respect to the lexical items involved) type of the possessive-reciprocal derivation.

4. Constructions with syntactic reciprocal markers

4.1 Syntactic reciprocal markers

Reciprocal constructions of more marginal and rare diathesis types are derived by means of what may be called syntactic reciprocal markers, which can be used either in combination with morphological reciprocal marking (see 4.2) or alone (see 4.3). These markers are derived from postpositional stems by means of the reciprocal prefix *n'e-*. The most frequent and most semantically neutral syntactic reciprocal marker is *n'e-molho-n* 'among themselves', cf.:

- (15) *ta:t n'e-molho-n mojie-d'e-t el-lejdi-ji:P'i id'i: kin qodimie omni:*
 SO REC-AMONG-PROL MIX-DETR-SS NEG-KNOW-1PL.INTR NOW [who which kin
o:gi.
 be-POSS]
 'Having merged with each other, we do not know now who comes from which kin.'

All the syntactic reciprocal markers with the initial postpositions are listed in (16):

- (16) *n'e-molho-n* (REC-among-PROL) 'among' ← *molho* 'among, between'
n'e-arqa (REC-near) 'near each other' ← *arqa* 'near'
n'e-lajji, n'e-lajjin (REC-DIR) 'to each other' ← *lajji, lajin* 'to'
n'e-n'as'-in (REC-face-DAT) 'to each other, at each other' ← *n'as'-in* 'to, at, opposite to' (← *n'as'e* 'face')
n'e-al'-in (REC-at-DAT) 'to each other, near each other' ← *al'a:* 'near, to, at, by'
n'e-jela: (REC-after) 'after each other, following each other' ← *jela:* 'after'
n'-ijer (REC-separately) 'separately' ← *ijer* 'separately from.'

Besides, there is one stem which is currently used only in combination with the reciprocal prefix and various locative postfixes: **malohu-* 'side' → *n'e-malohu-* 'both sides', cf.:

- (17) *taŋ jalhil-ge n'e-malohu-layden aŋs'i-t kewej-l'el-ŋi.*
 this lake-LOC REC-side-PROL search-SS go-EVID-3PL.INTR
 'They went to search (for him) on both sides of this lake.'

These compounds are also frequently used as syntactic reciprocal markers, cf.:

- (18) *n'e-malohu-de juö-de-ŋi.*
 REC-side-DIR look-DETR-3PL.INTR
 'They are looking at each other (in each other's direction).' (see also (22b), (23c))

4.2 Syntactic reciprocal markers combined with morphological reciprocals

4.2.1 Reciprocal constructions with underlying intransitives

As mentioned in 3.1.2, the reciprocal constructions with underlying intransitive verbs normally involve one of the syntactic reciprocal markers, cf.:

- (19) a. *tudel tude terike-ŋin mon-i ...*
 he his wife-DAT say-3SG.INTR
 ‘He said to his wife. . .’
 b. *tittel n’e-laŋi n’e-mon-ŋi ...*
 they REC-DIR REC-say-3PL.INTR
 ‘They said to each other. . .’
- (20) a. *met tet laŋin ejme-je.*
 I you DIR look-1SG.INTR
 ‘I am looking at you.’
 b. *n’e-n’as’in n’e-ejme-ŋi.*
 REC-to:face REC-look-3PL.INTR
 ‘They are looking at each other face to face.’
- (21) a. *tiŋ as’e met numö al’a: uldo:-j.*
 this deer my house to be.tied-3SG.INTR
 ‘This deer is tied to my house.’
 b. *n’-al’-in n’e-uldo:-ŋi.*
 REC-to-DAT REC-be.tied-3PL.INTR
 ‘They are tied to each other.’

As shown by these examples, it is not the case that one and the same postpositional stem must be employed in the initial non-reciprocal construction for marking the participant involved in the reciprocal transformation, on the one hand, and in the syntactic reciprocal marker, on the other: for example, the Addressee of the verb *moni-* ‘to say’ has the dative case form (see (19)), while the reciprocal construction makes use of the directional postposition *laŋi* (see (19), cf. also (20)). This transformation thus cannot be described formally as a simple replacement of an NP governed by a postposition with the reciprocal marker (indicating its cross-coreference relation with the subject), as the pair of examples in (21) might suggest. It seems that speakers are relatively free in their choice of the postpositional stem for the syntactic reciprocal marker, to the extent that this stem must specify the exact semantic relation between the reciprocal arguments, cf. the following pair of examples where this choice determines the semantic interpretation of the reciprocal constructions:

- (22) a. *mit jo:bi: n’e-jela: n’e-ewr-i:l’i.*
 we in.forest REC-after REC-go-1PL.INTR
 ‘We were walking around in the forest, following each other, in each other’s tracks.’
 b. *ediŋ pulut-pe n’e-ma:lohu-de n’e-ewre-ŋi.*
 this old.man-PL REC-side-to REC-go-3PL.INTR
 ‘These old men go to each other’s places, hither and thither.’

These examples show that this construction type can express reciprocal relations involving not only arguments of the verb, but adverbial NPs as well (cf., for example, (22b)). As a result, an intransitive verb itself does not specify the semantic relation that undergoes the reciprocal transformation, and an additional marker of this relation proves to be necessary. However, the use of this marker is by no means grammaticalized, cf. 3.1.2.

4.2.2 Reciprocal constructions with underlying applicatives

As described in 3.1.1.2, the reciprocal constructions are derived from applicative verbs according to the canonical model. Nevertheless, these constructions often contain syntactic reciprocal markers, exactly as the corresponding constructions with intransitives (see 4.2.1), cf.:

- (23) a. *met-ket irke-s*.
I-ABL be.frightened-3SG.INTR
'He was frightened by me.'
- b. *met-kele irkuo-re-m*.
I-ACC be.frightened-APPL-3SG.TR
'He was frightened by me (direct object).'
- c. *n'e-malogu-lanđe-t n'e-irkuo-r-i:l'i*.
REC-side-DIR-ABL REC-be.frightened-APPL-1PL.INTR
'We were frightened by each other.'
- (24) *tolow-pe n'e-n'as'in oho:-t n'e-ejme-ri-ŋi*.
deer-PL REC-to.face stand-SS REC-look-APPL-3PL.INTR
'The deer are standing opposite each other and looking at each other.'

Thus, the applicatives inherit some behavioral properties of the initial intransitives, although formally the constructions under discussion should be ascribed to the canonical type described in 3.1.1.

4.3 Syntactic reciprocal markers combined with non-reciprocal verbs

4.3.1 Oblique-reciprocal constructions with underlying transitives

The oblique-reciprocal meaning with transitives is expressed by means of the syntactic reciprocal marker *n'e-molho-de-gen* 'among themselves', derived from the postpositional stem *molho* 'among' (cf. *mit molho* "among us") in the prolicative case form, cf.:

- (25) a. *neme a:-lo:l-gele met-ket ahidi:-m*.
[what make-RES-ACC] I-ABL hide-3SG.TR
'He is hiding from me what he has done.'
- b. *n'e-molho-de-gen mit ahidi:-j neme a:-lo:l*.
REC-among-POSS-PROL we hide-1PL.TR [what make-RES]
'We are hiding from each other what we have done.'

Note that the verb in such a construction cannot take the reciprocal marker, since this would entail a "canonical" reciprocal meaning (cf. *n'e-ahidi:-* 'to hide each other'); the verb retains its transitive agreement markers.

4.3.2 Object-oriented reciprocal constructions

The Yukaghir reciprocal prefix cannot derive object-oriented reciprocal constructions; however, a symmetrical relation expressed by means of a syntactic reciprocal marker (i.e., by the reciprocal marker attached to a postpositional stem) may take place between two

(semantically and syntactically equal) objects, cf. the following examples with the verb *ulte-č-* ‘to tie (many objects)’:

- (26) a. *n'e-lajin ulte-č-ie-m.*
 REC-DIR tie-DISTR-INGR-3SG.TR
 ‘He began to tie (them) to each other.’
 b. *tude touke-pul n'-iŋer ulte-č-um.*
 his dog-PL REC-separately tie-DISTR-3SG.TR
 ‘He tied his dogs separately from each other.’

As shown by these examples, constructions of this type express a meaning like ‘to cause a symmetrical relation’ and usually involve lexical or morphological causatives. Note that the verb is not marked for the reciprocal meaning (see also 8.3 about causative reciprocal constructions in Tundra Yukaghir).

5. Means of expressing reciprocal arguments

5.1 Case marking

Reciprocal arguments may be expressed

1. by one NP marked for plurality (i.e. a noun or pronoun with the plural marker *-pe/-pul-*), cf. for example, (6)), (14), and (24), or a plural personal pronoun, cf. (11), (19); or
2. by two (or more) distinct NPs.

An NP representing both reciprocal arguments (type 1) may either have the basic (nominative) case form (see examples above), or be case-marked for focus, cf.:

- (27) *mit-ek n'e-kigiji:-l.*
 we-FOC REC-jab-SF
 ‘We are jabbing each other.’

If reciprocal arguments are expressed by a distinct NP each (type 2), then one of the NPs is in the nominative case form, the other one is usually marked by the comitative case marker *-n'e*, cf.:

- (28) *parna: qahiel-n'e ataqla:-t n'e-šörileš-ut modo-ŋi.* (N. Text 5)
 crow loon-COM be.two-SS REC-paint-SS sit-3PL.INTR
 ‘The crow and the loon, the two of them, were sitting and painting each other.’
 (29) *odu-pe kukujerd'i-pe-n'e n'e-nuk-telle n'e-lejtej-ŋi.*
 Yukaghir-PL even-PL-COM REC-meet-SS.PFV REC-learn-3PL.INTR
 ‘Yukaghirs and Evens met each other and got to know each other.’

Much less frequently, all NPs representing reciprocal arguments appear in the basic (nominative) form, cf. (14) and (30):

- (30) *ponžube momuša: šu:kedie n'e-es'keri:-lo:-pe-gi.* (N. Text 6)
 wood-grouse *momuša* pike REC-attack-RES-PL-POSS⁶
 'How a wood-grouse, a *momuša*⁷ and a pike attacked each other.'

In contrast with the cases when the both reciprocal arguments are expressed by a single NP, the second construction type is intended to keep the different (although semantically equal) arguments apart, so that the relations between the reciprocal arguments and the corresponding NPs may be schematically presented as follows:

- (31)

reciprocal arguments	A	B
NPs	NP ₁	NP ₂ (-n'e)

This is essential for the correct interpretation of sentences where one or both of these NPs are in the plural form (as in (14), (29)): such sentences express reciprocal relations either between two “collective” arguments (in these examples, between Yukaghirs and Evens as two peoples), or between single members of one group and single members of another group “in pairs”, but not within one group, so that formally one and the same noun form *odupe* ‘Yukaghirs’ names all the reciprocal arguments in a sentence like (32), but only one “collective” argument of a reciprocal relation in (14), (29).

5.2 Quantifiers

The distinction between prototypical reciprocal situations (with two reciprocal arguments) and “multiple” situations (with more than two participants involved in reciprocal relations “in pairs”) is regularly expressed by lexical means, namely, a reciprocal clause may contain either of two quantifiers: *ataqlo:t* ‘being two, two of them’ or *čumut* ‘all of them’, cf. (28) and the following example:

- (32) *odu-pe tuda: čumut n'e-lejdi:-nunnu-l'el-ŋi.*
 Yukaghir-PL that.time all REC-KNOW-HAB-EVID-3PL.INTR
 'At that time all Yukaghirs knew each other.'

Both quantifiers can be used anaphorically and thus function as the only means of lexical representation of the reciprocal arguments in a clause, cf.:

- (33) *ataqlo:-t n'e-šörileš-ŋi.* (N. Text 5)
 be.two-SS REC-paint-3PL.INTR
 'The two of them painted each other.'

6. The clause is nominalized, since it is the title of a fairy tale.

7. *momuša*: – a sort of fish; the word is translated (by Yukaghirs) into Russian as *katalka*, a word which probably belongs to a local dialect of Russian and which is absent from all Russian-English dictionaries which I was able to consult.

- (34) *kimd'i:-t čumut n'e-leŋ-ŋi.* (N. Text 45)
 fight-ss all REC-eat-3PL.INTR
 'In fighting, they all ate each other.'

5.3 Verb agreement

As mentioned above, the subjects are often dropped in Yukaghir, so the reciprocal arguments are represented only by the verb agreement markers (cf. (9), (12), (20)). The reciprocal verbs usually have plural agreement markers, independently of the type of lexical representation of the reciprocal arguments (cf. (28) and the (nominal) plural marker on the nominalized verb in (30)), i.e., the verb agrees with the NP expressing all the reciprocal arguments as a “unitary” object. Yet this is not obligatory when one of the reciprocal arguments is represented by a comitative NP:

- (35) *irkid'e ti: modo-je lige-je pulut-n'e n'e-nu:-l'el.* (N. Text 31)
 once [there live-ATR] [be.old-ATR] old.man-COM REC-find-EVID(3SG.INTR)
 'Once he met with a very old man living there.' (← *nu(g)*- 'to find, meet')

Here the NP representing one of the participants of the reciprocal situation is dropped anaphorically, and the other participant is represented by a comitative NP. The reciprocal verb form has a singular agreement marker, i.e. the agreement is controlled by the dropped NP alone, so that one of the reciprocal arguments is represented by the agreement marker, the other, by the comitative NP.

Finally, it should be mentioned that a reciprocal verb form may be used impersonally, hence without any agreement markers, cf. the following example, where the reciprocal verb is marked as an action nominal:

- (36) *olbut i:s'e-le n'e-kigiji:-l iŋl'i-s'.*
 [dead.tree sharp.edge-INST REC-jab-ANOM] be.terrible-3SG.INTR
 'It is terrible to jab each other with the sharp edges of a dead tree.'

5.4 Syntactic relations

5.4.1 *Alternative syntactic interpretations*

The subject of a reciprocal construction is easily identifiable when the reciprocal arguments are represented either by one NP or by a chain of NPs in the nominative form: both the case marking and the obligatorily plural verb agreement indicate that the reciprocal arguments are represented on the surface level by one subject constituent. This reciprocal diathesis may be schematically presented as follows:

- (37)

reciprocal arguments	A	B
NPs	S	

As for reciprocal constructions with comitative NPs, the evidence from verb agreement is controversial, since both the whole comitative complex NP+NP-COM (cf. (28)) and the nominative NP alone (cf. (35)) may control the verb agreement. The question is thus whether these constructions represent the same reciprocal diathesis (37), or another one,

with the subject expressed by the nominative NP alone, i.e. whether or not the comitative NP may be taken as an autonomous constituent (comitative object), as in the following scheme:

(38)	reciprocal arguments	A	B
	NPs	S	ComO

The list of subject properties which might give additional criteria for resolution of this question is as follows:

1. The subjects express the addressee phrase of imperatives (cf. Keenan 1976:321).
2. The subjects control switch-reference indicators within non-final verb forms (cf. Keenan 1976:315).
3. The subject is the only syntactic relation in an intransitive sentence that allows morphological focus-marking.

5.4.2 Evidence from imperative sentences

The first criterion gives a piece of evidence in favor of the solution presented in (38), i.e. there do exist imperative reciprocal sentences in which one of the reciprocal arguments functions as the addressee phrase, while the other is expressed by a comitative NP, cf.:

(39)	<i>n'e-lejtej-k</i>	<i>met</i>	<i>numö</i>	<i>šoromo-pul-n'e.</i>
	REC-learn-IMP.2SG	my	house	man-PL-COM
	‘Make the acquaintance of my family.’ (lit. ‘Make the acquaintance of each other with my family.’)			

Imperative sentences representing diathesis (37) exist as well, cf. (9) and (40):

(40)	<i>el-n'e-kudde-ŋi-le-k.</i>
	NEG-REC-kill-PL-PROH-IMP.2
	‘Do not kill each other.’

However, such examples do not contradict the non-subject interpretation of the comitative NP: since the addressee phrase is absent from the sentence, it can hardly be taken to be expressed by a comitative complex.

5.4.3 Evidence from the switch-reference procedure

This criterion is applicable to the problem under discussion only to a limited extent, since the Yukaghir switch-reference procedure allows both same-subject and different-subject marking in case of part-whole and set-element relations between the subjects of two clauses. It is exactly this type of relation that holds between the reciprocal arguments of one clause, on the one hand, and one of these arguments as the subject of another (non-reciprocal) clause, on the other, hence predictable variations in switch-reference marking.

However, there are some examples that seem to demonstrate that the reciprocal arguments may be treated by Yukaghir grammar as syntactically different constituents, cf.:

- (41) *n'e-nuk-lu-ge-ne met-in šar-ek kej-l'ie-nu-mle.*
 [REC-find-1PL-DS-COND] I-DAT something-FOC give-INGR-ITER-3SG.OF
 'If we meet each other, he starts to give me something.'

Here the subject (*he*) and the indirect object (*me*) of the main clause represent reciprocal arguments of the subordinate (reciprocal) clause; although the agreement marker within the subordinate verb form is 1PL, i.e. it expresses both reciprocal arguments (*I + he*), the switch-reference marker indicates that the subject of the reciprocal clause is not coreferent with the subject of the main clause.

The referential situation in the next example is apparently very similar: the reciprocal arguments of a subordinate clause are coreferent with the subject (= addressee of the imperative) and the object (*this man*) of the main clause. However, the switch-reference procedure treats this situation in the opposite way, cf.:

- (42) *tiŋ šoromo čobu-n örd'e laŋin n'e-kenmi:-t joqto-ŋi-k.*
 this man sea-ATR middle DIR REC-accompany-SS lead-PL-IMP
 'Lead this man to the middle of the sea, accompanying each other.'

An explanation of the different treatment of these cases by the switch-reference procedure can be based on the general empathy hierarchy SPEAKER > HEARER > THIRD PERSON. On the basis of this hierarchy, it may be assumed that the reciprocal arguments in (41) and (42), if not dropped, would have been expressed by comitative complexes like *met tude-n'e* 'I with him' and *tit tiŋ šoromo-n'e* 'you (PL) with this man' respectively (not **tudel met-n'e* 'he with me' and **tiŋ šoromo tit-n'e* 'this man with you'). If this reconstruction is accepted, the subject of the main clause appears to be coreferent with a comitative NP in (41), but with a nominative NP in (42), and it is this distinction that is reflected by switch-reference marking.

Due to the variations in switch-reference marking mentioned in the beginning of this subsection, this piece of evidence cannot be taken as a definitive argument in favor of the objecthood of comitative NPs representing a reciprocal argument (as suggested by the scheme in (38)). What seems to be clear, however, is that the switch-reference procedure distinguishes between what may be called the primary reciprocal argument (normally expressed by a nominative phrase) and the secondary reciprocal argument (normally expressed by a comitative phrase), so that it is the former one whose coreference with the subject of another clause is likely to be marked within a dependent verb form.

5.4.4 Evidence from focus-marking

The focus-marking procedure can be applied neither to the comitative complex, nor to the nominative NP within such a complex, so neither of the two candidates for subjecthood possesses this property (which is rather essential within the Yukaghir syntax). This criterion thus cannot be applied to the problem under discussion. However, this fact seems to be interesting in itself, insofar as it indicates that both candidates for subjecthood are far from what may be taken as the "prototypical" (intransitive) subject in Yukaghir. Note that an NP representing both reciprocal arguments does possess this property, cf. (27).

To sum up the discussion: reciprocal arguments are most frequently expressed by one (subject) constituent (see scheme (37)), which may be represented either by a single NP or by a complex containing several NPs. In some cases, however, a nominative NP and a comitative NP expressing reciprocal arguments are treated as autonomous constituents and play significantly different roles in the syntactic procedures. In order to explain these cases, the alternative diathesis (which ascribes the subject syntactic relation to the first reciprocal argument and the oblique object relation to the second one) may be suggested as one of the options for the reciprocal constructions (“discontinuous” reciprocal construction, as in (38)). Although the data presented above does not provide definitive arguments in favor of the oblique objecthood of the comitative NP, yet it clearly demonstrates that the choice of the first reciprocal argument may have syntactic consequences similar to those entailed by the choice of the subject.

6. Non-prototypical use of the morphological reciprocal marker

6.1 The reciprocal marker with lexical reciprocals

The morphological reciprocal marker can be attached to a verb expressing a symmetrical predicate, independently of its initial transitivity, cf.:

- (43) a. *čejlu*- ‘to be far’ → *n’e-čejlu*- ‘to be far from each other’
 b. *kimd’i*- ‘to fight’ → *n’e-kimd’i*- ‘to fight with each other’
 c. *titimie*- ‘to be the same as X/like X’ → *n’e-titimie*- ‘to be the same, like each other’
 d. *šaqal’e*- ‘to gather’ (vi) → *n’e-šaqal’e*- ‘to gather with each other.’

The following set of examples illustrate the use of the reciprocal marker with an intransitive lexical reciprocal, cf.:

- (44) a. *lebie-n pugil’-pe čumut šaqal’e-delle mon-ŋi* ... (N. Text 9)
 [earth-ATR lord-PL all gather-SS.PFV] say-3PL.INTR
 ‘All lords of the earth gathered and said: ...’
 b. *n’e-šaqal’e-delle n’ied’i-t ani-pe mol-l’el-Ni*.
 REC-gather-SS.PFV speak-SS fish-PL say-EVID-3PL.INTR
 ‘Having gathered with each other, in speaking, the fishes said: ...’
 c. *čumut n’e-šaqal’e-š-telle n’ied’i-nmu-l’el-ŋi*.
 all REC-gather-CAUS-SS.PFV speak-HAB-EVID-3PL
 ‘They used to gather and speak (with each other).’

Here the initial verb (*šaqal’e*- ‘to gather’), the formally reciprocal verb (*n’e-šaqal’e*- ‘to gather with each other’), and the reciprocal derived from the causative (*šaqal’e-š-* ‘to gather sb/sth’ → *n’e-šaqal’e-š-* ‘to gather each other’) are used in referentially identical situations, without any significant semantic shift. Note, however, that (44c) is a case of canonical reciprocal derivation from a transitive verb, while the simple reciprocal *n’e-šaqal’e-* is an instance of reciprocal derivation from an intransitive verb, which in the case of a non-symmetrical initial predicate should have been ‘supported’ by a syntactic

reciprocal marker (see 4.2.1). On the basis of this distinction, the occurrence of semantically “parallel” examples like in (44) may be explained as a result of the interaction of the following two factors:

1. The intention to highlight the reciprocal nature of a referential situation, which results in adding the morphological reciprocal marker to a lexical reciprocal.
2. The grammatical preference for the S+DO type of reciprocal transformation, which triggers the causative transformation in order to match the canonical pattern.

The syntactic reciprocal markers can be employed for highlighting reciprocity as well, cf.:

- (45) *n'e-molho-de-gen kimd'ie-l'ie-l'el-ŋi.*
 REC-among-POSS-PROL fight-INGR-EVID-3PL.INTR
 ‘They began to fight with each other, among themselves.’

6.2 The reciprocal marker with terms of kinship

The reciprocal prefix may be attached to some terms of kinship denoting relations within a generation, cf.:

- (46) a. *met emd'e-pul čumut amde-ŋi.* (N. Text 29)
 my younger.sibling-PL all die-3PL.INTR
 ‘All my younger brothers and sisters died.’
 b. *ja:n n'emd'e-die modo-l'el-ŋi.* (N. Text 21)
 three REC-sibling-DIM live-EVID-3PL.INTR
 ‘There lived three brothers.’

In (46a) the noun *emd'e* ‘younger sibling’ denotes a set of persons by naming their relation to another person (in this case, to the speaker); in (46b) the same noun expresses the relation which holds within the set of persons denoted by this noun, and the reciprocal prefix marks this situation (lit. ‘each other’s siblings’). Note that the semantic component ‘younger’ is neutralized in this context.

In my Kolyma Yukaghir corpus, the reciprocal prefix is found only in combination with the nominal stem *emd'e* ‘younger sibling’. In Tundra Yukaghir the following instances of this phenomenon are found: *n'ŋ-emd'e-jil'-pe* ‘(all) younger brothers’, *n'ŋ-aka-jil'-pe* ‘(all) elder brothers’, *n'ŋ-eki-jil'-pe* ‘(all) elder sisters’, *n'i-n'uge-jil'-pe* ‘(all) cousins’, *n'i-d'anmi-jil'-pe* ‘(all) elder brothers’ (all the examples and translations are taken from Krejnovich (1982:44)). The component *-jil'* in these forms is, according to Krejnovich (1982:43), an ancient plural marker (*-pe-* is the regular plural marker).

6.3 Non-reciprocal meanings of the reciprocal marker

The reciprocal marker in Yukagir is highly specialized, i.e. there are almost no instances of non-reciprocal use of this morpheme. However, there are some unique examples of this kind in my corpus, which are all listed below.

6.3.1 Referential chaining

The reciprocal from the intransitive verb *kebej-* ‘to leave’ signifies the chaining situation (‘A left after B, B left after C etc.’, cf. (Lichtenberk 1985; Kemmer 1993:100–1)); this interpretation is supported by the obligatory use of the syntactic reciprocal marker derived from the postposition *jela:* ‘after, behind’ in such clauses, cf.:

- (47) a. *tudel met jela: kewe-s’.*
 he I after leave-3SG.INTR
 ‘He left after me.’
 b. *n’e-jela: n’e-kewe-s’i:P’i.*
 REC-after REC-leave-1PL.INTR
 ‘We are leaving together, one after another.’

(Compare a similar example with another verb of motion in (22a).) Note that in order to derive the reciprocal proper from this verbal stem the reciprocal + applicative derivation is employed (cf. (5)).

6.3.2 The sociative (?) meaning

In the following example the reciprocal marker seemingly expresses a sociative meaning. This example involves the verb *im-ie-* ‘to put sth or sb into a boat or a sledge, or on deer- or horse-back’ which is derived from the verb *ima-* ‘to get into a boat or a sledge, or to mount a deer or a horse’ by means of the causative suffix *-ie-* which has an additional resultative meaning: it implies that the Causee is still in the state caused by the action in the time of reference, cf.:

- (48) a. *met tudel eks’il’-ge im-ie.*
 I he boat-LOC sit-CAUS(TR.1SG)
 ‘I have him in the boat with me.’
 b. *kin-pe-lek n’e-im-ie-ŋi-l eks’il’-ge.*
 WHO-PL-FOC REC-sit-CAUS-3PL-SF boat-LOC
 ‘Who (PL) are in the boat together?’

As shown by (48a), the sociative meaning is implied by the initial verb itself; the reciprocal presented in (48b) may thus be literally translated as ‘to put each other (in a boat, sledge, etc.), so that both are still there (together)’; then the reciprocal marker itself may be taken to have its basic meaning, while the sociative meaning is implied by its combination with the *-ie-* suffix.

6.3.3 The reflexive (?) meaning

There is a unique example of the possessive-reflexive meaning expressed by the reciprocal marker, cf.:

- (49) *met nojl pohoži juju:-ge tamun mided’e-le n’e-kigiji:-je.*
 my leg knee hurt-DS this needle-INST REC-jab-1SG.INTR
 ‘My knee was hurting, and I jabbed it with a needle.’

Note that the same verb normally has the reciprocal meaning, cf. (2), (27), (36), so this is hardly a case of (pure) lexicalization.

In the following example the reciprocal prefix marks a referential situation which is somewhat intermediate between the reflexive proper and the reciprocal proper, cf.:

- (50) *titte samuj n'e-n'u:-tie-nu-l'el-ŋi* *taŋ čomo:d'e-p-ki*
 their self REC-name-CAUS-ITER-EVID-3PL-INTR [this elder-PL-POSS
n'e-molho-de-gen n'ied'i-t taŋ titte omni:-n n'u:-gele
 REC-among-POSS-PROL speak-SS] this their clan-ATR name-ACC
n'u-tie-nu-l'el-ŋa.
 name-give-ITER-EVID-3PL.TR
 'They give names to each other (to themselves) themselves. The elders (of these clans),
 speaking among themselves (to each other), gave names to their clans.'

The pronoun *titte* 'their' in the first clause refers to several clans which used to live near each other; the situation expressed by the reciprocal in this clause is then described in more detail, so that it becomes clear that interpretations like 'they gave names to each other' and 'they gave names to themselves' are both possible: what is stressed in the first clause is that these names were not given by anyone outside the community; this is highlighted by the use of the reflexive particle *samuj* 'self' (which is a borrowing from Russian *sam* 'self').

6.4 Lexicalizations

There are only few clear instances of the lexicalized use of the reciprocal marker in my data, which are all listed in this subsection (about some less clear examples see 3.1.3, 3.1.1.2, and 6.2).

First, there are two cases of morphologically standard reciprocal derivation with an idiomatic meaning, cf. *n'e-mejnu-* 'to get married, to join' (lit. 'to take each other') ← *mejnu-* 'to take sth', and *n'e-lej-nu-l-ben* [REC-eat-ITER-ATR-SUBST] 'predator' (← *n'e-lej-nu-l* '(regularly) eating each other') ← *le(g)-* 'to eat'.

Secondly, one reciprocal verb is derived by the reciprocal prefix from a postpositional stem: *kije* 'before' → *n'e-kije-* 'to compete with each other, race with one another', cf.:

- (51) *adi-pe n'e-kije-din šubend'i-nnu-l'el-ŋi.*
 boy-PL REC-before-INF fun-HAB-EVID-3PL.INTR
 'The boys used to race with one another.'

Finally, if attached to the nominal stem *kie* 'span, interval', the reciprocal prefix derives the adverb *n'e-kie* 'alternately, turn and turn about.', cf.:

- (52) *tude mon-uol+možu-gele jaqte-le n'e-kie kič-um.*
 his say-RES+PRSP-ACC song-ACC REC-span learn-3SG.TR
 'He learnt (by heart) what he had to say, alternately with a song (by turn spoken and sung).'

7. Means of expressing related meanings

7.1 Comitative

7.1.1 *The comitative suffix*

Yukaghir has neither comitative nor sociative verb forms; the corresponding meanings are expressed either by the comitative case form or by a free comitative marker (see 7.1.2).

As shown in 5.1, the comitative case form is derived by means of the suffix *-n'e*; besides expressing one of the reciprocal arguments, the comitative case form has two basic functions:

1. It marks non-subject arguments of symmetrical predicates, cf.:

- (53) a. *titte es'ie-ŋin qamied'a:-nu-l'el-ŋi kereke-n'e kimd'i:-din.*
 their father-DAT help-ITER-EVID-3PL.INTR Koryak-COM fight-INF
 'They used to help their father fight with the Koryaks.' (N. Text 50)
- b. *ann'a:-l'el kind'e-n'e.*
 speak-INGR-EVID(3SG.INTR) moon-COM
 'She began to speak with the moon.' (N. Text 2)

2. It marks arguments of "sociative" situations (i.e. situations involving two participants playing equal roles), cf.:

- (54) a. *qristos lebie-gen tude šoromo-pul-n'e egužu-j.* (N. Text 9)
 Christ earth-PROL his man-PL-COM walk-3SG.INTR
 'Christ walked around the earth together with his men.'
- b. *amun-pe-n'e petr berbekin-gele pude peššej-m.* (N. Text 31)
 bone-PL-COM P. B.-ACC outside throw.out-3SG.TR
 'He threw out Petr Berbekin together with the bones.'

If a comitative NP denotes a 'collaborator' with the actor, the verb may agree both with the nominative NP alone and with the comitative complex as a unitary whole, exactly as described for the reciprocal constructions (see 5.3), cf. (54a) and:

- (55) *alandin tude šoromo-pul-n'e kel-ŋi.*
 A. his man-PL-COM come-3PL.INTR
 'Alandin with/and his men came.'

Thus, the comitative case appears if a situation involves two semantically equal participants, be it participants of a symmetrical or reciprocal situation, or participants of a "sociative" situation ('A and B together'), independently of whether or not the NPs denoting semantically equal participants are treated as one syntactic constituent.

7.1.2 *The free comitative marker*

The free comitative marker *n'aha*: 'together (with)' may function either as a postposition or as an adverb. As a postposition, it normally governs the comitative case, cf.:

- (56) [...] *as'e-gi kurčen-n'e n'aha: amdo:-t qodo:-pe-gi.*
 deer-POSS crane-COM together be.dead-ss lie-PL-POSS
 '...(that) his deer, together with the crane, lay dead.'

The comitative NP governed by this postposition may be dropped anaphorically, cf.:

- (57) *čarčaqan l'e-j n'aha: emd'e-p-ki l'e-ŋi.* (N. Text 29)
 C. be-3SG.INTR together younger.brother-PL-POSS be-3PL.INTR
 'There lived Charchaqan. Together with him lived his younger brothers.'

As an adverb, the free comitative marker occupies the preverbal position, cf.:

- (58) *n'aha: kebej-ŋi.*
 together leave-3PL.INTR
 'They left together.'

In some examples this marker has a meaning similar to the reciprocal one and may be used in a reciprocal construction with an intransitive verb in the function of syntactic reciprocal marker (see 4.2.1), cf.:

- (59) a. *n'aha: totto:-ŋi.*
 together stick-3PL.INTR
 'They stuck to each other, together.'
 b. *n'aha: n'e-juolod'a:-ŋi.*
 together REC-ask-3PL.INTR
 'They asked each other.'

To sum up, in the postnominal position, the word under discussion has the comitative meaning and can also occur with an NP denoting a non-subject reciprocal argument; as an adverb (in the preverbal position), it may mark both sociative and reciprocal situations.

7.2 Reflexive

The reflexive meaning is marked by the prefix *met-* (cf. (1c), (7c)), formally equal to 1SG pronoun 'I, my'. It may be assumed that this prefix has developed from a pronominal proclitic integrated into the verb morphology. This assumption is supported by the fact that in Tundra Yukaghir the reflexive marker (in the same morphological position) agrees with the subject in person in number, so that the reflexive meaning is expressed by the stem of a personal pronoun (coreferent with the subject) incorporated in the verb form, cf.:

- (60) a. *met me-met-qaiwes-t'eŋ.*
 I AFFRM-me-wound-1SG.INTR
 'I wounded myself.'
 b. *tet me-tet-qaiwes-t'ek.*
 you AFFRM-you-wound-2SG.INTR
 'You wounded yourself.'
 c. *tittel me-titte-qaiwes-ŋi.*
 they AFFRM-them-wound-3PL.INTR
 'They wounded themselves.'

As mentioned in 1.2, the reflexive and the reciprocal are opposed as the members of one morphological category, so that they cannot be combined within one verb form.

8. Notes on reciprocals in Tundra Yukaghir

8.1 General notes

In Tundra Yukaghir the reciprocal prefix has two phonological variants, *n'i-/n'iy-*; the latter occurs before vowels, cf.: *paj-* 'to knock' → *n'i-paj-* 'to knock each other', *ai-* 'to shoot' → *n'iy-ai-* 'to shoot each other'. The only significant syntactic difference between Kolyma and Tundra Yukaghir, as far as the reciprocals are concerned, has to do with reciprocal constructions with bitransitive verbs, in particular, with the relations between reciprocal and causative derivation.

8.2 Reciprocal constructions with underlying bitransitive causatives: "Indirect" or "canonical" reciprocals?

Tundra Yukaghir does not allow "indirect" reciprocal transformation (cf. 3.2), with the exception of reciprocal constructions with underlying bitransitive causatives, i.e., causatives derived from transitive verbs, cf.:

- (61) a. *tuj köde al'ha-le me-telies-um.*
 this man fish-ACC AFFRM-dry-3SG.TR
 'This man dried the fish.'
- b. *met tuj köde-ŋin al'ha me-telies-t'i-ŋ.*
 I this man-DAT fish AFFRM-dry-CAUS-(1SG.TR)
 'I asked this man to dry the fish, he dried the fish according to my request.'
- c. *mit me-n'i-telies-t'i-jel'i.*
 we AFFRM-REC-dry-CAUS-1PL.INTR
 'We asked each other to dry; we agreed to dry.'

In a causative construction (cf. (61b)) the initial direct object normally retains its syntactic position, the Causee occupies the indirect object slot (in the dative case form). The reciprocal marker in (61c) marks cross-coreference between the subject and the indirect object (Causer and Causee), while the initial direct object is not involved in the transformation (at least semantically). Yet the resulting construction is intransitive both syntactically and morphologically: no NP expressing direct object can be present in such a construction, and the verb can take only intransitive agreement markers, cf. another example of this type:

- (62) *mit me-n'i-t'ambi-se-jl'i.*
 we AFFRM-REC-help-CAUS-1PL.INTR
 'We asked each other (agreed) to help.'

Thus, reciprocal derivation from a bitransitive causative obligatorily entails detransitivization, although this is not implied by the semantics of this transformation.

An explanation for this phenomenon may be based on the following fact. When the initial direct object is not expressed in a causative sentence, the Causee can be encoded as direct object, cf.:

- (63) *met tuŋ köde me-telies-t'i-ŋ.*
 I this man AFFRM-dry-CAUS-(1SG.TR)
 'I asked this man to dry.'

It may thus be suggested that the reciprocal construction as in (61c) is derived not from a canonical causative construction as in (61b), but from a construction with an unspecified Patient and the Causee shifted to the direct object position, as in (63). If this hypothesis is accepted, the absence of the initial direct object should be viewed not as a formal implication of the reciprocal transformation, but as its obligatory condition. Then the reciprocal construction in (61c) belongs to the “canonical” diathesis type, and thus does not contradict the general rule which prohibits the “indirect” reciprocal transformation in Tundra Yukaghir.

8.3 Causative reciprocal constructions

Tundra Yukaghir, in contrast to Kolyma Yukaghir, has an object-oriented reciprocal construction. The subject of this construction denotes the Causer of reciprocal situation:

- (64) *met uör-pe me-n'i-t'ambi-se-ŋ.*
 I child-PL AFFRM-REC-help-CAUS(1SG.TR)
 'I made the children help each other.'

The reciprocal verb in such constructions must contain a causative suffix and takes a transitive agreement marker. The reciprocal arguments can be represented either by a single NP encoded as direct object (see 2.1) or by two distinct NPs, one of which is marked as direct object, and the other has the comitative case form, cf. (64) and the following example:

- (65) *tet met-ul met könme-n'e me-n'i-juö-se-mek.*
 you I-ACC my friend-COM AFFRM-REC-see-CAUS-2SG.TR
 'You showed me and my friend to each other, you helped us to see each other.'

This type of reciprocal construction can be described in terms of the causative transformation of a reciprocal construction, so that the sentence in (64) be taken as derived from (66); cf.:

- (66) *uör-pe me-n'i-t'ambi-ŋi.*
 child-PL AFFRM-REC-help-3PL.INTR
 'The children helped each other.'

Thus, Tundra Yukaghir can be assumed to have two options for combining reciprocal and causative meanings:

1. Reciprocal constructions with underlying causative verbs (Causer symmetrical with Causee), in which the subject-oriented reciprocal transformation is applied to a causative clause, cf. (61c), (62)), i.e. the causative marker is included within the scope of the reciprocal marker.

2. Causative (object-oriented) reciprocal constructions, in which causative transformation is applied to a canonical reciprocal clause, cf. (64), (65), and the reciprocal marker is within the scope of the causative marker.

It is interesting to note that in Even a similar distinction is reflected by the linear order of the reciprocal and causative suffixes within a verb form: V-CAUS-REC for the first construction type, and V-REC-CAUS for the second one (Malchukov, Ch. 39). In Yukaghir, this direct way of reflecting this distinction is not available because the reciprocal marker is preverbal, while the causative meaning is marked by suffixes. As a result, these construction types are morphologically opposed only by the choice of transitive vs. intransitive agreement markers, cf. (64) and (62).

8.4 Summary of distinctions between Tundra and Kolyma Yukaghir

The only significant distinction between the reciprocal constructions in Tundra and Kolyma Yukaghir may be formulated as follows: a transitive reciprocal in Kolyma Yukaghir can mark only cross-coreference between subject and indirect object (in particular, Causee in a causative construction), while in Tundra Yukaghir it can mark only cross-coreference between direct object and indirect object (Causee) in a causative construction. In other words, in both languages the opposition between transitive and intransitive agreement suffixes is employed to mark the distinction between “canonical” (intransitive) and “non-canonical” (transitive) reciprocal diathesis, but they have absolutely different types of non-canonical reciprocals (dative reciprocals in Kolyma Yukaghir and object-oriented reciprocals in Tundra-Yukaghir).

9. Etymological notes

As already shown, the comitative case marker in Kolyma Yukaghir has exactly the same phonological form as the reciprocal prefix. This coincidence is hardly accidental, given the obvious semantic similarity and the resulting regular co-occurrence of these morphemes within one clause (see 5.1). It might thus be assumed that both markers have developed from one morpheme that had been used to mark clauses denoting situations with two or more semantically equal arguments (i.e., both reciprocal and comitative/sociative situations), as the free comitative marker described in 7.1.2. Given the opposite linear positions of the morphemes under discussion with respect to the stem, this assumption seems to imply that the original comitative-reciprocal marker had been a free morpheme; this hypothesis is supported by the morphonological evidence in favor of the relatively recent integration of the reciprocal marker into the verb morphology (see 2.2.1). On the other hand, the clear pronominal origin of the reflexive prefix (see 7.2) demonstrates that the integration of a preverbal free morpheme into the verb form was once possible in Yukaghir.

This etymological hypothesis suggests that a structure like in (67) had been employed for both reciprocal ('A and B V each other') and sociative ('A and B together') situations, cf.:

(67) A B *n'e* V.

The next stage of development of this structure might have been a distinction between the postnominal (comitative) and preverbal (reciprocal) uses of *n'e*, cf.:

(68) (i) comitative: A B + *n'e* V
 (ii) reciprocal: A [B] *n'e* + V

(compare the similar behavior of the free comitative marker *n'aha*: (see 7.1.2)).

According to this hypothesis, the Yukaghir morphological reciprocal has developed from an analytical reciprocal form. It seems that this claim is supported by some synchronic features of reciprocals in Yukaghir, such as the extremely high degree of specialization, the small number of lexicalized reciprocals, absence (or minimum) of lexical restrictions. Some further evidence in favour of this claim is given by the free compatibility of the reciprocal marker with postpositional stems (see 4.1) and by the possibility of inserting a nominal stem between the reciprocal marker and the verbal stem (see 3.3.2).

In Tundra Yukaghir the reciprocal marker seems to be more deeply integrated into the verb morphology that in Kolyma Yukaghir: first, it has an additional morphological variant used to avoid clustering of vowels on the morpheme boundary, secondly, it can be included into the scope of a causative suffix.

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Reciprocal, response-reciprocal and distributive constructions in Cashinahua

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Acknowledgments

References

1. Introduction

1.1 The Cashinahua language

Cashinahua belongs to the Panoan language family which nowadays numbers of nearly thirty languages, spoken by about 38,400 people (Erikson et al. 1994:4–5). They live in the Amazonian Lowlands on the Bolivian, Brazilian and Peruvian borders. Cashinahua is spoken by about 4,587 people (ISA 1996:viii) who live along the Brazilian-Peruvian border in the basin of the Jurua and Purus rivers. The first study of the Panoan family is dated 1888 (presented by Raoul de Grasserie (1988) at the 7th International Americanist Congress in Berlin).

Most of the Panoan tribes and the Cashinahua among them refer to themselves as *huni kuin* ‘man *kuin*’, with some phonetic variations. The name of the Cashinahua language is *hanca kuin*. The term *kuin* is part of the Cashinahua socio-cultural system of classification. Sometimes, it is translated as ‘real’ (*huni kuin* ‘real people’ or ‘real man’) according to Kensinger (1994:83–94), Erikson (1996:73–77), and Deshayes & Keifenheim (1994) and I disagree with this translation (Camargo 1991). In the anthropological literature Cashinahua is spelt in a variety of ways: Caxinaua, Kashinawa, Kaxinawa, Cachinawa, etc. I will use the English and Spanish spelling *Cashinahua*.

It seems that the Panoan languages are related to the Tacanan as discussed by Mary R. Key on the basis of the phonological data analysis. She suggested that Panoan language groups: Chacobo, Pacaguara, Karipuna, and Kasharari, be viewed as one Pano-Tacana family (Key 1979:84–106). Fabre (1998:820) claims that this classification is based on lexicological data and suggests that their lexical similarity could stem from areal contact rather than genetic affiliation. It is stated in IEL (Bright 1992b:123; see also Bright 1992a:153–4) with reference to Kensinger (1985:268) that “a genetic relationship between Tacanan and the Panoan family is now widely accepted”.

1.2 Overview

In Cashinahua, there is no word or word group meaning ‘each other’. The principal means of coding reciprocity are the suffixes *-nami* and *-nan/-nanan*. Only subject-oriented diathesis types of reciprocals with these suffixes are attested in my data. In most cases of reciprocalization, the object of the underlying construction is deleted and *intransitivization* takes place. In the reciprocal construction, the subject cannot be marked by the ergative case marker *-n* (note that in Cashinahua, the intransitive subject as well as a direct object are zero marked when expressed by nouns). In Cashinahua there is no personal agreement.

- (1) a. *na huni-n haidu bina-ai.*
 this man-ERG H. look.for-PROGR
 ‘This man is looking for Jairo.’
 b. *na huni-bu bina-nami-ai.*
 this man-PL look.for-REC-PROGR
 ‘These men are looking for each other.’

Type (1b) is a typical reciprocal construction common cross-linguistically. I will refer to it as *reciprocal proper*. A specific feature of Cashinahua which is of interest typologically is the construction which I have tentatively termed *response reciprocal*¹ (in fact, this is a specific type of construction where the same reciprocal verbs are used; for brevity, in this case they may be referred to as response-reciprocal constructions). A significant feature of the response-reciprocal construction is a potential temporal distance between the reciprocal subevents. In this construction the subject may be singular, which distinguishes it from the above type. As a rule, the second participant cannot be named in this construction (cf. (1c)) but it may be named in the broader context, and even in the same sentence although not by an object (see, however, (2b)). In other words, it is always implied. Compare:

- c. *na huni bina-nami-ai.*
 this man look.for-REC-PROGR
 lit. 'This man is looking for each other.'
 = 'This man is looking for someone (who *also* (i) is looking for this man, (ii) will look for this man, (iii) looked for this man).'

A significant addition to the above: (1c) can be interpreted only as a response reciprocal because the subject is singular, while in (1b) this interpretation is a possible one alongside the reciprocal proper, i.e. a construction with a plural subject also allows the interpretation 'These men are looking for someone else (who is also looking for them ...)'.²

In (2a) and (2b) *mia* is the direct object form of the pronoun *min* 'you.sg'. As a rule, constructions of type (2b) are rejected by the native speakers, but for unclear reasons they accept a few such reciprocal constructions, e.g. (2b) with *bina-nami*. Note that the valency is not changed unless we count the omission of the ergative marking of the subject in (2b).

- (2) a. *paku-n mia bina-ai.*
 P.-ERG YOU.ACC look.for-PROGR
 'Paco is looking for you.'
 b. *paku mia bina-nami-ai.*
 P. YOU.ACC look.for-REC-PROGR
 'Paco is looking for you (and you – in Paco's belief – *also* (i) are looking for Paco, (ii) will look for Paco, (iii) looked for Paco).'

In "indirect" and "possessive" reciprocal constructions the direct object may be retained, i.e. intransitivization does not apply, in contrast to (1b) and (1c), but transitivity is weakened, because the subject in these constructions, as well as in (1b) and (1c) and (2b) cannot be marked by the ergative case (see also 3.1.2 and 3.1.3).

Here is an example of an "indirect" reciprocal. In (3b) the benefactive marker is used because in constructions with three-place transitives the object of addressee is omitted.

1. The term *response reciprocal* is not quite precise; it is used because the action of the co-participant may be distanced from that of the first participant in time and usually it is a kind of response to the latter action, both actions being expressed by the same form. Response action in the proper sense can be illustrated by the Ancient Greek derivatives with the prefix *άντι-*: *άντιδιαβαλλω* 'to respond with slander to slander', *άντεπαινεω* 'to respond to a praise with praise', *άνταδικεω* 'to respond to an offence with offence', etc.

- (3) a. *na huni-bu-n paku piti inan-mis.*
 this man-PL-ERG P. food give-HAB
 ‘These men always give food to Paco.’
- b. *na huni-bu-n piti inan-şun-mis.*
 this man-PL-ERG food give-BEN-HAB
 ‘These men always give food to someone.’
- c. *na huni-bu piti inan-nami-mis.*
 this man-PL food give-REC-HAB
- i. ‘These men always give food to each other.’
- ii. ‘These men always give food to someone else (who gives food to these men when they need it ...).’

If we substitute the suffix *-nan/-nanan* for *-nami* the construction as a rule retains its reciprocal meaning proper or its response-reciprocal meaning, and it also undergoes analogous intransitivization or a weakening of transitivity (i.e. ergativity is always absent, even if there is a direct object). I have no convincing data on restrictions of this kind of interchangeability, and the semantic distinctions resulting from substitution are hard to capture. This also pertains to the interchangeability of *-nan* and *-nanan*. In my corpus there are numerous pairs of sentences with *-nami* and *-nan/-nanan* that are explained or translated (into Portuguese and Spanish) by the informants in the same way. An example of differences adduced from some of my informants may be the following: in (4b) they sometimes characterize the meaning of the reciprocal as simultaneous.

- (4) a. *paku-n haidu diti-ai.*
 P-ERG H. hit-PROGR
 ‘Paco is hitting Jairo.’
- b. *paku inun haidu diti-nanan-ai-bu.*
 P. and H. hit-REC-PROGR-PL
 ‘Paco and Jairo are hitting each other.’

On the other hand, the following examples can hardly differ with regard to simultaneity (this also concerns example (7b) with a postponed response action). The difference between (5b) and (5c) is explained by one of my informants as follows: supposedly, (5b) implies that the lovers are already living together, while (5c) means that they are still living separately.

- (5) a. *haidu-n madia bicipaimis-ki.* ‘Jairo loves Maria.’
- b. *haidu inun madia bicipainami-mis-ki.* ‘Jairo and Maria love each other.’
- c. *haidu inun madia bicipainanan-mis-ki.* ‘Jairo and Maria love each other.’

(6) is a sentence the author heard in a conversation. Note that the Cashinahua believe that if you think of someone this person feels it and thinks of you in response, even if you are far away from each other. In this sentence the object referent is someone from Paco’s family.

- (6) *paku şinan-nanan-mis-ki, manu-nami-i-dan.*
 P. think-REC-HAB-ASS miss-REC-i-dan
 ‘Paco thinks of him, he misses him’ (and he thinks of Paco and misses him).

The response action may be different from the reciprocated action. Thus, for instance, in (7b) the donation of the government may be reciprocated by the Cashinahua by such response actions as the proper voting at the elections, giving a proper reception to the government representative, treating him with game meat (which is a sign of particular respect), etc.

- (7) a. *gubernu-n* *donation inan-şina-ki.*
 government-ERG donation give-PAST-ASS
 ‘The government made a donation to someone.’
 b. *gubernu* *donation maı-tibi inan-nanan-şina-ki.*
 government donation village-each give-REC-PAST-ASS
 ‘The government made a donation to each village.’

In this paper I shall also consider the distributive suffix *-akiaki* which does not carry the reciprocal meaning but it codes a number of meanings some of which in a number of languages may be rendered by reciprocal markers. It expresses meanings like ‘each’, ‘by turns’, ‘one after another’, ‘here and there’, ‘next to each other’, ‘from side to side’, ‘everywhere’, etc., depending on the lexical meaning of the base and/or context. It does not affect the valency of the underlying verb. In (8) the zero anaphora of the direct object implies someone close to the subject referent (note that for the Cashinahua life is limited to their family or village).

- (8) *paku-n* *dıti-akiaki-mis-ki.*
 P.-ERG hit-DISTR-HAB-ASS
 ‘Paco hits (the villagers) one after another.’

1.3 Database

This study is based on the data collected in 1994–1997 and in 1999 in a Cashinahua village called Colombiana (on the Peruvian side of the Curanja river, a tributary of the upper Purus river) with about 60 inhabitants. The Cashinahua people from this area were contacted in the late 1940s and have already assimilated much of the western life-style, such as clothing, but their ways of subsistence are still their own. Within the Cashinahua territory, they speak their language exclusively. They are supposed to learn Spanish, on the Peruvian side, and Portuguese, on the Brazilian side, in bilingual schools. Although some of the adult men, mainly the political leaders and their siblings, are in regular contact with western society and are able to communicate in one of these languages, they cannot be considered genuine bilinguals. Practically all ordinary teenagers had at that time only a scant knowledge of either of these languages.

I verified the data collected at different dates with Marcelino Piñedo (aged 56), Eda Piñedo (aged 28), Paco Piñedo (20), Jairo Piñedo (21), Jorge Torres (40), Agustino Torres (25), Alicia Puricho (50). For all of them Cashinahua is their native language. Paco, Jorge and Agustino have a fair knowledge of Spanish. Marcelino speaks a kind of mixture of Portuguese and Spanish. The others are entirely monolingual. Therefore I wish to warn

the reader that considerable care should be taken with the data as it is not always reliable due to the problems of communicating with the informants.

I am very much obliged to my main native informants Marcelino and Jorge and also to Agustino, Alicia, Eda, Paco and Jairo. Montag (1981) was consulted when necessary.

The present study is of an entirely preliminary nature, and some of the claims may undergo changes in the course of further research. Documentation of Cashinahua is in progress since 2006 within the DoBeS (Dokumentation Bedrohter Sprachen) program.

2. Grammatical notes

As so many of the Amazonian Amerindian languages, Cashinahua is still in the initial stage of investigation. It is an agglutinative language; it uses almost exclusively suffixes and has no prefixes. It manifests ergative/absolutive, nominative/accusative and neutral syntactic alignments (see Camargo 2005:55–88), weak noun-verb opposition (cf. Camargo 2003:25–39) and a rich derivational system.

2.1 The phonological system

The data are transcribed according to the Cashinahua phonological system. Cashinahua has eighteen phonemes: (a) four vowels: /a/, /i/, /i/ (= schwa), /u/, and (b) fourteen consonants: /m/, /n/, /p/, /t/, /c/, /k/, /b/, /d/, /j/ (occlusive palatal, often regarded as an affricate /tʃ/), /s/, /ʃ/ (a fricative voiceless retroflex), /h/, /ts/, /w/. At morpheme boundaries, morphological alternations (e.g. *bi-* > *bia-*) may occur.

2.2 Sentence structure. Word order. Word classes. Case relations

The word order is verb-final. The basic sequence is SOV, cf. (1)-(3). The transitive subject noun is marked by the ergative suffix *-n* (or by its allomorphs *-an*, *-in* or *-in*), and the intransitive subject noun and the object of a transitive construction are zero-marked (see (9a) and (10b) respectively). Table 1 summarizes the marking of nominal arguments:

Table 1. Noun marking

	Transitive	Intransitive
Subject	<i>-n</i>	∅
Object	∅	–

As to the personal pronouns, as transitive and intransitive subjects they are marked in the same way, i.e. with the final *-n* (cf. *mi-n* in (9c, d) and (10b)), and in the object position they have a different form (cf. subject *i-n* in (10c) and object *ia-∅* in (9b, c)). This distribution of subject and object marking between nouns and pronouns looks like split ergativity: constructions with nouns in syntactic positions are ergative while those with pronouns are “accusative” (the component *-a* is not a case marker in *i-a* because *i-* does

not occur separately, nor does the component *i-* in *i-n* and *mi-* in *mi-n*). The split ergativity system in Cashinahua is characterized by ergative-absolutive case marking on nouns and nominative-accusative case marking on pronouns. Moreover, both systems may combine in two ways. Thus, the following four types of explicit marking of transitive subjects and direct objects on nouns and pronouns can be distinguished (note that, in contrast to nouns, the pronouns have the same form in the intransitive and transitive subject position, and, again in contrast to nouns, they have special forms for a direct object). The four types are illustrated below. Proper ergative marking is observed in case (9a) only; case (9b) is a combination of ergative subject marking and accusative marking of the object; cases (9c) and (9d) are non-ergative. The form *ia* is provisionally called here accusative and, unlike *haidu* in (9a) and (9d), is not zero-marked because it never appears in subject position. Historically, however, the subject forms like *in* are derived from object forms like *ia* (full forms like *ia-n* are now used in displaced positions; cf. (15c)).

(9)	Subject		Object	
a.	noun marked	–	noun unmarked:	<i>paku-n haidu-Ø diti-ai</i> 'Paco is hitting Jairo.'
b.	noun marked	–	pronoun marked:	<i>paku-n ia diti-ai</i> 'Paco is hitting me.'
c.	pronoun unmarked	–	pronoun marked:	<i>min ia diti-ai</i> 'You are hitting me.'
d.	pronoun unmarked	–	noun unmarked:	<i>min haidu-Ø diti-ai</i> 'You are hitting Jairo.'

If the subject is a conjoined noun group the ergative marker is attached to the second element:

- e. *paku inun haidu-n ia diti-ai-bu.*
'Paco and Jairo are hitting me.' (cf. (9b)).

Nouns as intransitive subjects are not marked, and the pronouns, as mentioned, have the same form as transitive subjects (cf. (9c) and (10b)):

- (10) a. *haidu-Ø uša-ai.* 'Jairo is sleeping.'
 b. *min uša-ai.* 'You are sleeping.'
 c. *in uša-ai.* 'I am sleeping.'

The case markers are:

–*Ø* = absolutive (as a rule, this symbol is not used in the examples); it marks direct and indirect (including benefactive) objects (cf. (9a, d)) and intransitive subject (cf. (10a)).

–*n* = ergative (glossed ERG): it marks nouns in transitive subject position (see (9a, b)); its other meanings are possessive-genitive (glossed POSS; see (16a)) and locative (glossed LOC; see (11b)); (see Camargo 1998: 147–9)).

Besides the marker *-n*, there are three more case markers for different locative relations: *-ki* (glossed LOC; see (16a)); *-anu* (glossed LOC; see (11a)); *-anua* ablative (ABL; see (11c)); among these, the marker *-ki* alone seems to be also used on personal names and pronouns in non-direct object position.

Comitative relations are marked by two affixes on the object, the difference between them being unclear; both can code either a part of the subject group or a non-direct object: *-bi* (COM; see (11e)); *-bitan* (COM; see (11d)).

The instrumental case suffix *-win* (INST; see (38)) also marks the possessive form of the 3SG pronoun (see Table 3).

- (11) a. *bai-anu, in ka-mis.*
garden-DIR I go-HAB
'I often go to the garden.'
- b. *mai-n mani şaka puta-wi.*
floor-LOC banana peel throw-IMP
'Throw the banana peel on the floor!'
- c. *balta-anua min hu-şu-ki.*
B.-ABL YOU-SG come-PFV.PAST-ASS
'You arrived from Balta.'
- d. *paku madia-bitan cuta-mis-ki.*
P. M.-COM copulate-HAB-ASS
'Paco copulates with Maria.'
- e. *huni mi-bi hanca-ai.*
'The man is talking with you.'

2.3 Topicalization. Dependent predication

Deviations from SOV involve topicalization of the object (cf. (12b)) or subject (cf. (12c)), or dependent predicate (cf. (6)), etc.; if the topicalized argument changes its position it acquires the topical marker *-dan* which takes the position of a case marker – either zero (cf. *nami-Ø* in (12a) and *nami-dan* in (12b)) or overt (cf. *paku-n* in (12a) and *paku-dan* in (12c)). In writing, the topicalized argument is separated by a comma, to signify a virtual or potential pause:

- (12) a. *paku-n nami-Ø pi-mis.*
P.-ERG meat-OBJ eat-HAB
'Paco always eats meat.'
- b. *nami-dan, paku-n pi-mis.*
meat-TOP P.-ERG eat-HAB
'The meat, Paco always eats it.'
- c. *nami-Ø pi-mis, paku-n-dan.*
meat-OBJ eat-HAB P.-ERG-dan
'He always eats meat, Paco', i.e. 'It is Paco who (always) eats the meat.'

Constructions with *-dan* are extremely common in speech. This marker is particularly characteristic of objects, which results in a simplification of the syntactic structure. It seems that the suffix *-dan* does not always function as a topic marker, and I do not know its precise function. As its interpretations are dependent on the context they are a manifestation of its vagueness rather than polysemy (in particular the forms in *-dan* may denote the goal or cause of the action, a prior or subsequent action; i.e. functions which in other

languages may be rendered by forms termed converbs or verbal adverbials). Therefore henceforth it is repeated as *-dan* in the morphemic line of the example sentences.

As often as not, this suffix co-occurs with the aspectual markers *-i* and *-a*. Usually a verb with *-i-dan* seems to denote a non-realized action and with *-a-dan* a realized action, but this requires further study (on *-i* and *-a* see also 2.7). A dependent predicate when preceding the main predicate may have no tense/aspect markers or it may be marked with *-i* or *-a* (see (6), (69a), (50c), (52b), etc.).

2.4 Personal pronouns

As has been pointed out above, the personal pronouns in the subject position of an intransitive as well as a transitive construction contain the marker *-n*. In the *object position*, all the persons, except the 3rd of singular, appear in their full form (*i-n* → *ia*, *mi-n* → *mia*, *nu-n* → *nuku*, *ma-n* → *matu*, *hatu-n* → *hatu*, *habu-n* → *habu*) and are marked by a zero-morpheme (cf. in Table 2). The pronouns in Table 2 are segmented in order to point out their shared and distinctive segments, but further on in the examples the segment *-n* on pronouns (excepting the 3PL) is not as a rule hyphenated, as the remaining part does not occur separately. For the same reason, the segments *-ku*, *-tu* and *-bu* on the pronouns are not hyphenated either.

Comment 1. The 3SG pronoun is not used in communication, but is very common in narrative contexts in the meaning ‘the one we are talking about’; cf.:

- (13) a. *mai-n ha misti hu-mis-ki*
 land-LOC he alone come-HAB-ASS
 ‘Somebody (who we are talking about) comes alone by land.’
 b. *ha-n tsidi paku uin-tan-şan-iki-ki*
 he-ERG also P. see-tan-PRSP-EVID-ASS
 ‘(It seems that) he (who we are talking about) also, he is going to see Paco (and coming back).’

The pronoun *ha* seems to be descended from the demonstrative pronoun *ha* and it still retains this status (cf. *ha inka* ‘this Inca’; *ha huni* ‘this man’ (we are talking about)). Note that a sentence comprised of the predicate alone, like *hu-mis-ki* ‘he/somebody comes’, in an isolated position is accepted by all the informants, while *ha hu-mis-ki* ‘he comes’ sounds incomplete and requires information about the antecedent of the pronoun *ha*.

Comment 2. The 3PL forms *ha-tu* and *ha-tu-n* are used by the speaker to refer to a group of people from his own village or his next of kin (henceforth Inclusive pronoun).

Table 2. Personal pronoun marking

	Subject pronouns		Object pronouns	
	SG	PL	SG	PL
1st p.	<i>i-n</i>	<i>nu-n</i>	<i>ia-Ø</i>	<i>nu-ku-Ø</i>
2nd p.	<i>mi-n</i>	<i>ma-n</i>	<i>mia-Ø</i>	<i>ma-tu-Ø</i>
3rd p.	<i>ha; ha-n</i>	<i>ha-tu-n ha-bu-n</i>	<i>Ø</i>	<i>ha-tu-Ø ha-bu-Ø</i>

The forms *ha-bu* and *ha-bu-n* are used to refer to other groups of people (henceforth Exclusive). Note that the plural number on this latter pronoun is marked by *-bu* also used on nouns. Only the pronoun *habu* receives the ergative case-marking; and both *habu* and *hatu* take absolutive case-marking.

Comment 3. There is no 3SG pronoun form for the object position, and 3PL pronouns are usually omitted in this position: $\emptyset \emptyset$ *uin-mis-ki* ‘he/sb sees him/sb/sth’; *i-n* \emptyset *uin-mis-ki* ‘I see him/sb/sth’; \emptyset *ia uin-mis-ki* ‘he/sb sees me’. The omission is also characteristic of reciprocals.

- (14) a. *in* \emptyset *binima-nanan-ai*.
 I him/them be.happy-REC-PROGR
 lit. ‘I am happy (about him/them, e.g. my sons, who are happy about me).’

With two-place intransitives, the 3SG appears in the object position and it is marked, for instance, by the locative form *-ki* (14b). Its omission results in two readings according to the context of communication (14c):

- b. *in ha-ki binima-ai*.
 I he.SG-LOC be.happy-PROGR
 ‘I am happy because of him/her’ (e.g. because he is next to me, etc.).
- c. *in* (\emptyset) *binima-ai*.
 I (him) be.happy-PROGR
 i. ‘I am happy.’
 ii. ‘I am happy because of him’ (someone who is known to everybody).

Comment 4. In a displaced position (and also in conjoined phrases?) the object forms of the pronouns are used instead of the intransitive subject forms (see (15a, b)) and the full form of a transitive subject if the verb is transitive (see (15c)).

- (15) a. *ia* (not *in*!) *inun in baki, nun manu-nami-ai*.
 me and my son we miss-REC-PROGR
 ‘I and my son, we miss each other.’
- b. *ia, in daja-mis-ki*.
 me I work-HAB-ASS
 ‘As for me, I work.’
- c. *ian, in nami pi-mis-ki*.
 I I meat eat-HAB-ASS
 ‘As for me, I eat meat.’

Comment 5. The non-direct case forms of the pronouns are formed by substitution of the given case marker for the final segment of the possessive pronouns *-n* (cf. Table 3); thus the locative forms in *-ki* are: SG *i-ki*, *mi-ki*, *ha-ki*; PL *nu-ku-ki*, *ma-tu-ki*, *ha-tu-ki*, *ha-bu-ki*.

2.5 Possessive. Attributes

In the possessive construction, only human nouns and the personal pronouns contain the suffix *-n*; cf. (17a) and (17b) respectively. The possessive pronoun forms coincide materi-

Table 3. Possessive pronouns

	Singular	Plural
1st p.	<i>i-n</i>	<i>nu-ku-n</i>
2nd p.	<i>mi-n</i>	<i>ma-tu-n</i>
3rd p.	<i>ha-win</i>	<i>ha-tu-n</i> <i>ha-bu-n</i>

ally with respective subject pronouns, except the 3SG which takes the instrumental marker. Above is a table of possessive pronouns.

- (16) a. *paku-n bakì / hiwì / tai.* b. *mi-n bakì / hiwì / tai.*
 P.-POSS child house foot 2SG-POSS child house foot
 ‘Paco’s child / house / foot.’ ‘your child / house / foot.’

For non-human animate and inanimate nouns, there is no overt marking:

- (17) a. *awa tai* b. *hi p̃i*
 tapir foot tree leaf (feather, wing)
 ‘tapir’s foot’, or ‘tapir’s foot-print.’ ‘tree leaf.’ (cf. also (22))

An adjective usually follows the head noun:

- (18) *huni şua* ‘a fat man’, lit. ‘man fat’
hiwì iwapa ‘a big house’, lit. ‘house big.’

2.6 Agreement. Number

There is no person agreement in Cashinahua. The verb may agree only in number, agreement in the singular being zero marked. There is no agreement in number with the predicate if the subject is the 1PL or 2PL pronoun, i.e. the pronouns *nun* ‘we’ and *man* ‘you’. There are three cases of marking the plural number.

1. The subject is human. In this case plurality may be marked either on the subject or on the predicate, or on both the subject and predicate, in which case the subject is topicalized. There are two plural markers on the verb, *-bu* for the indicative mood (cf. (19b, d), (4b) and (8)) and *-kan* for the other moods (see (20b, c)). The suffix *-bu* also marks the plural number on human nouns, in subject or object position. Unlike *-bu*, *-kan* is not used on nouns.

With regard to the use of *-bu* on both nouns and verbs, as shown in (19), note that in Cashinahua, the difference between verb and noun is not always marked: most of the lexemes can take both verbal and nominal inflections.

To stress the sense ‘both, two’, the suffix *-dabi* (descended from the materially identical numeral, see (21b)) can be added to the predicate, along with either plural marker. (Thus this dual marker does not enter into the same opposition as the plural markers.) On reciprocals, its use is very productive.

The 3PL pronoun in subject position may be omitted, as in (20c), in which case plurality of the subject is marked on the predicate only. In (19e) the plural marker on the

predicate is optional because the coordinated subject is overtly plural. (21) illustrates the use of *-bu* on a direct object:

- (19) a. *huni pi-ai* 'the man is eating'
 b. *huni pi-ai-bu* 'the men are eating'
 c. *huni-bu pi-ai* 'the men are eating'
 d. *huni-bu pi-ai-bu* 'the men, they are eating'
 e. *paku and haidu pi-ai* 'Paco and Jairo are eating'
 f. *paku and haidu pi-dabi-ai-bu* 'Paco and Jairo, both of them, are eating.'
- (20) a. *huni pi-iki-ki* '(it might be) the man eats (is eating)'
 b. *huni pi-kan-iki-ki* '(it might be) the men eat (are eating)'
 c. \emptyset *pi-kan-iki-ki* '(it might be) they eat (are eating).'
- (21) *paku-n huni-bu kuşa-ai*
 P.ERG man-PL hit-PROGR
 'Paco is hitting men.'

2. The subject is non-human animate. In this case plurality may be marked on the verb only, and on the subject it may be expressed by a quantifier (which can also be used with animate nouns):

- (22) a. *kaman-an baka şau pi-mis-bu.*
 dog-ERG fish bone eat-HAB-PL
 'The dogs eat fish bones.'
 b. *kaman dabi pi-mis-bu.*
 dog two eat-HAB-PL
 'The two/both dogs eat.'

3. The subject is inanimate. In this case plurality may be expressed by a quantifier only and cannot be marked on the predicate:

- (23) a. *şiki muinti bina-ki.*
 corn mill new-ASS
 'The corn mill is new.'
 b. **şiki muinti bina-bu-ki.*
 'The corn mills are new.'
 c. *şiki muinti dabi bina-ki.*
 corn mill two new-ASS
 'Both corn mills are new.'

2.7 Tense, aspect, mood. Non-valency changing verbal derivation

What follows is highly tentative information. Most of the markers mentioned here are not glossed in the morphemic line of the sentential examples and are repeated in bold type.

1. The indicative mood. Cashinahua displays, among others, the following aspect or tense/aspect forms:

- (a) *-ai* – progressive, cf. (1);
 (b) *-mis* – habitual, cf. (3); its meaning may be rendered as 'always'; it also seems to have a meaning like that of the English Present Indefinite tense;

(c) *-a* – perfect/stative, with the meaning of resultant state on terminative verbs and highlighting the meaning of state on aterminative verbs, cf. (52b);

(d) *-i* – seems to denote the Present or simultaneity with another action, cf. (6).

The following markers code past tenses:

(e) *-ni* – a kind of Past Indefinite, cf. (38c);

(f) *-pau-ni* – historical past, cf. (38c);

(g) *-şu* – perfective past, cf. (11c);

(h) *-şin-a* – past (before today), see (7), (44)).

A particular case is the suffix *-şin* denoting an action that takes place at night.

2. The imperative mood is marked with the suffix *-wi* (cf. (11b)).

3. The evidential mood is represented by two suffixes:

(a) *-iki* for the present, cf. (69b);

(b) *-kiaki* for the past, cf. (38c); (cf. Camargo 1996a:272–84).

4. The prospective mood marker is the suffix *-şan* (cf. (13b)).

5. The assertive mood. In the examples in this paper it is mostly marked by the final suffix *-ki* denoting strong assertion, and by \emptyset for weak assertion; cf. *haidu, in haibu- \emptyset* ‘Jairo is my friend’ and *haidu, in haibu-ki* ‘I assert that Jairo is my friend’ (cf. Camargo 1996b:1–21). The suffix *-ki* is one of a series of suffixes (*-bin, -ka, -kin, -kin*) marking different shades of assertion. For brevity, the assertive marker is usually not translated in the examples below. It does not co-occur with the progressive.

6. Spatial/directional meanings. Cashinahua possesses numerous verbal suffixes with various such meanings which are not always clear: *-kain, -bain, -bidan, -kidan, -baun, -kawan*. Some of them may combine together, e.g. *-ku-bidan, -kun-kain, -kun-bain*, etc. Their meanings are not indicated in the glosses, they are simply repeated in bold type.

2.8 Verb classes

In Cashinahua the same valency classes of verbs are attested as in other languages:

(a) one-place intransitives, e.g. *daja* ‘to work’, cf. (10);

(b) two-place intransitives, e.g. *huni mi-ki binima-ai* ‘The man is happy with you’, cf. also (11e);

(c) two-place transitives, e.g. *caci* ‘to stab sb’, cf. also (1a);

(d) three-place transitives, including bitransitives with an indirect object of addressee: cf. respectively: *puta* ‘to throw sth somewhere/at sb’; the locative argument is marked with one of the locative case markers (11b); and *inan* ‘to give sth to sb’ (3a). In the last case the object of addressee has no marker; cf. *paku* in (3a).

2.9 Valency-increasing means

There is no comitative verb form in Cashinahua. The comitative meaning is coded by the comitative case markers *-bi* and *-bitan* on nouns:

(24) *paku haidu-bi kuşa-mis-bu*. lit. ‘Paco with Jairo hit someone’.

2.9.1 Causative

The causative marker is the suffix *-ma* on the verb which increases the number of the arguments as shown in (25). It operates on both transitives and intransitives.

- (25) *pi* 'to eat' → *pi-ma* 'to feed sb'
naši 'to bathe' → *naši-ma* 'to bathe sb'
kinĩ 'to paint' → *kinĩ-ma* 'to cause sb to paint sb (the body)'
buma 'to send, bring' → *buma-ma* 'to cause sb to send/bring sth.'
- (26) *in binĩ-n ia carlos kadu wa-ma-šun-iki-ki.*
 my husband-ERG me C. log make-CAUS-BEN-EVID-ASS
 '(It seems that) My husband makes Carlos cut the log for me.'

In some cases the members of a semantic causative opposition do not differ in the direction of formal derivation; this is observed when they are periphrastic verbs (see 2.11). Compare the following:

- (27) a. *tin* 'to fall'
 b. *in tin i-š-u-ki.* 'I fell' (-šu = PFV.PAST)
 c. *in tin a-š-u-ki.* 'I dropped it/him.'

Some verbs form a causative opposition by syntactic change in the construction only; cf. (28) where the causative opposition is complicated by an additional semantic change:

- (28) a. *haidu mi-ki datĩ-mis-ki.* 'Jairo is afraid of you.'
 b. *paku-n haidu datĩ-mis-ki.* 'Paco awakened Jario by scaring him.'

2.9.2 Benefactive

The benefactive is marked by the valency increasing suffix *-šun* on the verb. It indicates a 3rd argument valency. The base verb in this case is used transitively. As well as the direct object, the beneficiary is not marked for case. If the beneficiary is named by a personal pronoun it may refer only to the relatives of the subject referent.

- (29) a. *na huni-n hiwi wa-mis.*
 this man-ERG house make-HAB
 'This man always builds houses.'
 b. *na huni-n [min] hiwi wa-šun-mis.*
 this man-ERG you.SG house make-BEN-HAB
 i. 'This man always builds houses [for someone].' (without *min*)
 ii. 'This man always builds houses for your relatives.' (with *min*)
 c. *na huni-n ha-win baki-bu hiwi wa-šun-mis.*
 this man-ERG 3SG-POSS child-PL house make-BEN-HAB
 'This man always builds houses for his sons.'

2.10 Valency-decreasing means

There is no passive in Cashinahua.

2.10.1 Reflexive

Reflexivity is marked by the suffix *-k-* (vowel harmony variants: *-ki-*, *-ki-* and *-ku-*). This suffix seems to have no other meanings except reflexive proper which intransitivizes the base verb whose meaning may include that of a body part, cf. lit. *bicu* ‘to face-wash sb’. The reflexive construction appears mainly with body actions:

- | | |
|--------------------------------------|--|
| (30) <i>bicu</i> ‘to wash sb’s face’ | → <i>bicu-ki</i> ‘to wash one’s face’ |
| <i>huşu</i> ‘to hurt a foot’ | → <i>huşu-ku</i> ‘to hurt one’s foot’ |
| <i>caci</i> ‘to pierce’ | → <i>caci-ki</i> ‘to pierce oneself’ |
| <i>daşpi</i> ‘to massage’ | → <i>daşpi-ki</i> ‘to massage oneself’ |
| <i>mişti</i> ‘to hurt a hand’ | → <i>mişti-ki</i> ‘to hurt one’s hand’, etc. |

2.10.2 Reciprocal

It is derived by means of the suffixes *-nami-* and *-nan-/nanan-* (cf. (1b), (4), (5), (6)). For unclear reasons, derivatives with these suffixes from some of the verbs obligatorily take the reflexive suffix and it is preposed to the reciprocal one. In the underlying form this suffix may be absent.

- | | |
|---------------------------------------|--|
| (31) <i>daki</i> ‘to be afraid of sb’ | → <i>daki-ki-nan</i> ‘to be afraid of one another’ |
| <i>iku</i> ‘to hug sb’ | → <i>iku-ku-nan</i> ‘to hug one another’ |
| <i>nuku</i> ‘to meet sb’ | → <i>nuku-ku-nan</i> ‘to meet one another.’ |

2.11 Substitute verbs. Periphrastic verbs

Cashinahua does not employ a repeated verb for the same action. It has verbal substitutes (*vs*), *ik-/ij-/i-* for intransitive and *ak-/aj-/a-* for transitive verbs, to indicate the verbal valency concerned.

- (32) *nami pi-ju-wi, a-wi.*
 meat eat-*ju*-IMP *vs*-IMP
 ‘Eat some meat right now! Eat it!’

It seems that in principle verbal substitutes can derive periphrastic two-component correlates from many verbs (cf. (33b)). In this case the notional verb does not change or acquire any marker and the verbal substitute is inflected for tense, mood, etc. In the process, an intransitive verb may be transitivized (cf. (27c)) and a transitive verb may be intransitivized (cf. (33c)). The same technique is used in negative verb forms, esp. in the past tense (see (34)), and also in the formation of denominal verbs (see (35)). There are also periphrastic verbs with the auxiliary *wa* ‘to make’ (see (36)).

- | | | |
|---------|-----------------------------------|---------------------------------|
| (33) a. | <i>paku-n madia hantsu-ai.</i> | ‘Paco is embracing Maria.’ |
| b. | <i>paku-n madia hantsu ak-ai.</i> | (same as (33a)) |
| c. | <i>paku hantsu ik-ai.</i> | ‘Paco is embracing [somebody].’ |

- (34) *in nami pi-ama a-šu-ki.* 'I did not eat meat.' (-ama- = NEG)
 (35) *himi* 'blood' → *himi ik* 'to bleed'; cf. *in himi i-mis-ki* 'I bleed.'
 (36) *pi* 'good' → *pi wa* 'to repair sth for sb.'

3. Reciprocals with the suffix *-nami-* 'each other'. Subject-oriented reciprocals only

3.1 The simple construction; reciprocal proper. Expression of reciprocal arguments

The term 'simple reciprocal construction' refers to constructions with both reciprocal arguments expressed by the subject. Note that constructions with a singular subject (including those with a plural subject denoting one group participant, the co-participant being absent; cf. (1c) and (3c); for details see 3.2.1).

As reciprocal constructions are intransitive, the subject marker *-n* never appears in these constructions. In simple reciprocal constructions the subject must be necessarily plural. Its expression does not seem to differ from that of a plural subject in non-reciprocal constructions. The following cases are attested in Cashinahua: (a) a plural noun or pronoun (see (1b)); (b) a coordinated noun group with the conjunction *inun* 'and' (see (4b)). Besides, the subject may be a comitative group with the comitative case marker *-bi* (type *paku haidu-bi* lit. 'Paco with Jairo'). Moreover, the reciprocal arguments may be represented by anaphoric zero (see (1c), (14d)).

In a reciprocal construction the plural marker on the subject is optional (although it is very common otherwise). The point is, the suffix *-nami-* indicates at least two participants. Therefore in most cases the reciprocal predicate is not marked by the plural suffix *-bu*. In a random selection of 50 reciprocal constructions with a plural subject the predicate contains the suffix *-bu* in only 5 instances.

In order to stress the fact that there are only two participants, the reciprocal may acquire the dual marker suffix *-dabi*. Note that the plural marker on the predicate is retained in this case. As pointed out above (cf. (19f) and the relevant text), the suffix *-dabi* may co-occur with both plural markers *-bu* and *-kan*; cf.:

- (37) *paku inun haidu diti-nami-dabi-mis-bu.*
 P. and H. hit-REC-DU-HAB-PL
 'Paco and Jairo, the two of them always hit each other.'

3.1.1 "Canonical" reciprocals

3.1.1.1 *Derived from two-place transitives.* Two-place transitives are verbs taking an object without any case marker. The reciprocal construction loses the ergative marker *-n* on the subject, and also the object and becomes intransitive (cf. (1b)). Here are a few more examples illustrating this type:

- (38) a. *paku inun haidu nupi-win caci-nami-mis-ki.*
 P. and H. knife-INST stab-REC-HAB-ASS
 'Paco and Jairo always stab each other with a knife.'

- b. *ida inun idiani kini-nami-mis-bu-ki, nani-win-dan.*
 I. and I. draw/paint-REC-HAB-PL-ASS genipa-INST-dan
 ‘Eda and Eliane always paint each other(’s body) with *genipa*’ (black vegetable pigment).

Sentence (38c) was used in a situation with the following connotations: in the first clause the informant is stating a fact that the Cashinahuas did not (and do not even today) like white people; the second clause describes what had happened before the speaker was born, namely, that in the distant past the white people and the Cashinahuas used to kill each other, and the Cashinahuas even used to kill traitors: Patris, a Cashinahua himself, was killed by the Cashinahuas for raping a Brazilian girl, which was not approved in the Cashinahua society (polygamy and taking lovers is approved of but not rape). Patris was killed because they did not consider him a Cashinahua any longer but a white man.

- c. *nawa inun huni kuin bicipai-nami-ama i-pauni-ki,*
 white.people and man Cashinahua like-REC-NEG VS-RPAST-ASS
tsaka-nami i-pauni-bu-kiaki, patris tsaka-ni-bu-kiaki.
 kill-REC VS-RPAST-PL-PAST.EVID P. kill-PAST-PL-PAST.EVID
 ‘White people and the Cashinahuas did not quite like each other and they killed each other, they killed Patris.’

Here is a list of “canonical” reciprocals derived from two-place transitives (extracted from sentences obtained from native speakers):

- | | |
|--------------------------------------|---|
| (39) <i>bina</i> ‘to look for’ | → <i>bina-nami</i> ‘to look for each other’ |
| <i>bici</i> ‘to meet’ | → <i>bici-nami</i> ‘to meet each other’ |
| <i>bicipai</i> ‘to like, love’ | → <i>bicipai-nami</i> ‘to like, love each other’ |
| <i>buma</i> ‘to send sth’ | → <i>buma-nami</i> ‘to send to each other’ |
| <i>buti</i> ‘send away from hammock’ | → <i>buti-nami</i> ‘send each other away from hammock’ |
| <i>diti</i> ‘to hit, beat, quarrel’ | → <i>diti-nami</i> ‘hit/beat each other, quarrel with each other’ |
| <i>caci</i> ‘to hurt/stab’ | → <i>caci-nami</i> ‘to hurt/stab each other’ |
| <i>cuşa</i> ‘to burn’ | → <i>cuşa-nami</i> ‘to burn each other’ |
| <i>cuta</i> ‘to have intercourse’ | → <i>cuta-nami</i> ‘to have intercourse with each other’ |
| <i>hantsu</i> ‘to embrace’ | → <i>hantsu-nami</i> ‘to embrace each other’ |
| <i>hini</i> ‘to leave’ | → <i>hini-nami</i> ‘to leave each other’ |
| <i>ikuku</i> ‘to hug’ | → <i>ikuku-nami</i> ‘to hug each other’ |
| <i>kaşi</i> ‘to mock’ | → <i>kaşi-nami</i> ‘to mock each other’ |
| <i>kini</i> ‘to paint’ | → <i>kini-nami</i> ‘to paint each other’ |
| <i>kiju</i> ‘to bite’ | → <i>kiju-nami</i> ‘to bite each other’ |
| <i>kuşa</i> ‘to hit’ | → <i>kuşa-nami</i> ‘to hit each other’ |
| <i>kuşi</i> ‘to hit with sticks’ | → <i>kuşi-nami</i> ‘to hit each other with sticks’ |
| <i>manu</i> ‘to miss’ | → <i>manu-nami</i> ‘to miss each other’ |
| <i>midabi</i> ‘to help’ | → <i>midabi wa-nami</i> ‘to give help to each other’ |
| <i>mitsun</i> ‘to greet’ | → <i>mitsun-nami</i> ‘to greet each other’ |
| <i>ninin</i> ‘to pull’ | → <i>ninin-nami</i> ‘to pull each other’ |
| <i>pima</i> ‘to feed’ | → <i>pima-nami</i> ‘to feed each other’ |
| <i>şiti</i> ‘to sniff’ | → <i>şiti-nami</i> ‘to sniff at each other’ |
| <i>şinan</i> ‘to think’ | → <i>şinan-nami</i> ‘to think of each other’ |

<i>tsaka</i> ‘to kill’	→ <i>tsaka-nami</i> ‘to kill each other’
<i>tuši</i> ‘to squeeze’	→ <i>tuši-nami</i> ‘to squeeze out each other’s pimples’
<i>uin</i> ‘to visit’	→ <i>uin-nami</i> ‘to visit each other’
<i>juí</i> ‘to meet’	→ <i>juí-nami</i> ‘to meet each other’
<i>jusin</i> ‘to teach’	→ <i>jusin-nami</i> ‘to teach each other.’

3.1.1.2 *Derived from two-place intransitives.* Here belong reciprocals derived from two-place verbs with the unmarked subject and an object marked for case. I have only verbs with the object in *-ki* (LOC) and with *-bi* (COM) at my disposal. The textual example below is followed by a list of this type of reciprocals most of which denote negative emotions (in brackets, the case markers used on the object are given):

- (40) *sinata-nami-i-dan, nun kunja i-dabi-ai.*
 angry-REC-*i-dan*, we talk.strongly VS-DU-PROGR
 ‘Angry with each other, both of us are talking strongly.’
- (41) *bínimai (-ki, -bi, -win)* ‘be happy with’ → *bínimai-nami* ‘be happy with each other’
bíja (-bi) ‘to be accustomed to’ → *bíja-nami* ‘to be accustomed to each other’
daki (-ki) ‘to be afraid of’ → *daki-ki-nami* ‘to be afraid of each other’
misi (-ki) ‘to be afraid of’ → *misi-nami* ‘to be afraid of each other’
pununuka (-ki) ‘to be sad’ → *pununuka-nami* ‘to be sad about each other’
sinata (-ki) ‘to be sad’ → *sinata-nami* ‘to be sad about each other.’

3.1.2 “Indirect” reciprocals

This term is a label used to refer to reciprocals formed from non-derived or derived three-place verbs. Both objects (denoting moveable and unmoveable referents) are unmarked. Although the “indirect” reciprocal construction (as well as the “possessive” reciprocal, see 3.1.3.1) retains the direct object, the degree of transitivity is somewhat weakened because the subject cannot be marked with the ergative suffix *-n*. In this diathesis type the object of addressee is deleted and thus the valency decreases. There are two groups of base verbs that can undergo “indirect” reciprocalization.

3.1.2.1 *Derived from bitransitives.* There is a tendency to simplify the syntactic construction by omitting the direct object or demoting it to a non-direct object (cf. *kíni* and *kíni-win* in (42)) or replacing it with the suffix *-dan* (cf. 2.3). As the semantic type of direct object is implied by the underlying verb, the object is easily omitted, and the reciprocal may be interpreted as “canonical” (cf. *buma* ‘to send a message’ in (43) and in (39)). The sentential example (see also (3)) is followed by a list of relevant reciprocals:

- (42) a. *pancu-n haidu [kíni / kíni-win] junu-mis.*
 P-ERG H. letter / letter-INST send.message-HAB
 ‘Pancho sends Jairo messages [by letter].’
- b. *ha huni-bu [kíni / kíni-win] junu-nami-mis.*
 this man-PL letter / letter-INST send.message-REC-HAB
 ‘These men send messages to each other [by letter].’

- | | |
|--------------------------------------|---|
| (43) <i>bi</i> ‘to take sth from sb’ | → <i>bia-nami</i> ‘to take sth from each other’ |
| <i>buma</i> ‘to send sb a message’ | → <i>buma-nami</i> ‘to send messages to each other’ |
| <i>inan</i> ‘to give sth to sb’ | → <i>inan-nami</i> ‘to give sth to each other’ |
| <i>pi wa</i> ‘to repair sth for sb’ | → <i>pi wa-nami</i> ‘to repair sth for each other’ |
| <i>junu</i> ‘to send sth to sb’ | → <i>junu-nami</i> ‘to send sth to each other’ |
| <i>juu</i> ‘to tell/say sth to sb’ | → <i>juu-nami</i> ‘to tell/say sth to each other.’ |

3.1.2.2 *Derived from benefactives.* Reciprocals derive from three-place benefactives with the suffix *-sun* (cf. 2.9.2). These benefactives are in their turn derived from two-place transitives. Characteristically, the reciprocal suffix on the derivative does not follow the benefactive one, as could be expected, but precedes it.²

- (44) a. *dini-n şaşu wa-şina.*
D.-ERG boat make-PAST
‘Rene has made a boat.’
- b. *dini-n ha-wın baki şaşu wa-şun-şina.*
D.-ERG 3SG-POSS child boat make-BEN-PAST
‘Rene has made a boat for his son.’
- c. *dini inun paku şaşu wa-nami-şun-şina-bu.*
D. and P. boat make-REC-BEN-PAST-PL
‘Rene and Paco have made boats for each other.’ (cf. also (3) in 1.2, and 2.8.2)

3.1.3 “Possessive” reciprocals

3.1.3.1 *“Possessive” reciprocals proper.* These reciprocals derive from two-place transitives. The underlying construction contains a direct object with a possessive attribute denoting relations of alienable or inalienable possession. Here belong also one or two three-place transitives one of whose object referents (namely, the one denoting a person losing the object referent) can surface as a possessive attribute with a slight change of meaning (cf. *to take money from someone – to take someone’s money*). In Cashinahua there is a common marker for alienable and inalienable possession, only a human possessor being marked (e.g. *haidu-n bu* ‘Jairo’s hair’ in (45a)). In the derived construction, no valency decrease takes place as the direct object is retained and syntactically this diathesis type may coincide with the “indirect” type although they differ semantically. As in the previous case, the subject of the reciprocal construction does not take the ergative case marker, i.e. the degree of transitivity is weakened in comparison with the underlying construction; cf.:

- (45) a. *paku-n haidu-n bu ia bi-mis.*
P.-ERG H.-POSS hair louse take-HAB
‘Paco takes Jairo’s hair louse off.’
- b. *huni-bu hatu-n bu ia bia-nami-mis-bu.*
man-PL they-POSS hair louse take-REC-HAB-PL
‘[These] men always pick off each other’s hair lice’; cf. also:
- (46) a. *ainbu-aibu hatu-n baki-bu bicipai-nami-mis-bu.*
woman-PL they-POSS child-PL like-REC-HAB-PL
‘[These] women like each other’s children.’

2. Compare the analogous phenomenon in Quechua: van de Kerke, Ch. 31, §4.3.1.2.2.

- b. *ainbu-aibu hatu-n bakĩ pi-ma-nami-mis-bu.*
 women-PL they-POSS child eat-CAUS-REC-HAB-PL
 '[These] women always feed each other's children.'

3.1.3.2 “*Quasi-possessive*” reciprocals. I include here constructions without a direct object which are semantically contiguous to the “possessive” proper.

3.1.3.2.1 *Non-direct object instead of the direct one.* Here belongs the type exemplified by (47b), when it contains *bu-wĩn* instead of *bu*. Syntactically this type can also be interpreted as “canonical”. Native speakers accept both variants, with *bu* as well as with *bu-wĩn*, the first being preferable:

- (47) a. *paku-n haidu-n bu / bu-wĩn nini-mis.*
 P-ERG H.-POSS hair / hair-INST pull-HAB
 ‘Paco pulls Jairo’s hair off.’
 b. *paku inun haidu hatu-n bu / bu-wĩn nini-nami-mis-bu.*
 P. and H. they-POSS hair / hair-INST pull-REC-HAB-PL
 ‘Paco and Jairo pull each others’ hair off.’ (cf. (42) in 3.1.2.1)

3.1.3.2.2 *Reciprocals derived from one-place intransitives.* This type of reciprocal constructions is semantically similar to proper “possessive” constructions, but they contain no direct object. The object is semantically included in the meaning of the transitive verb *bĩcu* ‘to wash face’, lit. ‘to face-wash sb’ (see (48a)). For unclear reasons, the reciprocal derived from this transitive is ungrammatical (see (48b)). The verb *bĩcu* has a reflexive form in *-ki*, thus becoming intransitive (see (48c)). It is from this reflexive form that a reciprocal is derived (see (48d)). Why the formation of the reciprocal requires reflexivization is not clear. This is probably the case illustrated by (31). (The sentences in (48) are grammatical but quite artificial, because only a child can have his face washed, and it can be done only by his mother.)

- (48) a. *paku-n haidu bĩcu-mis-ki.*
 P-ERG H. wash.face-HAB-ASS
 ‘Paco washes Jairo’s face.’
 b. **paku inun haidu bĩcu-nami-mis-bu-ki.*
 P. and H. wash.face-REC-HAB-PL-ASS
 (intended meaning:) ‘Paco and Jairo wash each other’s faces.’
 c. *bakĩ bĩcu-ki-mis-ki.*
 child wash.face-REFL-HAB-ASS
 ‘The child washes his face.’
 d. *paku inun haidu bĩcu-ki-nami-mis-bu-ki.*
 P. and H. wash.face-REFL-REC-HAB-PL-ASS
 ‘Paco and Jairo wash each other’s faces.’

3.1.3.2.3 “*Canonical*” reciprocals for “possessive” reciprocal situations. These are verbs which denote holding each other’s hands or putting each other’s hands on each other’s

shoulders when dancing. The meaning of the body parts ('hands' and 'shoulders') is part of the verbal meaning.

- (49) a. *huni t̃ikuku-nami-mis-bu-ki hantsa-nami-i-dan.*
 'The men hold each other's hands and talk to each other.'
 b. *ainbu puntsu-nami hanca-mis-bu-ki.*
 'The women put their right arms on each other's shoulders and talk (during the ritual).'

3.1.4 Non-reciprocal meanings?

Each of the meanings in question has occurred only twice in my data, namely on intransitive verbs. Of course, they cannot be regarded as special meanings of the reciprocal suffix *-nami*, they are more likely to be a result of individual semantic shift, probably lexicalization, but it may be expedient to point them out: they are of typological interest as *-nami* occurs exceptionally on one-place intransitives here, and as a possible way of a sudden change of the reciprocal meaning.

3.1.4.1 *Sociative?* This meaning has occurred twice. In the first instance where it can be perceived the derivative from the verb *işcu* 'to jump' is used. Its reciprocal form denotes a ritual of initiation when a youth jumps with a grown-up holding hands, i.e. a joint action. In (50c), during this ritual Paco and Jairo keep jumping. The youths cannot stop until they fall exhausted. Each adult takes care of two children who stand next to him and holds them by the hands and does not let them stop. A similar instance has occurred with *-nanan*.

- (50) a. *paku işcu-mis-ki.*
 P. jump-HAB-ASS
 'Paco always jumps.'
 b. *paku işcu-nami-mis-ki.*
 i. 'Paco jumps (with someone else who jumps with Paco)
 ii. 'Paco jumps together with someone else.'
 c. *paku inun haidu işcu-nami-mis-ki, nişpu pima-i-dan.*
 P. and H. jump-REC-HAB-ASS *nişpu pima-i-dan*
 'Paco and Jairo jump with each other during the *nişpu pima* ritual.'

The other isolated example with an intransitive verb is (51). Combinability with *-nami* is probably assisted by the presence of *dabi* 'two'.

- (51) a. *paku inun sofia daka-ai.*
 'Paco and Sofia are lying down.'
 b. *paku inun sofia daka-dabi-nami-ai.*
 'Paco and Sofia are lying down together' (one with the other).

3.1.4.2 *Assistive?* The following example describes a situation where both participants are sitting and they want to stand up, and first one helps the other to stand up by giving his hand, and then the other does the same; this situation is very common among the older people when they sit on a bench and help each other to stand up. It is the reciprocal suffix *-nami* that indicates that Marcelino helps Alicia who has difficulty standing up, and he

gives his hand to her so that she might lean on it and stand up. The reading is dictated by the extra-lingual context, but it is worthwhile noting:

- (52) a. *marselino bini-mis-ki.*
 ‘Marcelino stands up.’
 b. *marselino inun alicia bini-nami-mis-ki, mitsun-nami-a-dan*
 M. and A. stand.up-REC-HAB-ASS hold.hand-REC-a-dan
 ‘Marcelino helps Alicia to stand up holding her with his hands, and then Alicia helps him.’

In the following instance which is not quite clear either, the meaning of help is determined by the pragmatic situation and is not rendered by *-nami* itself, but this example is of sufficient interest; the base verb is also intransitive here. (53b) is not used by native speakers but it is grammatical and is cited here as an indication of a possible path of the development of the assistive meaning.

- (53) a. *paku-n haidu hucu-mis-ki.*
 ‘Paco washes Jairo’s feet.’
 b. *paku hucu-ki-mis-ki.*
 ‘Paco washes his (own) feet.’
 c. *paku inun haidu hucu-ki-nami-mis-ki.*
 i. ‘Paco and Jairo help someone to wash their feet.’
 ii. ‘Paco and Jairo wash other people’s feet who will wash their feet later.’

(Compare also (48)).

3.2 The discontinuous construction; response reciprocals

3.2.1 *Introductory*

The discontinuous construction in Cashinahua is highly specific. It differs significantly from the discontinuous constructions in the languages considered in this volume where the differences between the discontinuous and the simple construction are connected with the topicalization of the first participant, the second participant being always named. In some of the languages only some reciprocals (usually more or less lexicalized) can form discontinuous constructions (see, for instance, Wiemer & Nedjalkov, Ch. 10 on German, §4.7), while in other languages all reciprocals can in principle be used in the discontinuous construction (cf. §3.1.4 in Kuular, Ch. 27 on Tuvan). In all of these languages the co-participant is named by an object in the discontinuous construction, and the reciprocal predicate may or must agree with the subject in person and/or number. In Cashinahua, the difference concerns not only topicalization, but also semantics, namely, only one (single or collective) participant is named, and it is named by the subject, while the co-participant is not named at all. As a result, the action of the co-participant is not only defocused but it may be distanced from the action of the first participant in time and/or in space (see (55c) and the text beneath it). This action may be termed a response action, and the co-participant may be termed unspecified. A reciprocal verb with an unspecified co-participant is termed here a response reciprocal. As E. Maslova suggested (p.c.), “the

primary participant (= subject) assumes or expects the converse situation (B V-s A) to take place. It is a sort of “potential” reciprocal”.

As the subject is singular the construction in question is syntactically different from the simple reciprocal construction where the subject is always (at least semantically) plural. The plural subject in the discontinuous construction names one collective participant, the co-participant remaining unspecified. But on the surface level this construction is ambiguous and allows an alternative, reciprocal proper reading (see (55e)). Thus any reciprocal form used as a response reciprocal can also be interpreted as reciprocal proper if the subject is plural. In other words, it seems that any reciprocal verb form can be used either as reciprocal proper or as response reciprocal, depending on the number of the participants named: in the former instance both participants are named and in the latter only one, the other remaining unspecified, and the subject may be singular.

One might suggest that the possibility of an unspecified co-participant in reciprocal constructions may be connected with the fact that the Cashinahuas are a very small community, and their range of communication is very narrow, consisting of the family members, relatives and co-villagers. Therefore the co-participant not named in a reciprocal sentence is easily recoverable from the extra-lingual situation. But this factor, though necessary, is not the determining one – there are lots of similar small groups, whose languages have not developed this type of reciprocal usage.

Out of context, (55c) describes a strange, unnatural situation, both logically and temporally: how does the speaker know that someone hit Paco later? Is it possible to find a natural context comprised of a number of linked sentences, maybe in the past narrative tense where this or analogous sentence would be natural?

- (55) a. *paku-n haidu diti-mis-ki.*
 P.-ERG H. hit-HAB-ASS
 ‘Paco hits Jairo.’
 b. *paku-n Ø diti-mis-ki.*
 P.-ERG 3p hit-HAB-ASS
 ‘Paco hits someone.’

The possibility of constructions like (55c) is obviously related to the existence of type (55b) constructions (see also (14)–(15) and the relevant text).

- c. *paku diti-nami-mis.*
 P. hit-REC-HAB
 ‘Paco hits someone who always hits him (later).’

According to the explanation of the informants, Paco hits someone who (a) does not want to hit him right now but will do so later; (b) has already hit him at an earlier/another time (i.e. in this case the response action is performed by the first participant).

We have not encountered any constructions of the (55d) type with a reciprocal verb with the plural suffix *-bu*, and most likely they are not possible. This indicates that these constructions do not contain a 3rd person zero subject of the co-participant. The latter participant can be introduced in a conjoined construction if only the subject is displaced (see (55e)).

- d. [?]*paku diti-nami-mis-bu*.
 P. hit-REC-HAB-PL
 (same intended meaning)
- e. *paku inun ha-dan, diti-nami-mis-bu*.
 P. and he-dan hit-REC-HAB-PL
 lit. 'Paco and him, (i) they hit each other; (ii) they hit someone/him who ...'

Response reciprocal constructions are common enough in comparison with proper reciprocal constructions: in my sample of 80 examples with *-nami* (part of the data obtained during field work) 28 constructions are of this type.

3.2.2 The subject is singular; response reciprocal only

3.2.2.1 *The co-participant is unnamed (usually a relative or co-villager)*. Judging by the data at my disposal, this is the most common case among response reciprocal constructions.

I have already mentioned that any reciprocal verb that can be used in the simple construction as reciprocal proper can also be used in the discontinuous type as a response reciprocal. The following examples which amplify examples (1), (3c), (55e), etc., illustrate these two types of usage of the same reciprocal verb:

- (56) a. *baki-bu bicipai-nami-mis-bu*.
 child-PL like-REC-HAB-PL
 'The children, they like each other.'
- b. *baki išta-dan bicipai-nami-mis*.
 child small-dan like-REC-HAB
 'The little child likes someone/him (who also likes the little child).'

As mentioned above, the unspecified co-participant is usually a family member, relative, etc. Therefore, the Cashinahua people experience sadness, happiness, or miss someone only with regard to their closest family (sons, parents, brothers, sisters, husbands, wives). The examples further on in this section illustrate this usage.

- (57) a. *paku binima-nami-ai*.
 'Paco is happy (with his siblings, etc. who are happy with him).'
- b. *in manu-nami-ai*.
 'I am missing him (and he is missing me).'
- c. *paku midabi-nami-mis-ki*.
 'Paco helps other people (who in their turn help him).'
- d. *paku caci-nami-mis, pain-dan*.
 'Pako, drunk, pierces the people (who will revenge on him).'
- e. *Paku mi-nami-mis*.
 'Pako touches her/his wife (who touches him).'
- (the husband alone can touch his wife).

The translation of (58b) below does not convey the reciprocal meaning of the predicate: it is hard to render it in a natural way, and an explanation is needed: (58a) is a neutral statement of an observable event, without any indication of the relations between the participants, while (58b) has subtle implications, viz. Paco is going from his village by boat

and taking some people as a favour and they know that they owe him a favour, and when Paco wants to return to his village he can ask one of them to take him there. This reflects the fact that among the Cashinahua favours are not free: in their society barter is the law.

- (58) a. *paku-n huni-bu iwi-ai.* 'Paco is giving some people a lift.'
 b. *paku iwi-nami-ai.* 'Paco is giving (some people) a lift.'

(59) describes a different kind of specific situation. Until the middle of the 20th century, the Cashinahuas practiced endocannibalism, they used to poison their distant family members in order to eat them. Afterwards the nearest relatives of those killed could revenge on the killer or his relatives.

- (59) *paku tsaka-nami-pauni-ki.*
 P. kill-REC-RPAST-ASS
 'Paco (has) killed somebody (whose kinsmen will revenge on Paco or his relatives).'

Some reciprocal constructions are rather difficult to interpret. Example (60a) does not require any special explanation, but (60b) needs some: it makes reference to a man who got into the habit of talking on the radio when he was in the urban area. The informant said that this sentence implies here the general participation of all the people who listen to the radio and of the man who speaks on the radio.

- (60) a. *pancu kini-win junu-nami-mis.*
 P. letter-INST send-REC-HAB
 lit. 'Pancho is always sending messages to somebody' (and getting response).
 'Pancho sends him a message by letter (and he will receive a reply by letter).'
- b. *pancu hanca-win junu-nami-mis.*
 P. voice-INST send-REC-HAB
 'Pancho is always talking on the radio (with each other)' (and getting response or at least being heard) lit. 'Pancho is always sending the voice to each other.'
 (Pancho lives on the Brazilian side and used to send messages by radio to the Cashinahua living on the Peru side.)

3.2.2.2 *The co-participant is named by a non-argument.* In this case the co-participant is named in the nearest context, even in the same sentence by a detached component, mostly with the marker *-dan*; cf.:

- (61) a. *Balta-anu, paku bija-nami-mis-ki, haibu-ja-i-dan.*
 B.-LOC P. be.used-REC-HAB-ASS friend-ATR-i-dan
 'Paco is used to his friends at Balta (the main Cashinahua village) who are also used to Paco (who is studying and living in Balta).'
- b. *paku manu-nami-mis, ha-win baki şinan-i-dan.*
 P. miss-REC-HAB he-POSS son think-i-dan
 'Paco misses *him*, he thinks of *his son* (who also misses his father and thinks of him).'

3.2.2.3 *The co-participant is named by a direct object.* In exceptional cases, the co-participant is named by a direct object. As a rule, the informants reject such sentences, but for unclear reasons the native speakers accept the following sentences (see also (2b) above).

The valency in (62b) is retained unless we count the omission of the ergative marker on the subject.

- (62) a. *paku inun haidu hatu diti-nami-mis-ki.*
 P. and H. them hit-REC-HAB-ASS
 ‘Paco and Jairo hit them.’
- b. *in mia midabi-nami-mis-ki.*
 I YOU.SG help-REC-HAB-ASS
 ‘I help you (and you help me).’
- c. *paku ha-win takada jauši-nami-mis-ki.*
 P. he-INST rooster stingy-REC-HAB-ASS
 ‘Paco is jealous of his rooster, and the rooster is jealous of Paco.’
 (i.e. the rooster does not like it when anyone approaches Paco.)

3.2.3 *The subject is plural; possible ambiguity*

If the subject is plural two interpretations are possible: reciprocal proper and response reciprocal. In the latter case the plural subject is interpreted as one (collective) participant, the unspecified co-participant being implied in the same way as in constructions with a singular subject. The following examples were interpreted by the informants in two ways (cf. also (3c)):

- (63) *paku inun haidu junu-dabi-nami-kan-iki-ki.*
 P. and H. send.message-DUAL-REC-PL-PRES.EVID-ASS
 i. ‘Apparently, Paco and Jairo, both of them send messages *to each other*.’
 ii. ‘Apparently, Paco and Jairo, both of them send messages *to someone else* (who send messages to them).’

The choice of the interpretation is culturally bound or depends on the context. In (64), as the Cashinahuas do not kill one another any longer, they accept the reciprocal proper interpretation if only the action is meant as a game. The response reciprocal interpretation is acceptable if the co-participants are strangers. In this case the meaning is that if Pako and Jairo kill someone they are in danger of being revenged by the clansmen of the victim who will (try to) kill them, and this is regarded as a (reciprocal) event.

- (64) *Paku inun Haidu tsaka-nami-mis-bu.*
 Paku and Jairo kill-REC-HAB-PL
 i. ‘Pako and Jairo kill *each other* (as a joke).’
 ii. ‘Pako and Jairo kill *other people*’ (who may also kill them in revenge).

4. Reciprocals with the suffixes *-nan* and *-nanan* ‘each other’. Subject-oriented reciprocals only

4.1 Distribution and the meanings of the suffixes *-nan*, *-nanan*, and *-nami*

The distribution and difference in meaning between *-nan* and *-nanan* are not clear. Most probably, they are in overlapping (to a great degree) distribution. Therefore it is re-

sonable to treat them as (free?) variants, and henceforth they are considered together as *-nan/-nanan* and always glossed as REC. If any differences are ever found they are likely to be very subtle (on some of the possible differences concerning the number of the co-participant see 4.3.4). As well as *-nami*, both of them are used in reciprocal proper and response reciprocal constructions, and in the same diathesis types: “canonical”, “indirect”, “possessive”.

The difference between *-nan* and *-nanan* is hard to capture, and I am not approaching any solution of this problem. But I will risk mentioning some of the characteristics offered by the informants. I wish to stress that all the suggestions below are highly tentative because the informants contradict themselves to a greater degree than one might expect.

Three logically possible cases of distribution of the variants *-nan* and *-nanan* on stems can be distinguished:

(a) most of the stems may occur with either *-nan-* or *-nanan-*; this is probably the main case; cf. *mīdabi* ‘to help sb’ → *mīdabi-nan/mīdabi-nanan* ‘to help each other’;

(b) a few stems seem to take *-nan* alone: *bīisin* ‘to look sb in the face’ → *bīisin-nan* ‘to look each other in the face’, but **bīisin-nanan*; *hantsu* ‘to hug/embrace’ → *hantsu-nan* ‘to hug each other’, but **hantsu-nanan*;

(c) a few stems seem to take *-nanan* alone: *usin* ‘to smile’ → *usin-nanan* ‘to smile at each other’, but **usin-nan*.

As pointed out, the suffix *-nan/-nanan* functions in the same way as *-nami*, but its semantic range seems to be somewhat broader although I cannot show it explicitly. The informants sometimes ascribe the meaning of simultaneity of reciprocal subevents to reciprocals in *-nan/-nanan* (see (4b)). To a certain degree, this is supported by the fact that in my data the verb *ciban* ‘to follow’ which implies simultaneous actions (movement) of both participants is attested many times with *-nanan* and never with *-nami*. But there are many reciprocals with *-nanan* where the meaning of simultaneity is unlikely.

With regard to the distribution of *-nami* and *-nan/-nanan* on different verbal stems, three cases can be distinguished as well. The causes of the differences in distribution are not clear. They may be related to the lexical meaning of the stems; some instances are probably fixed units. They may also be related to the semantic differences between these suffixes. The general picture requires further investigation. What follows is a tentative illustration of these logically possible cases:

(a) Most of the stems seem to occur either with *-nami* or with *-nan/-nanan*; this is probably the main case; in some of the resultant pairs some difference in meaning may be discerned but I find it difficult to explicate it; cf.: *bi* ‘to give’ → *bia-nami / bia-nanan* ‘to give each other, exchange’, *dīti* ‘to hit’ → *dīti-nami / dīti-nanan* ‘to hit each other’ (see (65) below).

(b) A few stems combine with *-nami* exclusively: a. *bīcipai* ‘to like sb’ → *bīcipai-nami* ‘to like each other’, but **bīcipai-nanan*, *kuşa* ‘to hit sb’ → *kuşa-nami* ‘to hit each other’, but **kuşa-nanan*.

(c) A few stems take *-nan/-nanan-* exclusively: *padan* ‘to mislead sb’ → *padan-nanan* ‘to mislead each other’, but **padan-nami*; *şinan* ‘to think’ → *şinan-nanan* ‘to think about each other’, but **şinan-nami*.

As mentioned, the informants sometimes differ in their evaluation of the possible forms. Thus my main informant Marcelino does not accept *diti-nanan* (from *diti* ‘to fight, hit’) but Jorge, a younger man, accepts it.

Here are some derivatives with the suffixes *-nami* and *-nan/-nanan* from the same bases with identical translations, elicited from the informants. Illustrations of reciprocal proper and response reciprocal constructions are cited separately, and within these two types, first reciprocals with *-nami* and *-nan* and then with *-nami* and *-nanan* are cited.

1. Proper reciprocal constructions:

- (65) a. *paku inun haidu jui-nami-mis-ki.* ‘Paco and Jairo tell stories to each other.’
paku inun haidu jui-nan-mis-ki. ‘Paco and Jairo tell stories to each other.’
- b. *paku inun haidu jusin-nami-mis-ki.* ‘Paco and Jairo teach each other.’
paku inun haidu jusin-nan-mis-ki. ‘Paco and Jairo teach each other.’
- c. *paku inun madia midabi-nami-mis-ki* ‘Paco and Maria help each other’
paku inun madia midabi-nan-mis-ki,
hatu-n bai dida-kin-dan. ‘Paco and Maria help each other,
 they-POSS land clear-kin-dan clearing their land.’
- d. *aidu inun madia bicipai-nami-mis-ki.* ‘Jairo and Maria love each other.’
haidu inun madia bicipai-nanan-mis-ki. ‘Jairo and Maria love each other.’
- e. *paku inun haidu kini-nami-mis-ki.* ‘Paco and Jairo write to each other.’
paku inun haidu kini-nanan-mis-ki. ‘Paco and Jairo write to each other.’
- f. *paku inun haidu kuşa-nami-mis-ki.* ‘Paco and Jairo hit each other with sth.’
paku inun haidu kuşa-nanan-mis-ki. ‘Paco and Jairo hit each other with sth.’
- g. *paku inun haidu mitsun-nami-mis-ki.* ‘Paco and Jairo greet each other.’
paku inun haidu mitsun-nanan-mis-ki. ‘Paco and Jairo greet each other.’

2. Response reciprocal constructions:

- (66) a. *paku jui-nami-mis-ki.* ‘Paco tells stories to other people/someone.’
paku jui-nanan-mis-ki. ‘Paco tells stories to other people/someone.’
- b. *paku junu-nami-mis-ki.* ‘Paco sends (a letter or sth) to other people (his family)’
paku junu-nanan-mis-ki, ha-win nabu. ‘Paco sends a letter to his family who on receiving it reply at once.’
- c. *paku jusin-nami-mis-ki.* ‘Paco teaches someone who in his turn teaches Paco.’
paku inun haidu jusin-nanan-mis-ki. ‘P. and J. teach somebody’ (like teachers).

4.2 The simple construction. Reciprocals proper

After I have cited pairs of examples just above, one might think that instead of discussing the constructions with *-nan/-nanan* I might limit myself to one phrase: replace the suffix *-nami* in the examples of Section 3.1 with *-nan/-nanan*, and the translations and explanations will remain the same. But I have decided to repeat the description for *-nan/-nanan* by arranging the data at my disposal in the same way as for *-nami*, in the hope that someone may get interested and try to explain the material.

4.2.1 “Canonical” reciprocals

4.2.1.1 *Derived from two-place transitives.* Reciprocal constructions of this type are formed in the same way as those with *-nami*. The examples are followed by lists of derivatives first with *-nan* and next with *-nanan*:

1. Reciprocals with the suffix *-nan*:

- (67) a. *paku inun haidu biisin-nan-a-ki, uin-nan-a-ki.*
 P. and H. look.at-REC-PERF-ASS see-REC-PERF-ASS
 ‘Paco and Jairo looked at one another and saw one another.’
 b. *paku inun madia midabi-nan-mis-ki, hatu-n bai dida-kin-dan.*
 ‘Paco and Maria help each other, clearing their land.’
- (68) *biisin* ‘to look sb in the face’ → *biisin-nan* ‘to look one another in the face’
hantsu ‘to hug’ → *hantsu-nan* ‘to hug each other’
iku ‘to kiss sb’ → *iku-ku-nan* ‘to kiss one another’
ikuku ‘to hug, embrace’ → *ikuku-nan* ‘to hug, embrace each other’
jusin ‘to teach’ → *jusin-nan* ‘to teach each other’
midabi ‘to help’ → *midabi-nan* ‘to help each other’
nuku ‘to meet’ → *nuku-ku-nan* ‘to meet each other’
uin ‘to see’ → *uin-nan* ‘to see each other’
usin ‘to smile’ → *usin-nan* ‘to smile at each other.’

(b) Reciprocals with the suffix *-nanan*:

- (69) a. *idiani inun kin uin-nanan-mis-bu-ki, bauta-anua-dan.*
 I. and K. visit-REC-HAB-PL-ASS bauta-ABL-dan
 ‘Eliane and Ken visit each other in Balta.’
 b. *paku inun haidu juan-nanan-kan-iki-ki, huni bitsa-bi hanca-iki-ki*
 P. and H. talk-REC-PL-EVID-ASS man other-COM talk-EVID-ASS
juan-nanan-i-dan.
 talk-REC-ASP-i-dan
 ‘(It might be that) Paco and Jairo are talking about one another;
 (but) the man talks about someone else. It’s a criticism.’
- (70) *daun* ‘to poison, cure’ → *daun-nanan* ‘to poison, cure each other’
diti ‘to fight’ → *diti-nanan* ‘to fight each other’
hubun ‘to sleep with sb’ → *hubun-nanan* ‘to sleep with each other’
iku ‘to embrace, hug’ → *iku-ku-nanan* ‘to hug each other’
juan ‘to talk’ → *juan-nanan* ‘to talk about each other’
jusin ‘to teach’ → *jusin-nanan* ‘to teach each other’
manu ‘to miss sb’ → *manu-nanan* ‘to miss each other’
midabi ‘to help’ → *midabi-nanan* ‘to help each other’
padan ‘to be unfaithful to’ → *padan-nanan* ‘to be unfaithful to each other’
şinan ‘to think of, about’ → *şinan-nanan* ‘to think of each other’
uin ‘to see’ → *uin-nanan* ‘to see, visit each other’
unan ‘to know’ → *unan-nanan* ‘to know each other’
usin ‘to smile’ → *usin-nanan* ‘to smile at each other.’

4.2.1.2 *Derived from two-place intransitives.* The same verbs belong here as those listed in 3.1.1.2. Here is an example:

- (71) a. *paku haidu-ki daki-mis-ki.*
 P. H.-LOC be.afraid-HAB-ASS
 ‘Paco is afraid of Jairo.’
- b. *paku inun haidu daki-ki-nan-mis-ki.*
 P. and H. be.afraid-REFL-REC-HAB-ASS
 ‘Paco and Jairo are afraid of each other’ (= do not want to see each other).

4.2.2 “Indirect” reciprocals

The same verbs belong here as those listed in 3.1.2.1. I have derivatives with *-nanan* only at my disposal, and none with *-nan*, but this may be accidental. If one gets something from the giver and receives something straight away, *-nanan* seems to be preferable to *-nami*. In (72a), both participants send letters to one another. As they live in different villages, physical simultaneity of sending the letters is out of the question, but the implication is that when each gets a letter, he answers it right away in order to send it back with the same messenger.

- (72) a. *paku inun haidu kini / kini-win junu-nanan-mis-ki.* (cf. (42b))
 P. and H. letter / letter-INST send.message-REC-HAB-ASS
 ‘Paco and Jairo send letters to each other and reply at once on receiving them.’
- b. *mişu midan bisti mijui jui-nanan-mis-bu-ki.*
 dark inside only myth tell.mith-REC-HAB-PL-ASS
 ‘In the afternoons, they tell only myths to each other.’

4.2.3 “Possessive” reciprocals

As in 3.1.3 and 4.2.2, the reciprocal meaning ‘each other’s’ appears in a construction with a direct ‘object’. I have derivatives with *-nanan* only at my disposal, and none with *-nan*, but this may be accidental, as in 4.2.2. Here are examples ((74b) illustrates “quasi-possessive” reciprocals noted for *-nami* in 3.1.3.2.2).

- (73) a. *ia bia-nanan-kan-iki-ki, ainbu dabi-dan.*
 louse remove-REC-PL-EVID-ASS woman two-dan
 ‘Both women, they remove each other’s lice’ (i.e. ‘delouse each other’), cf. (45).
- b. *paku inun haidu hatu-n pia bi-nanan-mis-ki.*
 P. and H. they.tu-POSS arrow take-REC-HAB-ASS
 ‘Paco and Jairo exchange each other’s arrows.’
- (74) a. *paku-n haidu miştun-mis-ki.*
 P.-ERG H. hold.hand-HAB-ASS
 ‘Paco shakes Jairo’s hand.’
- b. *paku inun ia-dan, nun miştun-nanan-mis-ki.*
 P. and me-dan we hold.hands-REC-HAB-ASS
 ‘Paco and I, we shake each other’s hands.’

4.2.4 Sociative?

Two different cases can be distinguished here: (a) sociative in the indicative mood and (b) sociative in the imperative where *-nan* adds the hortative meaning. As is known, the latter is an appeal to perform a joint action, i.e. the meaning ‘together’.

4.2.4.1 *In the indicative mood.* This case is analogous to that in 3.1.4.1 where verbs in *-namî* are dealt with. Only one verb is observed in this usage and it is attested with the suffix *-nanan* (not *-nan*) only. This case is attested with the same base verb as with *-namî*, and for denoting the same situation; cf.:

- (75) a. *paku işcu-mis-ki.* ‘Paco jumps.’
 b. *marselinu inun paku işcu-nanan-mis-ki, bakî işta nişpu pima-i-dan.*
 ‘Marselino and Paco jump (together) during the ritual of initiation.’

4.2.4.2 *In the imperative with the hortative meaning.* The suffix *-nan* (reciprocal or its homonym) has a sociative meaning when used on verbs with the imperative marker *-wî*.³ In these constructions only the form in *-nan* is accepted (*-nanan* is not registered in this usage). Most of the examples contain intransitive verbs (see, though, (78d)); note that in this hortative form reciprocals with *-namî* and also transitives can be used, cf. (78c)). Another sociative marker in the hortative is the suffix *-nu* (coincidence of the initial sonorant with *-nan* is hardly accidental). Forms with *-nan* denote invitation to perform an action (which has not begun yet) together, while forms in *-nu* contain invitation to join the action the subject is engaged in (a kind of comitative meaning). This difference may be expanded to cover the degree of spatial proximity; cf. (76) and (77):

- (76) a. *pi-wî.* eat-IMP ‘Eat!’
 b. *pi-nan-wî.* eat-together-IMP ‘Let’s eat together!’
 (the speaker is not eating yet)
 c. *pi-nu-wî.* eat-together-IMP ‘Eat with me!’
 (the speaker is already eating)
- (77) a. *nawa-wî.* dance-IMP ‘Dance!’
 b. *nawa-nan-wî.* dance-together-IMP ‘Let’s dance together!’
 (in the village where we are)
 c. *nawa-nu-wî.* dance-together-IMP ‘Let’s dance!’
 (in the other village)
- (78) a. *cuta-nan-wî.* ‘Let’s have intercourse together.’
 b. *hanca-nan-wî.* ‘Let’s talk together!’ (euphemism: this phrase is used by a man who wants to have sex with a woman and invites her to make love)
 c. *mîşukidi diti-namî-nan-şan-wî.* tomorrow hit-REC-(REC)-PRSP-IMP ‘Let’s hit each other (= fight) tomorrow!’
 d. *habias cici-nan-wî.* this share-HORT-IMP ‘Let us share this one!’

3. This usage may be compared with the data from Kirghiz (see Nedjalkov, Ch. 28, §9.3): in Kirghiz the reciprocal suffix *-ş-* has lost its sociative meaning: it is retained only in folklore texts, and about half of the sociative uses of this marker are in the hortative form.

4.3 The discontinuous construction; response reciprocals

For brevity, I disregard the diathesis types of reciprocals in this section.

4.3.1 *Introductory*

The general picture here is the same as with respective response reciprocals in *-nami* (see 3.2). In comparison with proper reciprocals in *-nan* and *-nanan*, the meaning of the response action of these forms is sometimes weakened to a considerable degree and acquires a virtual character. Moreover, the informants sometimes see a difference between verbs in *-nan* and *-nanan* with regard to the number of the co-participants, one with *-nan* verbs and more than one with *-nanan* verbs (see 4.3.4). This requires special investigation, because sometimes even in sentences with *-nan* the informants see the co-participant as plural rather than singular.

The weakening of the response reciprocal meaning is in a natural way connected with the delay of the response action and even with the hypothetical possibility of its non-performance: the first participant may die before he gets the response, although in this case the relatives may substitute for him/her.

Needless to say, any reciprocal verb with a singular subject (see 4.3.2) can be used with a plural subject (see 4.3.3), and the other way round, and any construction with a plural subject interpreted by an informant as response-reciprocal can also be interpreted as reciprocal proper.

There seems to be a tendency for reciprocals in *-nanan* with a plural subject to be more frequent in response constructions than those in *-nan* with a plural subject (cf. 4.3.3).

4.3.2 *The subject is singular; response reciprocals only*

4.3.2.1 *The co-participant is unnamed (usually it is a relative or co-villager).* As well as among reciprocals proper (see 4.2.1.1, 4.2.2, 4.2.3), the number of sentences with *-nan* in my corpus is markedly less than that with *-nanan*, which is likely to reflect the general frequency of *-nan* and *-nanan*. Examples follow (for brevity, the response action, like ‘and vice versa’, is omitted).

- | | | | |
|------|----|--|-------------------------------------|
| (79) | a. | <i>paku biisin-nan-mis-ki.</i> | ‘Paco looks at someone.’ |
| | b. | <i>paku daki-ki-nan-mis-ki.</i> | ‘Paco is afraid of somebody.’ |
| | c. | <i>paku šinan-nannan-mis-ki, manu-nami-i-dan</i> | ‘Paco thinks of sb, he misses him.’ |
| | d. | <i>paku mi-nanan-mis-ki.</i> | ‘Paco touches people (as a joke).’ |

4.3.2.2 *The co-participant is named by a non-argument.* The verb *binu* ‘to win’ with the suffix *-nanan* is used in a specific way: (80a) makes it clear that there is only one winner, Paco, and the other men only participated in the situation of competition, but this is sufficient cause for the use of the suffix.⁴

4. The reciprocal form of verbs with the meaning ‘to win’ behaves in a peculiar way in a number of other languages as well; cf., for instance, Tuvan (Kuular, Ch. 27, §5.5.2) and also Bulgarian (Penchev, Ch. 13, §10).

- (80) a. *paku huni-bu-bi kuşi-ni-ki, binu-nanan-i-dan.*
 P. man-PL-COM run-PAST-ASS win-REC-*i-dan*
 ‘Paco ran together with other men and he won.’
- b. *paku inun haidu juan-nanan-mis-ki, nawa-dan.*
 P. and H. speak.ill-REC-HAB-ASS western.man-*dan*
 ‘Paco and Jairo speak ill of the Western men.’

4.3.2.3 *The co-participant is named by a direct object.* As with the reciprocals in *-nami* (cf. 3.2.2.3), the informants usually do not accept constructions with the direct object of co-participant but in exceptional cases, for unclear reasons such constructions are not rejected. It is even more puzzling why (81c) with the first participant named by a noun and the co-participant by the pronoun *ia* ‘me’ is accepted by some of the informants, whereas replacement of the subject noun by the pronoun *min* ‘you.SG’ makes the construction unacceptable although the syntactic structure remains unchanged (nevertheless, I have encountered an analogous construction with the second participant named by a noun, cf. *mai-tibi* ‘each village’ in (85b)).

- (81) a. *paku-n ia şinan-mis-ki.*
 P-ERG me think-HAB-ASS
 ‘Paco thinks of me.’
- b. *paku şinan-nanan-mis-ki.*
 P. think-REC-HAB-ASS
 ‘Paco thinks of him/his family/etc. (and vice versa).’
- c. *paku ia şinan-nanan-mis-ki, in cai hiwi-kindan.*
 P. me think-REC-HAB-ASS I far.away live-*kindan*
 ‘Paco thinks of me (and I think of him, but) I live far away.’
- d. **min ia şinan-nanan-mis-ki.*
 (intended meaning:) ‘You think of me (and I think of you).’

4.3.3 *The subject is plural; possible ambiguity*

It might seem that if the subject is plural the first interpretation to come to mind should be the reciprocal proper, but this is not always the case, but, as mentioned above, in this case a reciprocal form may be interpreted not only as reciprocal proper (the subject naming both participants) but also as a response reciprocal (the subject naming one collective participant, the co-participant being unnamed). The main reason of the choice of interpretation by a native speaker may be accidental. When asked a second time, the same informant sometimes produces the other interpretation or both. The following examples with *-nan* and *-nanan* illustrate this type (for brevity, the second part of translation ‘and vice versa’ is omitted here). The interpretation of the verb’s lexical meaning in (82e) is determined pragmatically.

- (82) a. *paku inun haidu bişin-nan-mis-ki.*
 i. ‘Paco and Jairo look at each other.’
 ii. ‘Paco and Jairo look at other people.’
- b. *paku inun joana ikuku-nan-kan-iki-ki.*
 i. ‘(It might be that) Paco and Joana hug each other.’
 ii. ‘(It might be that) Paco and Joana hug other people.’

- c. *paku inun madia midabi-nan-mis-bu-ki.*
 - i. 'Paco and Maria help each other.'
 - ii. 'Paco and Maria help someone else.'
- d. *paku inun haidu biisin-nanan-mis-ki.*
 - i. 'Paco and Jairo look at each other.'
 - ii. 'Paco and Jairo look at others.'
- e. *paku inun haidu daun-nanan-mis-bu-ki.*
 - i. 'Paco and Jairo cure each other.'
 - ii. 'Paco and Jairo poison people.'
- f. *paku haidu-bi şinan-nanan-mis-ki.*
 - i. 'Paco with Jairo think of each other.'
 - ii. 'Paco and Jairo think of their families.'

4.3.4 *The plural or distributive meaning?*

As mentioned above, the response reciprocals in *-nanan*, in the opinion of some informants, may imply a plural second participant in contrast to the reciprocals in *-nan*. This seems to create a difference in meaning between *-nan* and *-nanan*, like 'one person' vs 'some/many persons' denoted by the object. Thus, if the subject is singular there is no quantitative symmetry between the two participants. This case is represented in my corpus by several examples (which require checking):

- | | | |
|---------|---|--|
| (83) a. | <i>paku mabu inan-nan-mis-ki.</i>
<i>paku mabu inan-nanan-mis-ki.</i> | 'Paco gives some things (to one person).'
'P. gives some things (to many/some persons).' |
| b. | <i>paku midabi-nan-mis-ki.</i>
<i>paku midabi-nannan-mis-ki.</i> | 'Paco helps one person' (and ...)
'Paco helps many people (and ...)' |
| c. | <i>paku inun haidu şusin-nan-mis-ki.</i>
<i>paku inun haidu şusin-nanan-mis-ki.</i> | 'Paco and Jairo teach (somebody and ...)'
'Paco and Jairo teach (them, many persons).' |
| d. | <i>paku inun haidu nuku-ku-nan-mis-ki.</i>
<i>paku inun haidu nuku-nanan-mis-ki.</i> | 'Paco and Jairo meet him/one person ...'
'Paco and Jairo meet them (some/many) ...' |
| e. | <i>alicia-dan, pima-nan-ki, jauşı-ma-dan.</i>
<i>alicia pima-nanan-mis-ki.</i> | 'Alicia feeds him, she is not greedy.'
'Alicia feeds her community (and they will feed her when she needs it).' |

(83e) was uttered by Alicia's husband when she fed the people who were coming to eat at her place because her plantation had not suffered while the other plantations had been destroyed by rain, and her husband was angry at Alicia for feeding them because he had also worked hard on the plantation. But it is only close relatives that get the food, not people from other villages.

In the following case the meaning of plural co-participant seems to be contiguous to the distributive meaning. (84c) describes a situation where participant Jorge comes to Colombiana (a Cashinahua village of about 10 houses with 60 inhabitants). In this sentence, the object (the Colombiana people) is not and cannot be named, but the context indicates that Jorge visits almost every house to see the people. The suffix *-kindan* 'one by one' on the predicate is distributive in meaning, and thus it emphasizes the meaning of *-nanan* in this sentence. The response visit of (some of) the Colombiana inhabitants is

implied in (84c) but it is backgrounded. Response visits are culturally expected, but in (84a–b) this is not expressed at all while (84c) implies it.

- (84) a. *jorge-n ha-win nabu uin-mis-ki, kulunbiana-anu.*
 J. 3SG-POSS family visit-HAB-ASS K.-LOC
 ‘Jorge visits his family in Colombiana.’
- b. *jorge-n uin-mis-ki, kulunbiana-anu.*
 J. visit-HAB-ASS K.-LOC
 ‘Jorge visits (people) in Colombiana.’
- c. *jorge uin-nanan-kindan-mis-ki, kulunbiana-anu.*
 J. visit-REC-DISTR-HAB-ASS K.-LOC
 ‘Jorge visits (different people) in Colombiana.’

The response action is backgrounded to a still greater degree in (85b) where the distributive meaning seems to be prevalent, which is highlighted by the suffix *-tibi* ‘each’. The expected response action of the Cashinahua people is distanced in time from the action of the government and in this situation it is practically absent. Moreover, the “donation” of the Cashinahua may take form different from that of the government’s. It may seem that the distributive meaning of (85b) entirely outrules the reciprocal reading, because the Cashinahua are hardly able to give the government anything that the government may give the Cashinahua. But the situation is not as simple as that. It turns out that a reciprocal action in this case is not ruled out, but it is highly specific. If the government gives them donations (like butter, milk, boats, etc.) the Cashinahua will vote for the government or they will receive the representatives of the government with prestigious (game meat) food, etc. Note that the syntactic structure of (85a) and (85b) is identical, with the exception of the ergative subject marking in (85a). Besides, I should like to stress that (85b), i.e. a response reciprocal construction, contains a nominal direct object (*mai-tibi*) = possible second participant, which, as mentioned above, is a very rare and unclear phenomenon (in constructions with response reciprocals).

- (85) a. *gubernu-n donacion mai-tibi inan-şina-ki.*
 government-ERG donation village-each give-REC-PAST-ASS
 ‘The government made a donation to each village.’
- b. *gubernu donacion mai-tibi inan-nanan-şina-ki.*
 government donation village-each give-REC-PAST-ASS
 (same translation).

Beside the instances considered above, there occur the suffixes *-nan/-nanan* whose meaning is hard to interpret as reciprocal (or at all) even in broad context, and there are instances of the type dealt with above which are interpreted by the informants as non-reciprocal, in a meaning close to the distributive meaning of *-aki-aki* (cf. Section 8). In fact, this fact gives rise to doubt whether in all the above similar cases the only possible interpretation is given.

- (85') a. *mawa-i pican-şun pi-kin, mai wa-ama, habia pican-şun hatu die-i put.on.fire-ss eat-ASS earth do-NEG now put.on.fire-ss they pi-paki-ki. na habianu mai bici-ni-şun mai unan-nan-ni-bu, eat-paki-ASS here then earth find-PAST-SS earth understand-REC-PAST-PL ana tsua-n hatu pi-ama mai midan-s mani-kunbiban-a-bu-ki. again who-ERG they eat-NEG earth inside-s be.together-kunbiban-a-PL-ASS*
 'He dies and he is put on fire for eating, they don't dig a grave, and each time they put him on fire and ate without stopping. Now these days they found out about graves [as the missionaries introduced graves in the 1960s] and understood what they were for. Since then no one eats them (i.e. human flesh) and (each time) the body is put into the earth.'
- b. *huni dau-ja dau-nanan-mis-ki.*
 man medicine-ATR treat-REC-HAB-ASS
 'The doctor treats everybody.'
- c. *paku misi-nan-nami-mis-ki.*
 'Paco is afraid of everybody.'
- d. *huni daun-nanan-ai juinaka, pi-nun ik-a.*
 man poison-REC-PROGR game eat-nun speak-PAST
 'The man is poisoning the game to eat, he said.'

4.4 Co-occurrence of the suffix *-nami* with *-nan* and *-nanan*

Most likely, co-occurrence of these suffixes is to a certain degree pleonastic. Unfortunately, I have only 9 instances of their co-occurrence in my corpus. These derivatives are rather heterogeneous. Characteristically, there is one case of *-nami-nanan* and 8 cases of *-nan/-nanan-nami*. This is probably evidence of the fact that *-nan* and *-nanan* are likely to be more concrete in meaning than *-nami*. Note also that as a rule the informants reject derivatives with the combinations *-nami-nan/-nanan*. My data are too limited to draw any conclusions, therefore I will restrict myself to their citing; first, the derivative with *-nami-nanan* is presented and then the derivatives with *-nanan-nami* and *-nan-nami*. Four of the reciprocals below are derived from two-place transitives; four derive from (potentially) three-place transitives (cf. (43)) and one from a two-place intransitive (cf. (41)).

- (86) a. *paku inun haidu mijui jui-nami-nanan-mis-ki.*
 'Paco and Jairo tell these myths to other people.'
- b. *hadi ka-jama-wi, kaman kiju-nanan-nami-mis-ki.*
 there go-NEG-IMP dog bite-REC-REC-HAB-ASS
 'Don't go there, the dog bites', lit. '... the dogs bite each other' (and bite those who approach, and they can bite you).
- c. *paku-n ha-win ain bawa junu-mis-ki, (paku) junu-nanan-nami-mis-ki.*
 P-ERG he-POSS wife cook send-HAB-ASS P. send-REC-REC-HAB-ASS
 'Paco sends his wife to cook, (and he) sends her (to do sth else, e.g. to cut a log down), (and she sends him to do the same).'
- d. *paku inun haidu kini-nanan-nami-mis-ki.*
 'Paco and Jairo write to each other.'

- e. *paku inun haidu inan-nanan-nami-i, pi-ki.*
 P. and H. give-REC-REC-i good-ASS
 ‘Paco and Jairo exchange (things/whatever) with each other, that’s good.’
- f. *paku inun haidu biisin-nan-nami-mis-bu.*
 P. and H. look-REC-REC-HAB-PL
 ‘Paco and Jairo look at each other.’
- g. *paku inun haidu ha-win mabu-dan inan-nan-nami-i pi-ki.*
 P. and H. he-POSS thing-dan give-REC-REC-i good-ASS
 ‘Paco and Jairo exchange things with each other, that’s good.’
- h. *paku inun haidu šinan-nan-nami-i.*
 ‘Paco and Jairo think of each other.’
- i. *paku inun haidu misi-nan-nami-mis-ki.*
 ‘Paco and Jairo are afraid of each other.’

5. Restrictions on reciprocal derivation

Restrictions on derivation are of the common trivial nature, i.e. reciprocals do not derive from verbs with an inanimate object only, like ‘to cut (logs)’, ‘to cook’, ‘to chop’, etc. Just in case, the informants were offered one-place intransitive verbs, to check their possible combinability with the suffix *-nami* and it turned out that the verbs *ka* ‘to go’, *kaša* ‘to cry’, *kuši* ‘to run’, *ni* ‘to walk’, *nawa* ‘to sing, dance’, *hu* ‘to come, arrive’, *bijus* ‘to play’ and a number of others do not take this suffix, and also a two-place transitive *uin* ‘to see’. (The meaning ‘to play with each other’ may approximately be rendered by marking the object with a comitative case marker, cf.: *paku haidu-bi bijus-ai* ‘Paco plays with Jairo’ = *haidu paku-bi bijus-ai* ‘Jairo plays with Paco’.) A few examples on restrictions are cited in 4.1, but they need careful checking yet (for instance, it is pointed out there that *uin* ‘to see, visit’ takes only the suffix *-nan/-nanan* but not *-nami*).

Of interest are those cases when reciprocal constructions are grammatically correct (i.e. these are not restrictions proper) but generally not accepted by the Cashinahua: the actions described are culturally unacceptable and even inconceivable, but under certain conditions they become acceptable. Thus, (87a) is not accepted by the informants for the simple reason that the Cashinahuas today do not kill each other, but if the subject refers to white people or if the situation of game is described, the informants allow the reciprocal form:

- (87) a. **huni kuin tsaka-nami-mis-bu.*
 ‘The Cashinahua kill each other.’
- b. *nawa tsaka-nami-mis-bu.*
 ‘The foreigners (western people) kill each other.’

6. Lexicalizations

Lexicalization seems to be rare enough among reciprocals. So far, I can illustrate it with the following reciprocal in *-nami* whose non-lexicalized meaning is ‘to take sth from each other’ (see 3.1.3.1) which is used here in a slightly lexicalized meaning ‘to exchange’ (see (88a)) and also in the literal meaning ‘taking/holding each other’, for the meaning ‘to dance together’, the dancing being indicated by the name of the ritual.

- (88) a. *paku inun haidu bia-nami-mis, hatu-n ain-dan.*
 P. and H. take-REC-HAB they-POSS wife-dan
 ‘Paco and Jairo exchange (lit. ‘take from each other’) their wives.’
- b. *paku inun haidu bia-nami-mis-ki, kaca nawa-i-dan.*
 P. and H. take-REC-HAB-ASS kaca nawa-i-dan
 ‘Paco and Jairo dance together (one with the other, arms locked), during the ritual *kaca nawa*.’

The following instance of a lexicalized reciprocal in *-nanan* also refers to the situation of exchange or sale as a variant of exchange: note that selling and buying does not involve money: there is no money used in the Cashinahua territory, their system is based on barter. These meanings are very close to the proper reciprocal meaning ‘to give sth to each other’

- (89) a. *paku inun haidu hatu-n tiuti inan-nanan-mis-ki.*
 P. and H. they-POSS necklace give-REC-HAB-ASS
 ‘Paco and Jairo exchange (lit. give each other) their necklaces.’
- b. *nun inan-nanan-ai, dadio inun grabadoda.*
 ‘We are selling radios and tape-recorders.’

7. Lexical reciprocals

A few lexical reciprocals at my disposal form the simple reciprocal construction only when combined with a reciprocal suffix, like ordinary non-reciprocal verbs. The underlying reversed constructions refer to the same situation, which is a distinctive feature of lexical reciprocals.

- (90) a. *paku-n haidu haibu-ki.*
 P.-ERG H. be.friends-ASS
 ‘Paco is friends with Jairo.’
- = b. *haidu-n paku haibu-ki.*
 ‘Jairo is friends with Paco.’
- ≠ c. *paku inun haidu haibu-bu-ki.*
 ‘Paco and Jairo are friends with someone else’ [not ‘with each other.’]
- d. *paku inun haidu haibu-nami-mis-ki.*
 P. and H. be.friends-REC-HAB-ASS
 ‘Paco and Jairo are friends with each other.’
- e. *paku haibu-nami-mis-ki.*
 ‘Paco is friends with someone (who is also his friend).’

The verb *nuku* ‘to meet’ is similar to it in this respect. Although the reversed constructions denote the same situation, the simple construction does not have a reciprocal meaning: it also requires a reciprocal suffix.

- (91) a. *paku haidu-ki nuku-mis-ki.*
 ‘Paco meets Jairo.’
 = b. *haidu paku-ki nuku-mis-ki.*
 ‘Jairo meets Paco.’
 ≠ c. *paku inun haidu nuku-mis-ki.*
 ‘Paco and Jairo meet someone.’
 d. *paku inun haidu nuku-ku-nan-mis-ki*
 ‘Paco and Jairo meet each other.’
 e. *paku nuku-ku-nan-mis-ki.*
 ‘Paco meets someone (who meets him).’

Some verbs whose meaning seems to indicate they are lexical reciprocals are not in fact lexical reciprocals in Cashinahua. Thus, unlike the verb *haibu* ‘to be friends’, *diti* ‘to hit, quarrel’ does not denote the same situation when used in reversed constructions (i.e. (92a) ≠ (92b)), which may be due to its polysemy. But like *haibu*, its simple construction (92c) does not denote the same situation as (92a) or (92b). Formation of the simple construction which might sum up the meaning of (92a) and (92b) requires marking with *-nami*, i.e. reciprocals are derived from these verbs in the regular way (see (92d)). True, it seems that if the co-participant is a close relative of the first participant, the simple construction with this verb may be reciprocal in meaning without the suffix (see (92e)).

- (92) a. *paku-n haidu diti-mis-ki.*
 ‘Paco quarrels with Jairo.’
 ≠ b. *haidu-n paku diti-mis-ki.*
 ‘Jairo quarrels with Paco.’
 ≠ c. *paku inun haidu diti-mis-bu-ki.*
 ‘Paco and Jairo quarrel with someone else.’
 d. *paku inun haidu diti-nami-mis-bu-ki.*
 i. ‘Paco and Jairo quarrel with each other.’
 ii. ‘Paco and Jairo quarrel with somebody (who quarrels with them).’
 e. *paku inun ha-win baki diti-mis-bu-ki.*
 ‘Paku and his son quarrel with each other.’

The verb *ciban* ‘to follow sb’ is not a lexical reciprocal proper, but it forms a converse opposition which is contiguous to the reciprocal one (Paco following Jairo implies Jairo preceding him, and both participants are active – they are moving). Although it is one of the participants that follows the other and the other (or others) is moving in front of him, this situation is described by a reciprocal verb with the literal meaning ‘to follow each other’, like in many other languages. Note that in all the sentences at my disposal the suffix *-nanan* alone is used.

- (93) a. *paku ciban-nanan-mis-ki, puikaman bu-ai-bu-dan.*
 P. follow-REC-HAB-ASS herb GO.PL-PROGR-PL-dan
 ‘Paco follows others, they go [to look] for the *puikaman* herb.’

- b. *unan cibān-nānān-mis-ki, unān-dān, hi pii piū-bāin-i*
 ant follow-REC-HAB-ASS ant-dān tree leaf carry-bāin-i
cibān-nānān-mis-bu-ki hiwī wā-i-dān.
 follow-REC-HAB-PL-ASS house do-i-dān
 ‘The ant follows the others, the ants carry tree leaves on their heads, they follow one another to build their house.’

8. Distributives: Derivatives with the suffix *-akiaki*

8.1 Introductory

Derivatives in *-akiaki* have a very broad range of interpretations implying, as a rule, repetition of the action by different subjects, or by the same subject in different places, or upon different objects. In other words, this suffix encodes repetition of one and the same action, each action acquiring an additional characteristic: (a) a change of the subjects acting one after another, (b) a change of the objects which are different for each action, (c) a change of direction or place. The latter case is not distributive proper but it is often concomitant with this meaning; it is sometimes termed dispersive (Dressler (1968:72) describes it as ‘überall, hier und dort’). There is also a number of extended usages of these meanings.

In distributive constructions, this meaning may be related either to the plural subject and denote successive actions of a number of subject referents (replacing each other), or to a singular (or plural, the number being irrelevant in this case) subject who performs repeated actions upon different objects or motion in different directions. Other, more detailed characteristics of distributive actions are attested as well. All these readings are interrelated and constitute a kind of continuum, and they may be regarded as actualizations of a single general meaning. Their actualization is basically determined by the lexical meaning of the base verb.

Sometimes, one and the same derivative may allow several interpretations, depending on such factors as the singular or plural subject (cf. (94a) and (94bb)), or presence of the object dependent on the derivative or in a displaced position with the suffix *-dan* (cf. (95a) and (95b)), (or depending on which interpretation is the first to occur to the informant).

- (94) a. *paku iŕcu-akiaki-mis-ki.*
 ‘Paco jumps here and there.’
 b. *paku inun haidu iŕcu-akiaki-mis-ki, bijus-i-dan.*
 ‘Paco and Jairo jump one after another while playing.’
- (95) a. *paku inun haidu daĵa-akiaki-mis-ki.*
 ‘Paco and Jairo work here and there.’
 b. *dini inun ia-dan, nun daĵa-akiaki-ai, nuku-n bai-tibi-dan.*
 D. and me-dan we work-DISTR-PROGR we-POSS garden-every-dan
 ‘Rene and I, we take turns working in each other’s gardens.’

As has been mentioned above, the suffix *-akiaki* is of particular interest due to the fact that its basic meaning of temporal or locative sequence is attested as a peripheral mean-

ing in the reciprocal markers in a number of languages.⁵ Unlike *-nami* and *-nan/-nanan*, this suffix does not change valency. It can co-occur with *-nami-* and *-nanan* (for obscure reasons, not with *-nan*) on the same verb, always as a second component only. Thus, distributives from reciprocals are possible but *there are no reciprocals from distributives* (see 8.5).

First I shall consider the range of the readings of *-akiaki* derivatives from intransitives and then those from transitives, although some of the readings may be more or less similar.

8.2 Distributives derived from intransitive verbs

Two groups of meanings are distinguished here: (a) a change of the subject (see (8.2.1)); (b) a change of direction or place (see 8.2.2).

8.2.1 *Change of subject (non-spatial (temporal) sequence; plural subject is obligatory)*

The common translation is ‘one after another’. Intransitive derivatives cannot take a singular (at least semantically) subject (cf. (96c); see also (94b) and (95b)).

- (96) a. *paku bini-mis-ki.*
‘Paco gets up.’
b. *huni-bu bini-akiaki-mis-ki.*
man-PL get.up-DISTR-HAB-ASS
‘The men get up one after another.’
c. **paku bini-akiaki-mis-ki.*
lit. ‘*Paco gets up one after another.’
- (97) a. *mai bitsa-anua juda-bu mawa ninka-tan kaşa-akiaki-mis-bu-ki.*
village another-ABL body-PL die listen-tan cry-DISTR-HAB-PL-ASS
‘In different villages they learnt that someone had died, and (outside the village) they cry (in all the houses) one after another (they bemoan this death).’
b. *huni diti-nami-i mawa-akiaki-mis-bu-ki, nupi-win-dan.*
man kill-REC-i die-DISTR-HAB-PL-ASS knife-INST-dan
‘People killed each other with knives, they died one after another.’

8.2.2 *Change of direction or place (spatial sequence; singular and plural subject equally possible)*

Besides the distributive meanings ‘each’, ‘one after another’, etc., the suffix *-akiaki* has a number of other meanings that are characteristic of distributive markers cross-linguistically, cf. readings like ‘here and there’ (see (94a) and (95a)), ‘from side to side’, ‘zigzagging’, ‘rotation’, ‘from one side to the other’, ‘in different places, elsewhere’, ‘everywhere’, ‘in all the houses’, etc. Although the number of the subject is of no importance, in my data the singular subject is prevalent with these meanings. Compare:

5. It is not accidental that some meanings characteristic of *-akiaki* are coded by reciprocal markers in other languages; cf. German *aufeinander* ‘one after another’, *untereinander* ‘one under another’, *nacheinander* ‘one after another’, *beieinander/nebeneinander* ‘next to each other’, etc. (Wiemer & Nedjalkov, Ch. 10, §5.5 ff.).

- (98) a. *in uša dabi-akiaki-mis-ki.*
I sleep toss.and.turn-DISTR-HAB-ASS
'I sleep tossing and turning from side to side.'
- b. *ni midan, in hiki-akiaki-kain-ai.*
jungle inside I walk-DISTR-kain-PROGR
'I am going by zigzags into the jungle, from one side to another' (taking different ways).
- c. *paku tin i-akiaki-mis-ki.*
'Paco falls somersaulting (rolling over repeatedly).'
- d. *paku kuši-akiaki-mis-ki.*
'Paco runs around everywhere.'
- e. *paku inun haidu uša-akiaki-mis-ki.*
'Paco and Jairo sleep wherever night finds them, here and there.'
- f. *paku inun haidu hiwi-akiaki-mis-ki.*
'Paco and Jairo live they don't care where, here and there.'
- g. *paku ka-akiaki-mis-ki, bai-anu-dan.*
P. go-DISTR-HAB-ASS plantation-LOC-dan
'Paco goes from one plantation to another.'

8.3 Distributives derived from transitive verbs

The most common translation equivalents of *-akiaki* on transitives are 'one after another', 'any, each', 'everybody', 'different (varieties)' relative to the *object*. For this reason the number of the subject (singular or plural) is irrelevant here.

8.3.1 *The object is named*

The referent may be in unmarked direct object position or in a displaced position with the marker *-dan* or it may be case marked, e.g. INST, or it may be named in the prior context); cf.:

- (99) a. *paku inun haidu kini-win junu-akiaki-mis-ki mai-tibi.*
P. and H. letter-INST send.message-DISTR-HAB-ASS village-each
'Paco and Jairo send messages by letter one after another to each village.'
- b. *paku-n ina-akiaki-mis-ki, disi-tibi-dan.*
P. mount-DISTR-HAB-ASS hammock-each-dan
'Paco mounts them one after another, all the hammocks.'
- c. *paku-n hatu hini-akiaki-mis-ki ainbu-tibi-dan.*
P-ERG them separate-DISTR-HAB-ASS woman-each-dan
'Paco leaves them one after another, each wife.'
- d. *in badansia in mi-akiaki-mis-ki.*
my watermelon I touch-DISTR-HAB-ASS
'I touch one watermelon after the other (by striking them to see if they are ripe).'
- e. *paku inun haidu nicin-akiaki-mis-ki, mani bana-kindan.*
P. and H. put.inside-DISTR-HAB-ASS banana plant-kindan
'Paco and Jairo plant all kinds of banana cuttings one after the other.'

- f. *bai hini-akiaki-mis-bu-ki.*
 plantation abandon-DISTR-HAB-PL-ASS
 ‘They abandon each one of the plantations.’⁶

8.3.2 *The object is not named*

It is usually a personal object. Compare:

- (100) a. *paku-n buma-akiaki-mis-ki.*
 ‘Paco sends messages to these and those.’
 b. *paku inun madia manu-akiaki-mis-ki.*
 ‘Paco and Maria are distressed for each member of their family.’
 c. *paku-n diti-akiaki-mis-ki.*
 ‘Paco hits one after another (each villager).’
 d. *kaman-an siti-akiaki-mis-ki.*
 ‘The dog sniffs everywhere, here and there.’
 e. *huni-bu, tsaka-akiaki ka-mis-bu-ki.*
 man-PL hunt-DISTR go-HAB-PL-ASS
 ‘The men, they go hunting any kind of animals they see.’
 f. *paku-n unan-akiaki-mis-ki.*
 ‘Paco knows everyone, each of the persons.’

8.3.3 *Extended distributive usage*

The usages cited below differ in one way or another from those considered above, although the semantic relatedness between these two groups of meanings is transparent enough. These usages are determined by the lexical meaning of the base. First, I will consider intransitive verbs and then transitives.

1. *Intransitive verbs.* The first example contains a non-spatial characteristic of a repeated action, and the second describes position of the subject referents next to each other:

- (101) a. *paku nawa-akiaki-mis-ki: sanba-dan, manca-dan, şuti-dan.*
 ‘Paco dances to different rythms (different dances one after another): samba, marcha, khote.’
 b. *bini-baun-mis-ki, bini-baun hi punjan-tibi tsau-akiaki-mis-ki.*
 flock-baun-HAB-ASS, flock-baun tree arm-each.one sit-DISTR-HAB-ASS
 ‘The flock perches next to each other on each branch.’

2. *Transitive verbs.* Their usage is much more varied. The examples illustrate the following readings (as mentioned above, the listed meanings are coded by reciprocal markers in a number of languages):

(a) placing objects one upon another (i.e. spatial sequence with regard to the change of position of the objects; I have not encountered the verb *macin-* without the distributive suffix; see (102a, b));

(b) placing objects next to one another (see (102c, d));

(c) winding or circular motion of an object or its part(s) (see (102e);

6. A tradition among the Amazonian minority is that when the plantation soil becomes tired and old, all the garden owners abandon every one of their plantations to make new ones.

- (d) intertwining of one object with/around another (see 102f);
 (e) iterativity linked with counteraction of the object (see (102g);
 (f) reciprocity (see (102h, i, k)).

- (102) a. *kadu macin-akiaki-mis-ki.*
 firewood pile-DISTR-HAB-ASS
 ‘He piles up the firewood (one on top of another).’
- b. *kadu makişkuma-akiaki-mis-ki.*
 firewood pile.and.line.up-DISTR-HAB-ASS
 ‘He piles and lines up (one on top of the other) a heap of firewood.’
- c. *huni-n hiwi mai wa-akiaki-mis-ki.*
 man house village make-SUC-HAB-ASS
 ‘The man builds village houses one next to the other.’
- d. *kinti pišta-ki pican-şun nupi dibu-wın şuki-akiaki-kin a-şun.*
 pan little-LOC put.on.fire knife point-INST punch-DISTR-ASS VS-şun
 ‘He punches holes one next to another in the little pan before putting it on fire.’
- e. *in awa tai dispi-wın in nişi-akiaki-ai.*
 my tapir paw rope-INST I tie.up-DISTR-PROGR
 ‘I am tying up my tapir’s paws around with a rope.’
- f. *nişpudun-dan, hi iwapa miwişi-akiaki-a-ki, du-n biçipai*
 liana-dan tree big hold.branch-DISTR-a-ASS monkey-ERG like
haida-mis-ki.
 a.lot-HAB-ASS
 ‘The liana intertwines with big trees, the monkey likes it a lot.’
- g. *ha inka-n aci-akiaki-şun.*
 that Inca-ERG hold-DISTR-şun
 ‘That Inca holds (restricting) her movements.’

The latter example is borrowed from a narrative and it describes the following scene: a man (Inca) holds tightly a woman in his arms who resists and tries to get rid of him and he presses her arms against her body to prevent her from breaking away.

Sentence (102h) allows two interpretations, depending on the pragmatic context:

- h. *paku inun haidu bijun-akiaki-mis-bu-ki.*
 P. and H. swing-DISTR-HAB-PL-ASS
 i. ‘Paco and Jairo swing each other by turns / one after the other.’
 (first Paco swings Jairo, then it’s Jairo’s turn to swing Paco).
 ii. ‘Paco and Jairo swing together here and there [where they find a swing/hammock].’
- i. *mai bai-dan cici-akiaki-mis-bu-ki.*
 village plantation-dan divide-DISTR-HAB-PL-ASS
 ‘They divided the communal land among themselves.’
- k. *sunia, ida inun badabada hanca-akiaki-mis-bu-ki.*
 ‘Sonia, Ida and Barbara talk to one another.’

8.4 Derivatives in *-akiaki* from reciprocals in *-nami* and *-nanan*

These derivatives are formed from reciprocals in the same way as from non-reciprocals. In derivatives from reciprocals with *-nami* the suffix *-akiaki* occurs in the same meanings as

with non-reciprocal verbs; cf. (103). Note that reciprocals do not derive from distributive forms, i.e. forms like *mia-nami-akiaki* / *mia-nanan-akiaki* ‘to touch each other by turns’ are possible, but **mia-akiaki-nami* is ungrammatical, and it is not clear what meaning it might have.

- (103) a. *paku inun madia mia-nami-akiaki-mis-bu-ki.*
 ‘Paco and Maria are touching each other by turns.’
 b. *kaman kiju-nami-akiaki-mis-bu-ki.*
 ‘The dogs bite each other wherever they meet, here and there.’
 c. *paku inun haidu diti-nami-akiaki-mis-ki.*
 ‘Paco and Jairo fight wherever they pass each other and wherever they meet.’
 d. *paku inun haidu bia-nanan-akiaki-mis-ki.*
 ‘Paco and Jairo exchange things wherever they come and whenever they meet.’
 e. *paku inun haidu kini inan-nanan-akiaki-mis-ki.*
 ‘Paco and Jairo give letters to each other and others one after the other.’

9. On the etymology of the reciprocal markers

Investigation of the Panoan languages is in its initial stage yet, and there is no information on the etymology of the reciprocal markers in Cashinahua and other Panoan languages. There is no information on reciprocals in other Panoan languages at all, but the following tentative suggestions could be made. With regard to *-nan* and *-nanan*, it is likely that *-nan* is the diachronically primary suffix and *-nanan* is probably its reduplication. (Note that reciprocal markers have reduplicated structure in a number of other languages.) In Costa (1992: 177–9) on the Marubo language two reciprocal suffixes are mentioned, *-nā* and *-nānā* which are counterparts of the Cashinahua suffixes. Coincidence of the two initial phonemes in *-nan* and *-nami* is probably not accidental either.⁷ The suffix *-nami* distinguishes Cashinahua from other Panoan languages which have only one reciprocal suffix, namely the one corresponding to *-nan/-nanan*. The suffix *-nami* can tentatively be regarded as related to the numeral *-dabi* and the homophonous dual suffix *-dabi* (cf. (22b), (23c) and (37)) from which *-nami* differs only in the nasalization of /d/ and /b/, which may be due to the influence of the suffix *-nan/-nanan* (P. Valenzuela, p.c.).

Note that the reciprocal suffix *-na* in Bolivian Quechua (see van de Kerke, Ch. 31) which is regarded as genetically unrelated to Cashinahua is also materially identical with the two initial phonemes of the Cashinahua reciprocal suffixes (for another similarity see Note 2). Further research may show whether this coincidence is the outcome of the contact of both language families or purely accidental.

7. The suffix *-nan* is materially identical with one of the suffixes deriving *nomina agentis* from verbs; cf.: *jusin* ‘to teach’ → *jusin-nan* ‘teacher’, *unan* ‘to know’ → *unan-nan* ‘the one who knows’, *uin* ‘to see’ → *uin-nan* ‘the spy’, etc. But I find it difficult to find an immediate semantic relation between them.

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C. Mostly pronominal reciprocal markers

Reciprocal and sociative constructions in Bamana

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1. Introduction

1.1 The Bamana language; dialectology

Bamana (autolinguonym; Bambara is a xenonym rooted in French) is an isolating language with some agglutinative elements. It is the most widely spoken language of the Manding branch of the Western group of Mande languages (Niger-Congo macrofamily). “Local dialects” of Bamana in Mali form a linguistic continuum merging into the continua of Maninka and Mandinka dialects to the west (Guinea, Senegal, Gambia, Guinea-Bissau), Jula and Konya and Manyà to the south (Côte d’Ivoire, Southern Guinea, and Liberia); all these constitute one large “Manding linguistic continuum”. Linguistic distance between the extreme representatives of this continuum slightly exceeds the limit of mutual intelligibility (around 90 common words in Swadesh’s 100-word list). All varieties of this continuum are spoken natively by at least 10 million people; if those who speak them as second languages are added, this figure exceeds 20 million people (unfortunately, more precise statistics are non-existent).

Bamana, in its urban form (“Standard Bamana”, which is analyzed in this paper) is the main inter-ethnic language in Mali, very close to the “dioula véhiculaire” (Inter-ethnic

Jula) of Côte d’Ivoire and Burkina Faso; these two varieties combined are spoken by about 10 million people.

The total number of languages in the Mande family exceeds 60. Their degree of genetic affinity is comparable to that of Indo-European languages.

1.2 Overview

The main means for expressing the reciprocal meaning in Bamana is a syntactic construction with the specialized pronoun *ɲɔŋɔ* which can occupy the position of one of the complements of a predicate:

- (1) a. *Mūsà yé Fántà bùgɔ.*
 M. PFV F. strike
 ‘Musa struck Fanta.’
- b. *Fántà yé Mūsà bùgɔ.*
 F. PFV M. strike
 ‘Fanta struck Musa.’
- c. *Mūsà ní Fántà yé ɲɔŋɔ bùgɔ.*
 M. and F. PFV REC strike
 ‘Musa and Fanta struck each other.’

ɲɔŋɔ is a pronoun, i.e. an actant type reciprocal marker: it can combine with postpositions, i.e. fill the positions of indirect and oblique objects; it can function as the first component of a determinative phrase (i.e., a non-adjectival attribute) and as the possessor within a possessive syntgm.

The same marker is also used as a suffix of deverbal derivation with the reciprocal meaning.

The sociative construction is derived from the reciprocal one by adding the postposition *fě* (principal meanings: comitative and of agentive complement) to *ɲɔŋɔ*. In other words, we have a “standard” way of formation of sociative, through combination of the reciprocal and the comitative markers. Thus, the adverbial phrase *ɲɔŋɔ fě* expresses the meaning ‘together’ (see Section 6).

2. Grammatical information

2.1 Tonal system

Bamana has two underlying tones: high and rising (low); their surface realization is regulated by a set of rather complicated rules. In the phrase examples below, surface tonal realizations are marked (in a sequence of syllables with the same tone, a tone mark is being placed on the first syllable of the sequence only). Nouns are used most often with a tonal article (suffixed “floating” low tone – ` , glossed as ART) which immediately follows the noun or a postposed adjective. (For a description of the Bamana tonal system see Introduction to the *Manding-English Dictionary* (Vydrine 1999).)

2.2 Personal pronouns

Person	Singular		Plural	
	Simple	Emphatic	Simple	Emphatic
1	<i>ní</i>	<i>né`</i>	<i>án</i>	<i>ánw</i>
2	<i>í</i>	<i>é`</i>	<i>á</i>	<i>áw</i>
3	<i>à</i>	<i>àlé</i>	<i>ǔ</i>	<i>òlú</i>

The forms of personal pronouns are not dependent on syntactic position and function.

2.3 Sentence structure

Word order in Bamana is fixed: Subject – Direct Object – Verbal Predicate – Indirect/Oblique Object + postposition (unlike the Indirect Object, the Oblique Object with postposition can be moved to the position of Topic before the Subject). Case relations are expressed by the word order and postpositions.

The most common postpositions are: *cé* ‘between’, *fě* ‘by’ (locative, agentive), *kǎn* ‘on, upon’, *kósjn* ‘because of, for the sake of’, *kɔ* ‘behind’, *kɔnw* ‘in, within, inside’, *lá* (*ná* after a nasal) ‘at’ (a broad locative meaning), *mǎ* ‘to’ (addressee), *yé* ‘for’ (addressee).

The adjective follows noun and in most cases forms with it a tonecompact syntagm. In the determinative syntagm the word order is “determiner – determined”. There exists a distinction between two types of nominal groups usually qualified (not quite properly) as “alienable – unalienable possession”; the former is referred to as “possessive group” (it has the connective element *ká*):

- (2) a. *dònsoké` ká mùrú`.*
 hunter.ART POSS knife.ART
 ‘hunter’s knife.’

The latter is called here “determinative group”; it has no connective element, and typical semantic types of words used in this construction are body parts and kinship terms:

- b. *dònsoké` kùnkólo`.*
 hunter.ART head.ART
 ‘hunter’s head.’

Plural is formed by adding the suffix *-ù* (*-w* in the current orthography) to the noun or to the subsequent adjective. There is no nominal or verbal agreement in Bamana.

In Bamana there is a part of speech which I call “qualitative verbs” (the term “stative verbs” is also used by some authors). It is distinguished from the verb formally (special markers: *ká* for positive meaning, *mán* for negative), semantically (expresses a permanent quality: *à ká jé* ‘it is white’, *à mán jàn* ‘it is not long’) and derivationally; for more details see Vydrine (1990).

2.4 Verb classes

A verb without a direct object is obligatorily intransitive, and a verb with such an object is necessarily transitive. There is no formal difference between transitive and intransitive verbs; the same verb can very often be used both as transitive and intransitive (which is considered here as syntactic derivation). There are therefore no formal (morphological) classes of verbs in Bamana; however, verbs can be classified according to their ability to undergo syntactic derivation of one type or another. There are three main classes of verbs according to their derivational capacity (for more detail see Vydrine & Coulibaly (1994–5, Part 1, 48ff.)).

1. Basically intransitive verbs, which are subdivided into *intransitiva tantum* (*kóoro* ‘to bellow’) and productive intransitives (*sègén* ‘to get tired’ – ‘to tire sb’). From the latter, transitives can be derived.

2. Basically transitive verbs are used typically as transitive, and can undergo passive transformation (*méseku* ‘to slice sth’/‘to be sliced’).

3. Diffuse verbs are those for which it is difficult to establish priority of intransitive or transitive use; they are not very numerous in Bamana (*mùnú* ‘to be patient’ – ‘to tolerate sth’).

Within each of these classes, some verbs require an indirect object which is more or less obligatory for the manifestation of their semantics.

2.5 Valency-increasing means

Adding a direct object to an intransitive verb is equivalent to transitive (causative/factitive or “limitative”) derivation, which can be (depending on particular verbs) unmarked morphologically or marked (causative derivation) by *lá-* (*ná-* after a nasal) (Vydrine & Coulibaly 1994–5: Part 1, 60–5).

2.6 Valency-decreasing means

1. Omission of the direct object marks a passive transformation (with the exception of a small group of “diffuse” verbs, cf. 2.4.c).

2. The reflexive form of the verb is marked by introducing one of the non-emphatic personal pronouns into the position of direct object, with one exception: there is a special 3SG pronoun which competes in this function with the personal pronoun *à* (rarely, the reflexive *í* can also correspond to 3PL of subject, instead of *ù*). There is also a particle *yèré* whose function is “hearer’s expectancy correction” (cf.: Kibrik & Bogdanova 1995; Bergel’son 1988:98) and which is used to form a “heavy reflexive pronoun”. The meaning of the reflexive form varies from one verb to another; this form can express, depending on the syntactic-semantic characteristics of the basic (non-reflexive) verb, a whole range of meanings (for details see Vydrine & Coulibaly 1994–5, Part 2); here is an example of semantic reflexive:

(3)	<i>ní</i>	<i>békà</i>	<i>ní</i>	<i>màsiri.</i>	‘I adorn myself.’
	<i>í</i>	<i>bék’</i>	<i>í</i>	<i>màsiri.</i>	‘You (SG) adorn yourself.’
	<i>à</i>	<i>bék’</i>	<i>à/í</i>	<i>màsiri.</i>	‘(S)he adorns herself/himself.’
	<i>án</i>	<i>bék’</i>	<i>án</i>	<i>màsiri.</i>	‘We adorn ourselves.’
	<i>á</i>	<i>bék’</i>	<i>á</i>	<i>màsiri.</i>	‘You (PL) adorn yourselves.’
	<i>ù</i>	<i>bék’</i>	<i>ù/(í)</i>	<i>màsiri.</i>	‘They adorn themselves.’

3. The reciprocal marker does not serve as a valency-decreasing means. The reciprocal and the reflexive markers can co-occur, while reciprocal and sociative cannot (on both semantic and morphological grounds, the sociative construction being a combination of the reciprocal and the comitative auxiliaries).

2.7 Tense/aspect/mood markers

These are (with one exception) auxiliary words placed between subject and direct object or between subject and intransitive verb. They are (in brackets negative counterparts are given):

bé (*té*) – Imperfective (habitual/iterative action, continued action, future; *bé* and *té* also function as verbs of being in locative sentences; glossed as IMPF);

békà (*tékà*) – Actualis; *bénà* (*ténà*) – Future;

nà/ná (*ténà*) – Certain Future;

ká (*kàná*) – Injunctive (Prohibitive);

kà – Infinitive; *mána* – Conditional.

The markers of Perfective (“punctual action unmarked in its relation to the time of speech or any other reference point”) glossed as PFV are: *yé* for transitives and the suffix *-ra/-la/-na* for intransitives (choice of allomorph depends on the preceding syllable); the corresponding negative marker is *má* for both transitives and intransitives (for the semantics of Bamana aspect markers see Idiatov (2000)).

There are four participles which are formed by suffixes: *-len/-nen* – Accomplished; *-tɔ* – Unaccomplished; *-ta* – Debitative (action which should be performed); *-bali* – negative.

3. Diathesis types of constructions with the reciprocal pronoun *ɲóɲɲ* ‘each other’

These types are distinguished according to the argument replaced by the reciprocal marker.

Due to its syntactic character, the Bamana reciprocal has few restrictions on diathesis: all overt reciprocal diathesis types are possible. The meaning of all reciprocals is regular and easily predictable.

3.1.3 “Possessive” reciprocals

“Possessive” and “determinative” noun groups (i.e., those connected by means of the formant *ká* and those connected paratactically, cf. 2.3) do not manifest any considerable difference with respect to reciprocal constructions. In both cases, the reciprocal marker takes the position of the first (attributive) component of the noun group; the latter can take the position of any argument, except for the subject.

1. Derived from two-place transitives:

- (8) a. *Í kàná né` ká kìnì` dún.*
 you PROH my POSS rice.ART eat
 ‘Don’t eat my rice.’
 b. *án kàná jǔgɔn ká kìnì` dún.*
 we PROH REC POSS rice.ART eat
 ‘Let’s not eat each other’s rice.’

2. Derived from two-place transitives with a benefactive adjunct:

- (9) a. *Áwà yé jí` gòniyá Kàjatu dén` yé.*
 A. PFV water.ART heat.up K. child.ART for
 ‘Awa heated up water for Kajatu’s child.’
 b. *Áwà ní Kàjatu yé jí` gòniya jǔgɔn dén-w yé.*
 A. and K. PFV water.ART heat REC child-PL for
 ‘Awa and Kajatu heated up water for each other’s children.’

3. Derived from one-place intransitives used with a locative adverbial adjunct:

- (10) a. *Mùsà bé sùnɔɔ Bákari ká só` kónɔ.*
 Musa IMPF sleep Bakari POSS house.ART in
 ‘Musa sleeps in Bakari’s house.’
 b. *Mùsà ní Bákari bé sùnɔɔ jǔgɔn ká só` kónɔ.*
 M. and B. IMPF sleep REC POSS house.ART in
 ‘Musa and Bakari sleep in each other’s houses’ (sometimes, they both sleep in Musa’s house, and sometimes in Bakari’s; or – simultaneously, Musa sleeps in Bakari’s house and Bakari sleeps in Musa’s house).

3.1.4 “Adverbial” reciprocals

jǔgɔn is acceptable not only in the position of an argument: it can also function as an adverbial co-referential with the subject:

- (11) a. *Bákari bé màlò` sèné à mùsò` kósɔn.*
 B. IMPF rice.ART cultivate his wife.ART because
 ‘Bakari cultivates rice because of his wife.’
 b. *Bákari ní à mùsò` bé màlò` sène jǔgɔn kósɔn.*
 B. and his wife.ART IMPF rice.ART cultivate REC because
 ‘Bakari and his wife cultivate rice because of each other.’

3.2 Object-oriented diathesis types

3.2.1 Derived from three-place transitives

The following illustrates this type of derivation:

- (12) a. *Dùgu-tígi` y' á` dénke` jira dúnan` ná.*
 village-head.ART PFV his son.ART show guest.ART to
 ‘The head of the village showed (introduced) his son to the guest.’
 b. *Dùgu-tígi` y' á` dénke` ní dúnan` jira jógon ná.*
 village-head.ART PFV his son.ART and guest.ART show REC to
 ‘The head of the village showed (i.e. introduced) his son and the guest to each other.’

3.2.2 Derived from subject-oriented reciprocals by means of causativization

I consider in this section both morphological (marked by the prefix *lá-/ná-*) and non-morphological causatives.

3.2.2.1 Morphological causativization. Causatives derived from transitives in Bamana are a very rare phenomenon, and they do not manifest any interesting peculiarities in comparison with the causatives from intransitives. Therefore, they will not be considered specially.

- (13) a. *Mùsà jàrabi-ra Áwà lá.*
 M. fall.in.love-PFV A. with
 ‘Musa fell in love with Awa.’
 b. *Mùsà ní Áwà jàrabira jógon ná.*
 M. and A. fall.in.love REC with
 ‘Musa and Awa fell in love with each other.’
 c. *Mórike` yé Mùsà ní Áwà lá-jàrabi jógon ná.*
 muslim.cleric.ART PFV M. and A. CAUS-fall.in.love REC with
 ‘A Muslim cleric made Musa and Awa fall in love with each other.’
- (14) a. *Misî` dège-rá wùlú` lá.*
 cow.ART get.accustomed-PFV dog.ART to
 ‘The cow has become accustomed to the dog.’
 b. *Misî` ní wùlú` dège-ra jógon ná.*
 cow.ART and dog.ART get.accustomed-PFV REC to
 ‘The cow and the dog have become accustomed to each other.’
 c. *Fúlake` yé misî` ní wùlú` dège jógon ná.*
 Pullo.ART PFV cow.ART and dog.ART accustom REC to
 ‘A Pullo (sg for Fulbe) has accustomed the cow and the dog to each other.’
- (15) a. *Fílen` d́́ b́́ dígi d́́ kán.*
 calabash.ART one IMPF weigh one.ART on
 ‘One calabash presses upon another.’
 b. *Fílen fila b́́ dígi jógon kán.*
 calabash two IMPF press REC on
 ‘Two calabashes press one upon another.’

- c. *Npògotiginín` bé fílen fila dígi jógòn kàn.*
 girl.ART IMPF calabash two press REC on
 ‘A girl presses two calabashes against each other.’

3.2.2.2 *Reciprocal causative constructions derived from “possessive” reciprocals.* Here is an example:

- (16) a. *Fántà gírín-na à sìnámúso` dén` kàn.*
 F. rush-PFV her co-wife.ART child.ART at
 ‘Fanta rushed at her co-wife’s child.’
 b. *Sìnámuso-má-w gírín-na jógòn dén-w kàn.*
 co-wife-R-PL rush-PFV REC child-PL at
 ‘The co-wives rushed at each other’s children.’
 c. *Nááfigi` yé sìnámusomá-w lá-gírín jógòn dén-w kàn.*
 tell-tale.ART PFV co-wife.PL CAUS-rush REC child-PL on
 ‘The tell-tale made the co-wives rush at each other’s children.’

3.2.2.3 *Referential ambiguity.* This is impossible in object-oriented causative reciprocal constructions with animate causees: even if the subject-causer is plural, in Bamana the reciprocal pronoun is co-referential with the plural direct object. Therefore,

- (16) d. *Nááfigi-w yé sìnámusomá-w lá-gírín jógòn dén-w kàn.*
 tell-tale.PL PFV co-wife.PL CAUS-rush REC child-PL on

means only ‘The tell-tales made the co-wives rush at each other’s (co-wives’) children’, and not *‘... tell-tales’ children’.

The situation is different if the causees are inanimate, and with originally trivalent verbs. Here, when both subject and direct object are plural, *jógòn* can be co-referential with either. Thus,

- (12) c. *Dú-tigi-w yé ù mùsó-w jira jógòn ná.*
 family-head-PL PFV their wife-PL show REC to
 ‘Heads of the families introduced their wives to each other.’

has two readings: either ‘the head of one family introduced his wife (or wives) to the head of another family and *vice versa*’, or ‘one head of a family introduced his wife (wives) to the wife (wives) of the head of another family, and *vice versa*’.

- (15) d. *Npògotígi-w bé fílen-w dígi jógòn kàn.*
 girl-PL IMPF calabash-PL press REC against
 ‘Girls press calabashes against each other.’

can be interpreted either as ‘girl X presses her calabash against girl Y, and girl Y presses her calabash against girl X’, or as ‘girl X presses her calabash against the calabash of girl Y’.

3.3 Adjunct-oriented introvert type

It is represented by a coordinative construction “plural noun or pronoun + *ni* ‘and’ + *jógòn*” which always takes position of an adjunct with the postposition *cé* ‘between,

among'; the antecedent of the reciprocal pronoun *ɲɔŋɔn* is the first member of the coordinative group. The meaning of this construction is 'between/among them':

- (17) a. *Fàamuyá tòn té kòrɔ-ké` ní dɔŋɔ-ké` cé.*
 understanding PAST IMPF.NEG elder-man.ART and younger-man.ART between
 'There was no understanding between the elder and the younger brothers.'
- b. *Fàamuyá tòn té ù ní ɲɔŋɔn cé.*
 understanding PAST IMPF.NEG they and REC between
 'There was no understanding between them.'

(The same meaning can be expressed by the sole postposition *cé*: *Fàamuyá tòn té ù cé*);

- (18) a. *Û b' á` fě kà dɔ́ bɔ́ kě̀kě̀fě̀n-w dɪ̀lali` lá Írisilá ní*
 they be it with INF some remove weapon-PL making.ART from Russia and
Sínuwa cé.
 China between
 'They want production of armaments to be reduced in Russia and China (in relation to each other).'
- b. *Û b' á` fě kà dɔ́ bɔ́ kě̀kě̀fě̀n-w dɪ̀lali` lá jàmaná-w*
 they be it with INF some remove weapon-PL making.ART from country-PL
ní ɲɔŋɔn cé.
 and REC between
 'They want production of armaments to be reduced mutually in the countries'
 (i.e., that the countries should reduce production of armaments on mutual agreement, in concord).
- (19) a. *Sànbú y' á` bólo bálán filen` ní tása` cé.*
 S. PFV his hand.ART jam calabash and pan.ART between
 'Sambu jammed his hand between a calabash and a pan.'
- b. *Sànbú y' á` bólo` bálán mìnén-w ní ɲɔŋɔn cé.*
 S. PFV his hand.ART jam utensils-PL and REC between
 'Sambu jammed his hand between utensils.'

4. Extended use of reciprocals

In this section, reciprocal constructions are considered which are not prototypical in the sense illustrated by (1), i.e. sentences of types (1a) and (1b) are either absent or may be reconstructed by means of some special operations, or sentences like (1a) and (1b) do not result in a sentence denoting simultaneous actions of type (1c). The following cases may be distinguished.

4.1 Reciprocal constructions without antecedent

They are possible, but not with finite verbs. The most regular are infinitive constructions, e.g.:

- (20) *Kà jɔŋɔn kóniya, ò mán gèlen.*
 INF REC hate this QUAL.NEG difficult
 ‘To hate each other, it is not difficult.’

4.2 Reciprocals based on converse constructions

If A follows B and B follows A (constructions of types (1a) and (1b)) this does not result in a construction of type (1c), i.e. a construction ‘A and B follow each other’, because this sentence denotes that only one of the participants walks in front and the other behind him. In this case in the role of construction (1b) a converse verb is to be used: ‘A follows B’ and ‘B precedes A.’

- (21) *Sòlimadèn-w bé tɔgu jɔŋɔn kɔ.*
 newly.circumcised-PL IMPF follow REC behind
 ‘The newly circumcised follow one another.’
- (22) *Jùlá` yé finí-w sògolon jɔŋɔn kàn.*
 merchant.ART PFV cloth-PL pile REC upon
 ‘The merchant piled up clothes.’
- (23) *Mùsò` yé fílen misenmán-w ní bélebebeba-w bila jɔŋɔn kɔnɔ.*
 woman-ART PFV calabash small-PL and large-PL put REC in
 ‘A woman put large and small calabashes one into another.’

4.3 Type ‘Christians and Muslims killed each other’

In this case a large number of participants act either as agents or as patients each and thus they normally do not coincide (this meaning is incompatible with Punctive):

- (24) *Mànden-ká-w tòn bé jɔŋɔn mìné kà jɔŋɔn fèere.*
 Manding-people-PL PAST IMPF REC capture INF REC sell
 ‘(At that time) the inhabitants of Manding used to capture and to sell each other.’
- (25) *Fùla-w ní nùmú-w bé jɔŋɔn fúru sísàn, òká fɔlɔ nɛn tòn*
 Fulbe-PL and Numu-PL IMPF REC marry now but formerly this PAST
té ké.
 IMPF.NEG do
 ‘The Fulbe and the Numu (a caste of blacksmiths and wood carvers) intermarry now, but formerly this was impossible.’¹

4.4 Simultaneity and succession of actions

It seems that a reciprocal construction with *jɔŋɔn* does not add anything to the semantics of a verb with respect to simultaneity or succession of actions. Therefore, in the following sentences actions can be interpreted either as simultaneous or successive:

1. The verb *fúru* is not a lexical reciprocal; its precise meaning is ‘take as a wife’, therefore the subject and the direct object cannot interchange. This means that in the situation under consideration agents and patients cannot coincide referentially even in theory.

- (26) *Ū yé jógòn màfìlè.*
 they PFV REC look
 ‘They looked at each other’ (simultaneously or alternately).

Cf. also example (10b) in 3.1.3.

5. Means of expressing reciprocal arguments

The antecedent of the reciprocal pronoun can be either a single noun phrase or a two-noun phrase group; collective nouns (words like *jàmá* ‘people’, *síya* ‘ethnic group; race’, *dénbaya* ‘nuclear family’, *kèlebólo* ‘army’, *jèkúlu* ‘group’, *jàmakúlu* ‘team, association’, etc.) cannot normally be antecedent to a reciprocal (except some lexicalized cases, cf. (44b), where *jàmá* ‘crowd’ is such an antecedent). On reciprocal constructions without subject see 4.1.

5.1 A formally singular antecedent for reciprocals

It is possible when it is an inanimate noun. Two cases can be distinguished.

1. Formally singular collective nouns or nouns for objects composed of smaller objects can be antecedents of *jógòn* when used with verbs of conjunction and disjunction, cf. 7.

2. Names of twin (pair) body parts are often used in the singular with the dual meaning, especially in contexts where the semantic opposition “singular : dual” is neutralized. Such names, morphologically singular and semantically dual, can be used as antecedents of *jógòn* in object-oriented reciprocal constructions:

- (27) a. *À yé à bólo` dó jòosi dó lá.*
 he PFV his hand.ART one rub one with
 ‘He rubbed his hand against the other.’
 b. *À y’ á` bólo` jòosi jógòn ná.*
 he PFV his hand.ART rub REC with
 ‘He rubbed his hands together.’

This use seems forbidden in subject-oriented constructions:

- (28) a. *jíé-w té jógòn yé.*
 eye-PL IMPF.NEG REC see
 ‘Eyes don’t see each other’
 while b. **jíé` té jógòn yé.*
 eye.ART IMPF.NEG REC see
 (same intended meaning)

is ungrammatical.

5.2 Two-noun phrase subject

Only the coordinative link is possible in Bamana. The linking marker is the conjunction *ní* (the “heavy” form *àní* composed of 3SG *à* and *ní* is also possible) which is always placed between the members of a coordinative construction (cf. examples (21b), (33), etc.).

The second component of a coordinative construction cannot be moved to object position (or, for the object-oriented reciprocal – to the position of indirect/oblique object), and it cannot be linked to the first component by any other means but *ní/àní*.

5.3 One-noun phrase subject

The noun in subject position (or in the direct object position for object-oriented constructions) has the plural marker *-w* (phonemically *-ù*) (see (30), (34)...). The noun can be determined by a numeral; in this case, the plural marker is not added. It is also possible to add the determiner *bée* ‘all’. This determiner can combine with both previous expressions of the idea of plurality:

- (29) a. *Súругu-w / súругu fila / súругu filá` bée / súругu` bée / súругu-w bée*
 hyena-PL / hyena two / hyena two.ART all / hyena.ART all / hyena-PL all
dími-na jógon kórc.
 chafe-PFV REC under
 ‘Hyenas/two hyenas/both hyenas/all hyenas got angry with each other.’

(Some informants admit a semantic nuance distinguishing two latter examples: in the former, *súругu` bée*, all hyenas are meant, without any restriction; in the latter, *súругuw bée*, only a group of hyenas in question.)

If the antecedent of the reciprocal pronoun is a human collective noun with the determiner *bée*, the reciprocal action or relation holds among the members of this group (i.e., within the group), rather than between several groups (as one might expect, cf. Section 5):

- (30) *Dénbaya` bée bé jógon kànu.*
 family.ART all INC REC love
 ‘In the family, everybody loves one another’ (not: *All families love each other’).

5.4 Inanimate nouns as subjects

The ability of reciprocals to occur with inanimate nouns depends on their semantic compatibility:

- (31) a. *Bálansan` fàlen-na bànán` kèré` fê.*
 winter-thorn.ART sprout-PFV ceiba.ART side.ART by
 ‘A winter-thorn sprouted by a ceiba-tree.’
 b. *Bálansan` ní bànán` fàlen-na jógon kèré` fê.*
 winter-thorn.ART and ceiba.ART sprout-PFV REC side.ART by
 ‘A faidherbier and a ceiba sprouted side by side.’

There are also examples of inanimate collective and dual nouns as antecedents of reciprocal pronouns in Section 5.1.

6. The sociative adverbial phrase *ɲɔ́ɔn fɛ̀* ‘together’, lit. ‘with each other’

The sociative construction is derived from the reciprocal one through adding the postposition *fɛ̀* (with comitative meaning) to *ɲɔ́ɔn*.

6.1 Subject-oriented sociatives

Following is an example of this type of sociative:

- (32) a. *Fúla-w bé m̀sɪ́ ɡén ɲɔ́ɔn fɛ̀.*
 Fulbe-PL IMPF COW.ART drive REC COM
 ‘The Fulbe drive a cow together.’

6.2 Object-oriented sociatives

Compare:

- (32) b. *Fúla` bé m̀sɪ́-w ɡén ɲɔ́ɔn fɛ̀.*
 Pullo.ART IMPF COW-PL drive REC COM
 ‘A Pullo (sg of Fulbe) drives the cows together.’

6.3 Referential ambiguity

It occurs when both subject and direct object are plural nouns or pronouns:

- (33) *Fúla-w bé m̀sɪ́-w ɡén ɲɔ́ɔn fɛ̀.*
 ‘Fulbe, *being together*, drive cows’, or ‘Fulbe drive cows (keeping them) *together*’, or even
 ‘Fulbe, *being together*, drive cows *together*.’

Some informants, however, prefer the first of these readings – they seem to give preponderance to the actant which has the highest agentive characteristics.

When necessary, referential conflict can be resolved by introducing a phrase with the verb *tó* ‘to leave’:

- (34) *Pɔ́ɔsɪ́-w yé án ná-bɔ́ k' án tó ɲɔ́ɔn fɛ̀.*
 policeman-PL PFV US CAUS-turn.out INF US leave REC COM
 ‘Policemen turned us out (keeping us) together.’

Another means of avoiding referential ambiguity is moving the sociative group to the position immediately after the subject:

- (35) *Pòlɔsí-w jɔ́gɔn fɛ́ y' án ná-bɔ́.*
 policeman-PL REC COM PFV US CAUS-turn.out
 ‘Policemen (being) together turned us out.’

Placement in this position is impossible for either indirect or oblique objects. This is additional evidence that in Bamana the group *jɔ́gɔn fɛ́* is losing the status of an oblique object and functions as a lexicalized adverbial phrase.

There seem to be no particular restrictions on combinability of the sociative group with particular verbs, excepting trivial limitations related to semantics.

7. Verbs of conjunction and disjunction

The main peculiarity of these verbs in Bamana is their ability to combine with formally singular nouns with a collective meaning co-referential to the reciprocal pronoun. They can be:

1. Subject-oriented intransitive:

- (36) *Dùgukólo in té jɔ́gɔn mìnɛ.*
 soil this IMPF.NEG REC catch
 ‘This soil does not stick together.’

2. Object-oriented transitive:

- (37) *À yé kùrú` bɔ́ jɔ́gɔn ná.*
 he PFV knot.ART get.out REC from
 ‘He has untied a knot.’
- (38) *À yé bín` bɔ́ jɔ́gɔn ná.*
 he PFV grass.ART get.out REC from
 ‘He has moved grass apart.’

3. Adjunct-oriented introvert:

- (39) *Wò misennin cáman bé bɔ́gɔ-kuru misen` ní jɔ́gɔn cé.*
 hole small numerous IMPF clay-clod small.ART and REC between
 ‘There are many small chinks between small clods of clay’ (Dumestre 1981–92: 158).

See also Sections 8.1.1.3 and 8.2.

8. Lexical reciprocals

These are not numerous in Bamana; they form a distinct syntactic class and therefore deserve special consideration. They all can be used in reciprocal meaning both with or without *jɔ́gɔn*, these uses being more or less different in meaning.

8.1 Subject-oriented lexical reciprocals

8.1.1 “Canonical” reciprocals

8.1.1.1 *Two-place transitives*. I am aware of at least four verbs of this type: *kèlé* ‘to fight’, ‘to quarrel’, *bě́n* ‘to meet’, *bàró* ‘to converse’, and *kǔnbě́n* ‘to meet’. In fact, all these do not represent a pure case, the passage from non-reciprocal to reciprocal form involving semantic shifts. These verbs can be employed in the following ways.

1. As intransitives, with a plural subject, in the reciprocal sense:

- (40) a. *Kɔ́nɔ́-w ní sògò-w kèlé-la.*
bird-PL and animal-PL fight-PFV
‘The birds and the animals quarrelled/fought/started a war against each other.’
- (41) a. *Jùlá` ní nsòn` bèn-na.*
merchant.ART and thief.ART meet-PFV
‘The merchant and the thief met/got reconciled.’
- (42) a. *Fàamá` ní jèliké` bàro-la.*
ruler-ART and griot.ART converse-PFV
‘The ruler and the griot (casted bard) talked.’

2. As transitives, with a plural subject and *ɲɔ́gɔ́n* as a direct object (the meaning of a verb in (b) can be broader or narrower than in (a)):

- (40) b. *Kɔ́nɔ́-w ní sògò-w yé ɲɔ́gɔ́n kèlé.*
bird-PL and animal-PL PFV REC fight
‘The birds and the animals quarrelled.’
- (41) b. *Jùlá` ní nsòn` yé ɲɔ́gɔ́n bèn.*
merchant.ART and thief.ART PFV REC meet
‘The merchant and the thief met.’
- (42) b. *Fàamá` ní jèliké` yé ɲɔ́gɔ́n bàro.*
ruler.ART and griot.ART PFV REC talk
‘The ruler and the griot talked.’

3. As transitives, with the first argument in subject position and the second argument as a direct object. The participants are no more regarded as equal; one of them is demoted and assumes the semantic role of patient, this resulting in a modification of the semantic structure of the verb. For all the verbs under consideration, transformation “a → c” is associated with a more or less considerable semantic shift:

- (40) c. *Kɔ́nɔ́-w yé sògò-w kèlé.*
bird-PL PFV animal-PL fight
i. ‘The birds launched a war against the animals.’
ii. ‘The birds fought down the animals.’
- (41) c. *Jùlá` yé nsòn` bèn.*
merchant.ART PFV thief.ART meet
‘The merchant met (= blocked the road to) the thief.’

- (42) c. *Jèliké` bɛ fâamá` bàro.*
 griot.ART IMPF ruler.ART talk
 ‘The griot entertains the ruler with conversation’ (this use of *bàró* is considered by many speakers as lofty and rare, and some others contest it).

4. As intransitives with a passive meaning (in the case of plural subject, there is syntactic homonymy with (a)):

- (40) d. *Sògó-w kèlɛ-la.*
 animal-PL fight-PFV
 ‘The animals were fought down.’
- (41) d. *Nsòɲ-w bèn-na.*
 thief-PL meet-PFV
 ‘The thieves were met, the thieves’ road was blocked.’

From the intransitive reciprocal uses (type 1), causative derivation (with or without morphological marking, depending on the verb) is possible which transforms the form into the object-oriented variant of the “canonical” type:

- (40) a. *Kɔ̀nɔ̀-w ní sògó-w kèlɛ-la.*
 bird-PL and animal-PL fight-PFV
 ‘The birds and the animals fought/quarreled/started a war against each other.’
- e. *Ntálén` yé kɔ̀nɔ̀-w ní sògó-w lá-kèlɛ.*
 spider.ART PFV bird-PL and animal-PL CAUS-fight
 ‘The Spider sowed dissension between birds and animals, impelled them to quarrel.’

Close to this type of lexical reciprocals are formal reflexives expressing reciprocal meanings (see Section 11).

8.1.1.2 *Two-place intransitives.* Here belong *kúma* ‘to talk’, *bɔ́* ‘to resemble’, *jě* ‘to copulate’. They can express one and the same referential situation in the following ways:

1. S1 + S2 = Subject, no Indirect Object:

- (43) a. *Dònsoké` ní bilisî` kúma-na.*
 hunter.ART and devil.ART speak-PFV
 ‘The hunter and the devil had a chat.’

(the same meaning as in 2; however, the meaning of plural action is also possible: ‘The hunter and the devil spoke’ – e.g., before a crowd, etc.).

2. S1 + S2 = Subject, *ɲóɲɲ* = Indirect Object:

- b. *Dònsoké` ní bilisî` kúma-na ɲóɲɲ fɛ̃.*
 hunter.ART and devil.ART talk-PFV REC with
 ‘The hunter and the devil had a chat.’

3. S1 = Subject, S2 = Indirect Object:

- c. *Dònsoké` kúma-na bilisî` fɛ̃.*
 hunter.ART speak-PFV devil.ART with
 ‘The hunter spoke with the devil.’

Examples with other verbs:

- (44) a. *Nsònsán` ní fálí` bɔ́-len bé.*
hare.ART and donkey.ART resemble-PART be
'The hare and the donkey resemble each other.'

(Unlike analogous constructions with other verbs, this sentence cannot be understood as elliptic: *'The hare and the donkey resemble somebody'.)

- b. *Nsònsán` ní fálí` bɔ́-len bé jɔ́gn fɛ́.*
hare.ART and donkey.ART resemble-PART be REC with
(the same meaning as in (a)).
- c. *Nsònsán` bɔ́-len bé fálí` fɛ́, ñká à dén té.*
hare.ART similar-PART is donkey.ART to but its child not
'A hare resembles a donkey, but it is not its child.'
- (45) a. *Kámalen` ní jínɛ-den` jè-ra.*
youth.ART and spirit-child.ART copulate-PFV
'The youth and the wood-spirit girl copulated.'²
- b. *Kámalen` ní jínɛden` jè-ra jɔ́gn fɛ́.*
youth.ART and wood.spirit.girl.ART copulate-PFV REC with
'The youth and the wood-spirit girl copulated.'
- c. *Kámalen` jèra jínɛden` fɛ́.*
youth.ART copulate-PFV spirit.child.ART with
'The youth copulated with a wood-spirit girl.'³

8.1.1.3 Intransitives with a predicative complement (infinitive). Some verbs denoting junction and disjunction express their reciprocal meaning in two ways:

2. In its other meaning, this verb functions at the same time as a two-place transitive reciprocal and a two-place intransitive reciprocal:

- a. *Màraká-w jè-ra fúla-w fɛ́.*
Soninke-PL unite-PFV Fulbe-PL with
'Soninke united with Fulbe', 'Soninke joined Fulbe.'
- b. *Màraká-w ní fúla-w jè-ra jɔ́gn fɛ́.*
Soninke-PL and Fulbe-PL unite-PFV REC with
'Soninke and Fulbe united, formed a union.'
- c. *Màraká-w ní fúla-w jè-ra.*
Soninke-PL and Fulbe-PL unite-PFV
(the same meaning as in (b)).
- d. *Màraká-w ní fúla-w yé jɔ́gn jè.*
Soninke-PL and Fulbe-PL PFV REC unite
(the same meaning as in (b)).

3. Both uses (b) and (c) of this verb are rare. In both of these sentences, the postposition *fɛ́* constitutes an idiomatic construction with the verb, and in these cases *jɔ́gn fɛ́* does not mean 'together'.

1. In an intransitive one-place construction:

- (46) a. *Jámá` jénsen-na.*
 crowd.ART disperse-PFV
 ‘The crowd dispersed.’

2. In an intransitive construction complemented by the infinitive of verbs *bó jógɔn ná* ‘to separate from each other’ (for disjunction) and *fàra jógɔn kǎn* ‘to add to each other’ (for junction):

- b. *Jámá` jénsen-na kà bó jógɔn ná.*
 crowd.ART disperse-PFV INF exit REC from
 (the same meaning; *ù jénsenna jógɔn ná is ungrammatical).

8.1.2 Three-place subject-oriented “indirect” lexical reciprocal

I am aware of only one lexical reciprocal of this type:

- (47) a. *Jùlá` yé màrifá` fàlén dònsoké` mà.*
 merchant PFV gun.ART replace hunter.ART to
 ‘The merchant replaced the hunter’s gun,’ ‘... replaced a gun for the hunter.’
- b. *Jùlá` ní dònsoké` yé màrifá-w fàlén jógɔn mà.*
 merchant.ART and hunter.ART PFV gun-PL exchange REC to
 ‘The merchant and the hunter exchanged (their) guns’ (the merchant gave his gun to the hunter, and the hunter gave his gun to the merchant).
- c. *Jùlá` ní dònsoké` yé màrifá-w fàlén.*
 merchant.ART and hunter.ART PFV gun-PL exchange
 (the same meaning; non-reciprocal reading also possible: ‘The merchant and the hunter changed their guns,’ i.e. put away their old guns and bought new ones).

8.2 Object-oriented lexical reciprocals: Verbs of conjunction and disjunction

They may or may not have an indirect object – *jógɔn* with the postposition *lá/ná*. When this indirect object is absent, a non-reciprocal interpretation is also possible:

- (48) a. *Jí` yé sében-fura-w nórɔ̀ dènén` ná.*
 water.ART PFV paper-sheet-PL glue wall.ART to
 ‘Water glued the sheets of paper to the wall.’
- b. *Jí` yé sében-fura-w nórɔ̀.*
 water.ART PFV paper.sheet-PL glue
 i. ‘Water glued the sheets of paper together.’
 ii. ‘Water glued sheets of paper (to sth)’ (non-reciprocal meaning; in this case, the utterance can be considered as an elliptic variant of (57a)).
- c. *Jí` yé sében-fura-w nórɔ̀ jógɔn ná.*
 water.ART PFV paper.sheet-PL glue REC to
 ‘Water glued the sheets together.’
- (49) a. *Kèlédén` yé jǎn` bólo-w siri jírí` lá.*
 warrior.ART PFV slave.ART hand-PL tie tree.ART to
 ‘The warrior tied the slave’s hands to the tree.’

- b. *Kèledén` yé jǎn` bólo-w siri.*
 warrior.ART PFV slave.ART hand-PL tie
 i. ‘The warrior tied the slave’s hands together.’
 ii. ‘The warrior tied the slave’s hands (to something).’
 (non-reciprocal meaning, elliptical variant of (49a)).
- c. *Kèledén` yé jǎn` bólo-w siri jǎgɔn ná.*
 warrior.ART PFV slave.ART hand-PL tie REC to
 ‘The warrior tied the slave’s hands together.’

8.3 Expression of equality

In Bamana there is one reciprocal predicative adjective, *kán* ‘to be equal, identical’. Its subject is necessarily plural:

- (50) a. *Ū bée ká kán.*
 they all EQT equal
 ‘They all are the same.’

Most often, if the participants of a referential situation have the same agentive status, an indirect object is added to indicate in what equality manifests itself:

- b. *Ū ká kán bòlí` lá.*
 they EQT equal race.ART in
 ‘They are equal in race.’

Bòlí can be replaced by any other word or noun group indicating a quality or a type of activity: *kèlé* ‘warfare’, *sèné* ‘farming’, *kúlun dílanni* ‘manufacturing of pirogues’, *hákili-ntanya* ‘brainlessness’, *kèkuyá* ‘ruse’, *sèndunyá* ‘bow-leggedness’...

9. Substantivization of the reciprocal marker

jǎgɔn can be a component of substantivized complexes. The underlying verbal construction may have *jǎgɔn* as a direct or indirect object. Productivity of these types of substantivization is limited:

- (51) a. *kà jǎgɔn yé*
 INF REC see
 ‘to see each other.’
 b. *jǎgɔnye* ‘meeting; conversation, intercourse.’
- (52) a. *kà yéle jǎgɔn ná*
 INF mock REC at
 ‘to mock each other.’
 b. *yélejɔgɔnna* ‘mutual mockery.’
- (53) a. *kà fɔ́ jǎgɔn kɔ́*
 INF gainsay REC behind
 ‘to contradict each other.’
 b. *fɔ́jǎgɔnkɔ́* ‘contradictions; conflict.’

ɲɔŋɔn can be sometimes combined with the stems of lexical reciprocal verbs which normally do not accept it in the underlying verbal construction:

- (54) a. *Sě̀kù ní à mùsò` bé bèn.*
 S. and his wife.ART INC get.on.with.each.other
 ‘Seku and his wife live in peace/get on with each other.’

(Sentences (54b) or (54c) with the same intended meaning are ungrammatical.)

- (54) b. **Sě̀kù ní à mùsò` yé ɲɔŋɔn bèn*
 S. and his wife.ART PFV REC meet
 c. **Sě̀kù ní à mùsò` bèn-na ɲɔŋɔn kàn*
 S. and his wife.ART meet-RFV REC ON
 d. *bèn-ɲɔŋɔn-yá* <meet-REC-SUFF> ‘mutual understanding, (intimate) friendship.’

10. The reciprocal marker as a nominal derivational suffix

10.1 Suffix *-ɲɔŋɔn* in deverbal derivation

It regularly functions as a word-forming suffix when added to (intransitive) verbal stems or combinations “direct object + (transitive) verbal stem”. The meaning of the derivative is: “[somebody’s (explicit marking is necessary)] companion/partner in the activity in question”, or, necessarily with the plural marker, “[group of] companions in the activity in question”. There seem to be no restrictions on this type of derivation, except semantic compatibility:

- (55) a. *Ń bé sɨgí à fɛ̃.*
 I IMPF live he by
 ‘I live near him.’
 b. *à sɨgi-ɲɔŋɔn`* ‘his neighbour’
 c. *sɨgi-ɲɔŋɔn-w* ‘neighbours.’
- (56) a. *kà dɔ̀lɔ` mɨn*
 INF beer.ART drink
 ‘to drink beer’
 b. *í dɔ̀lɔ-min-ɲɔŋɔn`* ‘your carouse-mate, revel-mate’
 c. *dɔ̀lɔ-min-ɲɔŋɔn-w* ‘revel-mates, companions in carousing.’
- (57) a. *kà jě* ‘to unite, join together’
 b. *í jě-ɲɔŋɔn`* ‘your friend.’
- (58) a. *kà bɔ̀lí* ‘to run’
 b. *í bɔ̀li-ɲɔŋɔn`* ‘your companion in escape.’
- (59) a. *kà ɲɔ̀ sònyé*
 INF millet.ART steal
 ‘to steal millet’
 b. *í ɲɔ̀-sonye-ɲɔŋɔn`* ‘your companion in stealing millet.’

10.2 Suffix *-jɔgɔn* on nominal stems

There are also at least four examples of *-jɔgɔn* with noun stems; in two cases the derivatives designate members of traditional social groups:

- (60) a. *tɔn* ‘group, association of unmarried young men’ (new meaning: ‘political party’)
 b. *ni tɔn-jɔgɔn* ‘my companion in youth association.’

In the second case, the meaning of the base word and derivative is virtually the same:

- (61) a. *filanin* ‘member of the same age-group (in relation to sb – explicit marking is necessary), initiated simultaneously; (sb’s) age-mate’
 b. *a filannin-jɔgɔn* ‘his/her age-mate, companion by initiation’.

The third case is yet to be verified for the exact meaning and acceptability by other Bamana-speakers; it is as follows:

- (62) a. *i bá* ‘your mother’ (in classificatory meaning)
 b. *i bá-jɔgɔn* ‘your mother’s age-mate.’

11. Reflexive verbs with the reciprocal meaning

In specialist publications there is an opinion that among the meanings of the Bamana reflexive verbs, reciprocal is absent (see Koné 1984). In fact, it is not quite true: there are two cases of reflexives with the reciprocal meaning, *másala* ‘to chat’ and *kòbí* ‘to make love’ (a mild term). However, neither of them is indisputable:

- (63) a. *Jèliké` bé fàamá` másala.*
 griot.ART IMPF ruler.ART entertain.with.chat
 ‘The griot entertains the ruler with a chat.’
 a’. ^(?)*Fàamá` bé jèliké` másala.*
 ruler.ART IMPF griot.ART talk
 ‘The ruler entertains the griot with a chat.’
 b. *Jèliké` ní fàamá` b’ ù másala.*
 griot.ART and ruler.ART IMPF REFL chat
 ‘The griot and the ruler chat.’

Though grammatically correct, sentence (63a’) is hardly acceptable for pragmatic reasons: in Bamana society, a situation when a ruler entertains a griot with conversation is hardly imaginable; in the situation *X bé Y másala*, roles X and Y are normally fixed and not interchangeable (it should also be mentioned that the transitive use of *másala* is rare and confined to poetic style).

As for the verb *kòbí* ‘to make love’, interchangeability of participants of the underlying transitive construction is absolutely excluded: a noun for the man necessarily fills the role of subject, and that for the woman is the direct object, and not *vice versa*.

The reciprocal meaning of the construction can be confirmed by adding *jɔgɔn* as an indirect object:

- (64) *Áwà ní Fónbà y' ù kòbi [jǒḡn ná].*
 A. and F. PFV REFL make.love REC to
 'Awa (she) and Fomba (he) made love [to each other].'

Note that both of these verbs have the same reciprocal meaning when used as intransitives; i.e., they are lexical reciprocals in both intransitive and reflexive uses.

There are two or three similar cases of “formal reflexives – lexical reciprocals”: *kóḡḡn* ‘to quarrel’, *kómayèlemá* ‘to fall out with sb, separate in quarrel’, *kála* rare ‘to get reconciled’. They have the same meaning in intransitive and reflexive uses each, which can be considered as anticausative in relation to the transitive.

12. Terms of reciprocal relationship with the suffix *-ma*

There is a morphological procedure for expressing the ornative meaning within the nominal system, viz. the suffix *-ma*. It forms denominal adjectives with the meaning ‘supplied with the quality in question’, ‘equipped with the object in question’, ‘containing the object or the matter in question’:

- (65) a. *kǒḡḡ* ‘salt’
 b. *jéḡe kǒḡḡ-má* ‘salt fish.’
 (66) a. *ḡǒni* ‘thorn’
 b. *jíri ḡǒni-ma* ‘thorny plant.’

When added to “reciprocal” kinship terms and terms for mutual relation partners (such as *téri* ‘friend’), *-ma* has the reciprocal meaning and stresses the mutual character of the relationship (it is glossed as R). In fact, *-ma* is redundant, because the reciprocal meaning is contained in the semantics of all these nouns; it can be compared with an optional noun class marker:

- (67) a. *í báden`* ‘your brother’ (by the same mother)
 b. *í báden-ma`* (the same meaning).

Báden is composed of two words, *bá* ‘mother’ and *dén* ‘child’. There is a less current synonym of *báden*, *bákelen* (*bá* ‘mother’ + *kélen* ‘one’) which can also take the reciprocal *ma*: *í bákelen` => í bákelen-ma`*.

- (68) a. *né sànkún`* ‘my partner in joking relations’
 b. *né sànkun-má`* (the same meaning).

Just like derivatives with *-jǒḡn* (see 10.1), those with the reciprocal *-ma* are normally employed in the plural (referring to a pair/group of persons connected by the relation in question) or within a determinative phrase with a determinant designating the partner in relation:

- (69) a. *sìnamuso-má-w* ‘co-wives, wives of one man’ (in a polygamous family)
 b. *í bá` sìnamuso-má`* ‘your mother’s co-wife, the other wife of your father.’

Some of these derivatives seem to be employed in the plural only. Therefore, it is possible to say *sínji-maw* ‘relatives by mother’⁴ (in relation to each other), but not **ń sínji-ma* ‘my relative by mother’. On the other hand, the use of some other terms (analogous to the derivatives with *-jɔ̀gɔ̀n*) is also attested:

- (70) *À ní Bákari Kúlibali yé térima` yé.*
 he and B. K. EQT friend.ART like
 ‘He and Bakari Kulibali are friends.’

Derivation with the reciprocal *-ma* is lexicalized and no longer automatic. Some terms for partners in mutual relations cannot take it, e.g. *júgu* ‘enemy’ – **júgumaw* ‘enemies (to each other)’.

On the other hand, the reciprocal *-ma* can be added to any derivative with *-jɔ̀gɔ̀n* without any noticeable modification of its meaning:

- (71) a. *À ní Táraore bé shɔ̀` dún jɔ̀gɔ̀n fɛ.*
 he and T. IMPF haricot.ART eat REC with
 ‘He and Traore eat haricot together.’
 b. *shɔ̀-dun-jɔ̀gɔ̀n* ‘companion in eating haricot.’
 c. *shɔ̀-dun-jɔ̀gɔ̀n-má* ‘companion in eating haricot.’

A special case is the form *tɔ̀gɔ̀ma* ‘namesake’: it appears to be a lexicalized derivative from *tɔ̀gɔ̀* ‘noun’ with *-ma* in its ornative meaning: *í tɔ̀gɔ̀-ma* ‘the person with the same name as you’, ‘your namesake’. When designating a term of “symmetrical” relation, it takes on a second *-ma*, this time in its reciprocal meaning: *í tɔ̀gɔ̀-ma-ma* (the same meaning).

Further evolution of its meaning is demonstrated by Mandinka, where the suffix *-maa* has lost the reciprocal meaning; and it can be added, it seems, to any kinship term, cf.: *báamaa* (= *báa*) ‘mother’, *kótomaa* (= *kóto*) ‘elder sibling’, etc.

13. Etymology of the reciprocal marker. Its cognates in genetically related languages

There are no direct data on the etymology of this word. In Bamana it has however a quasi-homonym (with a different tone) *jɔ̀gɔ̀n* ‘similar, like’:

- (72) a. *Án má nín jɔ̀gɔ̀n yé fɛlɔ̀.*
 we PFV.NEG this like see yet
 ‘We have never seen anything like this.’

The relatedness of both meanings is obvious (in some languages these can be different meanings of one lexeme), however, evidence against the derivation of *jɔ̀gɔ̀n* from *jɔ̀gɔ̀n* can be found in the corresponding forms in the closely related Mandinka language: *jóo* ‘each other’ and *jòɲ* ‘similar, like’, where the final nasal element strengthens the divergence between the two words.

4. *Sínji* means ‘mother’s milk’, lit. ‘liquid of breast.’

It is noteworthy that in Guinean Maninka (a language closely related to Bamana) the reciprocal marker *ɲɔɲ* can be accompanied by a reflexive pronoun:

- (73) a. *Jàdá` ní sùluku` báda í ɲɔɲ` máfêle.*
 lion.ART and hyena.ART PFV REFL REC look
 ‘The lion and the hyena looked at each other.’

Outside the Manding branch, this marker is attested in Vai (*ɲɔɲ*), Jeri (*ɲɔɲ*), in one of Looma dialects (*ɲɔɲ*) and in Mende (*ɲɔɲɲɔ*); in both latter languages it seems to be borrowed from Manding.

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Reciprocal constructions in Vietnamese

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1. Introduction

1.1 Vietnamese

Vietnamese (autonym *tiếng Việt*) is spoken in Vietnam (Socialist Republic of Vietnam) and Vietnamese communities in the USA, France, Laos, Cambodia, China and elsewhere. It is the mother tongue of at least 84 million people.

Vietnamese belongs to the Viet-Muong branch of the Mon-Khmer stock within the Austro-Asiatic family. It had ancient contacts with the Thai-Kadai family and with (genetically unrelated) Chinese. The great civilisation of China exerted a strong influence on Vietnam. Chinese (*Wényán*) served as a language of cultural elite for over a thousand years until the 20th century. As a result, Vietnamese vocabulary has a great number of Chinese loans.

Contemporary Vietnamese is a (mono)syllabic language, with one-to-one syllable – morpheme correspondences prevailing in system and usage. It is a typical isolating (strongly syntactic) language, which is to say there is no inflection, no morphology (excepting reduplication and compounding). Thus, *trộm cướp* may mean (i) ‘to steal and rob’, (ii) ‘stealing and robbery’, (iii) ‘thief/thieves and robber(s)’ (see, for instance, Nguyễn 1987:777–82; 1997:1–16).

1.2 Overview

The reciprocal meaning is expressed in Vietnamese by the pronoun *nhau* ‘each other’, ‘one another’ (in Nguyễn’s terminology ‘reciprocal substitute’; 1997:137). It has the syntactic functions of a noun: it may be an object (direct and indirect), an adverbial or an attribute. It cannot occur as subject. As an indirect (or oblique) object or adverbial, *nhau* may be combined with prepositions and adverbs. The reciprocal marker does not change verb

valency. It is a means of presenting two events in a more concise way, i.e. roughly speaking (1c) summarizes the denotative content of (1a) and (1b), by way of ignoring some pragmatic and subtle semantic differences (which in themselves deserve special attention).

- (1) a. *Lan yêu Hồng.* 'Lan loves Hong.'
 b. *Hồng yêu Lan.* 'Hong loves Lan.'
 c. *Lan và Hồng yêu nhau.* 'Lan and Hong love each other.'
- (2) a. *Lan khổ vì Hồng.*
 'Lan suffers because of Hong.'
 b. *Lan và Hồng khổ vì nhau.*
 'Lan and Hong suffer because of each other.'

Vietnamese has all the diathesis types of reciprocal constructions. There are no non-trivial restrictions on the use of the reciprocal marker. One can observe some interesting deviations from the reciprocal meaning proper. The discontinuous reciprocal construction occurs with lexical reciprocals only. The reciprocal marker does not express the sociative meaning if used alone. This meaning is expressed by a combination of the reciprocal marker *nhau* with the comitative preposition *với* 'with', viz. the phrase *với nhau* 'together', lit. 'with each other'. This type of sociative expression is typologically rather common.

2. Grammatical notes

2.1 Tonal system

Vietnamese has six tones which differ in relative height, contour of pitch and in glottal structure. Tone is a permanent characteristic of each syllable. A difference in toneme typically signals a difference in meaning; cf.: *ma* (tone ngang) 'ghost', *mà* (tone huyền) 'but', *má* (tone sắc) 'cheek', *mã* (tone ngã) 'horse', *mạ* (tone nặng) 'rice seedling', *mả* (tone hỏ i) 'tomb'.

2.2 Word structure

Traditionally, each syllable is regarded as a word in Vietnamese. In fact, a great number of Vietnamese words, especially in colloquial speech, are monosyllabic. This gives grounds to distinguish them as special basic units – syllabic words (word-morphemes) or syllabic morphemes, which may take part in grammatical processes, whatever their meaning or absence of any (Kasevich 1988: 171–8). But in literary Vietnamese, there are a great many polysyllabic (mostly disyllabic) units which are regarded as words or bound complexes of words, i.e. idioms. Thus words can be *simple* (monosyllabic and disyllabic reduplicative), *complex* (comprised of one or more bound morphemes and one free morpheme), and *compound* (comprised of two or more free morphemes) The formal characteristics of compounds are not quite clear, and it is not often easy to distinguish between a compound and a phrase (Thompson 1965: 116–21).

In the examples below, the morphemes comprising a compound or a complex word, are linked by the symbol “+”; to make it reader-friendly.

2.3 Word classes

Two major classes of “full” (notional) words are distinguished: nouns and predicatives. The latter include verbs and adjectives (also termed stative verbs and verbs of quality). The following classes of function (‘empty’) words are singled out according to syntactic criteria: numerals, locatives, determinatives, and particles. A peculiar feature of the Vietnamese lexicon is the class of word-substitutes (for nouns as well as for predicatives). The class of pronouns is undeveloped: in fact, terms of kinship are mostly used in place of personal pronouns, e.g. alongside *tôi* ‘I’ (also ‘servant’) used by adults over twenty the words *con* ‘I’ (a son about himself, and also ‘you’ when used by parents to address their son; also ‘child’), *em* ‘I’ (when a younger person addresses an older person or a wife addresses her husband; and also ‘you’ when an older person addresses a younger one or a husband addresses his wife; its proper meaning is ‘younger brother’ and ‘younger sister’) and some other terms are in use. Compare also *họ* meaning ‘they’ and ‘family’ (Thompson 1965:293–306, 248–53).

2.4 Sentence structure. Possessivity

Word order in Vietnamese is fixed: SVO. A direct object usually precedes an indirect object. An adverbial may take two basic positions: sentence-initial and sentence-final. Modifiers normally follow the head noun. A preposition is always preposed to the noun.

Possessivity is expressed by possessive modifiers in post-position to the head noun and by the preposition *của* lit. ‘thing, belongings’ preceding the modifier (cf. (22), (23)).

Coordination is expressed by conjunctives and by juxtaposition without a conjunctive (cf. (9), (10)).

2.5 Tense/aspect markers

In Vietnamese, tense mostly has no specific markers. A sentence without a tense marker refers to the basic time of the context. Tense/aspect markers indicate or emphasize a situation obtaining at a time different from this basic time. They are pre-posed to the verb.

The marker *đã* shows that an action or state began before the basic time of discourse and the results are to be seen at the time of discourse (cf. *Lan đã đi* ‘Lan went away/is going now’). This word also means ‘already’ (cf. *đã trưa* ‘(it is) already noon’) and ‘to finish, to end’. The marker *sẽ* ‘subsequent’ identifies an action or state as unrealized or subsequent to the basic time (cf. *Lan sẽ đi* ‘Lan will go’). The marker *đang* ‘during, while’ refers to an action or state to the basic time or the moment of utterance; etc.

2.6 Verb classes

According to their valency, verbs are divided into the following classes.

1. One-place intransitives, e.g. *chạy* ‘to run’, *ngủ* ‘to rest’, *bơi* ‘to swim’, *đi* ‘to go’, *cười* ‘to laugh’, etc.; cf.: *Lan khóc* ‘Lan cries’.

2. Two-place intransitives (with prepositionless locative nouns), e.g. *lên* ‘to rise’, *xuống* ‘to descend’, *ra* ‘to go out’, *vào* ‘to go into’, etc.; cf. *Lan vào phòng* ‘Lan goes into the room’.

3. Two-place intransitives (with prepositional objects), e.g. *đồng+y (với)* ‘to agree (with)’; cf.: *Lan đồng+y với An* ‘Lan agrees with An’.

4. Two-place transitives, e.g. *xây* ‘to build’, *đọc* ‘to read’, *nấu* ‘to cook’, *may* ‘to sew’, *ghét* ‘to hate’, etc.; cf. (1a).

5. Three-place transitives which fall at least into three subclasses:

(a) ditransitives like *cho* ‘to give’, *đút* ‘to give/shove’, *vay* ‘to borrow’, *mượn* ‘to lend’, etc.; cf.: *Lan gửi An tiền* ‘Lan sends An money’;

(b) lexical reciprocals like *nối* ‘to connect’, *kết+hợp* ‘to combine’, *so+sánh* ‘to compare’, *đôi+lập* ‘to contrast’, *phân+biệt* ‘to distinguish’, *trộn* ‘to mix’; cf.: *Lan trộn bột và / với đường* ‘Lan mixes meal and/with sugar’;

(c) verbs denoting moving an object to its goal or destination, e.g. *rưới* ‘to pour’, *pha* ‘to dissolve’, *thêm* ‘to add’; cf.: *Lan rưới nước vào gạo* ‘Lan pours water into rice’.

2.7 Ways of expressing the meanings: Reflexive, reciprocal, comitative, sociative, and benefactive

1. The *reflexive* meaning is expressed by the pronoun *minh* ‘self’, ‘oneself, myself, yourself, ...’ in object position; sometimes it may co-occur with the reflexive pronoun *tự* ‘self’, ‘oneself, myself, yourself ...’ (Chinese loan) pre-posed to the verb; cf.:

- (3) a. *Lan bảo+vệ Hồng.*
‘Lan defends Hong.’
b. *Lan tự bảo+vệ mình.*
Lan herself defend herself
‘Lan defends herself.’

2. As has already been mentioned, the *reciprocal* meaning is expressed by the pronoun *nhau* ‘each other’ in place of an object, or an adverbial, or an attribute (see (1) and (2)). Sometimes, the word *lẫn* i. ‘mutually’, ii. ‘together’ (descending from the verb *lẫn* ‘to mix’, ‘to confuse’), is added in pre-position to *nhau* to stress the meaning of reciprocity. Restrictions on combinability of *nhau* with *lẫn* are not quite clear. Thus, the phrases *đạy lẫn nhau* ‘to teach each other’ and *giúp+đỡ lẫn nhau* ‘to help each other’ are grammatical while *yêu lẫn nhau* ‘to love each other’ is not.

3. The *comitative* meaning is expressed by the preposition *với* ‘with’, ‘in company of’ or by the preposition *cùng* ‘together’, ‘in company of’ alone or with *với* ‘with’ (other meanings of *với* are ‘address’ and ‘instrument’):

- (4) *Lan đi+chơi với/cùng/cùng với An.* ‘Lan strolls with An.’

4. The *sociative* meaning is rendered by a combination of the above mentioned comitative markers with the reciprocal marker *nhau* ‘each other’:

- (5) *Lan và An đi+chơi với nhau/cùng nhau/cùng với nhau.*
 ‘Lan and An stroll together.’

5. The *benefactive* meaning is expressed by the preposition-verbs *cho* ‘for’, ‘to give’ and *hộ* ‘for’, ‘to help’ both post-posed to the predicate:

- (6) *Lan làm việc này cho Hồng.* ‘Lan does this work for Hong.’

2.8 Derived constructions with two predicates

Here belong causative and passive constructions.

1. Causative constructions are formed with the help of a causative verb pre-posed to the main verb:

- (7) a. *Lan nghỉ.* ‘Lan takes a rest.’
 b. *Hồng bắt Lan nghỉ.* ‘Hong compels Lan to take a rest.’

2. Passive constructions are formed with the help of the passive verbs *bị* and *phải* both meaning ‘to suffer, undergo’ (for negative actions), and *được* ‘to receive, get, obtain’ (for positive actions):

- (8) a. *Lan đánh Hồng.*
 ‘Lan beats Hong.’
 b. *Hồng bị Lan đánh.*
 Hong suffer Lan beat
 ‘Hong is beaten by Lan.’

(See also Nguyễn 1987: 782–96; Bystrov et al. 1975; Bystrov & Stankevich 1981: 103–14.)

3. Means of expressing reciprocal arguments

3.1 Simple reciprocal constructions

In this type of constructions, both reciprocal arguments are in subject position. The plural subject is expressed in the same ways as with non-reciprocal verbs. It can be expressed by one word (e.g. *họ* ‘they’), and by two or more words. In the latter case both arguments can be connected by juxtaposition or by the coordinative link *và* ‘and’:

- (9) *Lan Hồng (Lan và Hồng) đánh nhau.* ‘Lan and Hong fight’

and by the comitative links *với*, *cùng*, or *cùng với*, i.e. by the same means as a comitative object or adverbial (see (4)):

- (10) *Lan với /cùng/cùng với Hồng đánh nhau.* lit. ‘Lan together with Hong fight.’

3.2 Discontinuous reciprocal constructions

It is lexical reciprocals only that may occur in this type of constructions, which may serve as underlying constructions for those with the pronoun *nhau* (see Section 6). Depending on the verb valency, the second reciprocal argument can be expressed by a direct object:

- (11) a. *An và Hồng gặp nhau.* 'An and Hong met.'
 b. *An gặp Hồng.* 'An met Hong.'

or by a comitative object with the preposition *với* 'with' (less commonly by a prepositional non-comitative object); cf. (4) and the following:

- (12) a. *An và Hồng kết+hôn với nhau.* 'An and Hong got married.'
 b. *An kết+hôn với Hồng.* 'An got married to Hong.'

3.3 Constructions without an explicit reciprocal argument

Two cases should be distinguished here.

1. With a reciprocal verb, the subject has a singular referent and the second reciprocal argument is not expressed, in which case the interpretation is absolutive (the action is presented as a permanent feature of the subject referent); the range of reciprocals that allow this usage is to be established yet; cf.:

- (13) a. *Họ đánh nhau.*
 'They fight.'
 b. *Em không đùa+ngịch, không đánh nhau.*
 I not be.naughty not hit REC
 'I am not naughty and do not fight.'

2. In this case the reciprocal argument has no antecedent and the construction is subjectless, the reading being indefinite-personal: indefinite human agents are implied; in the following example it is people who are in the street:

- (14) *Ngoài đường đánh nhau.*
 outside street hit REC
 'There is fighting out there in the street.'

4. Diathesis types of constructions with the reciprocal pronoun *nhau*

4.1 Subject-oriented diathesis types

4.1.1 "Canonical" reciprocals

4.1.1.1 *Derived from two-place transitives.* This is the most common type of reciprocal constructions; see (1), (9), (11a).

4.1.1.2 *Derived from causative verbs.* In this case the reciprocal marker is also placed immediately after the verb (in (15b) *phải* = 'must'):

- (15) a. *An bắt Lan học.* 'An compels Lan to study.'
 b. *An, Lan bắt nhau phải học.* 'An and Lan compel each other to study.'

4.1.1.3 *Derived from two-place intransitives.* The underlying construction contains an object with the preposition *cho* 'for' or *với* 'with'. The reciprocal pronoun retains the preposition in the derived construction (see also (12)):

- (16) a. *An tha+thứ cho Lan.* 'An forgives (lit. for) Lan.'
 b. *An, Lan tha+thứ cho nhau.* 'An and Lan forgive each other.'
 (17) a. *An thông+cảm với Lan.* 'An feels sorry for (lit. with) Lan.'
 b. *An, Lan thông+cảm với nhau.* 'An and Lan feel sorry for each other.'

4.1.2 "Indirect" reciprocals

4.1.2.1 *Derived from ditransitives.* The class of ditransitives comprises the following verbs: *cho* 'to give', *đút* 'to give', *vay* 'to borrow', *muợn* 'to lend', *tặng* 'to give a present', *thưởng* 'to reward', *chuyển* 'to pass, to hand', *giao* 'to charge', 'to entrust', *giật* 'to snatch', *ăn+cắp* 'to steal', etc. These verbs may occur in two types of constructions differing in the order of the objects (and corresponding to the respective English constructions): if the human object denoting the addressee or source of the second object precedes the latter it functions as a direct object (it has no preposition), and if it follows the second object it acquires a preposition, e.g. *cho* 'for, to', *của* 'of'. Each of these two types of the underlying construction yields a respective reciprocal construction retaining the direct object.

1. The addressee or source is denoted by the direct object:

- (18) a. *Lan gửi An tiền.* 'Lan sends An money.'
 b. *Lan, An gửi nhau tiền.* 'Lan and An send each other money.'

A textual example:

- (19) *Các nước này tranh+giành nhau thị+trường.*
 PL country this contend.for REC commodity.market
 'These countries contend with each other for markets.'

2. The addressee or source is denoted by the indirect object:

- (20) a. *Lan gửi tiền cho An.* 'Lan sends money to An.'
 b. *Lan, An gửi tiền cho nhau.* 'Lan and An send money to each other.'

4.1.2.2 *Derived from benefactives.* This concerns two-place transitives used with an optional benefactive object (see (6) and the preceding text) which form constructions identical with (19); cf.:

- (21) a. *Lan xây nhà cho An.*
 Lan build house for An
 'Lan builds a house for An.'
 b. *Lan, An xây nhà cho nhau.*
 'Lan and An build houses for each other.'

4.1.3 “Possessive” reciprocals

This diathesis type of reciprocals is formed by the same verbs as the “canonical” type. The difference lies in that the direct object of the underlying construction has to have a possessive attribute. As well as in “indirect” reciprocals the direct object of the base construction is retained. The latter attribute may optionally be marked by the possessive marker *của* (see 2.4) or by the preposition *cho* ‘for’ (if the action is “positive”) which become obligatory in the reciprocal construction. The latter may be formally identical with the respective “indirect” reciprocal construction (compare (21b) and (22b)). Examples (22) and (23) illustrate inalienable and alienable possessive relations:

- (22) a. *An xoa+bóp bả+vai [của/cho] Lan.*
 An massage shoulder(s) of/for Lan
 ‘An massages Lan’s shoulders.’
 b. *An và Lan xoa+bóp bả+vai của/cho nhau.*
 ‘An and Lan massage each other’s shoulders.’
- (23) a. *An đốt nhà của Lan.*
 An burn house of Lan
 ‘An burns Lan’s house.’
 b. *Họ đốt nhà của nhau.*
 ‘They burn each other’s houses.’

4.1.4 “Adverbial” diathesis types

In this type the reciprocal marker substitutes for a non-argument of the underlying verb, namely, for an adverbial that is not commonly presupposed by the verbal meaning (see (2)). Benefactive reciprocal constructions may also be assigned to this type (see 4.1.2.2). It should be noted in this connection that in “possessive” reciprocal constructions the reciprocal marker does not replace an argument either (see 4.1.3).

4.2 Object-oriented diathesis types

4.2.1 Causatives derived from subject-oriented reciprocals

All the “canonical”, “indirect” and “possessive” reciprocals can be embedded in a causative construction; cf. (9) and the following:

- (24) *An bắt Lan và Hồng đánh nhau.*
 An compel Lan and Hong hit REC
 ‘An compels Lan and Hong to fight.’

4.2.2 The pronoun *nhau* with three-place lexical reciprocals. Pleonastic and non-pleonastic use

These are lexical reciprocals commonly denoting connection or disconnection of two or more objects. It seems that the obligatoriness of the reciprocal pronoun is determined by the type of syntactic construction. Thus the following construction may have two syntactic variants:

- (25) a. *Họ trộn đậu và/với gạo.*
they mix beans and/with rice
'They mix beans with rice.'

1. The reciprocal marker is optional if both objects follow the verb:

- b. *Họ trộn đậu và gạo [với nhau].*
they mix beans and rice with REC
lit. 'They mix beans and rice [together/with each other].'

2. The reciprocal marker seems to be obligatory if the object precedes the verb (inversion), in which case one of the auxiliaries (viz. *lấy* 'to take', *đem* and *đưa* 'to bring') is introduced:

- c. *Họ đem đậu và gạo trộn với nhau.*
they bring beans and rice mix with REC
'They mix beans and rice together/with each other.'

3. The reciprocal marker also seems to be obligatory if the two object referents differ in size or position, which involves the use of the verb-modifiers *lên* 'to rise', 'to go up', *vào* 'to go in, onto' in place of the preposition within the underlying construction. In the reciprocal construction, the pronoun *nhau* is placed after the modifiers:

- (26) a. *Họ dán một mảnh giấy lên mảnh giấy khác.*
they stick one piece paper rise piece paper another
'They stick one piece of paper onto another.'
- b. *Họ dán hai mảnh giấy lên nhau.*
they stick two piece paper rise REC
'They stick two pieces of paper one upon the other.'

4.2.3 *Passive constructions with object-oriented reciprocals*

Passive constructions may be derived in the regular way by means of the passive verbs *bị* and *được* (see 2.8). Compare (25c) and the following:

- (27) *Gạo, đậu bị họ đem trộn [với nhau].*
rice beans suffer they bring mix with REC
'Rice and beans are mixed [with each other] by them.'

5. Extension of the reciprocal meaning

The transitive verbs considered in this section may take the reciprocal pronoun in direct object position without acquiring the reciprocal meaning proper. The reciprocal arguments do not signify identical semantic roles of the referents. But in all the three cases both arguments perform an action or possess a property that implies the action or property of one of the arguments: the first argument referent performs the action (possesses the property) denoted by the underlying transitive verb, the other one performing the action (possessing the property) implied by the first action. Thus, (a) if A follows B it implies

that B moves in front of A; (b) if A carries B, it implies that B also moves, but unlike in case (a) B does not move independently; (c) if A surpasses B in some respect (e.g. is older, or bigger, etc.) it implies that B possesses this property in a lesser degree (e.g. is younger, or smaller, etc. The order of these three cases reflects the diminishing degree of activity of referent B.

5.1 Type *theo* ‘to follow’ verbs

Reciprocal constructions with these verbs may in fact refer to the same denotational situation as the underlying construction. They differ in that the underlying construction indicates the precise sequence of the actions of the argument referents in the situation described, while in the reciprocal construction their sequence is not indicated and may alternate and it may denote a situation with many participants. Here belong:

- (28) *theo* ‘to follow’ *tiễn* ‘to see off’
đuôi ‘to catch up with’ *nói+chân* ‘to go after’
vuốt ‘to overtake.’

and also “adjectives”:

- nói+đuôi* ‘(to follow) one after another’, lit. ‘joining by the tails’
hên+tiếp ‘(to pursue) close at heels.’
- (29) a. *Lan theo Hồng.* ‘Lan follows Hong.’
 b. *Hồng theo Lan.* ‘Hong follows Lan.’
 c. *Lan va Hồng theo nhau.* ‘Lan and Hong follow each other.’

The phrase *theo nhau* is often used as a kind of adverbial modifier of manner of the main action:

- (30) *Hai chiếc tàu chạy theo nhau.*
 two/both CLF train run follow REC
 lit. ‘Two trains run following each other (one after another).’

The other verbs of this group can be used in the same way, e.g.:

- (31) *Họ chạy vượt nhau.*
 they run overtake REC
 lit. ‘They run overtaking each other’, ‘They chase each other.’
- (32) *ô +tô nói+đuôi nhau qua cầu.*
 car join.tail REC pass bridge
 ‘Cars crossed the bridge one after another.’

5.2 Type *bé* ‘to carry’ verbs

These verbs are similar to the above type in that the reciprocal construction may refer to the same denotational situation as the underlying construction (cf. (34a) and (34c)), while inversion of the underlying arguments may result in an unnatural sentence. Here belong the following verbs:

- (33) *bé* ‘to carry in one’s arms’ *công* ‘to carry on one’s back’
đắt ‘to lead’ *nuôi* ‘to support, to bring up’
đèo ‘to give a ride on a bike’ *đạp* ‘to copulate’ (about animals).
- (34) a. *gà +trống đạp gà+mái.* ‘The rooster mates with a hen.’
 b. **gà+mái đạp gà+trống.* ‘The hen mates with the rooster.’
 c. *gà+trống và gà+mái đạp nhau.* ‘The rooster and the hen mate.’

The reciprocal causative verbs of motion usually occur as part of a predicate:

- (35) a. *Mẹ bé con đi dạo.*
 mother carry child go walk
 lit. ‘The mother carrying the child in her arms goes for a walk.’
 b. **Con bé mẹ đi dạo.*
 ‘The child carrying its mother in his arms goes for a walk.’
 c. *Mẹ con bé nhau đi dạo.*
 lit. ‘Mother and child carrying each other in their arms go for a walk’
 ‘The mother carrying the child in her arms goes for a walk.’
- (36) a. *Lan đèo An đi xe+đạp.*
 Lan carry An ride bike
 lit. ‘Lan carrying An on a bike rides the bike.’
 b. *An đèo Lan đi xe+đạp.*
 lit. ‘An carrying Lan on a bike rides the bike.’
 c. *Họ (Lan và An) đèo nhau đi xe+đạp.*
 lit. ‘They (Lan and An) carrying each other on a bike ride the bike.’
 ‘They ride the (same) bike together.’

5.3 Type *hơn* ‘to surpass’ verbs

There are four verbs that denote differing, mostly in age, i.e. “older” vs. “younger”:

- (37) *hơn* ‘to surpass, be greater’ *hơn+kém* ‘to differ’
kém ‘to be inferior’
thua ‘to be inferior.’

The reciprocal arguments may change places, but this results in a change of meaning which cannot be part of the reciprocal meaning (an exception is the verb *hơn+kém* ‘to differ’; cf. (39) where all the three sentences refer to the same denotational situation).

- (38) a. *Chị hơn em ba tuổi.*
 elder sister surpass younger sister three years
 lit. ‘The elder sister surpasses the younger sister by three years.’
 ‘The elder sister is three years older than the younger sister.’
 b. **Em hơn chị ba tuổi.*
 ‘The younger sister is three years older than the elder sister.’
 c. *Chị em hơn nhau ba tuổi.*
 lit. ‘The elder sister and the younger sister surpass each other by three years.’
 ‘The elder sister is three years older than the younger sister.’
 (i.e. the age difference between them is three years).

- (39) a. *Chị hon+kém em ba tuổ¹i.*
lit. 'The elder sister differs from the younger sister by three years.'
b. *Em hon+kém chị ba tuổ¹i.*
lit. 'The younger sister differs from the elder sister by three years.'
c. *Chị và em hon+kém nhau ba tuổ¹i.*
'The elder sister and the younger sister differ from each other by three years.'

The following sentence makes sense to the listener if only one of the names refers to an older sister/brother and the other to the younger one:

- (40) *Lan và Hồng thua nhau ba tuổ¹i.*
Lan and Hong be.inferior REC three year
lit. 'Lan and Hong are three years smaller than each other.'
'Lan is three years younger than Hong' (or the other way round).

6. Lexical reciprocals. Their use with the reciprocal marker

6.1 Introductory

As is known, lexical reciprocals are words with an inherent reciprocal meaning: their reciprocity is not coded by a reciprocal marker. A distinctive feature of lexical reciprocals is semantic equivalence of sentences with reversed arguments (we have in mind discontinuous reciprocal constructions; see 3.2):

- (41) a. *Lan gặp An.* 'Lan met An.'
= b. *An gặp Lan.* 'An met Lan.'

All lexical reciprocals that allow the discontinuous construction also occur in the simple reciprocal construction with an obligatory or optional reciprocal marker, which may depend on the particular lexical meaning of a reciprocal or the syntactic structure it occurs in (see (25)). It is obligatory in (41c), because otherwise it remains unclear whom Lan and An met (needless to say, *nhau* is impossible in (41a–b)):

- c. *Lan và An gặp nhau.* 'Lan and An met.'

There is however a small group of intransitives which are one-place verbs and therefore cannot occur in constructions like (41a–b) and which require a plural subject. They may be included among lexical reciprocals as a marginal group on the basis of their lexicographic definitions. They occur in simple constructions only (see 6.2.3)).

As well as in a number of other languages, the principal lexical domains of lexical reciprocals in Vietnamese are similarity – difference, spatial relations ('near', 'far', 'joining', 'parting', etc.), social and inter-personal relations (marriage, conversation, competition, etc.).

6.2 Subject-oriented lexical reciprocals. “Canonical” reciprocals only

The lexical reciprocals dealt with below are listed according to their syntactic properties and in the diminishing order of the number of units.

6.2.1 *Two-place intransitives*

This is certainly the most numerous group of lexical reciprocals in Vietnamese. Characteristically, nearly all of them are two-component units: complex or compound. In the following example which is analogous to (41) the reciprocal marker is however optional as well as in (43):

- (42) a. *An kết+duyên với Lan.*
 An marry with Lan
 ‘An married Lan.’
 = b. *Lan kết+duyên với An.*
 ‘Lan married An.’
 = c. *An và Lan kết+duyên [với nhau].*
 ‘An and Lan got married [to each other].’

As it happens, illogicality of the following sentence is an additional diagnostic feature of lexical reciprocals:

- d. **An kết+duyên với Lan, nhưng Lan không kết+duyên với An.*
 ‘An married Lan, but Lan did not marry An’ (see Bystrov 1966:243).
 (43) *Lan và An gây+gỗ [với nhau].*
 ‘Lan and An quarrel [with each other].’

In most cases, it seems, the reciprocal marker is preferable in simple constructions. Without it, a sentence may be perceived as elliptical. This is the case in the following examples, which distinguishes them from (42d) and (43):

- (44) *Lan và An đua+đòì với nhau.*
 ‘Lan and An compete with each other.’
 (45) *Lan và An ăn+ở với nhau.*
 ‘Lan and An cohabit.’

The lexical domain of these reciprocals covers the following typical meanings: quarrel – reconciliation, marriage – divorce, competition, rivalry – cooperation, friendship – hostility, agreement – disagreement, coincidence, conversation, , etc. Here belong at least forty verbs:

- | | |
|----------------------------------|---|
| (46) <i>ăn+ở</i> ‘to cohabit’ | <i>hực+hặc</i> ‘to be at odds’ |
| <i>cãi+vạ</i> ‘to quarrel’ | <i>hỗn+hộp</i> ‘to mix with’ |
| <i>cãi+cọ</i> ‘to quarrel’ | <i>kết+bạn</i> ‘to enter into marriage’ |
| <i>cãi+lộn</i> ‘to quarrel’ | <i>kết+hợp</i> ‘to unite’ |
| <i>câu+kết</i> ‘to be in clique’ | <i>kết+duyên</i> ‘to get married’ |
| <i>chuyện+trò</i> ‘to converse’ | <i>giao+hợp</i> ‘to copulate’ |
| <i>cạnh+tranh</i> ‘to compete’ | <i>giao+cấu</i> ‘to mate’ |

<i>chia+tay</i> ‘to part (with)’	<i>giao+tiếp</i> ‘to communicate’
<i>chia+vui</i> ‘to share a fortune, joy’	<i>lên+hệ</i> ‘to be connected with sb’
<i>chia+buồn</i> ‘to share misfortune’	<i>lên+lạc</i> ‘to be connected with sb’
<i>đánh+bạn</i> ‘to make friends’	<i>lên+kết</i> ‘to unite’
<i>đồng+cư</i> ‘to cohabit’	<i>ly+đi</i> ‘to divorce’
<i>đồng+ý</i> ‘to agree’	<i>mâu+thuẫn</i> ‘to contradict’
<i>đôi+địch</i> ‘to be opposed’	<i>phù+hợp</i> ‘to suit, match, correspond’
<i>đôi+đấu</i> ‘to be rivals’	<i>tình+tư</i> ‘to have a heart to heart talk’
<i>đua+đôi</i> ‘to compete’	<i>tiếp+xúc</i> ‘to have an affair with’
<i>đoạn+tuyệt</i> ‘to break with’	<i>tãng+tịu</i> ‘to have an affair with’
<i>đồng+cảm</i> ‘to sympathise with’	<i>tiếp+giáp</i> ‘to border’
<i>ganh+đua</i> ‘to rival’	<i>thân+thuộc</i> ‘to be relatives’
<i>gắn+bó</i> ‘to get connected firmly’	<i>hợp+tác</i> ‘to collaborate’
<i>giải+hỏa</i> ‘to make peace with’	<i>thỏa+hiệp</i> ‘to make peace with’
<i>giáp+giới</i> ‘to border on’	<i>trùng</i> ‘to coincide’
	<i>thích+hợp</i> ‘to match, correspond’
	<i>xô+xát</i> ‘to fight.’

Most of these verbs probably require the reciprocal marker when used in the simple construction.

It is likely that we should also include here the following three types of compound verbs each with the same initial component (a Chinese loan-word) which is reciprocal in meaning.

1. Verbs with the initial component *giao* (bound verbal lexical base in this meaning):

- | | |
|---|---|
| (47) <i>giao+cấu</i> ‘to copulate’ | <i>giao+du</i> ‘to associate with’ |
| <i>giao+hẹn</i> ‘to come to an agreement’ | <i>giao+hào</i> ‘to be on friendly terms’ |
| <i>giao+dịch</i> ‘to exchange’ | <i>giao+thiếp</i> ‘to be connected.’ |

Compare:

- | | |
|--|--|
| (48) <i>hai đường thẳng giao nhau.</i> | ‘Two straight lines cross each other.’ |
|--|--|

2. Verbs with the initial component *hợp* (also used alone as a one-place intransitive reciprocal (see 6.2.3):

- | | |
|---------------------|--|
| (49) <i>hợp+lực</i> | ‘to collaborate’ |
| <i>hợp+tác</i> | ‘to conduct talks’ |
| <i>hợp+lưu</i> | ‘to interflow, to flow together’ (about rivers). |

3. Verbs with the first component *hội* (bound verbal lexical base):

- | | |
|---------------------|-----------------------------------|
| (50) <i>hội+hợp</i> | ‘to meet’ |
| <i>hội+ý</i> | ‘to exchange opinions, to confer’ |
| <i>hội+kiến</i> | ‘to meet, to see each other’ |
| <i>hội+đàm</i> | ‘to confer, to converse.’ |

6.2.2 Two-place transitives

This is a group of predicatives that can take an object without a preposition, including predicatives that correspond to European adjectives and/or adverbs with respect to their lexical meaning.

6.2.2.1 *Transitives proper.* They seem to be very few in number:

- | | | |
|------|----------------------------|---|
| (51) | <i>đua</i> ‘to compete’ | <i>lấy</i> ‘to marry’ |
| | <i>ganh</i> ‘to be rivals’ | <i>ly+đị</i> ‘to divorce’ |
| | <i>giao</i> ‘to cross’ | <i>tự+biệt</i> ‘to leave’ |
| | <i>gặp</i> ‘to meet’ | <i>thi+đua</i> ‘to compete’ |
| | | <i>hợp+tính</i> ‘to be alike in character.’ |

In simple reciprocal constructions they seem to be mostly used with the reciprocal marker; cf.:

- | | |
|------|---|
| (52) | <i>Họ đạp đường đua nhau phóng xe.</i> |
| | they ride road compete REC rush bike |
| | ‘They competed in speed on their bikes along the road.’ |
| (53) | <i>Hai người hợp+tính nhau.</i> |
| | ‘Both men are alike in character.’ |

6.2.2.2 *Qualitative and spatial transitives (adjectives and adverbs).* This group comprises at least the following predicatives:

- | | | |
|------|----------------------------------|---|
| (54) | <i>xa</i> ‘(to be) far’ | <i>bằng</i> ‘(to be) equal, the same’ |
| | <i>gần</i> ‘(to be) near’ | <i>thân</i> ‘(to be) intimate with’ |
| | <i>giống</i> ‘(to be) similar’ | <i>đều</i> ‘(to be) equal, the same’ |
| | <i>chung</i> ‘(to be) common’ | <i>đồng+đều</i> ‘(to be) alike’ |
| | <i>bình+đẳng</i> ‘(to be) equal’ | <i>ngược</i> ‘(to be) contrary, in disagreement’ |
| | <i>cân</i> ‘(to be) balanced’ | <i>ngang</i> ‘(to be) equal in height’ |
| | <i>khác</i> ‘(to be) different’ | <i>tương+đường</i> ‘(to be) corresponding to each other.’ |

Some of the combinations of these words with *nhau* seem to have become fixed units, as they are given in some dictionaries as separate entries. All these fixed units denote similarity:

- | | | |
|------|-----------------|--------------------------------------|
| (55) | <i>như nhau</i> | ‘(to be) similar, the same’ |
| | <i>đều nhau</i> | ‘(to be) similar’ |
| | <i>cân nhau</i> | ‘(to be) symmetrical, proportional.’ |

In simple constructions with these verbs the reciprocal marker seems to be obligatory.

- | | | |
|------|-----------------------------------|--|
| (56) | a. <i>Tôi xa anh.</i> | ‘I am far from you.’ |
| | b. <i>Chúng ta xa nhau.</i> | ‘We are far from each other.’ |
| (57) | a. <i>Người khác vượn.</i> | ‘The man is different from the ape.’ |
| | b. <i>Người và khỉ khác nhau.</i> | ‘Man and monkey differ from each other.’ |

In the following reciprocal which has unique properties the reciprocal marker is optional. This reciprocal denotes sharing a thing by two or more persons or entities:

- (58) a. *Lan và An có một chiếc chăn chung [với nhau].*
 Lan and An have one blanket common with REC
 ‘Lan and An share one blanket.’
- b. *Lan và An chung [nhau] một chiếc chăn.*
 Lan and An common REC one blanket
 ‘Lan and An share one blanket.’

In (58a) *chung* functions as an attribute, while in (58b) it functions as a predicate. This reciprocal does not form constructions analogous to (56) and (57).

Another unique reciprocal different from all the other reciprocals of this group is *đều* ‘(to be) equal, the same’. This word does not form constructions of type (56a); it occurs in simple reciprocal constructions only:

- (59) *Hạt lúa đều [nhau] và chác.*
 grain rice equal REC and thick
 ‘The rice grains are equal in size [to one another] and thickness.’

6.2.3 One-place intransitives

This is a limited group of lexical reciprocals that do not form discontinuous constructions owing to their intransitivity. These verbs denote movement of two or more agents to one point from different points or movement against each other, and the like. Quite surprisingly, they can take the reciprocal marker:

- (60) a. *Các cháu xúm [nhau] lại.*
 PL grandchild gather REC MOD
 ‘The grandchildren gather here.’

If the predicate is followed by an adverbial the reciprocal marker, though possible, tends to be omitted:

- b. *Các cháu xúm [nhau] quanh bà.*
 ‘The grandchildren gather round (their) grandmother.’

Verbs of this type:

- (61) *xúm* ‘to gather’
hợp ‘to meet’
đoàn+tụ ‘to gather (about relatives)’
đoàn+kết ‘to be at one with’
chen ‘to jostle each other’, ‘to crowd’
tập+hợp ‘to come together (of many)’
tập+trung ‘to concentrate.’

This group also includes a number of compounds with the first component *hội* (bound lexical base; cf. (50)):

- (62) *hội+hợp* ‘to gather, come together’
hội+kiến ‘to meet, to see each other’
hội+tụ ‘to gather, to come together.’

6.3 Object-oriented reciprocals

6.3.1 Embedded subject-oriented reciprocals

The following example illustrates the embedding process of the subject-oriented reciprocal *bên+cạnh* ‘to be next to’ (belonging to 6.2.2). This reciprocal functions as an adverbial modifier and it does not appear as a single predicate in a sentence:

- (63) a. *Lan và An ngồi bên+cạnh nhau.*
 ‘Lan and An are sitting next to each other.’
 b. *Ông+chủ đề Lan và An ngồi bên+cạnh nhau.*
 host seat Lan and An sit next.to REC
 ‘The host seated Lan and An next to each other.’

The reciprocal *nhu nhau* ‘(to be) alike’ is a fixed combination where *nhu* is an auxiliary meaning ‘as’, ‘like’; cf.:

- (64) a. *Lan như ai.* ‘Lan is like everybody.’
 b. **Lan và An như.* *‘Lan and An are like.’
 c. *Lan và An như nhau.* ‘Lan and An are alike.’
 d. *Hồng đối+xử với Lan và An như nhau.*
 Hong regard với Lan and An alike
 ‘Hong regards Lan and An in the same way.’

6.3.2 Non-embedded object-oriented reciprocals (= lexical reciprocals)

Here we return to the issue discussed in 4.2.2, which involves some repetition. This group comprises about twenty reciprocals with two interacting object arguments (mostly inanimate), or with one plural argument. Their typical meanings are joining and mixing, and a few verbs denote separating, comparison, and introducing people.

- | | |
|---|---|
| (65) <i>buộc</i> ‘to tie together’ | <i>đối+lập</i> ‘to contrast’ |
| <i>cón</i> ‘to tie together’ | <i>đối+chiếu</i> ‘to compare’ |
| <i>chụm</i> ‘to put together’ | <i>lẫn+lộn</i> ‘to mix’ |
| <i>dán</i> ‘to glue together’ | <i>nối</i> ‘to tie together’ |
| <i>dùng+hòa</i> ‘to reconcile’ | <i>phân+biệt</i> ‘to distinguish’ |
| <i>dính</i> ‘to glue together’ | <i>pha</i> ‘to mix’ |
| <i>đính</i> ‘to attach, fasten’ | <i>so</i> ‘to compare’ |
| <i>gắn+ghép</i> ‘to attach, join’ | <i>so+sánh</i> ‘to compare’ |
| <i>gắn</i> ‘to join, fasten, glue’ | <i>tiếp</i> ‘to combine, join’ |
| <i>gắn+lại</i> ‘to join, fasten, glue’ | <i>gôm</i> ‘to collect, join’ |
| <i>ghép</i> ‘to cross (e.g. swords)’ | <i>trộn</i> ‘to mix’ |
| <i>giới+thiệu</i> ‘to introduce’ | <i>thống+nhất</i> ‘to unite’ |
| <i>kết+hợp</i> ‘to combine’ | <i>tách+biệt</i> ‘to separate, detach’ |
| <i>ly+gian</i> ‘to set sb against each other’ | <i>gộp</i> ‘to join into a single whole, unite’ |
| | <i>chia+ly</i> ‘to separate, divide’ |

(see Bystrov 1966: 281–2).

The verbs under consideration used in discontinuous constructions, i.e. with a direct and a non-direct prepositional object, do not occur with the reciprocal marker; cf.:

- (66) a. *Tôi so quyển+sách này với quyển+sách kia [*với nhau].*
 I compare book this with book that with REC
 lit. 'I compared this book with that book [*with each other].'

If used in the simple reciprocal construction, i.e. with a single object (homogeneous or heterogeneous), these verbs allow optional use of the reciprocal marker with the relevant preposition:

- b. *Tôi so hai quyển+sách này [với nhau].*
 I compare two book this with REC
 'I compared these two books [with each other].'

The direct object here may refer to a single entity on condition that it is divisible into parts:

- (67) *Tôi nối hai sợi+chỉ [với nhau].*
 I tied.up two thread with REC
 'I tied up the [two pieces of] thread [with each other].'

Most of the verbs of this group (excepting verbs like *so* 'to compare', *dùng+hòa* 'to reconcile', *phân+biệt* 'to distinguish', etc.) are also used in a different type of construction when they denote movement of an object towards a given point, in which case the reciprocal marker is impossible if two object referents are not the same, e.g. different in size; cf. (68a) and (68b):

- (68) a. *Nó dán hai tờ giấy [với nhau].*
 he stick two sheet paper with REC
 'He stuck two sheets of paper [with each other].'
 b. *Nó dán con+tem vào phong+bì [*với/vào nhau].*
 he stick stamp onto envelope with REC
 lit. 'He stuck a stamp onto the envelope.'

If the objects denote similar entities, constructions of types (68b) and (68c), i.e. constructions with spatial verb-prepositions, can also have variants with the reciprocal marker:

- c. *Họ dán một mảnh giấy lên mảnh giấy khác.*
 they stick one piece paper rise/onto piece paper another
 'They stuck one piece of paper on another.'
 a. *Họ dán hai mảnh giấy [lên nhau].*
 'They stuck two pieces of paper one upon another.'

The latter example of the relation between the reciprocal arguments is analogous to that described in Section 5.1.

6.4 Reciprocal nominal compounds denoting class membership

Many formations that belong here contain the bound lexical base *đồng* of Chinese origin, which determines its initial position in the compounds. These reciprocals satisfy the test for lexical reciprocals illustrated by (41) in 6.1 where all the three sentences are semantically equivalent and they have no non-reciprocal counterpart to which they might be

related in a standard way. The reciprocal marker (with *với* ‘with’ or *của* ‘of’) is optional, though it is sometimes used; cf.:

- (69) a. *Lan là đồng+huong với/của An.*
 Lan be fellow.village with/of An
 ‘Lan is An’s fellow-villager.’
 = b. *An là đồng+huong với/của Lan.*
 ‘An is Lan’s fellow-villager.’
 = c. *Lan và An là đồng+huong [với nhau].*
 ‘Lan and An are fellow-villagers.’

Here belong:

- (70) *đồng+chí* ‘comrade(s), like-minded person(s)’ (*chí* ‘thought, intention’)
đồng+bào ‘compatriot, blood relation’ (*bào* ‘womb’)
đồng+bọn ‘accomplice’ (*bọn* ‘clique’)
đồng+đội ‘brother-soldiers’ (*đội* ‘company’)
đồng+môn ‘fellow-student’ (*môn* ‘door, school, home, family’), etc.

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Reciprocal constructions in Ancient Chinese

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1. Introduction

1.1 Ancient Chinese

Ancient Chinese (Old Chinese, Archaic Chinese) was the literary and colloquial language of China approximately since the 5th century BCE until the 2nd century CE (colloquial

Ancient Chinese is known only so far as it is reflected in the literature). The language of the earlier texts (“Early Archaic Chinese”, “pre-classical Ancient Chinese”), including grammar, differs markedly from the Ancient Chinese of the named period. The texts of the 5th–3rd cc. BCE vary in some grammatical features, reflecting to a certain degree the dialects of their authors. But by the middle of the 3rd century BCE a kind of compromise standard Chinese was created, and it was in use for a few subsequent centuries, though one can assume that spoken Chinese was gradually undergoing changes during that time. A number of texts written since the 3rd century partly reflect this changed colloquial language and its new grammatical norms, but the predominant written language is still that of ancient texts accepted by the writers as standard. In the China of the 2nd millennium two literary languages are in use, “wényán” (lit. “literary language”) based on Ancient Chinese though deviating from it in details, and “báihuà” based on spoken Chinese and reflecting its evolution.

Chinese employs ideographic writing, therefore we have no direct knowledge of Ancient Chinese phonetics. The examples below are transcribed in accordance with the modern standard reading of the characters which differs drastically from the actual Ancient Chinese pronunciation of the words. As a result, for instance, two words identical in their latinized form were not necessarily homonymous in those times.

Despite a rather long history of investigation, a number of essential aspects of Chinese grammar cause considerable difference of opinion among specialists. The theories this study is based on are not universally recognized in Chinese linguistics.

1.2 Overview

In Ancient Chinese, the marker of reciprocity is the auxiliary word *xiāng* preposed to the verb and filling its object valency.

- (1) a. *Fù jiàn zǐ.*
 father see son
 ‘Father sees his son.’
 b. *Fù zǐ xiāng jiàn.*
 father son REC see
 ‘Father and son see each other.’

The auxiliary *xiāng* may precede the preposition *yǔ* ‘with’ and, much less frequently, the preposition *wèi* ‘for’.

- (2) a. *Fù yǔ zǐ biàn.*
 father with son argue
 ‘Father argues with his son.’
 b. *Fù zǐ xiāng yǔ biàn.*
 father son REC with argue
 ‘Father and son argue with each other.’

A meaning close to the reciprocal is expressed by the adverb *jiāo* ‘mutually’, ‘between them’.

The relation between a reciprocal construction and its underlying construction can be seen from the following example:

- (3) *Shì sàng dào yǐ, dào sàng shì yǐ, shì yǔ dào jiāo xiāng sàng*
 world lose dao yi dao lose world yi world and dao mutually REC lose
yě. (Zhuang 16)

ye

‘The world lost dao (the natural order of things), dao lost the world, the world and dao lost each other.’

The same idea is expressed here several times, by two parallel constructions with reversed actants and a reciprocal construction with the obligatory auxiliary *xiāng* and, in addition, the adverb *jiāo*.

Reciprocals are formed from verbs which can take a prepositionless object more or less homogeneous with the subject semantically. As a rule (though not always), both subject and object are human.

2. Grammatical notes

Ancient Chinese is an isolating (mono)syllabic language. Nearly all simple words consist of one syllable. Combinations of monosyllables, if they are idiomatic, are more conveniently described as phraseological units rather than as compound words. Words are invariable; the exceptions (they concern pronouns, with paradigms similar to the English *I – me – my*) are very few. The function of a word in a sentence is determined by word order and/or auxiliary words.

2.1 Sentence structure

Word order in Ancient Chinese is fixed, being in most cases similar to English (the SVO type). An attribute is preposed to the head word, and between them the particle *zhī* can be placed. A verb modifier may be followed by the particle *ér*. Some auxiliary words (e.g. prepositions) may entail changes in the word order.

The number of prepositions in Ancient Chinese is limited. Those of interest to us are as follows: the marker of an indirect object with numerous meanings *yū*; the polysemous preposition *yǐ* (its principal meaning is instrumental ‘with’; about another use see 4.2); *yǔ* ‘with’ (comitative), and *wèi* ‘for’ (note the tonal difference between *yū* and *yǔ*: historically, they are unrelated). A prepositional phrase usually precedes the verb, but a phrase with *yū*, and sometimes with *yǐ*, is placed after the verb and object (if there is one). A noun phrase with preposed *yū* (or one transformable into it) is regarded here as an indirect object (see 2.3, 4.2); a direct object may sometimes acquire the preposition *yǐ* (see 4.2).

A verb may be preceded by auxiliary words marking voice, aspect and tense (one of these auxiliaries is the reciprocal marker *xiāng*), but they occur very seldom due to

their very narrow meanings. Number on nouns and personal pronouns is not expressed grammatically.

In the absence of formal markers (such as prepositions), we identify the function of a word by the adjacent words in a sentence. Thus, for instance, a noun preceding a verb is the subject and the one following it is an object; an adjective is an attribute when preceding a noun and a predicate when following it; a word preceded by an adverb is the predicate, etc.

The subject of a sentence is often absent or omitted; in particular, a 3rd person pronoun cannot appear as subject of an independent clause, and the absence of a subject indicates a 3rd p. agent. Sometimes, the problem of distinguishing between subject and topic arises (cf. (43)).

One and the same subject may be related to two or more predicates that follow immediately one after another and are not separated by any conjunctions or particles. In such cases it is often impossible to determine whether it is a case of conjoined (or subordinated?) verbs, or a compound sentence, or a chain of independent simple sentences with omitted subjects, excepting the first one; cf. (64), (65), (75), (86), (87).

A sentence may begin or end with particles which are not easy to translate into other languages. Thus, the initial particle *fú* indicates that the content of the sentence is a well known fact; the final particle *yě* in a sentence with a nominal predicate is a copula and with a verbal predicate it signifies that the statement is meant to be moralizing, that the speaker asks to remember or take into consideration what he says. The final particle *yǐ* is related to the expression of perfect; and *ěr* means ‘only, merely’.

2.2 Word classes

The problem of parts of speech in Ancient Chinese is far from settled. Traditionally, words are divided into “full” (or plerematic) and “empty” (or cenematic). The latter are auxiliary words, pronouns and semantically underived adverbs. Practically any “full” word can be used (without any changes in form) in almost any function. It involves a change of its grammatical meaning, but its lexical meaning is usually retained, which may be taken to mean that a word retains its identity.

The most widespread opinion in general linguistics is that Ancient Chinese has no parts of speech. But, for all I know, it turned out to be impossible to write a grammar of Ancient Chinese without resorting to such terms as “verb” or “noun”. According to another theory, a word in Ancient Chinese does not belong to any particular part of speech and appears in the role of one or another depending on context. A third theory propounds the view that each word in all its usages always belongs to one particular part of speech and its meaning in any function is deduced from its principal meaning according to regular rules.

Each of the latter two theories has merits and demerits. In this study, the third mentioned theory is accepted: each word is seen as belonging to a given class though it may be used in unusual functions, i.e. those characteristic of other parts of speech. A change of function involves a change of the grammatical though not lexical meaning of a word. The

principal meaning of a word is the most frequent one and/or the one from which all its other meanings can be logically deduced.

Classes of “full” words differ in their principal functions. The main classes are the substantive (or noun) and predicative; the class of predicatives subsumes verbs, adjectives and also numerals. Substantives are commonly used as subjects and objects, and predicatives as predicates; both can function as attributes to a noun. As a rule, a verb has or at least may have an object (in this chapter, a combination of a word with an object is referred to as transitive use of this word). But it should always be kept in mind that words of any class may appear in functions untypical of their class; cf.:

- (4) a. *biān* ‘a whip’ – b. *biān mǎ* ‘to whip a horse’ (transitive use of a noun).
 (5) a. *zhòng* ‘heavy’ – b. *fù zhòng* ‘to carry [sth] heavy’ (adjective as an object).

The meaning of a word in an unusual function is deducible from its main meaning according to a set of rules specific for each class, and sometimes for a relatively small subclass (it is possibly these rules rather than usual functions that are the distinctive features of classes). For instance, a noun used transitively acquires the meaning ‘to use a thing as an instrument in the way normal for it’. Not all nouns can be used in this meaning, but the list of nouns that allow such usage is not limited.

Although it is only the verb that has transitive use among its usual features, it is important for the description of reciprocals that words of other classes (adjectives, numerals, some nouns) may also, though rarely enough, allow an object and, as a result, they can acquire a reciprocal form.

2.3 Verb classes

What is said above about word classes is also applicable to verb classification with regard to transitivity. Most verbs can be used with an object as well as without one. Adding or omitting an object may or may not change the grammatical meaning of a verb.

The following types of objects distinguishable by their formal characteristics and/or relation to the verb are relevant for dividing verbs into classes: (a) an obligatory object whose omission makes a sentence ungrammatical or incomplete, or changes the active meaning of a verb into passive; (b) an object with the preposition *yū*; (c) a prepositionless object which can be omitted or replaced by an object with *yū* without any change of meaning or violating grammaticality of the sentence; (d) a nominal clause as object.

According to the type of object and ability to occur without an object, verbs can be divided into three principal classes: active, experiential and inactive.

Active verbs take an obligatory object; if omitted an object is recoverable from the context, or the verb acquires a passive meaning. The preposition *yū*, if added before an object, also makes an active verb passive, the object with *yū* denoting the agent; cf.:

- (6) a. *shā rén* ‘[he] killed a man.’ – b. *shā yū rén* ‘[he] was killed by a man.’

Active verbs mostly denote actions which cause a change in the state of the object referent. Verbs of this class cannot take an object expressed by a subordinate nominal clause.

Experiential verbs are distinguished by their ability to subordinate a nominal clause. They can also take a noun phrase as an object; with some verbs (like *zhī* ‘to know’) it is obligatory, but after most of them (like *wèi* ‘to be afraid’) it can be omitted or replaced by an object with *yū* without changing the meaning of the verb.

Active and experiential verbs together can be called transitive. However, semantically experiential verbs are closer to inactive verbs, since both do not imply any effect on the object referent. Needless to say, an object of an Ancient Chinese transitive verb does not necessarily correspond to an object in the accusative case in other languages.

Inactive (intransitive) verbs occur both without and with an object, and the latter may be preceded by the preposition *yū* which does not change the meaning of a collocation; cf.:

- (7) a. *rù shì* ‘entered the room.’ = b. *rù yū shì* ‘entered the room.’

Inactive verbs and some experiential verbs can acquire a causative meaning, in which case an object becomes obligatory; e.g.:

- (8) a. *chū* ‘went out’ – b. *chū wǒ* ‘let me out.’

- (9) a. *nù* ‘got angry’ – b. *nù wáng* ‘made the king angry.’

The relationship between a verb and its object in the cases of its common and causative use is different, cf. (8b) where the object denotes a patient and (10) with a locative object:

- (10) *chū mén* ‘went out of the gate.’

2.4 Valency changing means

As is mentioned above (see 2.3), the passive meaning of active verbs and causative meaning of inactive and some experiential verbs may be determined by the presence or absence of an object and, in part, by the nature of this object.

Alongside these means, Ancient Chinese has auxiliary words marking voice which are preposed to a verb and fill in its object valency: *zì* ‘oneself’, *xiāng* ‘each other’, *jiàn* (passive marker); cf.:

- (11) a. *zì shā* ‘killed himself’
 b. *xiāng shā* ‘killed each other’
 c. *jiàn shā* ‘was killed.’

The word *zì* is also used emphatically as in (12), in which case it is preposed to a verb retaining its meaning and object:

- (12) *zì shā zhī*. ‘[he] killed him himself.’

The other two voice markers are not used in this way, i.e. they cannot co-occur with an object (see, however, 4.2, 4.3).

Causative relations can also be expressed by a construction with the auxiliary word *shǐ* ‘to cause’, ‘to let’, with the components arranged in the following sequence: initiator – *shǐ* – agent – verb – object; cf.:

- (13) *Zhào shǐ Lǐ Mù gōng Yān.* (“Shǐ” 81)
 state.Zhao cause L. M. attack state.Yan
 ‘[The state of] Zhao ordered Li Mu to attack [the state of] Yan.’

The auxiliary *shǐ* ‘to cause’ differs drastically in its formal properties from the voice markers and does not belong to the same type of auxiliaries with them.

3. Grammatical status of the reciprocal marker

The marker *xiāng* ‘each other’ may be assigned, it seems, the status of a separate word. Though no “full” word can be inserted between *xiāng* and the verb, sequence “*xiāng* – preposition – verb” is quite possible (see Section 7). If this marker were regarded as a segment of a verb (a prefix), this sequence would be hard to explain.

In traditional Chinese linguistics, *xiāng* was viewed as an “empty” word (see 2.2). In Western linguistics, words of this class would be regarded as auxiliary words, pronouns or adverbs.

In the earliest modern grammars of Ancient Chinese written by Chinese linguists, *xiāng* was regarded as a pronoun. Its pronominal character is revealed, in particular, by its ability to occur with prepositions (see Section 7), and also by the nature of the semantic shift it underwent in the subsequent period (see Section 11). But Chinese pronouns are used in the same functions as nouns, and it is only sometimes that they occur as object in pre-position to the head word, whereas such usage is ungrammatical for nouns. For the marker *xiāng*, however, position before a verb or a preposition is the only possible one. On the other hand, it fills one of the verbal valencies, which is impossible for adverbs.

In this study, we regard *xiāng* as an auxiliary word, viz. a marker of the reciprocal voice. Its combination with a verb is assigned here the status of a complex voice form (the nature of its co-occurrence with prepositions remains vague). The word *xiāng* has two properties of auxiliary words: it has an abstract grammatical meaning and it is one of a small class of words (voice markers, see 2.4) characterized by a distinctive set of properties.

It should be borne in mind that, strictly speaking, *xiāng* combines with any word used transitively rather than with verbs only (see 2.2). When preceded by *xiāng*, any word acquires the derived grammatical meaning which it has in the function of a predicate governing an object (see 4.1.3).

4. Diathesis types of reciprocals constructions. Subject-oriented only

4.1 “Canonical” reciprocals

4.1.1 *Derived from two-place transitives*

Transitive verbs from which a reciprocal form can be derived have or may have a prepositionless object which is more or less homogeneous with the subject semantically. They

may be divided into a number of principal semantic groups. This division is more detailed than the classification by formal properties (see 2.3), but there are no clearcut borderlines between the groups, since they are based on meaning only.

A. Verbs denoting physical, usually aggressive actions which are immediately experienced by the patient, if it is animate, or can change the state of the latter. The following reciprocals are formed from verbs with this kind of meanings (this and the other lists are far from exhaustive):

- | | | |
|------|--------------------|---|
| (14) | <i>xiāng jī</i> | 'to beat each other' |
| | <i>xiāng shāng</i> | 'to wound each other' |
| | <i>xiāng hài</i> | 'to destroy each other' |
| | <i>xiāng cán</i> | 'to destroy each other' |
| | <i>xiāng gōng</i> | 'to attack/assault each other' |
| | <i>xiāng fá</i> | 'to assault each other', 'to campaign against each other' |
| | <i>xiāng hé</i> | 'to bite each other' |
| | <i>xiāng dì</i> | 'to kick each other' |
| | <i>xiāng shí</i> | 'to eat each other.' |

The following verbs are close to these:

- | | | |
|------|--------------------|----------------------------------|
| (15) | <i>xiāng yǎng</i> | 'to feed each other' |
| | <i>xiāng xiàng</i> | 'to stand a treat to each other' |
| | <i>xiāng fú</i> | 'to support each other' |
| | <i>xiāng shě</i> | 'to let go of each other.' |

B. Verbs denoting all kinds of relations between people which do not imply physical action upon each other.

- | | | |
|------|-------------------|---|
| (16) | <i>xiāng jiù</i> | 'to save each other' |
| | <i>xiāng bǎo</i> | 'to defend each other' |
| | <i>xiāng lì</i> | 'to be useful to each other' |
| | <i>xiāng zhù</i> | 'to help each other' |
| | <i>xiāng ràng</i> | 'to give in/yield to each other' |
| | <i>xiāng dāng</i> | 'to block each other's way', 'to stand against each other without yielding' |
| | <i>xiāng bào</i> | 'to revenge on each other' |
| | <i>xiāng wéi</i> | 'to avoid each other' |
| | <i>xiāng shī</i> | 'to lose each other' |
| | <i>xiāng hè</i> | 'to congratulate each other' |
| | <i>xiāng yī</i> | 'to greet each other by bowing with the hands joined in front' |
| | <i>xiāng hè</i> | 'to join each other in a song', 'to accompany each other on a musical instrument' |
| | <i>xiāng cháo</i> | 'to pay an official visit to each other', 'to appear in court of each other (of princes)' |
| | <i>xiāng xí</i> | 'to succeed each other', 'to continue each other's deeds.' |

C. Verbs denoting feelings and/or their manifestations, approval or disapproval, mental activities and those of the organs of sense (experiential verbs):

- (17) *xiāng hào* 'to love each other'
xiāng ài 'to hold each other dear'
xiāng wù 'to loathe each other'
xiāng zēng 'to hate each other'
xiāng wèi 'to be afraid of each other'
xiāng dù 'to envy each other', 'to be jealous of each other'
xiāng yuàn 'to bear a grudge against each other'
xiāng āi 'to grieve over each other'
xiāng yuè 'to be pleased with each other'
xiāng huān 'to rejoice in each other'
xiāng yù 'to forgive each other'
xiāng yù 'to praise each other'
xiāng zǐ 'to revile each other'
xiāng zé 'to reproach each other'
xiāng zhī 'to know each other/(sth) about each other'
xiāng shí 'to know/be acquainted with each other'
xiāng wàng 'to forget each other'
xiāng xìn 'to believe each other'
xiāng yí 'to distrust each other'
xiāng shì 'to look at each other'
xiāng jiàn 'to see each other'
xiāng kuī 'to peep at each other'
xiāng wén 'to hear each other.'

D. Two-place verbs of motion in space which almost obligatorily require a non-patient object:

- (18) *xiāng suí* 'to follow each other'
xiāng cóng 'to follow each other' (the verb *cóng* usually implies subordination to the person followed)
xiāng zhú 'to chase each other'
xiāng sòng 'to accompany each other'
xiāng shuài 'to follow each other.'

The actions expressed by these reciprocals cannot be performed by two agents simultaneously (see Section 6 below).

E. Verbs denoting abstract static relations between entities (stative verbs):

- (19) *xiāng fǎn* 'to be opposite to each other'
xiāng yīng 'to correspond to each other'
xiāng cān 'to supplement each other'
xiāng ruò 'to be alike', 'to resemble each other'
xiāng sì 'to resemble each other in appearance.'

The following verbs denoting a change of state should probably be added to this group as well:

- (20) *xiāng dài* 'to replace/substitute/stand in for each other'
xiāng sàng 'to lose/be deprived of each other.'

Besides, two more words, usually regarded as adjectives, belong in this group: *jìn* ‘nearby’ and *yuǎn* ‘far’ which may take an optional object denoting place (like inactive verbs):

- (21) *xiāng jìn* ‘to be close to/near each other’
xiāng yuǎn ‘to be far from each other’ (cf. (43)).

Group E is the only one in which verbs and their reciprocal derivations can freely combine with inanimate (including abstract) nouns.

The reciprocal forms listed above are all encountered in the literature but the meaning of all of them is clear enough: if we know the form we can easily think of a situation in which it can be used. It seems likely that in Ancient Chinese *xiāng* could be freely added to any verb in case of necessity, though some combinations may sound strange out of context, e.g.:

- (22) *xiāng mó* (Zhuang 9) ‘to rub each other’, ‘to rub against each other’
xiāng chuī (Zhuang 1) ‘to blow at each other’
xiāng qì (Meng 8.33) ‘to weep for/bemoan each other’
xiāng mài (“Guo ce” 1) ‘to sell each other’
xiāng wú (Zhuang 17) ‘to not have each other’
xiāng shēng (“Dao” 2) ‘to give birth to/engender each other.’

4.1.2 Derived from two-place intransitives

Inactive verbs can take an object (see 2.3), but as a rule it is not homogeneous with the subject semantically. Therefore reciprocal formation is limited to some verbs with individual patterns of object government.

Thus, the verb *qù* ‘to go away (from somewhere)’ is also used in the meaning ‘to be at a (specified) distance from ...’. In the latter case it always occurs with an object and can be used in the reciprocal form *xiāng qù* ‘to be at a (specified) distance from each other’:

- (23) *Xiāng qù sì shí lǐ* (“Shi” 7)
 [King Xiang’s camp and the lord of Pei’s camp] were 40 li (Chinese miles) away from each other.’

The verb *sǐ* ‘to die’, obviously inactive, may occasionally occur with an object meaning ‘for [the sake of] ...’, e.g.:

- (24) *sǐ míng* ‘died for [the sake of] glory’.

From this verb, a reciprocal *xiāng sǐ* ‘to die for each other’ can be formed:

- (25) *Qí huānxīn zú yǐ xiāng sǐ* (“Guo yu” 6)
 ‘Their joy [because they found themselves next to each other in the army] was enough [for them to be ready] to die for each other.’

Reciprocal forms can also be derived from inactive verbs used causatively (see 2.3):

- (26) *xiāng wáng* ‘to destroy each other’ (← *wáng* ‘to perish’).

4.1.3 Derived from words of other classes

Transitive use is an uncharacteristic though possible function of words of other classes (see 2.2), and in this case they may form reciprocals.

If an object is added to an adjective the latter acquires the meaning ‘to consider as ...’; cf. *měi* ‘beautiful’:

- (27) *měi* *zhī*.
 [consider.]beautiful he/she.ACC
 ‘[He] considered her beautiful; ‘She seemed beautiful [to him].’

The derived reciprocal retains the meaning ‘to consider as ...’:

- (28) *Yī wù guān zhī, zì guì ér xiāng*
 with thing(s) look.at he/they.ACC REFL [consider.]precious er REC
jiàn. (Zhuang 17)
 [consider.]worthless
 ‘[If one] looks at things from their [own viewpoint], [all of them] consider themselves precious and each other worthless.’

A numeral used transitively acquires the meaning ‘to exceed sth X times’, and the reciprocal form means ‘[they] exceed each other X times’; cf.:

- (29) *Ci gōng zhī suǒ yǐ xiāng wàn yě.* (Lü 24.6)
 this merit(s) *zhī* that because.of REC 10.000 is
 ‘This is the reason why merits may exceed each other 10,000 times’ (i.e. the results of one man’s labour sometimes exceed those of another 10,000 times).

As to nouns, the marker *xiāng* is extremely rare though possible with them; cf.:

- (30) *Wáng zhī gǒu, ... tóu zhī yī gǔ, qīng qǐ xiāng*
 king *zhī* dog(s) throw it/they.ACC one bone light(ly) rise REC
yá... (“Guo ce” 5)
 teeth
 ‘Your dogs, sir, ... if thrown a bone, [they] jump up at once and begin to bite each other...’

In this sentence the reciprocal is formed from the noun *yá* ‘teeth’, which acquires the general meaning ‘to use an instrument in the way it is meant for’ (see (4) in 2.2). The reciprocal form is derived in accordance with the general rule and it is not lexicalized.

4.2 “Indirect” reciprocals

Three-place verbs have two objects, inanimate (DO) and animate (IO). This is characteristic of verbs of giving and also those of conveying information, like *gào* ‘to tell’, *shì* ‘to show’, *jiào* ‘to teach’. With these verbs, the marker *xiāng* always corresponds to an indirect object, the direct object being retained.

When used actively, verbs with two objects may generate up to four constructions differing in diathesis or word order. In three of these constructions an indirect object is placed immediately after the verb. A direct object is preceded by the preposition *yǐ* and is placed either finally after the indirect object or before the verb (an object of two-place

verbs cannot take this preposition at all). If a direct object is postposed to the indirect object the preposition can be omitted, in which case the two objects follow one after another without being separated by a preposition. Note that a 3rd person pronoun as direct object can be placed only before the predicate (after the preposition *yǐ*); it can be omitted and thus the absence of a word between the preposition and predicate signifies the meaning of the 3rd person (see (34), (35)).

In a reciprocal form, the marker *xiāng* is placed immediately before the predicate (after a direct object if it is preposed); an indirect object is absent and a direct object occupies either of its possible positions.

In the fourth type of constructions, a direct object immediately follows the verb, and an indirect object takes the preposition *yū* and is placed after the direct object; this construction does not have a reciprocal counterpart.

In the following examples, the reciprocal form is used in three different constructions with three-place verbs: with a direct object with and without the preposition *yǐ*, and with a direct object omitted between the preposition and verb:

- (31) *Xiāng yù yǐ shì, xiāng shì yǐ qiāo.* (“Guo yu” 6)
 REC tell *yǐ* matter REC show *yǐ* skilful
 ‘[Artisans] tell each other about [their professional] affairs, show each other [their] skill.’
- (32) *Jūnzǐ xiāng sòng yǐ yán, xiǎ orén xiāng sòng yǐ cái.* (“Shì” 126)
 ‘Noble men give each other words (i.e. wise advice) as presents, mean men give each other riches (i.e. expensive things).’
- (33) *[Nán nyù] bù xiāng shòu qì.* (“Li” 12)
 ‘[Man and woman] do not pass each other things [from hand to hand].’
- (34) *yǐ xiāng fēn* (Mo 11) ‘share it with each other.’
- (35) *yǐ xiāng jiào* (Mo 11) ‘teach each other this.’

The verbs *fēn* ‘to share sth with sb’ and *shì* ‘to show’ can be viewed as causative derivatives from *fēn* ‘to divide’ and *shì* ‘to look at’. *Jiào* ‘to teach’ is possibly a two-place rather than a three-place verb (‘to teach sb’) with an optional second object.

The position of a direct object with three-place verbs can be taken by direct speech introduced by the word *yuē* ‘to say’; in Ancient Chinese this is the only verb that can be followed by direct speech; e.g.:

- (36) *Bǎixìng ... xiāng gào yuē: “Wú wáng ... hé shì wǒ zhì yū cǐ jí?”* (Meng 2.1)
 ‘[People of the] hundred surnames ... say to each other: “Our king ... why did [he] let us fall into such an extreme [state]?”’

The verb *gào* ‘to tell’ requires two objects, indirect and direct; *xiāng* corresponds to the indirect object, and direct speech to the direct object.

4.3 “Possessive” reciprocals

In very rare cases, *xiāng* does not refer to the object referent but to the person it belongs to; i.e. a reciprocal signals coreference of the agent of one action with the possessor of the

patient of another identical action. The reciprocal verb retains its object, and its expected attribute, to which *xiāng* corresponds semantically, is deleted:

- (37) *Zhūhóu ... xiāng gōng guó.* (Mo 14)
 prince(s) REC attack state(s)
 ‘Princes ... attack each other’s states.’

Compare a “canonical” reciprocal construction:

- (38) *Wǔ gōng zǐ ... xiāng gōng* (“Shi” 32)
 five prince son(s) REC attack
 ‘Five sons of the prince ... attacked each other.’

Here are a few more “possessive” reciprocals:

- (39) *Nán nǚ fēi yǒu xíng méi, bù xiāng zhī míng.* (“Li” 1)
 ‘A man and a woman, if there was no talk of marriage [between them], [must] not know each other’s names.’
- (40) *Dà chén ... xiāng wéi ěr mù, yǐ hòu zhǔ xī.* (H.F. 17)
 ‘High officials ... become the ears [and] eyes of each other, spotting the weaknesses of [their] lord.’

In the following examples *xiāng* also indicates coreference of the agents and the possessors of the object referents; the agents (possessors) are not named but they are recoverable from the context (the preceding sentence). Semantically, the predicate is related to the omitted agent, but the subject position is taken up by the name of the patients; the latter feature makes the constructions contiguous to passive.

- (41) (*Lín yì xiāng wàng*), *jī gǒu zhī yīn xiāng wén.* (Zhuang 10)
 neighbouring settlement(s) REC look.into.distance fowl dog *zhi* sound REC
 hear
 ‘(The neighbouring villages [were so close that] saw *each other* in the distance), the crowing of cocks and barking of dogs *of each other* could be heard (= they could hear the cocks and dogs *of each other*).’
- (42) (*Èr jūn xiāng dāng*), *liǎng qí xiāng wàng.* (H.F. 31)
 ‘(Two armies are positioned against each other), the banners of both (sides) are seen to each other.’

Formally, these sentences retain the structure of reciprocal constructions (the reciprocal verb has no object), but semantically the subject may be interpreted only as patient and not the agent of the action. “The banners” can be “seen” and they cannot “see” each other.

Passive-like constructions can be derived from sentences with “possessive” only and not “canonical” reciprocals. The passive meaning is added to a verb requiring an object if this latter object is omitted (see 2.3); the subject in this case acquires the meaning of patient. But in “canonical” reciprocals the absence of an object is determined by the nature of the form and the subject combines the meanings of agent and patient, therefore their passivization is virtually precluded. “Possessive” reciprocals, which retain their object, pose no obstacles to passivization.

In the following example, reciprocal relations hold between the unnamed possessors rather than between the referents of the subject in the reciprocal form; the feature named by the predicate can be related only to the possessor (“people”) and not to the formal subject:

- (43) *Xìng xiāng jìn yě, xī xiāng yuǎn yě.* (“Lun” 17.2)
 nature REC near ye habit(s) REC far ye
 ‘By nature, [men] are close to each other; by practice, they become wide apart from each other.’

But the grammatical analysis of this sentence is disputable (note the English translation).

5. Lexicalisation of reciprocals

In very rare cases a reciprocal form acquires an idiomatic meaning (undeducible from the meaning of the underlying verb). Thus, the reciprocal form *xiāng dé* of the verb *dé* ‘to find’ may have the expected meaning ‘to find each other’ but it is more commonly used in the meaning ‘to be on good terms with each other’. The reciprocal *xiāng chí* ‘to be arranged in a certain order’ is derived from the polysemous word *chǐ* with the meanings ‘front teeth (incisors)’, ‘age’, also ‘to stand next to’, ‘to belong to the same class’, etc. and its semantic relatedness to any of these meanings is not clear.

6. Simultaneity and succession

In typical cases, two reciprocally directed actions expressed by a reciprocal form occur simultaneously; e.g.:

- (44) *Jīn Qí Chǔ xiāng fá.* (“Guo ce” 4)
 ‘Now (the states of) Qi and Chu are attacking each other.’
- (45) *Liǎng zhě bù kěn xiāng shě.* (“Guo ce” 30)
 ‘These two (a snipe and a mussel) did not want to let each other go (and the fisherman got them both).’

Simultaneity is particularly natural in reciprocals which do not denote actions in the narrow sense; e.g. *xiāng wèi* ‘to be afraid of each other’, *xiāng shì* ‘to look at each other’. Relations expressed by the reciprocal form of stative verbs and similar words (see group E in 4.1.1) can be simultaneous only; cf.: *xiāng ruò* ‘to be alike, to resemble each other’, *xiāng yuǎn* ‘to be far from each other’.

Among reciprocal actions proper, many can be performed by two agents by turns only; e.g.:

- (46) *Gù yǒu wú xiāng shēng.* (“Dao” 2)
 therefore exist not.exist REC give.birth
 ‘Therefore existence and non-existence engender each other.’

- (47) *Sǐ shēng cún wáng ... rì yè xiāng dài hū qián.* (Zhuang 5)
 ‘Death and life, preservation and disappearance ... replace each other before [our eyes] day and night.’

If plural simultaneous or repeated actions are described, a reciprocal form usually implies that no two persons or entities named by the subject which encodes both agents and patients are related as reciprocal agent and patient of one and the same act; e.g.:

- (48) *Wǔ xíng xiāng shēng.*
 five element(s) REC give.birth
 ‘Five elements engender one another.’

(In traditional Chinese belief, one element engenders another and is engendered by a third; e.g. wood engenders fire, fire engenders earth, etc; but an element cannot engender the element it is engendered by, in other words, no single act is reciprocal in the proper sense of the term.)

- (49) *Sān dài bù xiāng xí.* (“Shi” 6)
 ‘The three dynasties did not follow each other’s way.’
- (50) *Shòu xiāng shí, qiē rén wù zhī.* (Meng 1.4)
 ‘Even when it is animals who devour each other, man feels an aversion to them.’
- (51) *Zhūhóu xiāng sòng bù chū jìng.* (“Shi” 32)
 ‘Princes, when escorting each other off (after an official visit), do not go beyond the borders [of their principalities].’ (In each case one prince escorts another off and the restriction concerns only him.)

Finally, there are isolated cases when of the two subject referents only one could perform the action named by a reciprocal verb:

- (52) *Yàn quē ... zǐ mǔ xiāng bǔ yē.* (“Lǚ” 13.7)
 ‘Swallows and sparrows ... children and mothers feed each other.’ (It is but natural that it is only mothers that feed their younglings.)
- (53) *(Cǐ èr rén xiāng yǔ, tiānxià zhì huān yě;) rán ér zú xiāng qín zhě, hé yě?* (“Shi” 92)
 ([When] these two men were together (with each other), [it was] a great joy for the world; why did they nevertheless finally catch each other?’ (In fact, one of them killed the other.)

7. Reciprocal marker with prepositions

Prepositions are similar to verbs in that they have an object valency, and *xiāng* may fill this valency on condition that the meaning of a preposition allows an object semantically homogeneous with the subject. In this respect *xiāng* is closer to the English phrases *each other* or *one another* than to morphological markers of reciprocity (e.g. in the Turkic languages).

The Ancient Chinese reciprocal marker combines with the prepositions *yǔ* ‘with’ and (seldom) *wèi* ‘for’ thus forming complexes *xiāng yǔ* ‘with each other’ and *xiāng wèi* ‘for each other’. Note that the second preposition combines with another voice marker, viz.

zì ‘oneself’ (*zì wèi* ‘for oneself’) as well. But the voice markers do not combine with prepositions that are postposed to a verb, whatever the meaning of the object.

The marker *xiāng* with a preposition can be positioned before a verb of any type, either transitive or intransitive; its presence does not affect the verb’s ability to take an object.

The combination *xiāng yǔ* can be separated from the verb by a modifier, though this is not a common occurrence; cf.:

- (54) *Zhū dà chén xiāng yǔ yīn móu.* (“Shi” 9)
 all big official(s) REC with secret(ly) plot
 ‘All the high dignitaries plotted with each other in secret.’

The combination *xiāng yǔ* is most common with verbs taking a valency with the meaning of second agent (co-agent), i.e. with verbs which more or less obligatorily require this prepositional phrase:

- | | |
|--------------------------|---|
| (55) <i>xiāng yǔ yuē</i> | ‘to come to an agreement with each other’ |
| <i>xiāng yǔ zhēng</i> | ‘to struggle with each other’ |
| <i>xiāng yǔ dòu</i> | ‘to fight/quarrel with each other’ |
| <i>xiāng yǔ zhàn</i> | ‘to be at war with each other’ |
| <i>xiāng yǔ biàn</i> | ‘to argue with each other’ |
| <i>xiāng yǔ sòng</i> | ‘to be at law with each other’ |
| <i>xiāng yǔ yù</i> | ‘to meet (with) each other’ |
| <i>xiāng yǔ hé</i> | ‘to unite with each other’ |
| <i>xiāng yǔ jiāo</i> | ‘to be friends with each other’ |
| <i>xiāng yǔ yì</i> | ‘to be different from each other’ |
| <i>xiāng yǔ lín</i> | ‘to be neighbours with each other.’ |

The following phrase probably belongs in this list, too:

- (56) *xiāng yǔ wéi yǒu* ‘to be friends with each other.’

In this sentence, the noun *yǒu* ‘friend(s)’ is a predicate with the copula *wéi* ‘to be’; this noun requires explicit expression of the co-agent.

The literary translation of these reciprocals into European languages does not as a rule contain any explicit expression of reciprocity or it may be omitted; in other words, *xiāng yǔ yuē* is likely to be translated as ‘(they) came to an agreement’ rather than ‘(they) came to an agreement with each other’, etc.

Some of the verbs of this type may have (usually or sometimes) an object in postposition, alongside an object naming the co-agent; e.g.:

- (57) *xiāng yǔ zhēng nián.* (H.F. 32)
 REC with struggle year(s)
 ‘squabbled with each other about age’ (i.e. ‘argued who was older’).
- (58) *xiāng yǔ hé bīng.* (“Lü” 9.4)
 REC with join troop
 ‘joined their armies.’

However, the combination *xiāng yǔ* can also occur with other verbs, both transitive and intransitive, if the same action can be performed by two or more agents together. In such

cases a verb retains its customary object. The phrase in question is usually translated as ‘together’:

- (59) *xiāng yǔ mù yáng* (Zhuang 8) ‘shepherded/tended the sheep together’
xiāng yǔ yīn jiǔ (“Lü” 26.2) ‘drank wine together’
xiāng yǔ gōng Yì (H.F. 35) ‘attacked Yi together’
xiāng yǔ xì ‘play with each other/together’
xiāng yǔ yóu ‘take a walk together’
xiāng yǔ huán ‘returned together’
xiāng yǔ lè zhī ‘All [of them] rejoice in it’
xiāng yǔ xiào zhī ‘All [of them] laugh at it’
xiāng yǔ gē zhī ‘All [of them] sing about it.’

With a number of verbs, both *xiāng* alone and *xiāng yǔ* can be used, but with a significant difference in meaning:

- (60) a. *xiāng shí* ‘eat each other’
 b. *xiāng yǔ shí* ‘eat together.’
- (61) a. *xiāng gōng* ‘attacked each other’
 b. *xiāng yǔ gōng zhī* ‘attacked him together.’
- (62) a. *xiāng yuàn* ‘nursed a grudge against each other’
 b. *xiāng yǔ yuàn zhī* ‘all [of them] together nursed a grudge against him.’

An object with the preposition *wèi* ‘for’ cannot be, it seems, obligatory with any verbs. Theoretically, the phrase *xiāng wèi* ‘for each other’ can be used (in pre-position) with any verb, on condition the meaning of the latter allows it.

- (63) *Dào bù tóng, bù xiāng wèi móu.* (“Lun” 15.40)
 ‘[Those whose] courses are different [cannot] lay plans for one another.’
- (64) ... *bù kěn xiāng jiù, ān zài qí xiāng wèi sǐ!* (“Shi” 89)
 ‘(You and I used to be friends, and now)... [we] do not want to save each other, not to mention die for each other!’ (the real meaning is: ‘You do not want to save me, though you swore you were ready to die for me!’ Cf. (102) in Section 11).
- (65) *Tiān shēng wàn wù, yù líng xiāng wèi yòng* ... (“Lun heng” 14.2)
 ‘[If] the Sky, having given birth to ten thousand creatures, wanted them to be used [as food] by (lit. ‘for’) each other...’

The verb *móu* ‘to plan’, ‘to plot’ can be preceded both by *xiāng yǔ* ‘with each other’ and *xiāng wèi* ‘for each other’, but the meaning of the phrase changes:

- (66) a. *xiāng yǔ móu* ‘to confer with each other’
 b. *xiāng wèi móu* ‘to give advice to each other.’

Neither of these prepositions is obligatory with this verb; it may be used without a prepositional phrase, but in this case it usually takes another verb in post-position to it:

- (67) *móu shā zhī* ‘[he] plans to kill him.’

The phrase *xiāng yǔ* ‘with each other’ is close to the main meaning of the sociative in the languages that possess this category. But in Ancient Chinese it is not a special voice as it is

only one of the possible combinations of voice markers with prepositions. The meaning of *xiāng wèi* can be described as assistive.

8. Agent in reciprocal constructions

Whatever can be said about the agent or subject in sentences with a reciprocal verb form, also applies to the agent or subject of a sentence with *xiāng* followed by a preposition. Therefore, in this section any sentence containing the component *xiāng* (whatever it precedes) is regarded as a reciprocal construction.

The agent, and consequently the patient (referents of the subject) of a reciprocal construction are usually human, sometimes collective bodies (e.g. states), or animals; with a number of verbs (see group E in 4.1.1) they may be things and abstract concepts.

- (68) *Guì chén xiāng dù.* (H.F. 14)
'High dignitaries envy each other.'
- (69) *Qí Jìn xiāng yǔ zhàn.* ("Lǚ" 19.1)
'[The states of] Qí and Jìn were at war with each other.'
- (70) *Fú mǎ ... nù ér ... xiāng dī.* (Zhuang 9)
'Here the horses... being angry... kick each other.'
- (71) *Shì yǔ dào jiāo xiāng sàng yě.* (Zhuang 16)
'The world and dao lost each other.' (see also (48), (65), (88)).

The names of abstract concepts may be nouns (as in (71)), or they may be nominalized words of other classes (see 2.2); e.g.:

- (72) *Gù yǒu wú xiāng shēng, nán yì xiāng chéng ...* ("Dao" 2)
'Therefore being and not-being engender each other, the hard and the easy create each other ...'

In the first clause, the subjects are the verbs *yǒu* 'to have', 'to exist' and *wú* 'to not have', 'to not exist', and in the second the adjectives *nán* 'hard, difficult' and *yì* 'easy'.

8.1 Simple reciprocal constructions

The subject of a simple reciprocal construction may be:

A. A single noun or pronoun. There is no category of number in Ancient Chinese, but such a subject is always translated by the plural number:

- (73) *Fú yīng'ér xiāng yú xì yē ...* (H.F. 32)
'Here children, playing with each other ...'
- (74) *Chén kǒng qí xiāng gōng.* ("Shuo yuan" 9)
'I am afraid they will attack each other.' (Cf. also (30), (32), (37), etc.)

The subject of a simple reciprocal construction can be a collective noun (which seems to be impossible in the European languages), e.g.:

- (75) *Wèi jūn dà luàn xiāng shī.* (“Shi” 65)
 state.of.Weì army great(ly) be.in.disorder REC lose
 ‘The army of [the state of] Wei was in terrible confusion, and [people] lost each other.’
- (76) *Wēilěi zhī mǐn xiāng yǔ yán ...* (Zhuang 23)
 ‘The people of Weilei talked to each other ...’

Here reciprocal relations hold between the members of the entirety referred to by the subject: ‘an army’, ‘a people’.

B. A combination with the auxiliary word *zhě* ‘the one who/those who’ used in the functions typical of nouns.

- (77) *Tóng yù zhě xiāng zēng, tóng yōu zhě xiāng qīn.* (“Guo ce” 33)
 ‘Those who have the same desire (i.e. those who want to get the same thing), hate each other, those who have the same sorrows show friendliness to each other’ (see also (45)).

C. A noun with a numeral, seldom a numeral alone:

- (78) *Sān rén xiāng shì ér xiào.* (Zhuang 6)
 ‘[These] three men looked at each other and laughed.’
- (79) *Fú liǎng bù xiāng shāng ...* (“Dao” 60)
 ‘Here two [sides] (i.e. ghosts and people, or the lord and people) do not harm each other ...’ (see also (38), (48), (49)).

D. Two or more nouns combined paratactically, without a conjunction: see (1b), (39), (44), (46), (72), etc.

It is not always easy (sometimes impossible) to establish the underlying construction for reciprocal constructions of groups A–C.

Two nouns can be adjoined paratactically (group D) if only they are related as converses or are homogeneous semantically, it seems; cf. *fù zǐ* ‘father and son’, *Qí Jīn* ‘[the states of] Qi and Jin’ (see (1b), (69)). Words like *shì* ‘world’ and *dào* ‘dao’ (see (71)) that are not converses and do not belong to the same semantic group must be joined by the auxiliary word *yǔ* (see 8.2). The latter is possible though not obligatory between semantically homogeneous words as well.

If the agents of a reciprocal construction are expressed by two different words each of them most commonly refers to a single person (sometimes, an uncountable notion incompatible with the idea of number), but this is not always the case; cf.:

- (80) a. *Fù zǐ bù xiāng jiàn.* (Meng 2.1)
 ‘Fathers and sons do not see (i.e. are parted from) each other.’ (in the text, people complain of their hard life).

8.2 Discontinuous reciprocal constructions

The names of two reciprocally acting agents can be joined by the auxiliary word *yǔ* ‘with, and’. With this word, two different constructions are possible; cf.:

- (81) a. *Fù yǔ zǐ bù xiāng jiàn.*
 father *yu* son not REC see
 ‘Father and son do not see each other.’
 b. *Fù bù yǔ zǐ xiāng jiàn.*
 father not *yu* son REC see
 ‘Father and son do not see each other’; ‘Father does not meet with his son.’

These two sentences are very similar in meaning. The formal difference between them is the position of the noun with *yǔ* relative to the negation *bù*.

In the construction illustrated by (81a), all the adverbials including negation follow the second noun preceded by the auxiliary *yǔ*; cf. also:

- (82) *Wǒ yǔ ruò bù néng xiāng zhī yě.* (Zhuang 2)
 ‘I and you cannot know this about each other.’

The word *yǔ* in such examples is regarded as a coordinating conjunction ‘and’, and the coordinated words as subjects.

In the construction under (81b), the noun with *yǔ* is placed between the predicate and the preceding words that are grammatically dependent on the predicate; cf. also:

- (83) *Pèi gōng ... wèi dé yǔ Xiàng Yú xiāng jiàn.* (“Shi” 7)
 ‘The lord of Pei ... could not yet meet with Xiang Yu.’
 (84) ... *ér rén bù yǔ guì xiāng shāng.* (H.F. 20)
 ‘... and then people and the souls of the dead do not harm each other.’

In this construction the word *yǔ* is viewed as a preposition ‘with’ and the noun it precedes is a comitative object denoting the co-agent; its semantic role is analogous to that of the subject, but formally it is marked as a subordinated participant.

If the predicate is not preceded by any adverbials both constructions are formally identical:

- (85) *Jì Xīn yǔ Yuán Qiān xiāng yuàn.* (H.F. 31)
 ‘Ji Xin and Yuan Qian nursed a grudge against each other.’ (cf. also (88)).

It is possible that the two meanings of *yǔ* (‘and’ and ‘with’) are imposed by translation, while for Ancient Chinese the difference between “second subject” and “comitative object” is immaterial.

A reciprocal construction can adjoin another verbal phrase in such a way that only one of the two agents of the verb preceded by *xiāng* or *xiāng yǔ* is the agent of the other verb as well; this shared agent is the syntactic subject of the sentence, the second agent of the reciprocal construction acquiring the status of a comitative object or being recoverable from another fragment of the sentence, or the interpretation of the second reciprocal agent (as second subject or comitative object) remains unclear; cf.:

- (86) *Jī Zhèng ... mí ér shī dào, yǔ gōng xiāng shī.* (H.F. 32)
 J. Z. confused *er* lose way with prince REC lose
 ‘Ji Zheng ..., confused, lost his way, and [he] and the prince lost each other.’

- (87) *Wèi wáng jiàn gōngzǐ, xiāng yǔ qì.* (“Shi” 77)
 ‘The king of Wei met the prince and [they] both (lit. ‘together’) wept.’
- (88) *Jīn yǔ huǒ xiāng shǒu zé liú.* (Zhuang 26)
 ‘[If] metal and fire are next to each other, [the metal] will flow (i.e. ‘will melt’); [If] metal is next to fire, [it] will flow.’

9. The imperative use of reciprocals

A reciprocal form can be used in the imperative sense; but the only cases I have encountered are sentences with the prohibiting negation *wú* ‘don’t’. The agent/patient role is ascribed to the speaker and the addressee, sometimes someone else. The sentences have the nature of promises, wishes, or oaths; cf.:

- (89) *Gǒu fū guì, wú xiāng wàng.* (“Shi” 48)
 ‘If [one of us becomes] rich and distinguished, don’t let us forget each other.’
- (90) *Bù jí huáng quán, wú xiāng jiàn yě.* (“Zuo” Yin 1)
 ‘Until we reach the yellow spring (i.e. ‘until we die’) let us never see each other [again].’
- (91) *Shì shì zǐ sūn, wú xiāng hài yě.* (“Zuo” Xi 26)
 ‘Let [your] sons and grandsons from generation to generation never harm each other.’

10. Notional words expressing reciprocity and similar meanings

Such a meaning is rendered by the word *jiāo* ‘between themselves’, ‘with each other’, ‘mutually’, which occurs much less frequently than *xiāng* ‘each other’. As a rule, it has the properties of an adverb and can be dropped without affecting the grammaticality of a sentence; e.g.:

- (92) *Shàng xià jiāo zhēng lì ér guó wēi yǐ.* (Meng 1.1)
 above below mutually strive profit er state be.endangered yi
 ‘Superiors and inferiors will fight between themselves [each] for [his own] profit, and the state will be endangered.’
- (93) *Qí Jīn yòu jiāo fù zhī.* (“Zuo” Zhao 20)
 Q. J. moreover mutually support he/they.ACC
 ‘Moreover, [the states of] Qi and Jin support them together.’

In both examples the verb preceded by *jiāo* has an object, i.e. this word does not affect the valency of the verb. Its meaning seems to be closer to the sociative (‘together’, ‘all [of them]’) rather than to the reciprocal.

There are however examples of *jiāo* taking the place of the reciprocal marker, i.e. filling an object valency; e.g.:

- (94) *Zhōu Zhèng jiāo wù.* (“Zuo” Yin 3)
 Z. Z. mutually loathe
 ‘[Since then the states of] Zhou and Zheng came to loathe each other.’

The verb *wù* ‘to loathe’, ‘to hate’ cannot be used without an object, therefore *jiāo* can be regarded as filling an object valency.

The adverb *jiāo* ‘mutually’ can precede a verb that has a reciprocal marker; cf. (3). Unlike the voice markers, this adverb does not combine with prepositions.

It should be noted that in rare cases the marker *xiāng* may, like *jiāo*, not fill a verbal valency. Compare, for instance, the combination *xiāng kuā* (H.F. 33) ‘to boast to each other’: an object of the verb *kuā* refers to the entity one boasts about, and the meaning of the reciprocal form (‘to each other’) is in no way related to it. Though the general meaning of the reciprocal form is quite clear, the second role of the subject referents is hard to define. In any case, it is not the role of patients.

11. Symmetric predicates

Here belong verbs and adjectives with the idea of reciprocity inherent in their lexical meaning. Two types can be distinguished.

A. A number of stative verbs (see group E in 4.1.1) and words similar to them, like *ruò* ‘(to be) alike’, *qù* ‘(to be) at a specified distance from ...’, *yuǎn* ‘far’. Reciprocals derived from these words do not formally differ from other combinations with *xiāng*. They are distinguished on the basis of the logical analysis of the concepts they express, and this may not be reflected in their actual use. Thus, it does not follow from the phrase under (95) that a bell is like a noble man or that a noble man and a bell are like each other.

(95) *Jūnzǐ ruò zhōng* (Mo 39) ‘A noble man is like a bell.’

B. Verbs with an obligatory comitative object valency expressed by a noun phrase with the preposition *yǔ* ‘with’ (see Section 9). This syntactic property is a distinctive feature of this group.

12. The later shift in the meaning of reciprocals

In the 3rd century CE a new period begins in the history of Chinese; its grammatical norms undergo significant changes.

During this period the reciprocal form acquires one more meaning alongside the earlier one; in dialogue it comes to denote an action of one communicant directed at the other: ‘I (verb) you’ or, somewhat less commonly, ‘you (verb) me’. In these cases *xiāng* also corresponds to an object (which is always omitted, while the subject is mostly present). The choice between two possible readings of the form (‘(verb) you’ or ‘(verb) me’) is determined by the subject though sometimes it has to be recovered from the context; cf.:

(96) *Zhèn xiāng shì ěr.* (“Sou” 2)
 we (the emperor) REC test only
 ‘We, the Emperor, just tested you.’

- (97) *Gōng yǒu xiāng shā yì.* (“Sou” 16)
 lord have REC kill intention
 ‘Sir, you intend to kill me.’
- (98) *Hòu sān rì, rì zhōng dāng xiāng qǔ yě.* (“Sou” 5)
 afterwards three day(s) day middle FUT REC take ye
 ‘In three days, at noon, [I] will take you away.’

Sometimes, in two subsequent replies of the same interlocutor the marker *xiāng* refers to the 1st and 2nd persons interchangeably, and its referent can be inferred only from the knowledge of the previous events and from the natural logic of the story; e.g.:

- (99) ... *chū wěi xiāng dù, ... dāng yǒu yǐ xiāng xiè*
 [make.]go.out reed REC [let.]cross.over ought have with REC thank
zhě. (“Sou” 5)
 something.that
 ‘... [you] unloaded the reeds and took me across [the river], ... [I] must somehow return your kindness’ (lit. ‘... [I] must have something to thank you with’).

As well as with regular reciprocals, *xiāng* with three-place verbs corresponds to an indirect object (in both of the following examples *xiāng* means ‘[I] ... to you’):

- (100) *Ruò shēng nán, dāng yì xiāng huán.* (“Sou” 16)
 ‘If [she] gives birth to a son, [I] will give him back to you.’
- (101) *Gǎn jūn jiàn zài, gù yǐ xiāng yù.* (“Sou” 4)
 ‘[I am] grateful to you, sir, [that you] gave me a lift, therefore [I] told you this.’

The use of reciprocal forms to refer to the participants of a speech act is characteristic of polite, but not servile speech. In the course of a conversation, the same speakers may use polite forms with *xiāng* and regular personal pronouns as objects interchangeably.

The morpheme *xiāng* in this usage does not acquire the status of a pronoun: it does not indicate grammatical person (always the first or always the second) and occupies a syntactic position with respect to the verb uncharacteristic of a pronoun in Chinese. A sentence does generally retain the formal features of a reciprocal construction (an object is always absent).

The passive marker *jiàn* also acquires a similar function in the same period, but it always denotes an action of a 2nd person agent with a 1st person patient (‘you ... me’ or ‘I ... by you’); cf. (101).

Single instances of the use of *xiāng* in the meaning of the 2nd person occur in literature long before the 3rd century CE. Let us consider an example from “Zhan guo ce” (end of the 3rd c. BCE), when the king sees his wife crying and asks her (literally): “Is there something worrying [judging] by this?”, which is followed by another question:

- (102) *Hé bù xiāng gào yě?* (“Guo ce” 25)
 lit. ‘Why not tell each other [about it]?’

The situation and the queen’s reply show that the king is asking “Why don’t you tell me about it?” But not a single personal pronoun is used either in the first or in the subsequent question. It is not quite clear in what way this example should be interpreted: whether the

question is formulated in a vague form out of politeness and tact, or whether it is an early case of the use of the reciprocal marker in the meaning ‘you (verb) me’.

Compare also (64): in this example, like in (102), the speaker uses this polite manner in order to express a reproach to a person close to him.

In báihuà *xiāng* is not used independently (though it is possible in bound collocations). In wényán it is retained as a regular reciprocal marker. Besides, in the genre of short stories (written in simplified wényán) it may have the “pronominal” use described above; moreover, its functions are expanded: it can be used not only in dialogue but also in narration, and it can replace any personal pronoun, including that of the 3rd person.

Sources

5th–3rd cc. BCE

“Dao” – Lǎo Dān, “Dào dé jīng”.

“Guo ce” – “Zhàn guó cè”.

“Guo yu” – “Guó yú”.

H.F. – Hán Fēi, “Hán Fēi zǐ”.

“Lǐ” – “Lǐ jì”.

“Lun” – “Lún yú”.

“Lǔ” – “Lǔ shì chūnqiū”.

Meng – Mèng Kē, “Mèng zǐ”.

Mo – Mò Dí, “Mò zǐ”.

Zhuang – Zhuāng Zhōu, “Zhuāng zǐ”.

“Zuo” – “Zuǒ zhuàn”.

2nd c. BCE – 2nd c. CE

“Lun heng” – Wáng Chōng, “Lùn héng”.

“Shǐ” – Sīmǎ Qiān, “Shǐ jì”.

“Shuo yuan” – Liú Xiàng, “Shuō yuàn”.

4th c. CE

“Sou” – Gān Bǎo, “Sōu shén jì”.

Authorized translation from Russian by E. Geniušienė

Reciprocal constructions in Modern Chinese (with data from wényán)

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1. Introduction

1.1 The Chinese language and dialects

Chinese is one of the two branches of the Sino-Tibetan family of languages. The second branch is Tibeto-Burman numbering a few hundred languages, of which the largest are Burmese and Tibetan. The latter branch also includes Tangut (extinct), Limbu, Lahu, Kiranti, and other languages, Naga among them which in their turn are comprised of two groups of languages. Sometimes, the Karen language is distinguished as a third branch of the Sino-Tibetan family. Chinese is the language spoken by the most numerous people in the world, numbering 1,300,000,000. According to the specialist literature, it is represented by at least seven major groups of dialects. About 70% speak the Northern dialects *Guānhuà* (Mandarin). The official language *Pūtōnghuà* is based on these northern dialects (this language based on the written language *báihuà* ousted, in the first half of the 20th century, the literary Ancient Chinese *wényán* which was established in the 3rd–4th centuries BC; the new written language *báihuà* was formed by the 10th–13th centuries AD). The *Wú* group of dialects (one of them used in Shànghǎi) is spoken by about 80 million people, the *Yuè* (Guǎngdōng) dialects by about 47 million, the *Mǐn* dialects by over 40 million. Other groups of dialects are: *Hakka* (mostly in the Guǎngxī province; about 35 million), *Gàn* (the Jiāngxī province; about 23 million) and *Xiāng* (the Hùnnán province; about 46 million). The dialects are mutually unintelligible. The common factor is the official language and ideograms (see Bǎikē 1988: 140).

There are over 55 national minorities in China who had once occupied 60% of the present-day territory of China (the languages of these minorities belong to the Tibeto-

and (55)): if the underlying construction contains a *preposition* introducing an object it is omitted in the reciprocal construction (cf. (2a) and (2b); a number of certain other constituents are also omitted, if they are present in the underlying construction). In this respect *hùxiāng* is similar to Indo-European reflexive clitics which do not as a rule combine with prepositions either when used reciprocally and must be replaced by a reciprocal adverb if a preposition is necessary (cf. Penchev, Ch. 13, examples (1)–(2)). We need not mention reciprocal affixes which cannot combine with prepositions by definition. In Ancient Chinese the reciprocal marker did occur with those prepositions whose meaning was compatible with an object semantically, cf. *xiāng yǔ yuē* ‘to come to an agreement with each other’ (see Yakhontov, Ch. 48, Section 7).

The reciprocal adverb has a synonym *bǐcǐ* which is sometimes preferable. Thus, though *hùxiāng* is grammatical in (2b), a better choice in this particular case would be its synonym (cf. 5.2).

- (2) a. *Lǎo Zhāng duì Xiǎo Lǐ hěn kèqǐ.*
L. Z. to X. L. very polite
‘Lao Zhang is polite to Xiao Li.’
b. *Lǎo Zhāng hé Xiǎo Lǐ hùxiāng / bǐcǐ hěn kèqǐ.*
L. Z. and X. L. mutually mutually very polite
‘Lao Zhang and Xiao Li are polite to each other.’

The adverb *hùxiāng* can also be used if the subject is singular, on condition that the second participant is named by a comitative object (though some of the informants do not approve of this type of construction). In (2c) both reciprocal arguments are divided by the adverb *yòu* ‘again’ which indicates that the subject is the first noun phrase alone. Thus constructions with a comitative object behave as *simple* reciprocal constructions in Chinese, though obviously they are *discontinuous*: *hé* in (2c), unlike *hé* in (1b) and (1c), is usually interpreted as a preposition rather than as a conjunction:

- c. *Lǎo Zhāng yòu hé Xiǎo Lǐ hùxiāng / bǐcǐ hěn kèqǐ-le.*
L. Z. again with X. L. mutually mutually very polite-PERF
lit. ‘Lao Zhang is again mutually very polite with Xiao Li.’

The non-comitative marking of the alleged second reciprocal argument does not allow the use of *hùxiāng*; cf. (2a), (2b) and (2d):

- d. **Lǎo Zhāng duì Xiǎo Lǐ hùxiāng hěn kèqǐ.*
L. Z. to X. L. mutually very polite
lit. ‘Lao Zhang is mutually polite with Xiao Li.’

The adverb *hùxiāng* is used in all the diathesis types of *subject-oriented* reciprocal constructions (“canonical”, as in (1) and (2), and also “indirect” and “possessive”), and also in *object-oriented* ones (derived from three-place transitives, mostly with the meaning of joining or bringing two objects into contact). Reduplication of the verb in (3b) denotes weak actions of short duration. The cause may be rhythmic: the disyllabic *hùxiāng* tends to “prefer” disyllabic verbs (see 1.2.4 below). As in (2d), the non-comitative (in this case instrumental) marking of the second argument blocks the use of *hùxiāng* (see (3c)).

- (3) a'. *Nǐ yòng zuǒ shǒu bǎ yòu shǒu róu yī róu.*
 you.SG with left hand *ba* right hand massage one massage
 'Massage your right hand with your left hand.'
- a''. *Nǐ yòng yòu shǒu bǎ zuǒ shǒu róu yī róu.*
 you.SG with right hand *ba* left hand massage one massage
 'Massage your right hand with your left hand.'
- b. *Nǐ bǎ liǎng zhī shǒu [hùxiāng] róu-rou.*
 you.SG *ba* two CLF hand mutually massage-massage
 'Massage both your hands [with one another].'
- c. **Nǐ yòng zuǒ shǒu bǎ yòu shǒu hùxiāng róu yī róu.*
 you.SG with left hand *ba* right hand mutually massage one massage
 lit. 'Massage your right hand *with* your left hand mutually.'

It also serves, though rather seldom, to form constructions (henceforth termed *irreversible*) which have no underlying (standard) non-reciprocal constructions of type (1a') and (1a'') for (1b) (see 4.4); e.g. in (4) *hùxiāng* implies the meaning 'compare' (for details see 3.5.5.2). If *hùxiāng* is dropped in (4), the meaning is 'to weigh two fishes together' instead of 'one after another for comparison' (cf. also (65b)). This instance is close to object-oriented reciprocal constructions.

- (4) *Bǎ zhèi liǎng tiáo yú [hùxiāng] diān-dian.*
ba this two CLF fish mutually weigh
 'Weigh these two fishes [against one another].' (= 'to compare which one is heavier')

1.2.2 Lexical reciprocals

Roughly speaking, one may relate *lexical* reciprocals to *syntactic* and *morphological* reciprocals in the same way as *lexical* causatives are related to *analytical* (*periphrastic*) and *morphological* causatives semantically. Most of what is regarded as lexical reciprocals in this chapter, are included in the class of *symmetrical predicates*, or *inherent reciprocals*, in the literature. Despite the obvious difference between lexical and syntactic or morphological reciprocals their semantic similarity cannot be ignored.

1.2.2.1 General characteristics. In Chinese, there are numerous *lexical* (inherent) *reciprocals*. As well as reciprocals with *hùxiāng*, they require at least two identical participants. They may be monosyllabic and disyllabic (cf. (6a) and (6b–d) respectively). Due to the general tendency of replacing monosyllabic words by disyllabic (see 2.1), there are also numerous *compounds* among lexical reciprocals. Of typological interest are *compound lexical reciprocals*, both verbs and nouns, with the *recurrent initial components* (the *final* recurrent components seem to be less common in lexical reciprocals). This is a specific feature of the Chinese lexical reciprocals which makes them drastically different from the lexical reciprocals of all the languages considered in this monograph. Hence the particular attention and disproportionately large space devoted to them in this paper.

A distinctive feature of very many (majority?) of lexical reciprocals in Chinese is non-combinability with the reciprocal adverb *hùxiāng*; cf.:

- (5) a. *Tā-men tán-zhe huà ne.* b. **Tāmen hùxiāng tán-zhe huà ne.*
 s/he-PL talk-DUR words PRTL lit. 'They are talking mutually/with
 'They are talking.' each other.'

Note that the units which appear as the initial components (*hé₁* is one of them) in some compounds, may appear in final position in other compounds, including reciprocals; cf. (11) and (12). On the other hand, the final component may occur with different initial components in (quasi-)synonymous compounds. The verb *huàn* can also mean 'to change' in the sense 'replace (one thing by another)', in which meaning it may be used with a singular subject, while the other three verbs always require a semantically plural subject.

- (6) a. *huàn* 'to change, exchange sth'
 b. *hù-huàn* 'to exchange sth'; cf. *hù* in (9b) and (13a)
 c. *dù-huàn* (same as (b); *dù* 'to face, be opposite (to)')
 d. *jiāo-huàn* (same); cf. *jiāo* in (8a) and (10).

Compare:

- e. *Tāmen (*Tā) huàn-le / hù-huàn-le / dù-huàn-le / jiāo-huàn-le zhàopiān.*
 'They (*He) exchanged [their] photos.' (-le = PERF)

Some compounds differ in the arrangement of the components only (one of the variants may be more archaic); thus the meaning 'to unite' can be rendered by at least the following two compounds:

- (7) a. *jié-lián* 'to unite sth/sb', *jié* 'to tie, be/get tied'; cf. (12b); *lián*, cf. (12a)
 b. *lián-jié* arch. (same).

The semantic domains of collocations with *hùxiāng* and of lexical reciprocals differ to a significant degree. Among verbs collocating with *hùxiāng* those are prevalent that mostly take a human object and, consequently, a human (rarely animate) plural subject. Other verbs are rare enough among them. As regards lexical reciprocals, firstly, verbs with lexical meanings of active actions like 'to kill sb', 'to exterminate sb', 'to bomb sth/sb', etc. are not characteristic of them, and secondly, verbs with an inanimate subject are rather common among them.

1.2.2.2 Four groups of lexical reciprocals. We shall consider four groups of lexical reciprocals, though not in equal depth.

1. Group A comprises lexical reciprocals that are not compounds (cf. (8)) or they are compounds without a recurrent component (i.e. the initial component occurs in relatively few compounds, according to the dictionary data; see Section 5); cf. *lián* in (7b).

- (8) a. *Liǎng tiáo zhí xiàn jiāo yú yī diǎn.*
 two CLF straight line cross in one point
 'Two straight lines *intersect* at one point.' (example from *wényán*: no classifier, and preposition *yú* is used)

- b. *Tā shuōhuà bù qiè shíjì.*
 he words not correspond reality
 ‘His words do not *correspond* to facts.’

2. *Group B* is comprised of compounds with *hù-* (about 30 words) and *xiāng-* (about 100 words) of *adverbial* origin (neither is used as a free morpheme in Modern Chinese) as the recurrent components in the *initial* position, i.e. with the components of the reciprocal adverb *hùxiāng*. Therefore these compounds are considered here separately from those with other initial, mostly *verbal* components; see (6c, d) and (9), (10). The adverb *xiāng* ‘mutually, each other’ was the principal means of encoding reciprocity in Ancient Chinese (see Yakhontov, Ch. 48) and is retained in *wényán*, while in *báihuà* both *xiāng-* and *hù-* are preserved only in certain compounds registered in dictionaries; judging by the latter, the number of these compounds does not exceed 150 (see Section 6), compounds with *xiāng-* being several times more numerous than those with *hù-*. These components differ from those of *Group C* in that they are closer in meaning to *hùxiāng*. On the other hand, *xiāng* differs from *hùxiāng* in that in numerous compounds it does not change the meaning in any significant way; cf. *hǎo* ‘good’, ‘to be friends’ → *xiāng-hǎo* ‘to be friends.’ In the following example *xiāng* retains its reciprocal meaning: *ài* ‘to love’ → *xiāng-ài* ‘to love each other passionately’.

Only a few compounds with *hù-* (e.g. *hù-huàn* in (6b), *hù-zhù* in (13a)) are accepted by the informants. Curiously enough, in these compounds *hù-* cannot be replaced by *hùxiāng*, though for rhythmic rather than semantic reasons (see 1.2.4 below).

3. *Group C* comprises verbal and nominal compounds (about 220 and 115 units respectively) with the *initial* recurrent *verbal* (including adjectival) components that are lexical reciprocals. For description in this chapter, we have chosen those verbs that are, judging by the dictionaries, common enough as the initial constituents (therefore we have left out, for instance, the verb *qiè* illustrated in (8b)). All in all, we have chosen nine initial components (in the compounds their meanings may vary to a certain degree, and sometimes the meaning of a compound is not derivable from that of the constituents): *bǐ* ‘to compare, compete’, *duì* ‘to face, be opposite (to)’, *hé₁* ‘to connect, be connected, correspond’, *hé₂* ‘to be in concord, peaceful; to correspond, mix’ (*hé₁* and *hé₂* differ in origin and have different ideograms), *jiāo* ‘to intersect, cross, join, be friends’, *jiē* ‘to tie/be tied, join, come into contact’, *jié* ‘to tie up the ends, be tied; bind, meet; knit, weave’, *qīn* ‘relative, kin, close’ (adjective), *tóng* ‘same, alike’ (adjective). Some of them occur in 15 to 30 compounds, and *tóng* ‘same’ in about 80 compounds. The last two initial components differ sharply from the other ones in that they mostly form compound nouns with the meaning of class membership, e.g. *shì* ‘room’ → *tóng-shì* ‘roommate’ (‘you are *my* roommate’ = ‘I am *your* roommate’).

When these verbs (including adjectives) are used in reciprocal compounds, two main cases can be distinguished: (1) they *encode a reciprocal meaning* with non-reciprocal final components (see (9)); (2) they *do not significantly change the meaning* (and syntactic properties), in this case the final component is a lexical reciprocal, very often synonymous or nearly synonymous with the initial component (see (10)). Compare two analogous groups

with *xiāng* illustrated by *xiāng-hǎo* ‘to be friends’ and *xiāng-ài* ‘to love each other’ in case 2 above. Further on, we shall concentrate on these two cases.

- (9) a. *bài* ‘to bow to sb’ → *jiāo-bài* arch. ‘to bow to each other’
 b. *liú* ‘to flow’ → *jiāo-liú* ‘to flow together’
 c. *bǎo* ‘to vouch for sb’ → °*hé₁-bǎo* ‘to vouch for each other’
 d. *liú* ‘to flow’ → *hé₁-liú* ‘to flow together.’
- (10) a. *tán* ‘to converse’ → *jiāo-tán* ‘to converse’
 b. *chā* ‘to intersect, cross’ → *jiāo-chā* ‘to intersect, cross’
 c. °*dàng* ‘to correspond’ → °*hé₁-dàng* ‘to correspond.’

4. Group D consists of compounds with a *final* recurrent component; this type is less typical of reciprocal compounds and in this case, in a greater number of the compounds than in the first one, both components are lexical reciprocals. In our data, compounds with the meaning of joining are prevalent. The final constituent usually has a broader meaning than the initial one of the same compound and denotes a state resulting from the action named by the initial component (cf. (11a, b)) or it repeats parts of the meaning of the first component and in a way intensifies it (cf. (11a, b)).

- (11) a. *hàn* ‘to weld’ → *hàn-jiē* ‘to join by welding’
 b. *duàn* ‘to hammer (metal)’ → *duàn-jiē* ‘to join by hammering’
 c. *jiē* ‘to join’ → *jiē-hé₁* ‘to knit together’ (of bones)
 d. *hùn* ‘to mix, get mixed’ → *hùn-hé₁* ‘to mix, get mixed.’

The meaning of a compound in (a) approximates the meaning of resultative compounds (see (15)); here instead of the final component in some contexts the adverb *zài yīqǐ* ‘together’ can be used, and with some compounds this adverb may also be used pleonastically; cf. *féng* ‘to sew sth’ → *féng-hé₁* / *féng zài yīqǐ* / *féng-hé₁ zài yīqǐ* ‘to sew sth up together’.

1.2.3 Reciprocals with reduplicated or double auxiliary components

In these cases, the marker of reciprocity is combined with a repeated verb or two synonymous (usually monosyllabic) verbs. This marker can be: (a) repetition of the syllable *hù* on each verb, as in (12a); (b) the antonymous verbs of motion in opposite directions *lái* ‘come’ and *qù* ‘go’, as in (12b); (c) the personal pronouns *nǐ* ‘you.SG’ and *wǒ* ‘I’ (*nǐ V wǒ V*), as in (12c’) where both verbs mean ‘to catch up’, sometimes repeated in reversed order (*nǐ V wǒ, wǒ V nǐ*), as in (12c’):

- (12) a. *Tāmen jīngcháng hù-bāng-hù-zhù.* ‘They often help each other.’
 b. *Tāmen jīngcháng dā-lái-dā-qù.* ‘They often hit each other.’
 c’. *Tāmen nǐ zhuī wǒ gǎn.* ‘They overtake each other (in friendly emulation).’
 c’. *Tāmen nǐ kàn wǒ, wǒ kàn nǐ.* ‘They looked at each other.’

Types (12b) and (12c) are polysemous: the main meaning of (12b) is iterativity, durativity, motion to and fro, and (12c) may have the meanings ‘each’, ‘by turns’, etc. Type (12a) is of low productivity.

1.2.4 “Rhythmic agreement”

This metaphoric term refers to the tendency to use monosyllabic morphemes after monosyllabic words and disyllabic morphemes after disyllabic words.

A monosyllabic morpheme (word) requires a monosyllabic morpheme (word) after it, and a disyllabic word requires a disyllabic word after it.

Thus, the disyllabic adverb *hùxiāng* does not sound well with a monosyllabic verb (13c), but if the latter is replaced by a disyllabic synonym its combination with *hùxiāng* is possible (13e). The monosyllabic *hù-* does not sound well with the disyllabic *bāng-zhù* (13d) (both *zhù* and *bāng*, mostly used as bound morphemes, mean ‘to help’). However, a monosyllabic verb with *hù-* does not always result in a grammatical compound: thus *hù-zhù* (13a) is accepted by native speakers, while *hù-bāng* (13b) is rejected by most informants.

- (13) a. *Tāmen jīngcháng hù-zhù.* ‘They often help each other.’
 b. [?]*Tāmen jīngcháng hù-bāng.* (same)
 c. **Tāmen jīngcháng hùxiāng zhù.* (same intended meaning)
 d. **Tāmen jīngcháng hù-bāng-zhù.* (same intended meaning)
 e. *Tāmen jīngcháng hùxiāng bāng-zhù.* ‘They often help each other.’

A peculiarity of the component *hù-* is that it may, though rarely, be attached to verbs with the negation *bù* (but not with the negation *méi*), if *bù* is attached to a disyllabic verb. Note that without negation the same verbs with *hù-* are ungrammatical; cf. **hù-bāng-zhù* in (13d) and *hù-bù-bāng-zhù* in (13g).

- f. *Tāmen bù bāng-zhù tā.*
 they NEG help he
 ‘They do not help him,’
 but: g. *Tāmen hù-bù-bāng-zhù.*
 they REC-NEG-help
 ‘They do not help each other.’

The tendency provisionally termed “rhythmic agreement” finds expression in the following: if a monosyllabic predicate follows *hùxiāng*, i.e. a disyllabic word, there are several ways of adding another syllable to the predicate. It may be:

- (a) an object, e.g. *hùxiāng ràng wèizi* ‘to let each other take the place’;
 (b) an aspectual particle, e.g. *hùxiāng jiàn-guo* ‘to have seen each other’;
 (c) a count word, e.g. *hùxiāng jiàn yīxià* ‘to see each other briefly’;
 (d) a resultative marker, e.g. *hùxiāng ài-shang* ‘to fall in love with each other’;
 (e) reduplication of the predicate, e.g. *hùxiāng jiàn-jàn* ‘to see each other sometimes’.

1.3 Database. Symbols /²/ and /^o/

The illustrative material for this chapter has been obtained from dictionaries, specialist literature and from the informants.

In the sections on lexical reciprocals the lists of verbs are compiled almost entirely on the basis of the *Great Chinese-Russian Dictionary* (Oshanin 1983–4) which contains

250,000 entries from both *pǔtōnghuà* and *wényán*, and from diverse literary sources of diverse styles, and also on the basis of the *Chinese-Russian Dictionary* (Xia Zhong'yi (ed.), *Hàn E cídiǎn*. 1983; over 50,000 entries). The English translations of Chinese verbs and compounds are mostly based on these dictionaries. Sometimes, the data from *wényán* are also used for illustration. Besides, the *Modern Chinese Dictionary* (*Xiàndài Hànyǔ cídiǎn* 1996; more than 56,000 entries) and *The Great Russian-Chinese Dictionary* (*Hēi lóng jiāng dà xué é yǔ xì*, 1985; 157,000 entries) have been used (for the information on the dictionaries see Sources below). A number of compounds have been added from Tao Hongyin (1987: 344–82).

For evaluations and tests native speakers have been consulted; over ten informants have been questioned. Unfortunately, the entire material could not be checked with all the informants; only a part of the data has been checked by several of our informants; not infrequently, their judgments varied, from complete agreement to complete disagreement. The informants have also been asked to evaluate the data from the viewpoint of their usage in Modern Chinese. It was sometimes impossible to draw clearcut boundaries between various groups of verbs due to the informants' contradictory evaluations. Some decisions may be arbitrary. It remains to add that one of the authors of this chapter, Monique Hoa, also acted as an informant.

Each item of the dictionary data has been evaluated at least by one informant from the viewpoint of its usage in Modern Chinese. The informants' evaluations are designated as follows: the symbol /°/ marks reciprocals that are registered in the dictionaries but rejected by informants; /[?]/ in verb-lists shows that the form is evaluated as doubtful. These symbols are also sometimes used on the base verbs.

The symbol /*/ is used to mark ungrammatical compounds and sentences constructed by the authors of this paper. In doubtful cases /[?]/ is used.

The examples kindly supplied by Katia Chirkova and obtained by her from the Beijing colloquial speech (collected in the spring of 2000) are marked with five- to seven-digit numbers indicating their number in her corpus (now published in Chirkova 2003).

2. Grammatical notes

2.1 The word

Chinese is an isolating language with elements of agglutination. There are no inflections in Chinese and very little morphology (except compounding). Syntactic relations are signalled by word order and auxiliary words. Chinese is a tone language. Dialects differ with regard to the number of tones. Cantonese has the greatest number of tones, viz. nine. To a certain degree, tone serves to distinguish between words; e.g. in Běijīng Mandarin which has four tones: the syllable /ba/ means 'eight', 'scar', etc. if pronounced as *bā*, 'to pull out', 'epilogue', etc. if it is *bá*, 'to hold', 'target', etc. if it is *bǎ*, and 'to give up', 'monster', etc. if pronounced as *bà*. Note that in Chinese there are only a little more than 200 syllables

regardless of tones, and not more than 900 syllables if we count tones. To render them, 50 to 60 thousand ideograms are used.

The source language of the Modern Chinese dialects was monosyllabic, but by the 14th century Chinese phonological system had undergone a drastic simplification, e.g. the loss of the voiced vs. voiceless opposition, some tones, etc., which resulted in the development of massive homonymy among monosyllabic words, and this brought to life the tendency towards polysyllabicity. Polysyllabic words are mostly combinations of full words, and there are about ten derivational morphemes used to derive names of things, processes, persons (cf. *yuán* ‘basis, beginning’ → *yuán-zī* ‘atom’) and for adjectival derivation from verbs (cf. *chī* ‘to eat’ → *kě-chī* ‘edible’, *kāo* ‘to depend’ → *kě-kāo* ‘dependable’). But the number of derivatives with these morphemes is relatively small. Most words contain no indication of their belonging to any certain part of speech. In (ideogram) writing, words are not separated from one another.

2.2 Compounds

To quote Li & Thompson (1987: 816–8), “Roughly two-thirds of the basic everyday Beijing Mandarin vocabulary consist of polysyllabic (mostly disyllabic) words”, the remainder being monosyllabic. It is not always easy to understand (i.e. assign a meaning to) a monosyllabic Chinese word on hearing. Many words have two parallel forms, mono- and disyllabic (cf. (14)). Along with stable compounds, new coinages according to certain patterns are frequent in speech. Here are examples of types of compound words:

1. *Parallel verb compounds* consisting either of synonymous, or nearly synonymous or semantically similar words:

- | | | |
|-----------------------------|---|--|
| (14) <i>bāng</i> ‘to help’ | → | <i>bāng-zhù</i> (same) (<i>zhù</i> ‘to help’) |
| <i>huāng</i> ‘to worry’ | → | <i>fā-huāng</i> (same) (<i>fā</i> ‘to show’) |
| <i>dài</i> ‘to take, carry’ | → | <i>xié-dài</i> (same) (<i>xié</i> ‘to take, carry’) |
| <i>xīng</i> ‘to do, make’ | → | <i>shí-xīng</i> (same) (<i>xīng</i> ‘to do’). |

2. *Resultative verb compounds*; the second part signifies some result of an action or process conveyed by the first part:

- | | | |
|--|---|---|
| (15) <i>dǎ-pò</i> ‘to break by hitting’ | ← | <i>dǎ</i> ‘to hit’ + <i>pò</i> ‘to break’ |
| <i>tuī-kāi</i> ‘to push (the door, etc.) open’ | ← | <i>tuī</i> ‘to push’ + <i>kāi</i> ‘open.’ |

3. *Nominal compounds* consisting of two nouns:

- | | | |
|-----------------------------|---|--|
| (16) <i>dào-zéi</i> ‘thief’ | ← | <i>dào</i> ‘thief’ + <i>zéi</i> ‘thief’ |
| <i>fāng-dǐng</i> ‘roof’ | ← | <i>fāng</i> ‘house’ + <i>dǐng</i> ‘top’ |
| <i>fù-mǔ</i> ‘parents’ | ← | <i>fù</i> ‘father’ + <i>mǔ</i> ‘mother’. |

4. *Verb-noun compounds*:

- | | | |
|---|---|---|
| (17) <i>dìng-hūn</i> ‘to get betrothed’ | ← | <i>dìng</i> ‘to order’ + <i>hūn</i> ‘marriage’ |
| <i>xíng-lǐ</i> ‘salute’ | ← | <i>xíng</i> ‘to perform’ + <i>lǐ</i> ‘salutation’ |

As verbs and nouns are not differentiated formally and most monosyllabic words may function (or functioned) as both, it is often difficult to determine whether the final component of a compound is relatable to a verb or to a noun (as often as not, an additional difficulty is the choice of the underlying meaning if the base word is polysemous, and if the meaning of the compound has deviated from that of the base, i.e. not like in (18)). In principle, it may be relatable to both, as in (18) where the base monosyllabic word *yuē* which has gone out of use as a free unit has given rise to the compound *jié-yuē*. (Note that as a rule disyllabic verbal compounds (except resultatives, cf. (15)) easily undergo substantivization, cf. *jiāo-huàn* i. 'to exchange', ii. '(an) exchange', *jiāo-dài* i. 'to get acquainted', ii. 'acquaintance'):

- (18) *yuē* i. 'agreement', ii. 'to conclude an agreement'
 → *jié-yuē* 'to conclude an agreement.'

In the following case the underlying word is clearly a noun:

- (19) *xí* 'mat'
 → *tóng-xí* 'to be at the same table at a banquet.'

Some of the components are bound units and appear in compounds only, as, for instance, *fān* 'to oppose' which has practically gone out of use and is replaced by the compound *fān-duì* whose second component is synonymous with it and rarely used as a free verb.

The borderline between compounds and word combinations is not always clear; some compounds are divisible and words can be inserted between the components like infixes (which may be due to incomplete fusion, i.e. a compound may not be grammaticalized enough to be perceived as a single lexical unit), e.g. in the compounds *fēn-kāi* 'to become divided', *tán-huà* 'to talk', *dǎ-guān-sī* 'to be at law with sb'; cf.:

- (20) a. *Lǐlùn hé shíjiàn shì fēn-bù-kāi-de*
 theory and practice COP divide-NEG-open-ATR
 'Theory is inseparable from practice.'
 b. *Tāmen tán-guō-huà.* (= (5a))
 they converse-EXP-words
 'They talked to each other.'
 c. *Wǒ hé nǐ dǎ-le hěn jiǔ-de guānsi.*
 I and you beat-PERF very long-ATR legal.case
 'I and you have been at law with each other for a very long time.'

In this paper, the verbal compounds are segmented into morphemes, as a rule. This is meant in the first place to show the morphemic structure of disyllabic lexical reciprocals to which about half of this paper is devoted. It seemed also expedient to apply this to other disyllabic verbs in the examples.

2.3 Sentence structure

The basic word order is commonly SVO. A prepositionless object follows the predicate. With some formal types of predicates (reduplicated, with a post-verbal adverbial of re-

sult), and often with three-place transitives, the direct object precedes it and is marked by the preposition *bǎ* (cf. (3b), (4), (24b), (25)). In the case of verbs with two objects, if they are verbs of speech and giving, both objects may be postposed to the verb and have no preposition (see (24a)); an object corresponding to a direct one can be preposed to the verb and used with the preposition *bǎ*, in which case the second object follows the predicate. The subject precedes the predicate, except predicates of existence and appearance. An attribute precedes the head noun and is marked by the suffix *-de* (cf. *tā* 's/he' → *tā-de* 'his/her'; cf. (31), (52)–(54)). It may also mark adverbs (cf. *mànmàn-de pǎo* 'to run slowly'; cf. (27)). A form with this suffix may also function as a predicate with the copula *shì* 'to be' (cf. (20a)).

2.4 Word classes

In Chinese the same principal word classes can be distinguished as in other languages. Because of scanty morphology, most of the words cannot be identified as belonging to one or another word class. In dictionaries, the basic lexical meaning is usually indicated. Very many of the compounds can function both as nominals and verbs, adjectives and adverbs, etc.; cf.:

- (21) a. *bāng-zhù* i. 'to help', ii. 'help' (lit. 'to help + to help'; cf. (14a))
 b. *kě-néng* i. 'to be able', ii. 'possibility', iii. 'possible' (lit. *kě* 'can' + *néng* 'be able').

The particular functional meaning of a word – substantival, verbal or adjectival – is determined by the syntactic context and combination with auxiliary morphemes; e.g.:

- (22) a. *Wǒ kàn-jàn nín hěn gāo-xìng.*
 I see you.POL very joy
 'I saw you (and) rejoiced/was very glad', or 'It was nice to see you.'
 b. *Wǒ duì cǐ gǎn-dào gāo-xìng.*
 I to this feel joy
 'I feel joy because of this', 'I am happy about it.'

When used predicatively, adjectives do not require a copula. They are usually included in the same class as verbs, viz. the class of predicatives.

The noun is frequently preceded by a classifier that marks its class; cf., for instance, *zhī* in (3b), *tiáo* in (4), *běn* in (24a, b).

2.5 Tense-aspect markers

Most verbs in Chinese texts do not contain any tense-aspect markers, the temporal or aspectual meaning being inferred from the context. If necessary, the following suffixes (or auxiliary morphemes) can be used: *-le* for perfective past (see (20c)), *-guo* for experiential perfect (see (20b)), *-yǐ* in the meaning 'as soon as, immediately, just', *-zhe* as a marker of state or durative or resultative meaning (= the state resulting from a previous action; see (23b)), etc.

- (23) a. *Tā qù kāi mén.*
 he go open door
 'He will open the door now.'
- b. *Mén kāi-zhe.*
 door open-RES
 'The door is open.'

The morpheme *qilai* (lit. 'to stand up'; *qǐ* 'to rise', *lái* 'to come') on verbs denotes either a (gradual) beginning of an action (cf. *ná qilai* 'to begin taking') or achievement of a certain result (cf. *cáng qilai* 'to hide sth'; cf. (33), (104c, d)).

If a direct object with the preposition *bǎ* precedes the predicate the sentence is usually not ended by a single verb: the verb is followed by a resultative complement or it is reduplicated (*V + V* or *V + yī + V*), or it receives an aspectual marker or a count word (cf. *yīxià* lit. 'once' in (39), (48b)). Repetition of the verb (mono- or disyllabic) usually signifies a weakened action, like 'a little' (cf. *diān-dian* in (4)).

2.6 Verb classes

Verbs of different classes form constructions differing in the number, meaning and sequence of the obligatory components, and also in the auxiliaries used and in their transformational potential. The following main subclasses of verbs can be distinguished:

1. One-place intransitives: *pǎo* 'to run', *xiào* 'to laugh', *shuì-jìào* 'to sleep', *gōng-zuò* 'to work', etc.

2. Two-place intransitives; they take a prepositional object, in pre-position to some verbs and in post-position to other verbs; here belong *shī-wàng* 'to get disappointed in sth/sb', *kèqǐ* 'to be polite to sb' (with a preposed object with the preposition *duì* 'to, towards'; see (2a)).

3. Two-place transitives; they take a prepositionless object: *cán-shā* 'to kill sb (in a cruel manner)', *jiàn-zhù* 'to build sth', *zūn-zhòng* 'to respect sb', *wèn-hào* 'to greet sb', *biàn-wéi* 'to turn into sth', *ài-mù* 'to love sb', *jì-dù* 'to be jealous', etc. (see (1a)).

4. Three-place transitives, with the following subtypes:

4a. Verbs of speech and giving which can appear in constructions with two prepositionless objects, e.g.:

- (24) a. *Wǒ jiāo-gěi-le tā yī běn shū.*
 I give-PERF he one CLF book
 'I gave him a book.'
- b. *Wǒ bǎ yī běn shū jiāo-gěi-le tā.*
 I ba one CLF book give-PERF he
 (same translation).

4b. Verbs of naming sth/sb and turning sth into sth, like *jiào-zuò* 'to call, name', *biàn-wéi* 'to turn sth into sth' (25) with the first object always used with the preposition *bǎ* and preposed to the verb, and the second object in postposition;

- (25) *Tā bǎ wǒ kàn-chéng dírén.*
 he ba I consider enemy
 'He considers me (his) enemy.'

4c. Verbs with the meaning of joining two things where both objects are usually preposed to the verb, the first one introduced by *bǎ* and the other by a comitative preposition; cf. (33b).

4d. Causative verbs, e.g. *bāng-zhù* ‘to help sb to do sth’, *quàn* ‘to (try to) persuade sb to do sth’, *ràng* ‘to allow’, *gǔ-lì* ‘to instigate, encourage’, etc.; some of them may be used both as matrix verbs (that require a sentential argument; see (29)) and as two-place transitives, i.e. without an embedded clause. (For more information see Yakhontov 1957.)

2.7 Expression of reflexivity, reciprocity, passive voice, causativity, benefactivity, sociativity and comitativity

These meanings are encoded mainly by the following means.

1. *The reflexive meaning* is denoted by the pronoun *zìjǐ* ‘oneself, one’s own’ placed after the verb:

- (26) *Tā bú huì zhào-gu qīzi / zìjǐ.*
 he NEG able take.care wife / oneself
 ‘He is not able to take care of his wife / himself.’

2. *The reciprocal meaning*, as mentioned, is expressed by the adverb *hùxiāng* ‘mutually’ which is sometimes replaced by the adverb *bǐcǐ* (see 4.2, where two more rare reciprocal means are cited) or, less commonly, by *xiāng-hù* ‘mutually’ (for other means see 1.2.3). In colloquial speech *hùxiāng* is sometimes used with the attributive particle *-de*:

- (27) *(Tāmen) ... bǐcǐ hùxiāng-de tí yìjiàn.*
 they this.that mutually-de AUX criticism
 ‘(They) both criticize each other.’ (Chirkova 2003:06116)

3. *The passive* is expressed by a construction with the preposition *bèi* used with an agentive complement (the prepositions *ràng*, *jiào*, *gěi* may also be used); the preposition is added to the verb immediately. But most frequently the passive is not marked, the only indication being the patient in subject position:

- (28) a. *Dàjiā zūn-zhòng tā.* b. *Tā bèi dàjiā zūn-zhòng.*
 all respect he he PASS all respect
 ‘Everyone respects him.’ ‘He is respected by everyone.’

4. *The causative meaning* is rendered by notional causative verbs (see case 4d) in 2.6 and (29b)) or by the auxiliary verb *shǐ* ‘to cause/make’ (see (34b)):

- (29) a. *Wǒmen guǎn-lǐ guójiā* b. *Rénmín wěi-tuō wǒmen guǎn-lǐ guójiā.*
 we govern country people entrust we govern country
 ‘We govern the country.’ ‘The people entrusted us with governing the country.’

5. *The benefactive meaning* is denoted by the prepositions *gěi* ‘to, for’ (lit. ‘to give’), *wèi* ‘for’:

- (30) *Tā gěi wǒ dào-le chá.*
 he for I pour-PERF tea
 'He poured tea for me.'

6. *The comitative meaning* is signalled by the prepositions *hé*, *yú*, *gēn*, *tóng* 'with' which may function as conjunctions with the meaning 'and' as well (the components *hé* and *gēn* are usually interchangeable, but *gēn* is more colloquial than *hé*, and *yú* is used in written Chinese). Expression of the meanings 'and' and 'with' by the same word or affix is, as is well known, rather common cross-linguistically. Since these prepositions are used in reciprocal constructions, we shall touch upon their main usages. Three main cases can be distinguished, which are determined by the three valency verb types:

A. The comitative group can be omitted, because it is not determined by the lexical meaning of the verb and it is optional. This is particularly clear with one-place verbs: interpretation of this group as (a) part of the subject or (b) a verbal complement depends on the syntactic structure, and it may remain unclear. Thus, in (31a) interpretation (a) may be determined by the units *dōu* 'all' and *liǎng ge rén* 'the two/both of us/you/them, together' and interpretation (b) by the negation *bù* or by adverbs (e.g. *yòu* 'again', *zhèng* 'just', etc.) which disrupt the coordinative link. If the words in brackets are omitted, both readings (i) and (ii) in (31a) are possible (the examples and partially interpretations are borrowed from Shutova 1991:298–80, 260). Rearrangement of the constituents, even in the case of interpretation (ii), does not change the denotational content of the sentence (cf. 'I went out ... with P.Y.' vs. 'P.Y. went out ... with me').

- (31) a. *Wǒ (zhèng) hé P. Y. (liǎng ge rén) cóng yè-xiào chū-lái...*
 I just and/with P. Y. two CLF man from night.school go.out
 i. 'I and P.Y. (together) went out of the night school...'
 ii. 'I (just) went out of the night school with P.Y...'

In the other two cases the comitative group cannot be omitted, because it names an obligatory participant of the situation named.

B. The predicate is not a lexical reciprocal in (31b'–b''), therefore rearrangement of the nominal constituents changes the meaning and the comitative phrase cannot be a part of the subject (cf. 'they followed *me*' vs. 'I followed *them*'; 'I am angry *with him*' vs. 'He is angry *with me*'). Example (31b') is indicative as an illustration of two functions of the word *hé*, coordinating 'and' and subordinating 'with' (true, there is no comitative meaning in the second instance):

- (31) b'. *Fùqin hé mǔqin hé wǒ zhēngchǎo.*
 father and mother with I quarrel
 'Father and mother quarrelled with me.'
 b''. *Wǒ gēn tā shēng-qì.*
 I with s/he angry
 'I am angry with him.'

C. The predicate is a lexical reciprocal. The comitative group cannot be omitted but together with the first noun it may be replaced by a plural noun/pronoun, which is ruled out in case (31b'–b''). In case (1) it is possible, but the second participant is not part of

the lexical meaning of the predicate. If the bracketed words are absent, both readings are possible, though the informants usually prefer reading (i) which is monosemous if the adverb ‘again’ is used. If words like ‘both/two of us’ are used, reading (ii) is highlighted. As in (31a), rearrangement of the nominal constituents does not change the denotational content of the sentence (cf. ‘he argues *with me*’ vs. ‘I argue *with him*’).

- (31) c. *Tā (yòu) hé wǒ (liǎng ge rén) biàn-lùn.*
 he again and/with I two CLF man argue
 i. ‘He (again) argues with me.’
 ii. ‘He and I (both of us) argue.’

7. *The sociative meaning* is denoted by adverbs with the meaning ‘together’: *yīkuài*, *yīqǐ*, *yītóng* (the initial component *yī* means ‘one’). The second one may also have the non-sociative meaning of joining of two entities (see (115)), though more frequent in this meaning is the collocation *zài yīqǐ* (see (90c), (101), (104a, b)).

- (32) *Nǐmen bú yào yīqǐ shuō-huà.*
 you.PL not necessary all speak
 ‘You shouldn’t speak together.’

2.8 Valency changes. Transitive/intransitive correspondences

Many verbs may change their meaning and valency without undergoing any formal changes or by taking a copula; thus *fā-zhǎn* ‘to develop sth’ (vt/vi), when used with the copula *wéi* means ‘to develop into sth’ (vi), and it may take an object with the preposition *bǎ*, in which case it acquires the meaning ‘to develop/change sth into sth’; the verb *jiào-zuò* means both ‘be called sth/have the name of’ (vi) and ‘give the name (of) to sb’ (vt). Valency also changes in the process of resultative derivation from two- or three-place transitives (see (33)). In (33a) → (33b) the intransitive or transitive meaning is determined by the syntactic structure only, and in (34a) → (34b) by the causative auxiliary verb *shǐ* ‘to cause/make’:

- (33) a. *Shuǐ tóng jiǔ hùn-hé₁-le qilai.*
 water with wine mix-PERF qilai
 ‘Water got mixed with wine.’
 b. *Tā bǎ shuǐ tóng jiǔ hùn-hé₁-le qilai.*
 he ba water with wine mix-PERF qilai
 ‘He mixed water with wine.’
- (34) a. *Nán nǚ quánlì píng-děng-le.*
 man woman rights be.equal-PERF
 ‘The rights of men and women became equal.’
 b. *Zhènfǔ shǐ nán nǚ quánlì píng-děng-le.*
 government cause man woman rights be.equal-PERF
 ‘The government made the rights of men and women equal.’

To sum up, the following valency characteristics are relevant: (1) transitive-intransitive nature of verbs like *kāi* ‘to open’; (2) causativization by means of the auxiliary *shǐ*; (3)

valency reduction by means of passivization; (4) valency reduction by means of the adverb *hùxiāng* ‘mutually’ and also, sometimes, bound morphemes *hù* and *xiāng* (see Group B in 1.2.2.2); 5) valency reduction marked by the initial recurrent components listed above (see Group C in 1.2.2.2). In the latter two cases valency reduction is not obvious if the base verb is transitive-intransitive.

3. Diathesis types of reciprocal constructions with the adverb *hùxiāng*

3.1 Expression of reciprocal arguments

3.1.1 *Introductory*

The reciprocal arguments may take either the subject or object position, depending on the subject-object or object-object cross-coreference; see (1b), (2b) and (3b) respectively. As mentioned above, the respective constructions are termed here subject-oriented and object-oriented. The reciprocal arguments can be expressed either by a plural (at least semantically) noun phrase, as in (36), or by coordinated noun phrases, as in (1b), (2b), (3b), etc. These nouns may be preceded by numerals, as in (36d), (37b), or classifiers, as in (37a), or collective nouns with meanings like ‘group’, ‘class’, as in (36e). In Chinese there is no grammatical category of number but there is an optional marker of plurality: in the case of a plural subject, plurality can be encoded by the suffix *-men* on pronouns and animate nouns (see (36a) and (5)). Plurality mostly remains uncoded: the context usually makes it clear; in the case of reciprocals, it is implied by the adverb *hùxiāng* (see, for instance, (36b)).

If the subject of a construction with *hùxiāng* is a single proper name or a singular pronoun, the construction is ungrammatical (see (35a)). As the singular participant is coded explicitly, it cannot perform the same function as in (36b) where the noun can be interpreted either as singular or as plural.

- (35) a. **Tā hùxiāng qī-piàn* b. **Lǐ Sì hùxiāng qī-piàn*
 he mutually deceive L.S. mutually deceive
 lit. ‘He deceives each other.’ lit. ‘Li Si deceives each other.’

3.1.2 *Simple reciprocal constructions*

3.1.2.1 *Plural subject.* This section concerns constructions where the reciprocal arguments are expressed by a single constituent.

3.1.2.1.1 *Subject-oriented constructions.* The following examples illustrate this type of constructions. In (36a) the reciprocal arguments are named by the plural subject, and in (36b) and (36c) plurality of the participants is indicated by *hùxiāng*. In (36c) the latter is optional because the predicate is a lexical reciprocal (for details see 6.2.1).

- (36) a. *Zhànzhēng shíqī rén-men hùxiāng cán-shā.*
 war time man-PL mutually exterminate
 ‘In wartime people exterminate one another.’

- b. *Yěshòu hùxiāng cán-shí.*
beast mutually devour
'Wild beasts devour each other.'
- c. *Shānbǎn [hùxiāng] pèng-zhùang zhe.*
boat mutually collide DUR
'Boats collide with each other.'
- d. *Liǎng guó hùxiāng hōng-zhà.*
two country mutually bomb
'Two countries bomb each other.'
- e. *Yī qún shuǐshòu hùxiāng bāng-zhù.*
one group sailor mutually help
'A group of sailors helped each other.'

3.1.2.1.2 Object-oriented constructions. This construction is formed by three-place or two-place transitives with a plural object (mostly lexical reciprocals with the meaning of *joining* or *bringing two objects into contact*). As mentioned, the reciprocal arguments are usually denoted by a semantically plural object. Plurality may be expressed by a numeral or it may be implied by the verbal meaning or by *hùxiāng*. (37a) and (37b) contain lexical reciprocals, therefore *hùxiāng* which stresses the interaction of two entities can be optional (though this is not a general rule).

- (37) a. *Tā bā liǎng zhī gēbo [hùxiāng] jiāo-chā zhe.*
he *ba* two CLF arm mutually cross DUR
'He crossed his arms.'
- b. *Tā bā liǎng zhāng zhàopiān [hùxiāng] bǐ-jiāo*
he *ba* two sheet photo mutually compare
'He compares two photos.' (cf. also (3b) and (4)).

3.1.2.2 Coordinated subjects

3.1.2.2.1 Subject-oriented constructions. In this type of constructions the reciprocal arguments are two or more constituents which can be linked with or without a coordinating conjunction (unless at least one argument is denoted by a pronoun), usually *hé* 'and/with', less commonly *yú*, *gēn*, or *tóng* 'and/with' (see (32)).

- (38) a. *Tā hé wǒ hùxiāng qī-piàn.*
he and I mutually deceive
'He and I deceive each other'; cf. also (1b), (2b).
- b. *Mǔ-zǐ hùxiāng bāng-zhù-guo.*
mother-son mutually help-help-EXP
'Mother and son helped each other.'

3.1.2.2.2 Object-oriented constructions. Coordinated reciprocal arguments are rather rare in this construction, probably due to the requirement of two arguments belonging to the same class of entities. (39) is one of the few examples at our disposal (object-oriented constructions are more frequent with lexical reciprocals; cf. (33b), (34b)):

- (39) *Tā bǎ wǒ hé tā-de gēge hùxiāng jiè-shào-le yíxià.*
 he *ba* I and he-ATR elder.brother mutually introduce-PERF once
 ‘He introduced me and his elder brother to each other.’

3.1.3 *Discontinuous reciprocal constructions. Subject-oriented constructions only*

As a matter of fact, we have no proper discontinuous object-oriented constructions at our disposal. But constructions with the conjunctions and/or prepositions listed in 3.1.2.2.1 may also be interpreted as discontinuous with a comitative object. The nature of these constructions (simple or discontinuous?) often remains obscure. As mentioned in the text above (31), if the interpretation is comitative, these items are regarded as prepositions with the meaning ‘with’. Note that either interpretation does not essentially change the meaning of the sentence. A construction is obviously discontinuous if there is an adverb (e.g. with a meaning like ‘again’, ‘yesterday’, ‘just’, ‘probably’, etc.) or a verb (e.g. ‘to want’) between the first and the second arguments.

In Chinese the difference between simple and discontinuous constructions with certain verbs seems to be blurred to a certain degree. This is due to the fact that comitative prepositions can function as conjunctions and also because the noun phrase with this preposition precedes the predicate and thus outwardly these constructions do not differ. The English sentence given as translation (i) in (40) offered for translation to the informant is translated by sentence (40) which may be interpreted as simple, as reflected in translation (ii):

- (40) *Wǒ hé tā xiānghù nì-xíng.* (F. Li., p.c.)
 I and/with he mutually opposite-go
 i. ‘I am going in the opposite direction from *him*.’
 ii. ‘I and *he* are going in opposite directions *from each other*.’

If there is an intermediate word between the two arguments and the first one is singular, it would seem that *hùxiāng* cannot be used (see (41a), (41b); cf. also (2c)), but this is not so, and *hùxiāng* is possible, because its domain covers both the subject and the comitative object. Note, however, that some of our informants object to such constructions.

- (41) a. *Tā yóu hé wǒ hùxiāng qī-piàn.*
 he again with I mutually deceive
 ‘He and I again deceive each other’, lit. ‘He again with me deceives *each other*.’
 b. *Tā xiǎng hé wǒ hùxiāng bāng-zhù.*
 he want with I mutually help
 ‘We want to help *each other*’, lit. ‘He wants with me to help *each other*.’

The informants are more unanimous in their rejection of constructions with *hùxiāng* if the second argument has a non-comitative preposition, viz. a preposition used in the underlying non-reciprocal construction. Thus a non-comitative object is not covered by *hùxiāng* and type (42b) sentences sound as unacceptable as (35a) and (35b); cf. (42b) and (42c).

- (42) a. *Wǒ duì tā shī-wàng-le.*
 I to s/he be.disappointed-PERF
 'I got disappointed in him.'
- b. **Wǒ duì tā hùxiāng shī-wàng-le.*
 lit. 'I got disappointed *mutually* in him.' (see also (2d))
- c. *Wǒ hé / gēn / yú / tóng tā hùxiāng shī-wàng-le.*
 'I and he got disappointed *in each other*.'

3.2 Subject-oriented constructions

Four main diathesis types of subject-oriented constructions can be distinguished: “canonical”, “indirect”, “possessive”, and “adverbial”.

In the first two types, the subject is cross-referenced with an object argument, i.e. with a constituent required by the lexical meaning of the verb: in “canonical” constructions, it is the direct object (with two-place or three-place transitives) or the only non-direct object, and in “indirect” constructions formed from three-place transitives it is the indirect object that is cross-referenced with the subject, the direct object being retained (cf. (51)).

In the remaining two types, it is not an object argument that is cross-referenced with the subject but it is a possessive attribute of the direct or indirect object in a “possessive” construction, and in an “adverbial” construction, as is clear from the term, it is an adverbial, i.e. those constituents are cross-coreferenced with the subject that are not required by the verbal lexical meaning (we have also included here reciprocal constructions with verbs taking an optional benefactive object which is essentially an adverbial constituent though it is semantically close to the obligatory dative object).

In this section all the four main logical possibilities of the subject cross-reference with other sentence constituents are considered: with syntactic arguments (a direct and non-direct object) and with non-arguments (an attribute and an adverbial).

Moreover, there is a fifth irreversible type of reciprocal constructions where the marker *hùxiāng* does not have a counterpart in the base construction. This type may be both subject- and object-oriented.

3.2.1 “Canonical” reciprocals

Reciprocals of this type may be regarded as intransitive, i.e. they do not take a direct object, while the underlying construction may be either transitive or intransitive. There are grounds, it seems, to see a kind of intransitivization (or at least valency decrease, since the syntactic status of an adverb is lower than that of a noun object) in the transformation (1a') → (1b), where a direct object is replaced by the reciprocal adverb. It does not occupy the slot of the object it replaces in the sentence structure. Needless to say, this intransitive construction differs from a transitive one with a morphological reciprocal in some agglutinative languages, in which case the reciprocal construction does not contain any words that replace the cross-referenced constituents.

3.2.1.1 *With two-place transitives.* This is the most common type of reciprocals, which is only natural, since two-place transitives are the most numerous class of verbs.

- (43) a. *Tā jīngcháng pī-píng nǐ.*
 he often criticize you.sg
 'He often criticizes you.'
- b. *Nǐmen jīngcháng hùxiāng pī-píng*
 you.PL often mutually criticize
 'You often criticize *each other*.' (see also (1b), (36), (38), (41), etc.).

Here is a list of some of the verbs attested with *hùxiāng*; verbs of non-physical actions rather than verbs of physical actions are predominant among them; cf.:

- (44) *chéng-rèn* 'to recognize sb/sth' *liáo-jǐè* 'to know sb'
fěng-cì 'to be ironic about sb/sth' *qī-piàn* 'to deceive sb'
gǎn-xiè 'to thank sb' *zhào-gu* 'to take care of sb'
gǔ-lì 'to encourage sb' *zhī-chí* 'to support sb'
jū-dù 'to be jealous of sb' *zūn-zhòng* 'to respect sb'
mà 'to scold sb' *pī-píng* 'to criticize sb'.

3.2.1.2 *With two-place intransitives.* In the derivation of this type of reciprocal constructions, the following components are lost:

- the preposition introducing an object, see (42a), (45a);
- the words *nàr* 'there' and *zhèr* 'here' postposed to human nouns and denoting destination or goal of motion (46);
- a copula (*chéng, wéi, chéng-wéi, zuò*, etc.) which is used with verbs of turning into sth (47).

- (45) a. *Wǒ xiàng tā dào-qian-le.*
 I to he apologize-PERF
 'I apologized to him.'
- b. *Tāmen hùxiāng dào-qian-le.*
 they mutually apologize-PERF
 'They apologized *to each other*.'
- (46) a. *Wǒ jīngcháng dào tā nàr chuàn-ménr.*
 I often to he there go
 lit. 'I often go to his place on a visit.'
- b. *Wǒmen jīngcháng hùxiāng chuàn-ménr.*
 'We often visit *each other*.'
- (47) a. *Diànzǐ zhuǎn-huà chéng guāngzǐ.*
 electron change become photon
 'Electrons change into protons.'
- b. *Diànzǐ hé guāngzǐ hùxiāng zhuǎn-huà.*
 'Electrons and protons change into *each other*.'

Non-combinability of the reciprocal marker with prepositions can be compared with the non-combinability of reflexive reciprocals with prepositions in the Indo-European languages (cf., for instance, Penchev, Ch. 13, §1.2). In Ancient Chinese the reciprocal marker

did occur with those prepositions whose meaning was compatible with an object semantically, cf. *xiāng yǔ yuē* ‘to come to an agreement *with* each other’ (see Yakhontov, Ch. 48, §7).

3.2.1.3 *With three-place transitives.* The following three semantic groups of verbs are distinguished:

- a verb with the meaning ‘to introduce oneself to sb’ (in the reciprocal construction *two* objects are deleted);
- verbs of naming and changing into sth;
- notional causative verbs.

In fact, (50b) alone is a “canonical” reciprocal proper, because it alone does not contain a direct object. In (49b) one of the two direct objects is retained but it can be interpreted as part of a complex predicate (in (49a) the word *dírén* ‘enemy’ cannot be placed before the predicate and take the preposition *bǎ*). In the classification adopted in this volume, it seems convenient to place the reciprocals of the latter two types, i.e. (49) and (50), among “canonical” reciprocals. Compare the respective examples:

- (48) a. *Tā xiàng wǒ jiè-shào-le zìjǐ.*
 he to I introduce-PERF oneself
 ‘He introduced himself to me.’
 b. *Tā hé wǒ hùxiāng jiè-shào-le yíxià.*
 he and I mutually introduce-PERF once
 ‘He and I introduced ourselves to each other.’
- (49) a. *Tā bǎ wǒ kàn-chéng dírén.*
 he *ba* I consider enemy
 ‘He considers me an enemy.’
 b. *Tā hé wǒ hùxiāng kàn-chéng dírén.*
 ‘He and I consider *each other* enemies.’
- (50) a. *Wǒ gǔ-lì tā cān-jīa bǐsài.*
 I instigate he participate competition
 ‘I instigate him to take part in the competitions.’
 b. *Wǒmen hùxiāng gǔ-lì cān-jīa bǐsài.*
 ‘We instigate *each other* to take part in the competitions.’

3.2.2 “Indirect” reciprocals

Note that “indirect” here serves as a label, by analogy with other languages where some of the verbs like those listed below take a dative case. In the derived constructions in question the direct object is retained and the indirect object denoting goal in the broad sense (or, much less commonly, an object of source; see (52)) is eliminated. The preposition (and the marker *nàr*) is omitted in the same way as mentioned in 3.2.1.2, see (46). Three groups of verbs can be distinguished here:

1. Verbs of communicating information, giving/receiving an object, and the like (cf. *bào-gào* ‘to report/let know’, *zèng-gěi* ‘to give a present’, *sòng* ‘to send’, *jiāo-gěi* ‘to give/pass/pay in’, *dé-dào* ‘to receive’, *xún-wèn* ‘to ask’, *jiè* ‘to borrow’, etc.).

2. Verbs of moving an object (e.g. *chū-kǒu* ‘to export/take out’, *pài-qiǎn* ‘to send’, etc.):

- (51) a'. *Wǒ sòng gěi tā lǐwù.* + a'. *Tā sòng gěi wǒ lǐwù.*
 I send to/for he present he send to/for I present
 ‘I sent him a present.’ ‘He sent me a present.’
- b. *Wǒmen hùxiāng sòng lǐwù_{i+j}.*
 we mutually send present
 ‘We sent each other presents.’
- (52) a. *Wǒ gēn tā jiè qián.*
 I from he borrow money
 ‘I borrow money from him.’
- b. *Wǒmen hùxiāng jiè qián.*
 we mutually borrow money
 ‘We borrow money from each other.’

As a rule, *hùxiāng* does not collocate with monosyllabic verbs for rhythmic reasons, but in (51b) and (52b) this tendency is violated, because the verb is followed by a direct object which in a way “completes” the required rhythmic pattern: a disyllabic adverb and a disyllabic (or trisyllabic) combination verb + noun (on “rhythmic agreement” see 1.2.4 and 6.5.3).

In the following examples *hùxiāng* combines with disyllabic verbs according to the rule of “rhythmic agreement”.

- (53) a. *Yī guó xiàng líng yì guó pài-qiǎn jiàndié.*
 one country into/to another country send spy
 ‘One country sends agents into another country.’
- b. *Liǎng guó hùxiāng pài-qiǎn jiàndié.*
 ‘Two countries send agents into each other.’
- (54) *Tāmen bǎ zhè běn shū hùxiāng chuán-yuè yíxià.*
 they ba this CLF book mutually pass-read once
 ‘They passed this book to each other for reading [by turns].’

3.2.3 “Possessive” reciprocals

The base constructions of these reciprocals contain a possessive attribute preceding a direct or non-direct object which is omitted in the derived construction or replaced by the word *duìfāng-de* ‘partner’s’. Thus the syntactic structure is retained and a direct object is also retained as well as in “indirect” reciprocals, and in the case with *duìfāng* the syntactic structure is retained (cf. also 4.4). These reciprocals are derived from both two-place and three-place transitives (including those that are entered in the above types as well; cf. ‘to criticize each other’ as in (43b) in 3.2.1.1 and ‘to criticize each other’s mistakes’ as in 3.2.3.1). Denotationally, and also according to the feature +direct object, sentences with “possessive” reciprocals are close to those with “indirect” reciprocals.

3.2.3.1 *With two-place transitives.* A direct object may denote either an alienable or inalienable possession of the subject referent. In the reciprocal construction the attribute *duìfāng-de* ‘of the other party’ is possible and even preferable. If it is used, the syntactic

structure of both the underlying and derived constructions is the same. The lexical content of this type partially overlaps with that of “canonical” reciprocals; cf. *pī-píng* in (55b) and (43b).

- (55) a'. *Wǒ pī-píng tā-de cuòwu* + a". *Tā pī-píng wǒ-de cuòwu*
 I criticize he-ATR mistake he criticize I-ATR mistake
 'I criticized his/her mistakes.' 'He criticized my mistakes.'
- b. *Wǒmen hùxiāng pī-píng duìfāng-de cuòwu.*
 we mutually criticize partner-ATR mistake
 'We criticize each other's mistakes.'
- (56) a. *Wǒmen fāng-wèn tāmen-de shǒudū.*
 We visit their-ATR capital
 'We visit their capital.'
- b. *Wǒmen hùxiāng fāng-wèn [duìfāng-de] shǒudū.*
 we REC visit partner-ATR capital
 'We visit each other's capitals.'

3.2.3.2 *With three-place transitives.* Here is an example with a verb of putting an object somewhere; one of the objects is inalienable possession of the attribute referent:

- (57) a. *Wǒ wǎng tā-de liǎn-shang cuō fěn.* (*shang* = postposition)
 I on s/he-ATR face-on rub powder
 'I put powder on his/her face.'
- b. *Wǒmen hùxiāng wǎng liǎn-shang cuō fěn.*
 we mutually on face-on rub powder
 'We put powder on each other's faces.' (see also (65a) and (67a)).

3.2.4 *Adverbial reciprocals*

In this case, as mentioned above and as is seen from the heading, the subject is cross-referenced with a non-argument, i.e. with an optional constituent not required by the lexical meaning of the verb, at least not in the degree as in the other cases. This type covers two subtypes.

1. Constructions with two-place transitives taking an optional benefactive object. This type is adverbial, because a benefactive constituent is not presupposed by the verbal meaning but semantically these constructions are adjacent to “indirect” ones (cf. (51a)):

- (58) a. *Wǒ gěi tā dào chá.*
 I to/for he pour tea
 'I pour tea for him.'
- b. *Wǒmen hùxiāng dào chá.*
 'We pour tea for each other.'

2. Constructions with one-place intransitives where a non-subject constituent denotes a human referent not determined by the lexical meaning of the verb, but related to the subject referent by the expression of the emotion named. (59a) and (59b) differ to a certain degree in that (59b) “would imply that the participants intentionally shed tears to each other” (F. Li, p.c.):

- (59) a. *Tā duì wǒ diào-zhe yǎnlèi.*
s/he to I shed-DUR tear
'He is shedding tears before/in front of me.'
- b. *Tāmen hùxiāng diào-zhe yǎnlèi.*
they mutually shed-DUR tear
'They are shedding tears in front of/in the presence of each other.'
- (60) a. *Tā duì tāmen tàn-zhe-qì.*
he to they sigh-DUR-breath
'He is sighing in front of them.'
- b. *Tāmen zuò-zhe hùxiāng tàn-zhe-qì.*
they sit-DUR mutually sigh-DUR-breath
'They are sitting there sighing to each other.'

3.2.5 Embedded subject-oriented constructions

Embedding of a subject-oriented reciprocal construction does not affect its reciprocity. No referential conflict arises in (61c).

- (61) a. *Wǒ zhào-gu háizi.*
I take.care child
'I take care of the child.'
- b. *Wǒmén hùxiāng zhào-gu.*
'We take care of each other.'
- c. *L.X. hé W.Z. quàn wǒmén hùxiāng zhào-gu.*
L.X. and W.Z. ask we mutually take.care
'L.X. and W.Z. ask us_i to take care of each other_i.'

3.3 Object-oriented constructions; three-place transitives of joining

Here belong reciprocals derived from three-place verbs of connecting two things, bringing two entities into contact (both literally and figuratively) and the like (note that the subject can be singular here). The underlying construction contains one direct and one non-direct prepositional object denoting either an addressee or an instrument (cf. *yòng yí kuài mùtóu* in (62a)), or two prepositionless objects (see case 4 in 2.6). As a rule, the single object of the reciprocal construction is semantically plural and names both participants (the potentially heterogeneous objects of the base construction become homogeneous in the reciprocal construction). It is always preposed to the predicate and introduced by the preposition *bǎ*, and the adverb *hùxiāng* always follows the object that determines it (in the same way as in the subject-oriented construction *hùxiāng* always follows the subject). In other words, *hùxiāng* cannot be related to a direct object that follows the predicate (cf. 3.4.2). The object-oriented construction is characteristic of lexical reciprocals, and *hùxiāng* is often optional with them (cf. 5.3.2).

3.3.1 The underlying non-direct object denotes the addressee

The verb with the meaning 'to introduce sb to sb' is of this type, too (this verb may occur as a subject-oriented reciprocal in combination with *hùxiāng*; cf. (48b)). Reciprocals with

meanings like ‘sb sets dogs on each other’, ‘sb sends sb(PL) to each other’, etc., seem to be of this kind, too. For an example of this type see (39).

3.3.2 *The underlying non-direct object denotes an instrument*

As mentioned above (see (3) and the relevant text), the base construction (e.g. (62a)) is often less acceptable than the derived one (e.g. (62b)).

- (62) a. [?]*Tā yòng yí kuài mùtòu bǎ lìng yí kuài mùtòu qiāo-le qiāo.*
 he with one piece wood *ba* another one piece wood rub-PERF rub
 ‘He rubbed one piece of wood *with/against* another.’
- b. *Tā bǎ liǎng kuài mùtòu hùxiāng qiāo-le qiāo*
 he *ba* two piece wood mutually rub-PERF rub
 ‘He rubbed two pieces of wood against each other.’ (see also (66a), (67b))

3.3.3 *The underlying non-direct object denotes an attachable thing. Subject-oriented reciprocals (resultatives) derived from object-oriented reciprocals*

Here is an example:

- (63) a. *Tā bǎ dà tiě guǎnzǐ tào-zài xiǎo tiě guǎnzǐ shàng.*
 he *ba* big iron pipe put.on-PPS small iron pipe on
 ‘He put the big pipe onto the small one.’
- b. [?]*Tā bǎ liǎng gēn tiě guǎnzǐ hùxiāng tào qilái.*
 he *ba* two CLF iron pipe mutually put.on *qilai*
 ‘He inserted two iron pipes into one another.’
- c. *Tiě guǎnzǐ hùxiāng tào-zhe.*
 iron pipe REC insert-DUR
 ‘Iron pipes are inserted one into another.’

3.4 Two-diathesis types of reciprocal constructions

Collocations of *hùxiāng* with some of the verbs allow two readings. Such cases are attested only in transitive reciprocal constructions. In some instances (see 3.4.2) one or the other reading is determined by the position of *hùxiāng* before or after the direct object. Each interpretation is relatable to the underlying construction of its own.

3.4.1 *Within subject-oriented constructions: “Indirect” or “possessive”?*

Thus, for instance, (64) allows two readings, which are related to different base sentences.

- (64) *L.Z. hé X.L. hùxiāng kuājiǎng háizi.*
 L.Z. and X.L. mutually praise children
- i. ‘L.Z. and X.L. praise their own children to each other.’
- ii. ‘L.Z. and X.L. praise each other’s children.’

3.4.2 *Subject-oriented (“possessive”) or object-oriented?*

This case concerns collocations of *hùxiāng* with three-place transitives (one of the objects may be optional). A collocation of *hùxiāng* with the same verb can form two constructions. They differ in the position of *hùxiāng*: in the subject-oriented construction it

precedes the object (the subject is necessarily plural) and in the object-oriented one it follows the direct object (the subject may be singular). Below are examples: for subject-oriented (“possessive”) construction (65a) the base is (65b), and for object-oriented (66a) it is (66b). (67a) and (67b) are subject- and object-oriented respectively, cited without their base constructions.

- (65) a. *Nǐ-men hùxiāng bǎ liǎng zhī shǒu róu-rou.*
 you-PL mutually *ba* both CLF hand massage
 ‘Massage each other’s hands!’ (each massages the hands of the other)
- b. *Nǐ bǎ duìfāng-de shǒu róu-rou.*
 you.SG *ba* partner-POSS hand massage
 ‘Massage your partner’s hand!’
- (66) a. *Nǐ-men bǎ liǎng zhī shǒu hùxiāng róu-rou.*
 you-PL *ba* both CLF hand mutually massage
 ‘[Each of you,] massage one hand with the other [hand]!’
- b. *Nǐ bǎ zìjǐ-de shǒu róu-rou.*
 you.SG *ba* own-POSS hand massage
 ‘Massage your hand!’ (naturally, with your other hand)
- (67) a. *Nǐ-men hùxiāng bǎ liǎng zhī gēbo jiāo-chā qilai.*
 you-PL mutually *ba* two CLF arm cross *qilai*
 ‘You(PL) crossed each other’s arms.’
- b. *Nǐ bǎ liǎng zhī gēbo hùxiāng jiāo-chā qilai.*
 you.SG *ba* two CLF arm mutually cross *qilai*
 ‘You(SG) [each] cross your [own] arms.’ (F. Li, p.c.)

3.5 Irreversible reciprocal constructions (= without (standard) underlying constructions)

There are two types. In the first type the adverb *hùxiāng* does not replace any word. In the second type the adverbials that appear in the reciprocal construction sound unnatural in the base construction without appropriate context.

3.5.1 *The adverb hùxiāng does not replace any constituent*

(68a) is most likely lacking a respective base construction with an explicit addressee. If this is so, it may be regarded as (“indirect”) quasi-subject-oriented. In (68b) rejected by some of our informants even those who accept it prefer to omit *hùxiāng*. The point is, that, unlike (4) which is also irreversible, (68b) makes it clear that different pairs of shoes are to be tried on one after another (F. Li, p.c.). It contains a two-place transitive with both arguments explicit. As it implies a comparison of two objects, it is quasi-object-oriented. The analogous construction in (4) is more readily accepted by the informants (for the explanation see the text above example (4)).

- (68) a. *L.Z. hé X.L. hùxiāng jiān-chí zìjǐ-de yìjian.*
 L.Z. and X.L. mutually persist one’s.own-ATR opinion
 ‘L.Z. and X.L. each insists on his own opinion (against each other).’

- b. ²Nǐ bǎ zhè jǐ shuāng xié [hùxiāng] shì yíxià.
 you.SG ba this several pair shoe mutually try once
 lit. ‘Try on some of these pairs of shoes mutually (= compare them with each other in order to see which pair is better).’

3.5.2 Irreversible adverbials

There is a group of adverbs (e.g. *tóngshí* ‘at the same time’, *lúnliú* ‘alternately, by turns’, etc.) whose meaning presupposes two or more actions at the same time. They cannot be used in underlying constructions of the (69b) type without a suitable previous context like (a) ‘X.L. pointed his finger at L.Z. and L.Z. pointed his finger (at him) almost *at the same time*’, or (b) ‘L.Z. pointed his finger almost *at the same time as X.L. did*’, or (c) ‘Who else knows this?’ (and the reply may be ‘... *and at the same time* he pointed his finger at that man’), i.e. (69b) cannot be an opening statement, because the meaning ‘at the same time’ requires two actions. (69b) can be made complete if it is continued ‘... at the same time as X.L. did’.

- (69) a. L.Z. hé X.L. jīhū tóngshí hùxiāng zhī-le-zhī.
 L.Z. and X.L. almost at.the.same.time mutually show-PERF-show
 ‘L.Z. and X.L. pointed their fingers at each other almost *at the same time*.’
 b. L.Z. jīhū tóngshí zhī-le-zhī X.L. ...
 L.Z. almost at the same.time show-PERF-show X.L.
 ‘L.Z. pointed his finger almost *at the same time* ...’

3.6 Restrictions on *hùxiāng* and “violations” of these restrictions

Most likely, restrictions on the use of *hùxiāng* with non-reciprocal verbs are of trivial nature, e.g. it does not occur with one-place intransitives (cf. *shuì-jiao* ‘to sleep’) and two-place verbs with a non-human object (cf. *jiàn-zhù* ‘to build sth’). As to lexical reciprocals, there are restrictions determined by their lexical meaning: many of them do not combine with *hùxiāng*, as is shown in example (5b) (see also 5.3).

Non-reciprocal verbs, however, display curious restrictions on combinability with *hùxiāng* but these restrictions are not specific for *hùxiāng* as they are determined by the more common rhythmic tendency in Chinese to collocate monosyllabic words with monosyllabic ones, and disyllabic with disyllabic ones. Therefore, as a rule, the informants accept collocations like *hù-zhù* ‘to help each other’ and *hùxiāng bāng-zhù* ‘to help each other’ and reject outright collocations like **hùxiāng zhù* (same intended meaning); see also 1.2.4 and 6.5.3. This restriction is not observed, it seems, in colloquial speech, which is manifested by the following recordings of Beijing inhabitants:

- (70) a. Zhèi xiǎohár wèi zhe qiáng hùxiāng jǐ.
 this child around SUFF wall mutually press
 lit. ‘Those children press each other around the wall.’ (the speaker describes the children’s behaviour during breaks at school) (Chirkova 2003:0266682)

- b. *Xiànzài nǐ xiǎng Àdàlìyà Jiānádà hái hùxiāng dǎ ne.*
 now you.SG think A. C. still mutually beat PRTL
 ‘Now, think of it, Australia and Canada still fight with each other.’ (Chirkova 2003:02743)
- c. *Jiànmiào a jiào xiāng, jiù hùxiāng xiāng.*
 meet thus be.called bride-show namely mutually look.in.the.face
 ‘The meeting (of the bride and bridegroom) is called ‘xiang’, so they ‘xiang’ each other’ (the informant speaks about traditional Manchu wedding rituals). (Chirkova 2003:05261)

See also the text beneath example (54).

3.7 Nominalization

The adverb *hùxiāng* cannot be a part of a nominal compound, and thus it is not involved in the substantivization of the verb it depends on. In this respect collocations of verbs with *hùxiāng* (cf. (71b)) differ from compound verbs, including lexical reciprocals, which easily undergo nominalization. Nevertheless, collocations with *hùxiāng* may appear in argument positions dependent on other verbs; cf. (69c). In these cases *hùxiāng* can precede the predicate (see (72c); *chǎn-shēng* ‘to generate, produce’).

- (71) a. *L.Z. bāng-zhù X.L.* ‘L.Z. helps X.L.’
 b. *Tāmen hùxiāng bāng-zhù.* ‘They help each other.’
 c. *Tāmen xū-yào hùxiāng bāng-zhù.* ‘They need mutual help’, lit. ‘... mutually help.’
- (72) a. *L.Z. wù-huì X.L.* ‘L.Z. misunderstands X.L.’
 b. *Tāmen hùxiāng wù-huì X.L.* ‘L.Z. and X.L. misunderstand each other.’
 c. *Tāmen hùxiāng chǎn-shēng wù-huì.* ‘Misunderstanding sprang between them’, lit. ‘They mutually produced misunderstanding.’

4. Words used instead of *hùxiāng*

4.1 The adverb *xiānghù* ‘mutually’, ‘mutual’

This adverb differs from *hùxiāng* in the arrangement of the components and lesser frequency, though it does not differ from it in meaning. It is more common than *hùxiāng* as an attribute (in this usage both adverbs, and also *bǐcǐ*, bear the optional attributive marker *de*); e.g. *xiānghù tài* ‘reciprocal voice’; cf. also the title of the paper “*Xiānghù dòngcí jí xiānghù dòngcí jù*” [Reciprocal verbs and sentences with reciprocal verbs] by Tao Hongyin entered in References. It may also be used in predicative position marked with *de* (in certain cases, as in (73b), with *shì ... -de*). Compare (in (73a) the head words are substantivized verbal compounds):

- (73) a. *xiānghù zuò-yòng* ‘mutual action, interaction’ (< ‘to work’)
xiānghù jiāo-tì ‘alternation’ (< ‘to alternate’)
xiānghù liǎo-jǐě ‘mutual understanding’ (< ‘to understand’).

- b. *Zhīyuán shì shuāng-fāng-de, shì xiānghù-de.*
 support COP two-side-ATR COP mutual-ATR
 '[This] support is bilateral and mutual.'

Xiānghù and *hùxiāng* are mostly interchangeable, as in (74). However, there are some differences between them:

- *xiānghù* is characteristic of written style and therefore less common.
- *hùxiāng* is an adverb and therefore does combine with nouns; *xiānghù* behaves like an adverb or as a determiner of a noun.
- *xiānghù* is used mostly in statements with respect to behaviour, manners, and emotions.

- (74) a. *Wǒmen xiāng-hù / hù-xiāng liǎo-jiě.*
 we mutually mutually understand
 'We understand each other.'
- b. *Tāmen xiāng-hù / hù-xiāng bù xìnren.*
 they mutually mutually NEG confidence
 'They have no confidence in each other.'
- c. *Wǒmen yīnggāi kàndào tāmen de xiāng-hù / *hù-xiāng zuòyòng.*
 we must see they ATR mutually mutually action
 'We must see their interaction.'

4.2 The adverb *bǐcǐ* 'mutually'

This adverb is a combination of demonstrative pronouns *bǐ* 'that (one)' + *cǐ* 'this (one)'. In preverbal position this unit means i. 'both, that and this', ii. 'mutually, together'. Even in case (i) this adverb always implies relations between two parties. It can function as a nominal constituent.

- (75) a. *Bǐcǐ dōu zuò-de hěn duì.*
 both all correct-ATR very behave
 'Both of them behave correctly (in a situation which implies the attitude of one to another).'
- b. *Bǐcǐ bù xiāng-róng.*
 both NEG mutually-tolerate
 'Both cannot stand each other.'

The adverb *bǐcǐ* is synonymous to *hùxiāng*. The latter is grammatical as a substitute in any sentence where *bǐcǐ* is used. But *bǐcǐ* seems to be a much better choice with verbs denoting "attitudes" or "views".

- (76) a. *Tā bǎ wǒ kàn-chéng dírén.*
 he ba I consider enemy
 'He considers me an enemy.'
- b. *Wǒ hé tā hùxiāng / bǐcǐ kàn-chéng dírén.*
 I and he consider each other enemies.'

The following sentences have occurred with *bǐcǐ* (it may combine with reciprocal verbs containing *xiāng*- (examples (77c) and (77d)) or *hù*- (77e).

- (77) a. *Bàodào bǐcǐ máo-dùn.*
‘The reports contradict one another.’
- b. *Zhè liǎng jiàn shìqìng shì bǐcǐ fēn-bù-kāi-de.*
this two CLF affair COP mutually share-NEG-share-de
‘These two affairs are inseparable.’
- c. *Tāmen liǎng-ge rén bǐcǐ xiāng-liàn.*
‘They both are mutually interrelated.’
- d. *Tāmen liǎng-ge rén bǐcǐ xiāng-sì.*
‘They both are mutually alike.’
- e. *Tāmen bǐcǐ hù-zhù.*
‘They help each other’ (lit. ‘mutually’).
- f. *Zhè shìxiōng shīdì liǎng bǐcǐ jìdù-de liǎo-bù-dé.*
this older.pupil younger.pupil two mutually envy-de finish-NEG-de
lit. ‘These two pupils, the older and the younger one, envy each other very much.’

In the literature, separate use of the components *bǐ* and *cǐ* is registered as alternative in meaning, though in the reverse order (see He Zili 1990: 156):

- (78) *cǐ qǐ bǐ fú.*
this rise that fall
‘rise one after another.’

4.3 The postposition *zhījiān* ‘among’

This postposition (composed of *zhī* (= marker of attribute) and postposition *jiān* ‘among, between’) is possible, as a rule, with verbs of emotions (to be more precise, with nominalized verbs of emotions and attitudes, etc.) in constructions with meanings like ‘There is (exists, appeared, developed) mistrust (misunderstanding, sympathy, compassion) between them (*tāmen zhījiān*), or between us (*wǒmen zhījiān*), or between you (*nǐmen zhījiān*)’ (these combinations are not limited to personal pronouns); cf.:

- (79) a. *Wǒ duì tā fāshēng-le bù xìnren.*
I to he appear-PERF NEG trust
‘I began to feel mistrust towards him.’
- b. *Wǒmen zhījiān fāshēng-le bù xìnren.*
we among.ourselves appear-PERF NEG trust
‘There developed a mistrust between us.’
- (80) a. *Wǒ duì tā yǒu-le tóngqíng.*
I to he appear-PERF sympathy
‘I feel compassion towards him.’
- b. *Wǒmen zhījiān yǒu-le tóngqíng.*
we among.ourselves appear-PERF sympathy
‘There developed a sympathy between us.’

- c. *Wǒ hé Xiǎo Wang zhījiān yǒu-le tóngqíng.*
 I and X.W. among-ourselves appear-PERF sympathy
 ‘There developed a sympathy between me and X.W.’

To sum up, all the substitutes of *hùxiāng* under discussion can be used with verbs of emotions (in the broad sense), though (81b) seems to be less adequate than the other two:

- (81) a. *Tā duì wǒ fā-shēng-le wùhuì.*
 he to I appear-PERF misunderstanding
 ‘He developed a misunderstanding towards me.’
 b. *Tāmen hùxiāng / xiānghù fā-shēng-le wùhuì.*
 they mutually mutually appear-PERF misunderstanding
 ‘There developed a misunderstanding between them.’
 c. *Tāmen bǐcǐ fā-shēng-le wùhuì* (same meaning)
 d. *Tāmen zhījiān fā-shēng-le wùhuì* (same meaning)

In the next sentence (Beijing colloquial speech) this postposition is used with a different tone in the reciprocal meaning in a way different from the above (other informants reject this sentence):

- (82) *Rén yǔ rén zhījiān jiàn-dào jiù hùxiāng dǎ-zhāo-hu “Nín hǎo”.*
 man with man among meet then mutually greet “You good”
 ‘When people meet they greet each other saying “Hello”.’ (Chirkova 2003:05351)

The following should be noted with regard to the use of *xiānghù* (*zhī*)*jiān* and *bǐcǐ* (*zhī*)*jiān*: *zhījiān* ‘between’ may follow *xiānghù* and *bǐcǐ*; the first syllable *zhī* is often omitted. *Zhījiān* rather rarely occurs with *hùxiāng*, in which case *zhī* cannot be omitted.

4.4 The noun *duìfāng* ‘partner’

This noun (composed of *duì* ‘to face, be opposite’, ‘two (of people)’ (cf. (91)) and *fāng* ‘side’; cf. (73b)) with the literal meaning ‘opposite side’ is cited above in 3.2.3 on “possessive” reciprocals where it occurs in attributive position before an object. In the cases below it serves as the only reciprocal marker in (83a) (borrowed from Meng Yeh 1991:233) and in combination with *hùxiāng* in (83b) (borrowed from Jiang Ping 2000:42–3), but it is not an attribute. This usage of *duìfāng* is rather rare and requires further investigation.

- (83) a. *Tāmen jié-hūn shí nián le, réngrán shēn-ài-zhe duìfāng.*
 they marry ten year PERF still love-DUR partner
 ‘They have been married for ten years, and still deeply love each other.’
 b. *Xiǎo Wang hé Xiǎo Li rèn-wéi tā-liǎng hùxiāng xǐ-huan duìfāng.*
 X.W. and X.L. think they-both mutually like partner
 i. ‘Xiao Wang and Xiao Li think that they both like each other’ (i.e. ‘Each thinks that X.W. likes X.L. and she likes him.’)
 ii. ‘Xiao Wang thinks that he likes Xiao Li and Xiao Li thinks that she likes Xiao Wang.’

5. Lexical reciprocals. General characteristics. Co-occurrence with *hùxiāng*

5.1 Introductory

5.1.1 *Three notional groups of lexical reciprocals. Compound verbs*

In Chinese, there are numerous *lexical* (= inherent) *reciprocals*. This section serves as a kind of background for Sections 6 and 7 where lexical reciprocals with initial recurrent components are considered. And the discussion of the use of *hùxiāng* (see above) is continued here.

As well as in many other languages, Chinese lexical reciprocals are quite diverse and fall into three main notional classes with the meanings listed below (cf. Knjazev, Ch. 2, §3). Between these main groups the borderlines are not always clearcut. Some of the reciprocals may be included in two groups at the same time.

The meanings of all these groups might be reduced to one opposition viewed broadly: as *drawing together* or, less commonly, *apart*, literally or figuratively.

1. *Social relations* (= rivalry or collaboration, quarrelling or reconciliation, marriage or divorce, etc.).

2. *Spatial relations* (= proximity/remoteness, joining/separating, intersection, etc.).

3. *General relations* (= identity or difference, coincidence or contrast, and also correspondence, harmony, comparison, etc.).

The semantic domains of lexical reciprocals and verbs with *hùxiāng* differ to a significant degree, though sometimes they are contiguous, which is made obvious by their co-occurrence.

A lexical reciprocal can be a verb, an adjective or a noun. It may have one, or two, or three, or four syllables, or it may be a compound comprised of two, or three, or four components. The most common are disyllabic words; in compounds the first (less commonly second) component often appears in a larger number of words – from ten to a hundred and more. The great number of Chinese lexical reciprocals is partly due to their ability to combine with one another into compounds. Some of the components may take either the first or the second place in compounds thus forming hundreds of units. For instance, the meanings ‘to quarrel’, ‘to argue, debate’ may be rendered by at least seven compounds, five of the constituents also expressing roughly the same or similar meaning (see (84) where *zhēng* means ‘to quarrel’, *chǎo* ‘to shout, quarrel’, *zuǐ* ‘mouth’, *lùn* ‘to discuss’ and *biàn* ‘to debate’; the latter two are bound morphemes). The compounds may differ in the amount of energy put into the quarrel, or argument, or the like:

(84) *zhēng-chǎo* *zhēng-zuǐ* *zhēng-lùn* *biàn-lùn*
 ? *chǎo-zhēng* *chǎo-zuǐ* *zhēng-biàn*

5.1.2 *Synonymy/non-synonymy of the components: Two main groups of disyllabic lexical reciprocals*

Lexical reciprocals may be monosyllabic and disyllabic (cf. (92) and the right hand columns in (93)–(94) respectively). Due to the general tendency of replacing monosyllabic words by disyllabic ones (see 2.1), there are also numerous compounds among the latter.

Of typological interest are *compound lexical reciprocals*, both verbs and nouns, with the *recurrent initial components* (less productive are the *final* recurrent components). These compounds are extremely numerous, their numbers running into hundreds in the dictionaries. The range of lexical meanings of the initial recurrent components and their combinability need further investigation.

Type 1. As mentioned, lexical reciprocals are defined here as verbs which form reciprocal sentences that do not have any respective underlying non-reciprocal sentences at all or are not related to them in a more or less standard way semantically, as is illustrated in the relation between (1b) and (1a'–a"). Therefore both compounds in (85) cannot be regarded as reciprocal derivatives proper: both a disyllabic verb and its second (base) component are synonymous and do not differ syntactically; e.g. (*duì* 'to face, opposite to'):

- (85) °*děng* 'of equal value' → *duì-děng* (same)
jiē 'to join (sth) together' → *duì-jiē* (same).

As Semenas (1992:61) claims with reference to Xie Wenqing (1982:82–3), among synonyms in Chinese, the most numerous are units with the same shared component; these components may have the same typified meaning and often replace each other.

Type 2. Type (85) comprises one group of lexical reciprocals, and the other type exemplified by (86) and (87) are lexical reciprocals that may have respective base verbs which are not synonymous to them, i.e. constructions with the latter verbs are not reciprocal and may differ syntactically, i.e. valency decrease takes place, though in rare cases (cf. one-place *lì* 'to stand' in (86b)) valency increase takes place (this is an instance of typologically predictable lexicalization).

- (86) a. *mà* 'to scold' → *duì-mà* 'to scold each other'
 b. *lì* 'to stand' → *duì-lì* i. 'to be opposed to each other'
 ii. 'to oppose sth and sth to each other' (see (104d)).

When the reciprocal meaning is coded by an *initial* or *final* recurrent component (see (9)–(11) and (12) respectively) we observe two-component formations that do not meet the definition of lexical reciprocals, because there are corresponding non-reciprocal constructions. But, since these formations are *limited in number* they can hardly be regarded as grammaticalized units.

Many of this kind of verbal pairs have gone out of use but they probably indicate a (weak) *tendency to code reciprocity with the first component*. Cf. the compounds with the initial component *jié* 'to tie/be tied' and *jiāo* 'to intersect/cross':

- (87) *tuō* 'to rely on sb' → °*jié-tuō* 'to rely on each other'
hèn 'to hate sb' → *jié-hèn* 'to hate each other.'
 (88) *wù* 'to hate sb' → ?*jiāo-wù* 'to hate each other'
fú 'to trust sb' → *jiāo-fú* 'to trust each other.'

The initial component looks like a derivational marker of reciprocity: as in (86)–(88), it is reciprocal in meaning and thus forms a kind of morphologically reciprocal verb, and it semantically corresponds to reciprocal affixes of agglutinative languages. In other words,

we observe a kind of derivation as reciprocity is brought into a compound by the initial component (they might be tentatively termed *quasi-derived lexical reciprocals*), but it is convenient to consider such instances together with other lexical reciprocals because, as mentioned, these compounds, though numerous, are limited in number and registered in dictionaries, although in fact they are kind of intermediate between *reciprocals proper* and *lexical reciprocals*. Another reason is that the initial and particularly final components are attached to monosyllabic verbs that are lexical reciprocals themselves, without incurring any significant change of meaning (cf. (11d, e), (85)).

These compounds may sometimes undergo lexicalization and either remain reciprocal (cf. (86b)) or become non-reciprocal (cf. (88) and *jiāo-bàn* ‘to entrust with sth’, where *bàn* means ‘to do’). It should also be taken into account that some of the underlying monosyllabic verbs are of limited use or practically out of use as free words (cf. *zhù* ‘to help’ in (8), *biàn* ‘to argue’ and *lùn* ‘to discuss’ in (84)). As has been mentioned, such components are referred to as *recurrent initial reciprocal components* (*recurrent components* for brevity) to distinguish them from those first components which occur in reciprocal compounds only occasionally, or at least not so frequently (true, we believe that further investigation may find other recurrent components that have escaped our attention). Thus this term is used here loosely as a label.

5.1.3 Three distinctive features of lexical reciprocals

The distribution of three distinctive features in question produces a number of overlapping groups of lexical reciprocals: some groups may possess one of these distinctive features while others may have both or all three. (Thus, for instance, the first feature does not cover many verbs with the meaning of *joining* (see (96c)). Lexical reciprocals possess the following properties, though in a different degree (in specialist literature a number of other features of lexical reciprocals are also distinguished, but we shall not dwell on them). We have in mind the following features (which may serve for distinguishing prototypical lexical reciprocals; see also paragraph A.3 in 6.3.1.2):

1. *Non-combinability* with *hùxiāng* (cf. (5b); as a rule, this concerns simple constructions. Judging by the lists of lexical reciprocals cited in (55) in Yakhontov (Ch. 48) which do combine with the reciprocal marker *xiāng*, this feature seems to be lacking in Ancient Chinese.

2. *Synonymy of discontinuous constructions with reversed arguments*. A distinctive feature of a large group of lexical reciprocals is the synonymy of (1a’) and (1a’’) type constructions, with the reversed arrangement of the arguments: they denote the same extralingual situation, with a slight difference in pragmatics.

- (89) a. *Tā chángchang hé wǒ jìng-zhēng.*
 he all.the.time with I compete
 ‘He always competes with me.’
 = b. *Wǒ chángchang hé tā jìng-zhēng.*
 I all.the.time with he compete
 ‘I always compete with him.’

- (90) a. *Lǐlùn lián-xì shíjiàn.*
 theory be.connected practice
 ‘Theory is connected with practice.’
 = b. *Shíjiàn lián-xì lǐlùn.*
 ‘Practice is connected with theory.’

3. Possibility of expressing two semantic arguments by one syntactic argument, the subject (of two-place verbs) or object (of three-place verbs); cf. (89a–b) and (89c). Certain verbs of joining (mental or physical) require an obligatory adverbial like *zài yìqǐ* ‘together’ (see (90c)). Some of the informants allow the use of *hùxiāng* in these cases, i.e. there is a kind of semantic affinity between these two adverbs.

- (89) c. *Tāmen chángchang [hùxiāng] jìng-zhēng.*
 they all.the.time mutually compete
 ‘They always compete [with each other].’ (= (84a, b))
- (90) c. *Zhèxiē lǐlùn liánxì zài yìqǐ.*
 these theory be.connected together
 ‘These theories are connected together.’
 d. *Zhèxiē lǐlùn hùxiāng liánxì.*
 these theory mutually be.connected
 lit. ‘These theories are mutually connected.’

5.2 Lexical reciprocals without recurrent components

As has been pointed out above, we have included here non-compound verbs and also those compounds with components that occur in a single verb or in a smaller number of verbs than those considered in Sections 6–7.

Unlike constructions with *hùxiāng*, these constructions are syntactically varied. As well as in the previous case, the reciprocal arguments can be both in the subject position or in object position, depending on the type of construction (subject-oriented or object-oriented); cf. *quánlì* in (34a) and (34b).

5.2.1 Lists of monosyllabic and disyllabic reciprocals

In this paper, the lists are naturally incomplete but sufficient to give a general idea.

5.2.1.1 *Monosyllabic reciprocals.* Their number is highly restricted in comparison with disyllabic ones.

(91) and (92) are lists of some monosyllabic lexical reciprocals that occur in the illustrative material in the dictionaries and have been obtained from the informants ((92) may be enlarged if we take into account the base verbs of the compounds considered in 6.3.1.4, 7.2.1.2, 7.2.2.2). Some of the verbs (being both intransitive and transitive) may function both as subject-oriented and object-oriented reciprocals (therefore the distribution of verbs in this respect among the groups and their number needs further specification). For a number of reasons, the functioning of lexical reciprocals from (91) within compounds is selected for a more detailed analysis in Section 7.

number of such monosyllabic lexical reciprocals (both free and bound morphemes) function as recurrent components of reciprocal compounds, including those listed in (91): *tōng*, *huì*, *bìng*, *fēn*, etc. Besides, the bound morphemes *yuē* ‘to come to an agreement’, etc. and also those functioning as initial components in a figurative meaning, e.g. *dǎ* ‘to beat’, are also used as such and form mostly lexical reciprocals with the meanings ‘to play’, ‘to compete’, ‘to fight’: *dǎ-pái* ‘to play cards’ (*pái* ‘cards’), *dǎ-qiú* ‘to play ball’ (*qiú* ‘ball’), *dǎ-quán* ‘to box’ (*quán* ‘fist’), *dǎ-dǔ* ‘to bet’ (*dǔ* ‘bet’), *dǎ-jià* ‘to fight’ (*jià* ‘to parry’), *dǎ-zhàng* ‘to fight’ (*zhàng* ‘to be at war’), etc.; cf. also compounds with the initial components *dòu* ‘to fight’ and *bìng* ‘to unite’, ‘together’: *°dòu-yǒng* ‘to vie in courage’, *dòu-zú* ‘to squabble’, *dòu-zhēng* ‘to fight’, *dòu-zhì* ‘to vie in wit’, *dòu-fǎ* ‘to vie with the help of witchcraft’, etc.; *bìng-xíng* ‘to walk side by side’ (*xíng* ‘to walk’), *bìng-cún* ‘to co-exist’ (*cún* ‘to live’), *bìng-jǔ* ‘to use simultaneously’, *bìng-liè* ‘to be, stand next to’ (*liè* ‘to stand’), etc.

5.2.1.2 *Disyllabic reciprocals*. The number of these reciprocals is considerable and much greater than that of the monosyllabic reciprocals. They usually contain a less commonly used monosyllabic synonym. The initial components of this group not infrequently occur in several compounds rather than in single ones and do not form any large groups of compounds. The verbs *lián* ‘to join together’ and *shāng* ‘to discuss, consult, speak’ enter into chains of at least three or four compounds. A few more examples (see also (84)):

- | | | | |
|------|--|---|--|
| (93) | <i>hé</i> ₁ ‘to be connected’ | → | <i>lián-he</i> ₁ ‘to join’ |
| | <i>xì</i> ‘to tie’ | → | <i>lián-xì</i> ‘to tie/be tied’ |
| | <i>jié</i> ‘to tie, gather’ | → | <i>lián-jié</i> ‘to tie, gather’ |
| | <i>jiē</i> ‘to tie, join’ | → | <i>lián-jiē</i> ‘to join.’ |
| (94) | <i>°cuō</i> ‘to exchange views’ | → | <i>°shāng-cuō</i> ‘to exchange views’ |
| | <i>dìng</i> ‘to fasten, fix sth’ | → | <i>shāng-dìng</i> ‘to come to an agreement’ |
| | <i>liáng</i> ‘to measure’ | → | <i>shāng-liáng</i> ‘to confer, arrange things’ |
| | <i>tān</i> ‘to talk’ | → | <i>shāng-tán</i> ‘to exchange views’ |
| | <i>tǎo</i> ‘to discuss’ | → | <i>shāng-tǎo</i> ‘to discuss’ |
| | <i>tuō</i> ‘to be proper’ | → | <i>shāng-tuō</i> ‘come to an agreement after discussion’ |
| | <i>°xié</i> ‘to be in concord’ | → | <i>shāng-xié</i> ‘to talk things over’ |
| | <i>°yì</i> ‘to discuss’ | → | <i>shāng-yì</i> ‘to discuss, consult.’ |

Here are additional lists of disyllabic subject- and object-oriented lexical reciprocals:

a. Subject-oriented reciprocals

- | | | |
|------|---|--|
| (95) | <i>dǎ-zhàng</i> ‘to be at war’ | <i>lái-wǎng</i> ‘to associate’ |
| | <i>fēn-bié</i> ‘to part, separate’ | <i>lián-xì</i> ‘to be connected’ |
| | <i>fēn-lí</i> ‘to be separated’ | <i>lí-bié</i> ‘to part, separate’ |
| | <i>fēn-kāi</i> ‘to be separated’ | <i>lí-kāi</i> ‘to part, separate’ |
| | <i>guà-zhù</i> ‘to get coupled’ | <i>píng-děng</i> ‘equal’ |
| | <i>huì-wù</i> ‘to meet’ | <i>shuāng-fāng</i> ‘to become reconciled’ |
| | <i>hùn-hé</i> ₁ ‘to get mixed’ | <i>zhēng-lùn</i> ‘to argue’, etc. (see also (52) in 4) |
| | <i>jiāng-hé</i> ₂ ‘to become reconciled’ | <i>yù-jiàn</i> ‘to meet.’ |
| | <i>jìng-zhēng</i> ‘to compete’ | |

b. Object-oriented lexical reciprocals

- | | |
|---|---|
| (96) <i>duàn-jīē</i> 'to join by welding' | <i>tiáo-tíng</i> 'to reconcile' |
| <i>fēn-bíé</i> 'to separate sb/sth' | <i>tiáo-jíé</i> 'to reconcile' |
| <i>fēn-kāi</i> 'to separate sb/sth' | <i>tiáo-hé₂</i> 'to reconcile' |
| <i>fēn-lí</i> 'to separate sb/sth' | <i>xié-tiáo</i> 'to reconcile' |
| <i>guà-shàng</i> 'to couple sth' | <i>zá-jiāo</i> 'to crossbreed' |
| <i>hùn-hé₁</i> 'to mix sth up' | <i>zá-pèi</i> 'to crossbreed' |
| <i>lí-jiàn</i> 'to set on to fight' | <i>zhēng-chǎo</i> 'to make quarrel' |
| <i>qū-bíé</i> 'to separate' | <i>pèi-hé₁</i> 'to coordinate' |
| <i>qū-fēn</i> 'to distinguish' | |

Like monosyllabic reciprocals, some of these are transitive/intransitive; some of the object-oriented reciprocals can be formed from subject-oriented by means of the auxiliary causative verb *shǐ* 'to cause, make'; cf. *píng-děng* 'equal' → *shǐ ... píng-děng* 'to equalize' (see (34)).

5.2.2 *Expression of reciprocal arguments*

In this section we will illustrate the use of lexical reciprocals in different types of constructions. These reciprocals are grouped according to the means of expressing the arguments.

5.2.2.1 *Subject-oriented reciprocals.* In addition to (89a–b) and (90a–b), the following examples illustrate the discontinuous and the simple types of reciprocal constructions with both monosyllabic and disyllabic reciprocals.

5.2.2.1.1 *Discontinuous constructions.* This type of constructions is displayed most unambiguously with lexical reciprocals, especially those of equality, distance and connecting, because their second argument may follow the predicate (cf. (8b), (90a–b), (97), (98)). As mentioned above, transformation of this type with verbs that are not lexical reciprocals results in a sharp change of the denotational situation named, of the type 'The neighbour is afraid of him' and 'He is afraid of the neighbour' (cf. (31a–c) and the relevant text). The co-argument can be either a direct or, more commonly, a comitative object with a preposition *yú*, *gēn*, *tóng*, or *hé* 'with/and'; cf. (89a) and (89b), and (90a) and (90b) respectively):

- (97) a. [*Rénmín bì*] *shí yuán hé₁* *dūoshao lúbù?*
 Chinese.currency ten yuan correspond how.much rouble
 'How much are (lit. '... correspond') 10 Chinese yuan in roubles?'
 = b. ... *dūoshao lúbù hé₁* *shí yuán?*
 how.much rouble correspond ten yuan
 'How much roubles are (lit. '... correspond') 10 Chinese yuan?'
- (98) a. *Wǒmen-de chuānghu duì-zhe tāmen-de chuānghu*
 we-ATR window face-DUR they-ATR window
 'Our windows face their windows.'

- = b. *Tāmen-de chuānghu duì-zhe wǒmen-de chuānghu*
 they-ATR window face-DUR we-ATR window
 ‘Their windows face our windows.’

In (97)–(98), the second reciprocal argument is placed after the predicate, therefore they are unambiguously discontinuous, the second argument being a complement. But, we repeat, this is possible only with a certain group of lexical reciprocals. When the prepositional comitative phrase of a two-place predicate is preposed to it the difference between the simple and the discontinuous construction is neutralized on the surface, i.e. it is unclear whether the comitative noun-phrase is part of the subject or a comitative object (cf. the analogous situation in Ancient Chinese: Yakhontov, Ch. 48, §8.2). In other words, the picture is similar to that with *hùxiāng* constructions (cf. 3.1.3; see also case 6 in 2.7). This issue is discussed in the Chinese specialist literature with emphasis on the status of words like *hé* as conjunctions or prepositions in these sentences (for details see Zhang Yisheng 1996:330–8). Chinese examples like (99) are usually translated by native speakers as (i), and, on the other hand, English sentences like (i) and (ii) are both translated by native speakers into Chinese in the same way by sentences like (99).

- (99) a. *Wǒ hé tā yuē-hǎo-le.*
 I and/with he make.appointment-PERF
 i. ‘I made an appointment *with him*.’
 ii. ‘I *and he* made an appointment *with each other*.’
- b. *Tā hé wǒ biàn-lùn-le.*
 he and/with I argue-PERF
 i. ‘He argued *with me*.’
 ii. ‘He *and I* argued.’
- c. *Wǒ hé shūshu hěn qīn-jìn.*
 I and uncle very close
 i. ‘I am very close *to my uncle*.’
 ii. ‘I *and my uncle* are very close *to each other*.’

5.2.2.1.2 *Simple constructions.* Here both reciprocal arguments, as mentioned above, are coded in the same ways as in constructions with *hùxiāng*, i.e. by one syntactic argument (cf. (36), (38)). It may be reasonable to distinguish between *spatial* and *non-spatial* lexical reciprocals. In the simple construction with monosyllabic as well as with disyllabic reciprocals of joining there is a tendency to employ in the sentence-final position either (a) the adverbs *yìqǐ* ‘together’, *zài yìqǐ* ‘together’ (cf.90c), (101)); or (b) the auxiliary word *qílái* which in this case denotes causing a certain state of the object (see (33a), (67)); and even (c) use sometimes the adverb *hùxiāng* (see (73a), (90d)). A choice between (a), (b) or (c) may be possible (see (90c–d)). Additional constituents of types (a) and (c) are usually absent or even disallowed in the respective explicitly discontinuous constructions. The tendency to use them depends on (i) the meaning of the individual reciprocal and (ii) some peculiarities of the structure of a simple construction.

1. *Non-spatial reciprocals*

- (100) a. *Tā hé wǒ chángchang bǐ liqi.*
 he and I often compare strength
 ‘He and I compete in strength [with each other].’
 lit. ‘He and I compare our strength.’
- b. *Tāmen bùzhībùjué tán-le liǎng xiǎoshí.*
 they imperceptibly converse-PERF two hour
 ‘They have talked for two hours without noticing it.’
- c. *Tāmen liǎ bù hé₂.*
 they two NEG harmonious
 ‘They are not on good terms.’
- d. *Wǒ hé tā chángchang kàn₁fā bù tóng.*
 I and he often opinion not same
 ‘I and he often have different opinions.’

2. *Spatial reciprocals*

- (101) a. *Gè zhǒng yánsè de xiàn jiāo-zhī zài yīqǐ.*
 every kind colour ATR thread get.entangled together
 ‘Threads of all kinds of colour got entangled.’
- b. *Wǒmen-de xīn yǒngyuǎn lián zài yīqǐ.*
 we-ATR heart forever connect together
 ‘Our hearts are (linked) together forever.’

5.2.2.2 *Object-oriented reciprocals.* A distinctive feature of object-oriented lexical reciprocals is the obligatory plurality of the object denoting two or more things of the same class. The objects of a discontinuous construction are sometimes not of the same rank in the situation described and it is difficult to arrange them in an order analogous to that in (89). Cf. (102a) and (102b). See, however, (103a) and (103b) which are semantically more or less equal, unlike (102a) and (102b).

5.2.2.2.1 *Discontinuous constructions.* The meaning of exchange is close to that of equality which, as has been mentioned above, is characteristic of explicitly discontinuous constructions (cf. 5.2.2.1.1). There seem to be grounds to include (102c) here rather than among simple constructions.

- (102) a. *Tā_i yòng jiù bì huàn xīn bì.*
 he with old money exchange new money
 ‘He exchanged old money for new money.’
- = b. *Tā_j yòng xīn bì huàn jiù bì.*
 he with new money exchange old money
 ‘He exchanged new money for old money.’
- c. *Bù néng bǎ gōngzuò hé/gēn xúxí duì-lì qilai.*
 NEG can *ba* work and/with study oppose *qilai*
 ‘One cannot set work in opposition to study.’

5.2.2.2.2 *Simple constructions.* The reciprocal arguments are most commonly expressed by a (semantically) plural homogeneous object. The latter often precedes the predicate and takes the preposition *bǎ* or the verb-preposition *ná* ‘take’. Less commonly the object follows the predicate (see (103b)).

1. *Non-spatial reciprocals*

- (103) a. *Tā bǎ liǎng jiàn yīfu bǐ le bǐ.*
 he *ba* two CLF thing compare PERF comparison
 ‘He compared two pieces of clothes.’ (lit. ‘He compared ... one comparison.’)
- b. *Tā bù fēn shì fēi qū zhí.*
 s/he NEG distinguish right wrong crooked straight
 ‘S/he does not distinguish (between) truth (and) lies, straight (and) crooked.’

2. *Spatial reciprocals*

- (104) a. *Tā bǎ liǎng ge chēxiāng guà zài jīqǐ.*
 s/he *ba* two CLF carriage couple together
 ‘S/he coupled two carriages together.’
- b. *Tā bǎ liǎng kuài píng féng zài jīqǐ.*
 he *ba* two piece skin sew together
 ‘He sewed two pieces of skin together.’
- c. *Wǒ děi bǎ zhè liǎng gēn diànxiàn jiē qilai.*
 I must *ba* this two CLF wire bind *qilai*
 ‘I must bind these two electric wires.’
- d. *Zhè ge xiǎo gūniang ài jié húdiéjié.*
 this CLF little girl like tie butterfly.knot
 ‘This small girl likes to tie butterfly knots.’

5.2.2.3 *Constructions with a singular subject.* In the discontinuous construction the role of the second argument may be noticeably weakened. This is most common when a situation is described as being in progress, or negated (the role of one participant in a joint event is emphasized, while the other participant is backgrounded as in (105), though if someone does not associate with his neighbour it is clear that the neighbour does not associate with him either).

- (105) *Tā bù tóng línjū lái-wǎng.*
 s/he NEG with neighbour associate
 ‘S/he does not associate with his/her neighbours.’

The second argument may remain unnamed; in these cases the subject may be singular, though there is no second argument. Generally, as we mentioned, sentences with a singular subject (and no co-argument in non-subject position) are rejected by the informants, but in certain cases such elliptical sentences are accepted and they presuppose the knowledge of the situation preceding the one described. For (106a) this is the knowledge of the prior quarrel of two persons,

- (106) a. *Tā jù-jué hé₁-jiě.*
 he refuse be.reconciled
 ‘He refused to get reconciled (with sb).’

A sentence with a singular subject does not sound elliptical if the predicate implies a change in the social status of the subject referents participating in the prior event. Tao Hongyin (1987:363) claims that the second argument here is covert because we cannot add *zìjǐ* ‘by oneself, alone’, *dān dū*, *dúzì* ‘only alone’ (as we cannot add its translation in the English sentence *John married *alone*).

- b. *Tā dīng-hūn / jié-hūn / lí-hūn-le.*
 s/he betroth / marry / divorce-PERF
 ‘She/he is betrothed/married/divorced.’

5.2.2.4 *The adverb dōu ‘all’.* Sentences of the (107a) type with a plural subject are usually interpreted as non-elliptical, denoting actions with all the participants named. If we add the adverb *dōu* ‘all’ in (107b), the plural subject is unambiguously interpreted as a single collective participant and the construction is interpreted as discontinuous with an omitted second argument; every participant, on his part, performs this action (consequently, together with the other participant):

- (107) a. *L.Z. hé / gēn X.L. dǎ-jià-le.*
 L.Z. and X.L. fight-PERF
 i. ‘L.Z. and X.L. fought *with each other*.’
 ii. ‘*L.Z. and X.L. fought (*with someone else*).’
 b. *L.Z. hé / gēn X.L. dōu dǎ-jià-le.*
 L.Z. and/with X.L. all fight-PERF
 i. ‘*L.Z. and X.L. fought *with each other*.’
 ii. ‘L.Z. and/with X.L. both of them fought *with someone else*.’

The use of *dōu* in constructions with *hùxiāng* does not change the reading of the sentence, because, as mentioned, the domain of *hùxiāng* covers only the words that precede it.

- (108) *Tāmen hòuxiāng dōu qī-piàn-le.*
 they mutually all deceive
 i. ‘All of them deceive *each other*.’
 ii. ‘*All of them deceive *someone else*.’

5.3 Co-occurrence with *hùxiāng*. Pleonastic use?

The present section concerns lexical reciprocals that are considered below in Section 7 (note that compounds in Section 6 do not collocate with *hùxiāng*), because it also concerns the use of *hùxiāng*. Sometimes, the informants hesitate or their opinions differ significantly with regard to the acceptability of collocations with *hùxiāng*. The use of *hùxiāng* is either pleonastic or it stresses the reciprocal meaning, highlighting the presence of two participants or two parties.

Judging by example (55) in Ch. 48 on Ancient Chinese (Yakhontov), collocations of lexical reciprocals with *xiāng* were also possible in Ancient Chinese; a list of more than ten such collocations are cited there (all of them retain the comitative preposition of the base

verb). Of course, it is difficult to draw any conclusions concerning restrictions on these Ancient Chinese collocations.

5.3.1 Subject-oriented reciprocals

They fall into two groups with respect to combinability with *hùxiāng*: Group A that allows (usually optionally) combinability with *hùxiāng*, and Group B that does not allow it (in special contexts, however, exceptions are possible; see 5.3.3). The lists below are meant as illustrations and they are not exhaustive.

5.3.1.1 *Lexical reciprocals collocating with hùxiāng.* Most easily two subgroups of lexical reciprocals listed below collocate with *hùxiāng*. There seem to exist certain tendencies of collocability with *hùxiāng* depending on the meaning of one of the components and also its initial or final position in the compound; thus, the initial position of the verb *tán* ‘to talk’ blocks the use with *hùxiāng* (cf. (5b)), while its final position does not (cf. 110)). As for the verb *shāng* ‘to discuss, consult’ (cf. (94)) it does not prevent the use with *hùxiāng* in either case. Most of the compounds with the initial *tōng* can be modified by *hùxiāng* (cf. (110)).

1. Lexical reciprocals of *spatial relations* with the meaning of *joining* and *contact* (literal or mental); they are preferable with *hùxiāng*; this small group is semantically homogeneous:

- | | | |
|-------|--|------------------------------------|
| (109) | <i>hé₁-bìng</i> ‘to flow/join together’ | <i>jiāo-jié</i> ‘to border’ |
| | <i>hé₁-lǒng</i> ‘to put together’ | <i>jiāo-zhī</i> ‘to get entangled’ |
| | <i>jiāo-chā</i> ‘to collide, come upon each other’ | <i>lián-xì</i> ‘to be connected’ |
| | <i>jiāo-cuò</i> ‘to interweave’ | <i>pèng-zhùang</i> ‘to collide’. |
| | <i>jiāo-róng</i> ‘to get mixed’ | |

2. Lexical reciprocals of communication with a prominent semantic component of speech:

- | | | |
|-------|--|--|
| (110) | <i>biàn-lùn</i> ‘to argue, dispute’ | <i>tōng-huà</i> ‘to communicate by telephone’ |
| | <i>chǎo-zuī</i> ‘to quarrel’ | <i>tōng-qì</i> ‘to be in communication with’ |
| | <i>duì-huà</i> ‘to have a dialogue’ | <i>tōng-shāng</i> ‘to have trade relations’ |
| | <i>gào-bié</i> ‘to say goodbye, part’ | <i>tōng-xìn</i> ‘to communicate by letter’ |
| | <i>jiāo-tán</i> ‘to dispute with each other’ | <i>zhēng-chāo</i> ‘to quarrel with each other’ |
| | <i>jiāo-wǎng</i> ‘to be in contact with’ | <i>zhēng-biàn</i> ‘to quarrel’ |
| | <i>liáo-tiān</i> ‘to chatter with sb’ | <i>zhēng-lùn</i> ‘to argue’. |
| | <i>shāng-tán</i> ‘to exchange views’ | |

3. Other lexical reciprocals:

- | | | |
|-------|---|---|
| (111) | <i>bī-jìào</i> ‘to compete’ | <i>jiē-jìn</i> ‘to be near, become friends’ |
| | <i>dǎ-dù</i> ‘to make a bet’ | <i>jìng-zhēng</i> ‘to compete’ |
| | <i>hé₂-hǎo</i> ‘to get reconciled’ | <i>qīn-jìn</i> ‘to be intimately close’ |
| | <i>hé₂-qīn</i> ‘to become friends’ | <i>qīn-mì</i> ‘to be intimately close’ |
| | <i>hé₂-xié</i> ‘to be in harmony with’ | <i>wò-shǒu</i> ‘to shake hands’ |
| | <i>jiāo-wǎng</i> ‘to see each other, be friends’ | <i>yōng-bào</i> ‘to embrace’ |

jié-bài ‘to pledge brotherhood’ *yù-jiàn* ‘to meet’
dǎ-jià ‘to fight’

The following examples illustrate the use of *hùxiāng*:

- (112) a. *Liǎng liàng dāchē lùn hùxiāng guà-zhù-le.*
 two CLF vehicle wheel mutually entangle-PERF
 ‘The wheels of two carts got entangled.’
- b. *Lù hé hé hùxiāng jiāo-zhī-zhe.*
 road and river mutually get.entangled-DUR
 ‘The road and the river intersect.’
- c. *A hé [gēn, tóng] B [hùxiāng] jiāo-jiē.*
 A and *gen tong* B mutually border
 ‘A and B border on each other.’
- d. *Nǐmen bú yào [hùxiāng] zhēng-lùn.*
 you.PL NEG necessary mutually argue
 ‘You shouldn’t argue with each other.’
- e. *Tā tóng lín-jū [hùxiāng] bù lái-wǎng.*
 he with neighbour mutually NEG associate
 ‘He does not mix with his neighbours.’
- f. *Tāmen hùxiāng dǎ-dù-le.*
 ‘They made a bet with each other.’
- g. *L.W. hé L.Z. [hùxiāng] bù hé₂-xié.*
 L.W. and L.Z. mutually NEG in.harmony
 ‘L.W and L.Z. are not on good terms [with each other].’

It should be stressed that the verb *huàn* takes a special place among the reciprocals in question. In (113a) it functions as an object-oriented reciprocal, i.e. entity A is replaced by entity B, which means that entity B is replaced by entity A at the same time. In (113b) this situation of replacing entities by one another is retained, but it is further complicated by the change of the subject referents, i.e. the verb is simultaneously subject-oriented (cf. “indirect” reciprocals in 3.2.2). The adverb *hùxiāng* indicates and stresses subject-oriented reciprocity.

- (113) a. *Tā huàn-le zhùzhái.*
 he change-PERF flat
 ‘He changed his flat.’
- b. *Tāmen [hùxiāng] huàn-le zhùzhái.*
 they mutually change-PERF flat
 i. ‘They changed their flat.’ (without *hùxiāng*)
 ii. ‘They exchanged their flats.’ (both with and without *hùxiāng*)
- c. *Tāmen hùxiāng jiāo-huàn-le zhùzhái.*
 ‘They exchanged their flats [with each other].’

5.3.1.2 *Lexical reciprocals that disallow hùxiāng.* They seem to be in the majority. This restriction concerns only a certain group of lexical reciprocals. Firstly, *hùxiāng* does not occur with lexical reciprocals whose first component is *hù-* or *xiāng-*, i.e. a component contained in *hùxiāng* (on these reciprocals see Section 6), and *tóng* ‘equal’; its compounds

often have a sociative sense; cf. *tóng-jū* ‘to live together’, *tóng-chuáng* ‘to sleep in the same bed’. Note that compounds with *hé₁* combine with *hùxiāng* if *hé₁* denotes joining (see (158)) and, as a rule, they do not combine with it if their meaning is sociative, as in *hé₁-zuò* ‘to work together’, *hé₁-chàng* ‘to sing in chorus’ (see (155), etc.

- | | | |
|-------|---|--|
| (114) | <i>bàn-zuǐ</i> ‘to argue’ | <i>jié-hūn</i> ‘to get married’ |
| | <i>chǎo-zuǐ</i> ‘to argue, quarrel’ | <i>jié-wěn</i> ‘to kiss each other’ |
| | <i>dìng-hūn</i> ‘to get betrothed’ | <i>lái-wǎng</i> ‘to associate with each other’ |
| | <i>hé₂-jiě</i> ‘to get reconciled’ | <i>lí-hūn</i> ‘to get divorced’ |
| | <i>hé₂-hǎo</i> ‘to get reconciled’ | <i>nào-jiāng</i> ‘to get angry at each other’ |
| | <i>hé₁-pāi</i> ‘to be in harmony’ | <i>nào-biè-niú</i> ‘to be sulky with each other’ |
| | <i>hé₂-yuē</i> ‘to come to an agreement’ | <i>tán-huà</i> ‘to converse’ |
| | <i>jiàn-miàn</i> ‘to meet each other’ | <i>tán-pàn</i> ‘to carry on talks’ |
| | <i>jiāng-hé₂</i> ‘to get reconciled’ | <i>zá-jiāo</i> ‘to crossbreed.’ |
| | <i>jiāo-zhàn</i> ‘to fight’ | |

5.3.2 Object-oriented reciprocals

In this type of constructions with verbs of joining in the broad sense, including comparison (a kind of mental “joining”), the informants’ opinions have divided as follows: some assert that *hùxiāng* when used in (115), though optional, requires an adverb with the meaning ‘together’. A number of the informants, however, allow omission of the latter adverb even if *hùxiāng* is used, as in (116). Note that in these cases *hùxiāng* obligatorily follows the direct object: otherwise the latter does not fall under its scope.

- (115) a. *Tā bā liǎng zhāng zhǐ [hùxiāng] zhān zài yìqǐ.*
 he *ba* two sheet paper mutually paste to together
 ‘He pasted two sheets of paper together.’
- b. *Tā bā liǎng tiáo shéngzi [hùxiāng] jì-zài-le yìqǐ.*
 he *ba* two CLF rope mutually tie-PERF together
 ‘He tied two ropes together.’
- c. *Tā bā liǎng zhāng zhàopiān [hùxiāng] bǐ-jiào-le yíxià.*
 he *ba* two sheet photo mutually compare once
 ‘He compared two photos.’

5.3.3 Special cases

The use of *hùxiāng* may be determined by a change of the denotational situation: description of a less common situation instead of a more common one allows the use of this adverb.

1. Thus, the verb *jiàn-miàn* ‘to meet (each other)’ does not as a rule combine with *hùxiāng*; the only exception is when it is used to describe the first meeting of two young people when they get acquainted, with the purpose of subsequent marriage. *Hùxiāng* is meant to stress the special character of this meeting (cf. Hoa 1983:54).

2. The adverb *hùxiāng* is possible with the lexical reciprocal *jié-hūn* ‘to get married’ only in one rather rare instance, viz., when the subject names a number of brides and bridegrooms being married simultaneously.

6. Reciprocal compounds with the components *hù*- and *xiāng*-

6.1 Introductory

The components *hù*- and *xiāng*- both, as mentioned, with the meaning ‘mutually’ are not used as free units in Modern Chinese (*báihuà*), and they are retained as the initial components of some compounds only (see, for instance, Zograf 1979: 308). In the *Chinese-Russian dictionary* (Oshanin 1983–4) 31 compounds with *hù*- are registered and about 100 compounds with *xiāng*-. Most probably, the compounds registered in the dictionary form more or less closed lists which can hardly be enlarged: more likely, judging by the informants’ evaluations, their number should be considerably reduced. The compounds with these components do not collocate with *hùxiāng*, for the obvious reason that the components *hù*- and *xiāng*- are combined in *hùxiāng* and coincide with it in meaning (note that the adverb *bǐcǐ* is synonymous with *hùxiāng* and collocates with these compounds; see (138b), cf. 4.2). Due to their adverbial origin, *hù*- and *xiāng*- cannot appear in final position in compounds, which is natural for many verbal components (see, for instance, (7)). It is expedient to consider them apart from other lexical reciprocals.

As mentioned, the term *lexical reciprocals* is used here to cover the compounds that are registered in the dictionaries as separate entries, unlike combinations with the adverb *hùxiāng*. It is interesting to outline the semantic content that is retained and that is lost in the compounds with *hù*- and *xiāng*-, and also to compare them with reciprocals with *hùxiāng*. The latter have ousted the tendency of morphological coding of the reciprocal sense by means of compounding that seemed to be taking shape.

We have found no information about the component *hù*- in the specialist literature. As regards *xiāng*, it is usually mentioned in the grammars. According to some authors, there is no difference between *xiāng* and *hùxiāng*. For instance, Wang Liaoyi (1957: 58–9) claims in the section “The reciprocal pronoun” (in Chinese grammatical tradition these words are often called pronouns): “The only reciprocal pronoun in Chinese is the word *xiāng* ‘each other’. It expresses relations of reciprocity between two (or more) persons or things. [...] Sometimes, instead of *xiāng* the form *hùxiāng* is used in the same meaning”. Further on, however, this author claims that in modern colloquial speech the word *xiāng* is slowly going out of use. Wang Liaoyi (1957: 58) asserts that without being a pronoun, *xiāng* serves in some *wényán* sentences as a pronoun, though its principal meaning when used adverbially is ‘mutually’. He also claims that sometimes *xiāng* loses its meaning of a reciprocal pronoun and in a way it becomes similar to the inverted (i.e. preposed to the predicate) personal pronouns *tā* ‘s/he’, *nǐ* ‘you.sg’, *wǒ* ‘I’, or to the reflexive pronoun *zìjǐ* ‘oneself’. He notes that the pronoun *tā* can be used instead of *xiāng*, as in (116b), without any change in meaning. If in (116a) *xiāng* is translated by a 3rd p. pronoun according to the context, in (117a) it is translated as the 1st p. pronoun (this example is borrowed from Lü Shuxiang (1956: 162) who regards *xiāng* in this usage as a pronoun); these phrases are of the written style.

- (116) a. *Zhòng rén máng xiāng-quàn-wèi.*
 all man rush *xiang*-console
 ‘Everybody started consoling her.’
 b. *Máng quàn-wèi tā.*
 rush console s/he
 ‘(They started) consoling her.’
- (117) a. *Èrtóng xiāng-jàn bù xiāng-shí*
 boy *xiang*-see not *xiang*-recognize
 ‘The child glanced *at me* and did not recognize *me*.’
 b. *Èrtóng jiàn wǒ bù shí wǒ.*
 boy see I not recognize I
 (same translation).

On the use of *xiāng*- instead of personal pronouns see also Yakhontov (Ch. 48, §12): “During this period (in the 3rd century CE) the reciprocal form *xiāng*- acquires one more meaning alongside the earlier one; in dialogue it comes to denote an action of one communicant directed at the other: ‘*I* (verb) *you*’ or, somewhat less commonly, ‘*you* (verb) *me*’. In these cases *xiāng*- also corresponds to an object (which is always omitted, while the subject is mostly present). The choice between the two possible readings of the form ((verb) *you*’ or ‘(verb) *me*’) is determined by the subject though sometimes it has to be recovered from the context [...] In báihuà *xiāng*- is not used as a free unit (though it is possible in bound collocations). In wényán it is retained as a regular reciprocal marker. Besides, in the genre of short stories (written in simplified wényán) it may have the “pronominal” use described above; moreover, its functions are expanded: it can be used not only in dialogue but also in narration, and it can replace any personal pronoun, including that of the 3rd person” (see also Lü Shuxiang 1965:58).

As is pointed out by I.M. Oshanin in his notes in Lü Shuxiang (1965:77), *xiāng*- in Ancient Chinese had a reciprocal and also a *sociative* meaning:

- (118) a. *xiāng-shā* i. ‘to kill *each other*’
 ii. ‘(of *many*) to kill one’
 iii. ‘(of one) to kill *many*’
 b. *xiāng-shā-zhī* ‘to kill him/her *together/jointly*’.

As regards the component *hù*, it had at least two usages in Ancient Chinese, as an adverb with the meaning ‘each other’ and as a verb ‘to interlace, interweave’.

6.2 Reciprocals with the component *hù*-

As mentioned, our list contains 31 compounds with *hù*-, of which 25 units are verbs (23 subject-oriented and 2 object-oriented) and 6 are registered in dictionaries as nouns only (see 6.4). The following forms, which display slight traces of grammaticalization, have branched off from these compounds: (a) on verbs with the negation *bù*- the component *hù*- functions, though very rarely, as a reciprocal marker (cf. (13g)), and (b) reduplicated *hù*- has developed a degree of activity as a reciprocalizer (cf. (12a)).

6.2.1 *Subject-oriented reciprocals*

6.2.1.1 *Compounds with the reciprocal meaning coded by hù- only.* These compounds are slightly more numerous than those listed in (121) and, moreover, more than half of them are accepted by the informants, though some of them only marginally. Among the base verbs, transitives are prevalent, and among the compounds, intransitives prevail (the range of these base verbs overlaps with that of compounds with *xiāng-*; thus *bǎo*, *còng*, *mà*, *ràng*, *zhù* occur in both groups, most of the pairs being synonymous). Sentential examples and lists of these compounds follow; (120a) contains “canonical” reciprocals and (120b) “indirect” reciprocals; (about the latter type see 4.1.2, cf. also (113) and the text above it):

- (119) a. *Wǒ gěi tā ràng-le dào.*
I for he give.in-PERF way
'I made way for him.'
- b. *Wǒmen hù-ràng-guo dào.*
we REC-give.in-EXP way
'We made way for each other.'
- (120) a. *bǎo* 'to vouch for sb' → °*hù-bǎo* 'to vouch for each other'
cóng 'to follow sb' → °*hù-cóng* 'to follow each other'
lì 'to be beneficial/profitable' → *hù-lì* 'to be mutually beneficial'
mà 'to scold' → *hù-mà* 'to squabble'
miǎn 'to encourage' → °*hù-miǎn* 'to encourage each other'
nì 'to go in the opposite direction' → °*hù-nì* 'to go away from each other'
ràng 'to give in/concede' → *hù-ràng* 'to give in to each other'
zhèng 'to corroborate, verify' → °*hù-zhèng* 'to corroborate mutually'
zhù 'to help' → *hù-zhù* 'to help each other'
zhuàng 'to beat, push' → *hù-zhuàng* 'to collide'
- b. *pài* 'to send' → *hù-pài* 'to send sb to each other'
shì 'to send' → *hù-shì yǎnsè* 'to exchange glances'
tóu 'to throw sth' → *hù-tóu* 'to throw sth to each other'.

6.2.1.2 *Both components are reciprocal in meaning.* The translations of the base verbs and respective compounds either coincide or differ slightly; cf. sentential examples and a list of these compounds where (123a) contains “canonical” reciprocals and (123b) “indirect” reciprocals:

- (121) a. *Zhè ge guójiā huàn-le dàshǐ.*
this item country change-PERF ambassador
'This country changed its ambassador.'
- b. *Liǎng ge guójiā hù-huàn-le dàshǐ.*
both item country REC-change-PERF ambassador
'The two countries exchanged ambassadors.'
- (122) a. [?]*Tā tōng qíngbào.*
he convey/get information
'He conveys/gets information.'
- b. *Tāmen hù-tōng qíngbào.*
they REC-convey information
'They exchange information.'

- (123) a. *dìng* ‘to agree, confirm’ → °*hù-dìng* ‘to come to an agreement’
 °*guān* ‘tied’ → °*hù-guān* ‘to be connected with each other’
jiāo ‘to intersect’ → *hù-jiāo* ‘to intersect’
jiē ‘to join, come into contact’ → °*hù-jiē* ‘to be/get joined’
jié ‘to join, tie, be tied’ → °*hù-jié* ‘to join/get tied’
 °*shāng* ‘to confer/counsel’ → °*hù-shāng* ‘to confer/counsel’
shì ‘to trade’ (now only ‘market’) → °*hù-shì* ‘to trade’
- b. *huàn* ‘to change sth/sb’ → *hù-huàn* ‘to mutually exchange sth/sb’
tōng ‘to communicate, convey’ → *hù-tōng* ‘to mutually exchange information’
 °*yì* ‘to change sth’ → °*hù-yì* ‘to exchange sth’ (cf. also (113)).

6.2.2 Object-oriented reciprocals

This type of reciprocals that may be used with a singular subject is represented only by two synonymous compounds.

- (124) *cóng* ‘to follow sth’ → °*hù-cóng* ‘to explain ideograms by means of each other’
xùn ‘to explain sth’ → *hù-xùn* ‘to explain ideograms by means of one another.’

6.2.3 Reduplication of the components *hù-* and *xiāng-*

This component seems to have retained relative productivity on some disyllabic verbs, where it is repeated on each monosyllabic component. This is, for instance, the case with the verb *bāng-zhù* ‘to help’ composed of two synonyms and used instead of each, as a rule (see (125h)). This results in interesting correlations between different expressions of reciprocity. Thus the meaning ‘They often help each other’ is commonly rendered by the mode used in (125b) and considered in detail in Section 4. (Most of the examples in (125) occur in (13) above.)

- (125) a. *Tāmen chángchang bāng-zhù wǒ.*
 they often help-help I
 ‘They often help me.’
- b. *Tāmen chángchang hùxiāng bāng-zhù*
 they often mutually help-help
 ‘They often help each other.’

The use of *hù-* instead of *hùxiāng* in this case is rejected by the informants (see (125c)). On the other hand, the compound *hù-zhù* is accepted, unlike *hùxiāng zhù* (see (125d) and (125e) respectively). The point is, as mentioned above (see 1.2.4), the disyllabic adverb does not rhythmically “agree” with a monosyllabic verb. For the same reason the monosyllabic *hù* and *xiāng* do not “agree” with disyllabic verbs, and in order “to survive” both adverbs have combined into one. Moreover, the reciprocal *hù-zhù* does not have, curiously enough, a standard underlying counterpart due to the homophony of the form *zhù* which means ‘to help’, also ‘to live’, ‘to stop’, ‘to congratulate’, etc. (the word *yī-bì-zhī-lì* ‘the force of one hand’ = ‘help’, lit. ‘one-hand-PRTL-force’ (see (125g)) resolves ambiguity and makes the sentence correct); cf.:

- c. **Tāmen chángchang hù-bāng-zhù.* (intended meaning as in (125b))
 d. *Tāmen chángchang hù-zhù.* (same meaning as in (125b))
 e. **Tāmen chángchang hùxiāng zhù.* (intended meaning as in (125b))
 f. **Tāmen chángchang zhù wǒ.* ‘They often help me’ (cf. (125a))
 g. *Tāmen chángchang zhù wǒ yī-bì-zhī-lì.* ‘They often help me’ (cf. (125a))

If *hù-* is repeated on the verb from (125c), the resultant form (see (125h)) is correct and even more acceptable than (125d) which is accepted by most of the informants. Characteristically, substitution of *xiāng-* and *hùxiāng* for *hù-* in (125h) results in an ungrammatical sentence (though combinations with *xiāng-* are more productive than those with *hù-*, and *hùxiāng* has no obvious restrictions, except the rhythmical restrictions just mentioned, as a standard reciprocal marker); cf.:

- h. *Tāmen chángchang hù-bāng-hù-zhù* (same meaning as in (125b) and (125d))
 i. **Tāmen chángchang xiāng-bāng-xiāng-zhù* (intended meaning as in (125b))
 j. **Tāmen chángchang hùxiāng bāng hùxiāng zhù* (same intended meaning).

Chinese has retained a few stable combinations of the (125i) type in which some of the informants accept reduplicated *xiāng-*; cf.:

- (126) a. *Tāmen xiāng-fǔ-xiāng-chéng.*
 they mutually-support-mutually-become
 ‘They supplement each other.’
 b. *Tāmen xiāng-qīn-xiāng-ài.*
 they mutually-close-mutually-love
 ‘They love each other.’

Constructions of the (125h) type are subject to significant restrictions: they tend to be formed with verbs of a certain lexical group (for details see 9.1 where these constructions are also considered because reciprocity is expressed here by two markers, in this case by a repeated marker).

6.2.4 The component *hù-* with the negation *bù*

A peculiarity of the component *hù-* is that it may, though rarely, attach to verbs with the negation *bù* (but not with the negation *méi*) if *bù* is used on a disyllabic verb. It goes without saying that the formations in question are not lexical reciprocals, but they are considered here because of the identity of the markers. (We owe a large part of the data and comments in this section to Lu Dzu-Jyan.)

The item *bù* denotes negation of an imperfective action (cf. *méi* which negates a perfective action and does not form a complex marker with *hù-*; *méi* combines with *hùxiāng* in the same way as *bù*). In constructions with *bù*, the component *hù-* displays a number of peculiarities. Two cases of usage can be distinguished.

1. Negation on reciprocals of monosyllabic verbs registered with the component *hù-* is ungrammatical; cf.:

- (127) a. *Tāmen hù-zhù.* ‘They help each other.’
 b. **Tāmen hù-bù-zhù.* (intended meaning:) ‘They do not help each other.’

- (128) a. *Tāmen hù-ràng.* ‘They give in to each other.’
 b. **Tāmen hù-bù-ràng.* (intended meaning:) ‘They do not give in to each other.’

It should be noted that (127a) and (128a) do not sound natural. The verb requires some addition following it to make them natural. For instance, in (127a) it may be *hé-zuò*, the synonym ‘to help each other’, and in (128a) *liǎo-shì*; in this case the combination *hù-ràng liǎo-shì* means ‘to give in to each other in order to settle an affair’.

2. The base verb can take the reciprocal negation *hù-bù-* but it cannot take *hù-* alone, i.e. the relation between (129a) and (129b) is asymmetrical to (127a) and (127b). Two subcases are distinguished here.

2a. With common *disyllabic* verbs, e.g. *qī-piàn* ‘to deceive’, the component *hù-* cannot be used to code reciprocity (because of its monosyllabic structure), though the negative form with *hù-bù-* is retained (because of its disyllabic structure); cf.:

- (129) a. **Tāmen hù-qī-piàn.* (intended meaning:) ‘They deceive each other.’
 b. *Tāmen bù qī-piàn wǒ.* ‘They do not deceive me.’
 c. *Tāmen hù-bù-qī-piàn.* ‘They do not deceive each other.’
 (130) a. **Tāmen hù-bāng-zhù.* (intended meaning:) ‘They are helping each other.’
 b. *Tāmen bù bāng-zhù wǒ.* ‘They are not helping me.’
 c. *Tāmen hù-bù-bāng-zhù.* ‘They are not helping each other.’

The following examples with *hù-bù-* have no correlates with *hù-* alone. Note that *hù-bù-* occurs in all the diathesis types of reciprocal constructions: “canonical” (see (129b), (130b) and (131a)), “indirect” (see (131b)) and “possessive” (see (131c)); moreover, it also occurs on lexical reciprocals, viz. on those that do not collocate with *hùxiāng* (see (131d)).

- (131) a. *Tāmen hù-bù-pī-píng.* cf. (43b)
 they mutually-NEG-criticize
 ‘They don’t criticize each other.’
 b. *Wǒmen hù-bù-zèng-sòng lǐwù.* cf. (51b)
 we mutually-NEG-send present
 ‘We don’t send presents to each other.’
 c. *Liǎng guó hù-bù-qīn-fàn guójìng.* cf. (56b)
 two country mutually-NEG-invade country.border
 ‘The two countries do not invade each other’s borders.’
 d. *Tā hé línjū hù-bù-lái-wǎng.* cf. (114)
 he and neighbour mutually-NEG-associate
 ‘He and his neighbours do not mix with each other.’

Non-negative reciprocal forms of the verbs cited above with the marker *hù-bù-* are marked in a standard way by the adverb *hùxiāng* from which negative constructions can be formed in their turn with the negation *bù*; cf.:

- (132) a. *Tāmen gān-shè wǒmen-de nèizhèng.*
 they interfere we-ATR internal.affairs
 ‘They interfere in our internal affairs.’
 b. **Tāmen hù-gān-shè nèizhèng.*
 (intended meaning:) ‘They interfere in each other’s internal affairs.’

- c. *Tāmen hù-bù-gān-shè nèizhèng.*
 they mutually-NEG-interfere internal.affairs
 ‘They do not interfere in each other’s internal affairs.’
- d. *Tāmen hùxiāng gān-shè nèizhèng.*
 they mutually interfere internal.affairs
 ‘They interfere in each other’s internal affairs.’ (same as intended in (132b))
- e. *Tāmen hùxiāng bù gān-shè nèizhèng.*
 they mutually NEG interfere internal.affairs
 ‘They do not interfere in each other’s internal affairs.’

2b. The combination *hù-bù-* is common on *disyllabic* verbs with the initial component *xiāng-*. This case is particularly representative of *hù-* merging with *bù-* because the base verb does contain the reciprocal marker *xiāng-*. This usage is possibly accounted for by the rhythmic arrangement of the form, i.e. by the need for a four-syllable structure; cf. the analogous rhythmic pattern of *hù-bù-gān-shè* in (132c) and *hù-bù-xiāng-róng* in (133d). Thus the verb *róng* ‘to tolerate’, being a monosyllabic word, does not usually combine with *hùxiāng*. A respective negative reciprocal construction can be formed by means of *hù-bù-* from the reciprocal compound *xiāng-róng*; cf. (these verbs are used with negation only and they are usually rejected by native speakers when used without negation):

- (133) a. *Tā bù róng wǒ.*
 he NEG tolerate I
 ‘He does not tolerate me.’
- b. *²Tāmen xiāng-róng.*
 they mutually-tolerate
 ‘They tolerate each other.’
- c. *Shuǐ huǒ bù xiāng-róng.*
 water fire NEG mutually-tolerate
 ‘Water and fire are incompatible.’
- d. *Tāmen hù-bù-xiāng-róng.*
 they mutually-NEG-mutually-tolerate
 ‘They do not tolerate each other.’

6.3 Reciprocals with the component *xiāng-*

Prior to the discussion of reciprocals with this component, we should stress that there is a considerable number of words where the component *xiāng-* is not reciprocal in meaning, and the connection with the reciprocal meaning is not easy to trace; e.g.:

- (134) *fán* ‘to bore, pester’ → *xiāng-fán* ‘to hamper, bring sb trouble’
kàn ‘to look’ → *xiāng-kàn* i. ‘to look at sb’, ii. ‘look at each other’
mán ‘to conceal’ → *xiāng-mán* ‘to conceal from sb’
qǐng ‘to invite’ → °*xiāng-qǐng* ‘to invite’
quàn ‘to persuade’ → *xiāng-quàn* ‘to persuade’
xìn ‘to believe’ → *xiāng-xìn* ‘to believe’

zé 'to reproach'	→	xiāng-zé 'to reproach'
zhòng 'to catch sb's fancy'	→	xiāng-zhòng 'to choose sb', etc.
°zuò 'to accuse'	→	°xiāng-zuò 'to bring sb to trial instead of sb.'

6.3.1 Subject-oriented reciprocals

As in reciprocals with *hù-*, the second component is usually a monosyllabic verb, with a few exceptions.

6.3.1.1 Semantic characteristics of the base verbs. Before listing the reciprocals, we shall briefly characterize the base verbs. The characteristics also apply to the base verbs of the compounds with *hù-*. Distribution of *hù-* and *xiāng-* within compound verbs does not seem semantically motivated: some base verbs may occur with either of these components. In a number of cases, reciprocity involves other semantic shifts. All these compounds, with a few exceptions, are intransitive, the bases being two-place transitives (cf. (138)) or, more seldom, two-place intransitives. Two principal groups of base verbs are distinguished: Group 1 comprising non-reciprocal verbs (cf. 6.3.1.3) and Group 2 comprising lexical reciprocals (cf. 6.3.1.4). The reciprocal meaning coded by *hù-* and *xiāng-* generally corresponds to that of *hùxiāng* (and also of reciprocal affixes in other languages). The meaning of the compounds in question is not always compositional, at least not as clearly as in (138).

Group 1. Here, verbs are prevalent that denote the following:

1. A prior or co-occurrent action/state which is a kind of *response*, e.g. 'to answer' is a response to the action 'to ask'; cf. also 'to concede', 'to help', 'to agree', etc.; or
2. A provoking action, e.g. 'to attack' as provoking the action 'to defend'; cf. also 'to beat', 'to push', 'to scold', 'to persuade', 'to accuse', 'to call', etc.

Group 2. The base verbs of this group are characterized at the beginning of Section 6.1; these are lexical reciprocals with meanings like 'to compete with', 'to be alike', 'to correspond', 'to converse', 'to meet', 'to intersect', etc. Special note deserve reciprocals that have converse correlates, e.g. 'to be far from' – 'to be close to'; here belong some of the lexical reciprocals when used in the discontinuous construction of the type *A is far from B = B is far from A*. But in the simple construction the plural subject of this type of verbs without a reciprocal marker is understood as a single participant and the sentence is perceived as elliptical; cf. *A and B are far ... [from sth/sb]* and *A and B are far from each other* (cf. (139)).

Historically, in Group 1 verbs *xiāng-* was added to express reciprocity in simple constructions. As to Group 2, this component was probably added pleonastically and in accordance with the tendency to use disyllabic verbs instead of monosyllabic ones.

6.3.1.2 Simple and discontinuous constructions. What follows illustrates the use of the reciprocals under consideration. They are classified according to the type of constructions they are used in. This is most probably also valid for reciprocals with *hù-*, but we have too little data on constructions with the latter marker. Constructions with *xiāng-* are more varied than those with *hùxiāng* (in that there are cases with the reciprocal argument placed after the reciprocal predicate; cf. (136); this occurs mostly with verbs denoting equality

and distance), though they are also simple, as a rule, i.e. both reciprocal arguments are named by the subject. Below we consider first constructions with *xiāng* (see case A) and next their relations with the underlying verbs (see B).

6.3.1.2.1 *Constructions with compounds.* Theoretically, three main types of expression of the reciprocal arguments are logically possible here:

- A. Both arguments are denoted by one word (with a plural meaning semantically coded on a reciprocal compound; see (135a, b) or by dependent words, e.g. a numeral, see (135c)) or by two words in immediate contact, as in (135d, e).
- B. The arguments are separated by other words, e.g. by the predicate, a modal word, adverb, etc.; see (136).
- C. The arguments are joined by a preposition/conjunction; see (137).

Case A is illustrated, among others, by compounds whose base verbs are out of use.

A. *Both reciprocal arguments are coded by the subject.* As mentioned, reciprocals with *xiāng-* are mostly used in the simple construction. The examples under (135) are amplified by those cited further on in (138b), (139b), (141b). The general picture is analogous to that with *hùxiāng* in 3.1.2.1.1.

- (135) a. *Táiqiú xiāng-zhuàng-le.*
billiard.ball REC-collide-PERF
'The billiard balls collided.'
- b. *Yìjiàn xiāng-hé₁.*
'The opinions coincide.'
- c. *Wǔ xíng xiāng-shēng.*
five elements REC-engender
'Five elements engender one another.'
- d. *Fù-zǐ xiāng-bǎo.*
father-son REC-protect
'Father and son protect each other.'
- e. *Míng shí xiāng-fú.*
name essence REC-correspond
'Form and content correspond to each other.'

B. *The second reciprocal argument is not coded by the subject.* In this case the construction is discontinuous. In case B the subject may be singular, while in case A it is always (semantically) plural. This type can be unambiguously identified if the second argument is (a) placed after the predicate (see (136a); this seems to be characteristic of verbs denoting interrelations, equality, etc.; cf. 5.2.2.1.1) or (b) separated from the first argument by negation *bù*, a modal word or an adverbial (see (136b, c)):

- (136) a. *Xiànzài yì tiān xiāng-dāng yú guòqù èrshí nián.*
today one day REC-equal PREP past ten year
'One day today corresponds (lit. 'is equal') to ten years in the past.'
- b. *Tā bù néng hé nǐ xiāng-bǐ.*
he NEG be.able with you.SG REC-compare
'He is not your equal'. 'He can't compare with you.'

- c. *Shīyè bìrán tóng sīyǒuzhì jīngjì xiāng-lián-xì.*
 unemployment by.all.means with private.property economy REC-connect
 ‘Unemployment is necessarily interrelated with the economy of private property.’

C. *Simple or discontinuous?* If both reciprocal arguments precede the predicate and they are linked by the items *hé, gēn, yǔ*, or *tóng* ‘with/and’, it may be not obvious whether the second argument is a non-direct object or part of the subject (true, this difference in the interpretation may not be reflected in the translation, and does not change the meaning of the sentence significantly). In these instances for establishing the syntactic status of the second noun phrase a number of criteria can be used which, however, are not entirely convincing. We are faced with the same problem here that is discussed in 3.1.3, also in paragraph 6) of 2.7 and in the text above (99). The examples below seem to be of the discontinuous type because an adverbial can be inserted in pre-position to the comitative phrase (see also 5.1.3).

- (137) a. *Yìwén [dàgài] yǔ yuánwén hěn xiāng-jìn.*
 translation probably with original very REC-close
 ‘The translation is [probably] very close to the original text.’
- b. *Měi yǔ chǒu xiāng-duì.*
 beauty with ugliness REC-oppose
 ‘Beauty contrasts with ugliness.’
- c. *Wǒmen-de kànfā tóng tāmen qiàqià xiāng-fǎn.*
 we-ATR opinion with they just REC-opposite
 ‘Our opinions are just opposed.’
- d. *Xiǎo Wang hé/gēn/yǔ/tóng tā xiāng-ài.*
 X.W. and/with he REC-love
 i. ‘Little Wang loves him.’
 ii. ‘Little Wang and he love each other.’
- e. *Tā bù hé/gēn/yǔ/tóng wǒ xiāng-hǎo.*
 he NEG and/with I REC-be.friends
 i. ‘We are not friends with him.’
 ii. ‘He is not friends with me.’

6.3.1.2.2 *Constructions with the base verbs.* They may be of two main types (note that many of the verbs listed below (see (142) and (143)) are not used any more because they are monosyllabic and they are replaced by synonymous disyllabic verbs). Two subtypes are distinguished with regard to the valency change.

A. *Valency reduction.* The base construction contains two syntactic arguments (the second one is a prepositionless object); this is possible with two types of base verbs, non-reciprocal verbs and lexical reciprocals (cf. (138) and (139) respectively). In this case the valency reduction, including detransitivization (see (138b)), is easily identified.

- (138) a. *Tāmen bù róng tā.*
 they NEG tolerate he
 ‘They don’t tolerate him.’

- b. *Tāmen* [bǐcǐ] *bù xiāng-róng.*
 they mutually NEG REC-tolerate
 ‘They cannot stand each other.’
- (139) a. *Zhè cūn jù nà cūn bù yuǎn.*
 this village be.distant this village not far
 ‘This village is not far from that village.’
- b. *Liǎng cūn xiāng-jù bù yuǎn.*
 two village REC-be.distant NEG far
 ‘Two villages are not far from each other.’

B. No (obvious) valency reduction. Two subcases can be distinguished here.

B1. If both reciprocal arguments precede the predicate and they are linked by a preposition, it may be not quite obvious whether the second argument is a non-direct object or part of the subject; (cf. (137)); e.g.:

- (140) a. *Tā gēn wǒ hǎo.*
 he and/with I be.friends
 i. ‘He is friends with me.’
 ii. ‘He and I are friends.’
- b. *Tā [bù] gēn wǒ xiāng-hǎo.*
 he NEG and/with I REC-be.friends
 i. ‘He is [not] friends with me.’
 ii. ‘He and I are [not] friends.’

B2. The underlying construction contains one syntactic argument; needless to say, this is possible only with lexical reciprocals.

- (141) a. *Liǎng tiáo xiàn jiāo yú yī diǎn.*
 two CLF line cross at one point
 ‘Two lines cross at one point.’
- b. *Liǎng tiáo xiàn xiāng-jiāo yú yī diǎn.*
 two CLF line REC-cross at one point
 ‘Two lines cross at one point.’

6.3.1.3 Compounds with the reciprocal meaning coded by *xiāng-* only. There are 28 units with *xiāng-* (that follow below) in a list of 98 verbal compounds in our data. In most cases *xiāng-* is translated by the English reciprocal pronoun *each other*. A slight, though predictable change of meaning can be observed in pairs with translations like ‘to push – to collide’, ‘to beat – to fight’, ‘to see – to meet’, ‘to hold – to come to blows’, etc. But sometimes the meaning changes in an individual way (cf.: ‘to evade – to break up / separate’). This was probably an unrealized tendency in Chinese to create a reciprocal prefix.

The list of verbs is loosely divided into lexical groups for the reader’s convenience. As one can see from the number of compounds in Group A (with an obligatory human subject), on the one hand, and Groups B and C (where both a human and non-human subject is possible) on the other, compounds obligatorily taking a human subject are four times more numerous.

A. Social relations

a. Friendly and neutral relations

- (142) ài 'to love' → xiāng-ài 'to love each other'
 bāng 'to help' → °xiāng-bāng 'to help each other'
 bǎo 'to vouch for sb' → xiāng-bǎo 'to vouch for each other'
 jiàn 'to see' → xiāng-jiàn 'to meet (each other)'
 ràng 'to concede, give in' → xiāng-ràng 'to concede to each other'
 róng 'to tolerate' → xiāng-róng 'tolerate/combine with each other'
 shàn 'to be kind' → °xiāng-shàn 'to be friends'
 wěn 'to kiss sb' → xiāng-wěn 'to kiss each other'
 °yīn 'to support, lean on' → °xiāng-yīn 'to lean upon each other'
 zhù 'to help' → xiāng-zhù 'to help each other'

b. Hostile relations

- (143) bèi 'to turn one's back on/to' → xiāng-bèi 'to oppose/counteract each other'
 chí 'to hold' → xiāng-chí 'to come to blows'
 dǎ 'to beat' → °xiāng-dǎ 'to fight'
 jī 'to beat' → °xiāng-jī 'to fight/struggle'
 mà 'to scold' → xiāng-mà 'to squabble'
 pū 'to beat' → °xiāng-pū 'to come to blows/grapple'
 wéi 'to break' → °xiāng-wéi 'to break up/separate' (vi).

c. Communication

- (144) °guān 'to look' → °xiāng-guān 'to exchange glances'
 huàn 'to call' → °xiāng-huàn 'to call/shout to one another'
 kàn 'to look' → xiāng-kàn 'to look at each other'
 shì 'to look' → xiāng-shì 'to exchange glances.'

B. Spatial relations (contact)

- (145) pèng 'to push' → xiāng-pèng 'to collide'
 zhuàng 'to push, beat' → xiāng-zhuàng 'to collide'

C. Chaining relations

- (146) a. chéng 'to inherit, succeed' → °xiāng-chéng 'to succeed one another'
 cóng 'to follow' → °xiāng-cóng 'to follow each other'
 shēng 'to engender' → xiāng-shēng 'to engender one another.'

The verb °xiāng-chéng 'to succeed one another' may be used only in certain combinations; e.g.: fù 'to help' → xiāng-fù-xiāng-chéng 'to mutually complement one another', fǎn 'opposite' → xiāng-fǎn-xiāng-chéng 'to complement one another in counteraction'.

There are very few transitive reciprocals with xiāng-, and the "indirect" reciprocal xiāng-chuán in (146b) (cf. "indirect" reciprocals with hù in (120b) and (123b)), which may also denote a chaining action, is the only example at our disposal.

- b. chuán 'to pass (give) sth to sb' → xiāng-chuán i. 'to pass sth to one another'
 ii. 'to pass sth from generation to generation.'

6.3.1.4 *Both components are reciprocal in meaning.* There are over 60 reciprocals of this type in our material. The derived and base verbs have mostly identical or synonymous translations (semantically, most of the verbs of this group coincide with the Ancient Chinese verbs which could take *xiāng* with the preposition *yǔ* ‘with’). As in the previous case, the verbs are subdivided into lexical groups. Unlike in 6.3.1.3, there is one compound denoting hostile relations, three of communication and none of chaining here; instead, verbs of equality, comparison (in the meaning ‘to compare’ (vi), cf. (136b)) and spatial relations are quite numerous. In comparison with the data in 6.3.1.3, the split-up in Group A with an obligatory human subject on the one hand, and Groups B and C on the other, is noticeably different: instead of 4:1 we observe the approximate split-up 1:2.

A. *Social relations*

a. *Friendly and neutral relations*

- | | | |
|--|---|---|
| (147) <i>féng</i> ‘to come across, meet’ | → | <i>xiāng-féng</i> ‘to meet’ |
| <i>hǎo</i> ‘to be friends’ | → | <i>xiāng-hǎo</i> ‘to be friends’ |
| <i>hé₂</i> ‘to be in concord’ | → | ^o <i>xiāng-hé₂</i> ‘to be in harmony’ |
| <i>qīn</i> ‘to be close, related’ | → | <i>xiāng-qīn</i> ‘to be in close relations’ |
| <i>shú</i> ‘to be well acquainted’ | → | <i>xiāng-shú</i> ‘to be well acquainted’ |
| <i>yú</i> ‘to be together’ | → | <i>xiāng-yú</i> ‘to be at one/to be friends’ |
| <i>yù</i> ‘to meet’ | → | <i>xiāng-yù</i> ‘to meet’ |
| <i>yuē</i> ‘to come to an agreement’ | → | <i>xiāng-yuē</i> ‘to come to an agreement’ |
| <i>zhī</i> ‘to know’ | → | <i>xiāng-zhī</i> ‘to know each other well, be friends’ |

b. *Hostile relations*

- | | | |
|-----------------------------------|---|---|
| (148) <i>chǎo</i> ‘to make a row’ | → | ^o <i>xiāng-chǎo</i> ‘to wrangle’ |
|-----------------------------------|---|---|

c. *Communication*

- | | | |
|--|---|---|
| (149) <i>shāng</i> ‘to counsel/ask advice’ | → | <i>xiāng-shāng</i> ‘to counsel with each other’ |
| <i>tán</i> ‘to converse, talk’ | → | [?] <i>xiāng-tán</i> ‘to talk to each other’ |
| <i>tōng</i> ‘get into communication’ | → | <i>xiāng-tōng</i> ‘communicate’ (e.g. of vessels). |

B. *Spatial relations (contact and distance; also mental)*

- | | | |
|---|---|--|
| (150) <i>fǎn</i> ‘opposed’ | → | <i>xiāng-fǎn</i> ‘opposed’ |
| ^o <i>gān</i> ‘to bear a relation to sth’ | → | <i>xiāng-gān</i> ‘to adjoin each other’ |
| <i>gé</i> ‘to be at distance X from’ | → | <i>xiāng-gé</i> ‘be at distance X from each other’ |
| ^o <i>guān</i> ‘tied/connected’ | → | <i>xiāng-guān</i> ‘to be related to each other’ |
| <i>huì</i> ‘to gather’ | → | <i>xiāng-huì</i> ‘to gather’ |
| <i>jiāo</i> ‘to intersect/join together’ | → | <i>xiāng-jiāo</i> ‘to intersect/join together’ |
| <i>jiāo</i> ‘to be close’ | → | <i>xiāng-jiāo</i> ‘to be close/near to each other’ |
| <i>jiē</i> ‘to adjoin/coincide’ | → | <i>xiāng-jiē</i> ‘to adjoin’ |
| <i>jìn</i> ‘to be very close’ | → | <i>xiāng-jìn</i> ‘to be very close to each other’ |
| <i>jù</i> ‘to be distant from sth’ | → | <i>xiāng-jù</i> ‘to be apart from each other’ |
| <i>lián</i> ‘to join together’ | → | <i>xiāng-lián</i> ‘to join each other/together’ |
| ^o <i>lín</i> ‘to be by the side’ | → | <i>xiāng-lín</i> ‘to be neighbours’ |
| <i>qiè</i> ‘to draw together’ | → | ^o <i>xiāng-qiè</i> ‘to adjoin’ |
| <i>yuǎn</i> ‘to be far’ | → | ^o <i>xiāng-yuǎn</i> ‘to be far from each other’ |

C. Relations of equality (including non-equality) and comparison

(151) <i>bǐ</i> ‘to compare’	→	<i>xiāng-bǐ</i> ‘to compare’ (vi); cf. (136b)
<i>chèn</i> ‘to match, fit’	→	<i>xiāng-chèn</i> ‘to match, fit’
<i>chí</i> ‘to hold’	→	<i>xiāng-chí</i> ‘to be balanced’
<i>dāng</i> ‘to correspond’	→	<i>xiāng-dāng</i> ‘equal’
<i>děng</i> ‘alike/same’, ‘equal’	→	<i>xiāng-děng</i> ‘equal’
<i>duì</i> ‘to be opposite’	→	<i>xiāng-duì</i> ‘contrasting, to contrast’
<i>fān</i> ‘to be against/opposite’	→	<i>xiāng-fān</i> ‘contrasting, to contrast’
<i>fāng</i> ‘to imitate’	→	<i>xiāng-fāng</i> ‘to be like/similar’
<i>fú</i> ‘to coincide, correspond’	→	<i>xiāng-fú</i> ‘to coincide, correspond’
<i>hé₁</i> ‘to coincide, correspond’	→	^o <i>xiāng-hé₁</i> ‘to coincide, correspond’
<i>hū</i> ‘to correspond’	→	<i>xiāng-hū</i> ‘to correspond to sth, to agree’
<i>jiào</i> ‘to compare’	→	<i>xiāng-jiào</i> ‘to compare (vi), compete’
<i>peì</i> ‘to make up a pair’ (vi)	→	<i>xiāng-peì</i> ‘to suit each other’
<i>píng</i> ‘equal’	→	<i>xiāng-píng</i> ‘to compare’ (vi)
<i>qí</i> ‘equal’	→	<i>xiāng-qí</i> ‘to compare’ (vi)
<i>qì</i> ‘to correspond’	→	<i>xiāng-qì</i> ‘to correspond’
<i>rú</i> ‘to be alike’	→	^o <i>xiāng-rú</i> ‘to be similar/alike’
<i>ruò</i> ‘to be alike’	→	^o <i>xiāng-ruò</i> ‘to be alike/similar’
<i>sì</i> ‘to be alike’	→	<i>xiāng-sì</i> ‘to be alike’
<i>tóng</i> ‘(to be the) same’	→	<i>xiāng-tóng</i> ‘(to be the) same’
<i>xiàng</i> ‘to be alike’	→	<i>xiāng-xiàng</i> ‘to be alike, similar’
<i>yì</i> ‘to be different’	→	<i>xiāng-yì</i> ‘to be different’
<i>yíng</i> ‘to correspond’	→	<i>xiāng-yíng</i> ‘to correspond’

The dictionaries register a group of compounds with *xiāng* in combination with disyllabic verbs which are usually lexical reciprocals and more or less synonymous with the compounds, e.g. ^o*xiāng-hé₁-hé₂* ‘to be in harmony’, *xiāng-jié-hé₂* ‘to be in harmony’, *xiāng-hé₂-xié* ‘to be in harmony’, *xiāng-fú-hé₁* ‘to correspond’, *xiāng-yī-zhì* ‘to correspond’, *xiāng-máo-dùn* ‘to be contradictory’, *xiāng-dǐ-chù* ‘to be contradictory’, *xiāng-pǐ-dí* ‘equal’, *xiāng-lián-xì* ‘to be interrelated’.

6.3.1.5 Lexicalized compounds with a reciprocal meaning. We have included here compounds with non-compositional reciprocal meanings and one compound with the meaning ‘to oppose’ which is not reciprocal proper but it presupposes a counteraction. Pairs with non-standard semantic relations are mentioned above, but in (152) this is more obvious, the components entering into individual semantic relations. The base verbs are not reciprocal in meaning.

(152) <i>tóu</i> ‘to throw sth’	→	<i>xiāng-tóu</i> ‘to get on well with each other’
<i>zuǒ</i> ‘left’, ‘to go left’	→	<i>xiāng-zuǒ</i> ‘to oppose’
<i>qù</i> ‘to go away’	→	<i>xiāng-qù-wújǐ</i> ‘almost the same’, lit. ‘to move away from each other a little’ (<i>wújǐ</i> ‘a little’).

6.3.2 Object-oriented reciprocals

As mentioned above, there are very few transitive reciprocals with *xiāng* in our corpus. It is probably not accidental that the underlying transitive construction (see (153b)) of the passive (subject-oriented intransitive) sentence with *xiāng-lián* in (153a) registered in a dictionary is rejected by the informants.

- (153) a. *Liǎng tiáo hé zhījiān yòng yùnhé xiāng-lián.* (Xia Zhong'yi (ed.) 1983:992)
 two CLF river between by canal REC-join
 'Two rivers are connected by canals.'
- b. **Yùnhé bǎ liǎng tiáo hé xiāng-lián.*
 canal ba two CLF river REC-tie
 'The canal ties two rivers with each other/mutually.'

An object-oriented reciprocal may be derived from a subject-oriented reciprocal by means of a periphrastic phrase with the causative auxiliary verb *shǐ* 'to cause' (cf. (34)):

- (154) a. *Xīn jīnglǐ shǐ shōu-zhī xiāng-děng-le.*
 new director CAUS income-expenditure REC-equal-PERF
 'The new director has balanced the profit and expenditure.'
- b. *Tā shǐ táiqiú xiāng-zhuàng-le.*
 he CAUS billiard.ball REC-collide-PERF
 'He brought the billiard balls into collision.'

We have encountered in the dictionaries two object-oriented reciprocals, which happen to be synonymous. The second one composed of two compounds is of unclear derivation:

- c. *bǐ* 'to compare' → *xiāng-bǐ* 'to compare sth and sth'
tí 'to hold'; *bìng* 'join; together'; *lùn* 'discuss' → *xiāng-tí bìng-lùn* 'to discuss
 and interpret sth and sth in the same way.'

6.4 Nominal compounds

To complete the discussion of compounds with *hù*- and *xiāng*-, lists of nominal compounds with these components are given below. As mentioned above, practically any polysyllabic verb (including those that are entered in the numerous lists above) can be nominalized. It is but natural that most of the nominal compounds are in fact nominalizations of respective formally identical verbs (note that there are no compound nouns with *hùxiāng*; see Section 3.6). Therefore the lists are purely illustrative and incomplete. In (155) and (156) the lists under (a) contain deverbal compounds and those under (b) denominal ones. One of the compounds below functions as an adverb.

1. Compounds with *hù*-

- (155) a. *biàn* 'to change' (vi) → *hù-biàn* 'mutual transformation'
dǎo 'to lead' → *hù-dǎo* 'mutual conductivity'
huì 'favour/favourable' → *hù-huì* 'mutual favour'
lì 'to be profitable' → *hù-lì* 'mutual profit'
liàng 'to understand' → *hù-liàng* 'mutual understanding'
zhù 'to help' → *hù-zhù* 'mutual help'

<i>zhuàng</i> ‘to beat, push’	→	<i>hù-zhuàng</i> ‘collision (e.g. of trains)’
<i>zūn</i> ‘to respect’	→	° <i>hù-zūn</i> ‘mutual respect’
<i>xùn</i> ‘to explain’	→	<i>hù-xùn</i> ‘cross-explanation of ideograms by means of one another’
b. <i>wén</i> ‘language’	→	° <i>hù-wén</i> ‘paired phrases.’

2. Compounds with *xiāng*-

(156) a. <i>bǐ</i> ‘to compare’	→	<i>xiāng-bǐ</i> ‘comparison’
<i>fān</i> ‘opposed’	→	<i>xiāng-fān</i> ‘contrast’
<i>shí</i> ‘to know’	→	<i>xiāng-shí</i> ‘acquaintance’
b. <i>shēng</i> ‘voice’	→	<i>xiāng-shēng</i> ‘pair compère’
<i>shǒu</i> ‘hand’	→	? <i>xiāng-shǒu</i> ‘partner’
° <i>cì</i> ‘order, succession’	→	° <i>xiāng-cì</i> ‘in succession’ (< ‘follow one another’).

6.5 Some comments on relationship between *hù*-, *xiāng*- and *hùxiāng*

By way of partly repeating ourselves, we shall dwell on three points here.

6.5.1 Process of grammaticalization of *hù*- and *xiāng*-

The latter element, as is known, was the main reciprocal marker in Ancient Chinese. There are grounds (see Yakhontov, Ch. 48) to see some features of grammaticalization of *xiāng*- in this period which manifested itself in its functioning as an auxiliary. This tendency was cut short and *xiāng*- was retained in a limited, though large enough, number of compounds and disappeared as a free unit. The component *hù*- was also lost as a free unit and it is retained in a very small number of fossilized compounds. But combined together they gave rise to the adverb *hù-xiāng* or *xiāng-hù* which seems to have lost some auxiliary properties *xiāng*- used to display: it was retained as a complex due to the general tendency towards disyllabicity. The point is, the monosyllabic *hù*- and *xiāng*- violated the tendency towards “rhythmic agreement”, i.e. collocability of monosyllabic words with monosyllabic ones and disyllabic with disyllabic words (see 1.2.4). This is why *hù*- has survived by way of achieving a weak degree of grammaticalization when used, firstly, as a double reciprocal morpheme in *hù-V-hù-V* subject to rigid (semantically motivated) restrictions (see 6.2.3 and 9.1) and, secondly, as a marker (though rare) of reciprocity on predicates with the negation *bù* (see 6.2.4). As it seems, sufficiently frequent use of the complex *hù-bù-bāng-zhù* ‘do not help each other’, and in the absence of the form *hù-bāng-zhù* ‘to help each other’ could result in the reanalysis of the combination *hù-bù*- as a single complex.

6.5.2 Relations between compounds with *hù*- and *xiāng*-

One can see a kind of overlapping distribution in the combinability of these two morphemes with various verbs. As compounds with *xiāng*- are approximately three times as numerous as those with *hù*-, many verbs with *xiāng*- clearly do not have correlates with *hù*-. Nevertheless, there are compounds in *hù*- whose correlates with *xiāng*- are less commonly used or are not accepted by the informants. The following main types of these compounds should be specially noted.

1. Compounds with *hù-* that are preferred by native speakers or do not have correlates with *xiāng-* at all; e.g.:

- (157) *zhù* 'to help' → a. *hù-zhù* 'to help each other' b. ²*xiāng-zhù* (same)
huàn 'to (ex)change' → a. *hù-huàn* 'to exchange' b. ⁰*xiāng-huàn* (same)
miǎn 'to encourage' → a. ²*hù-miǎn* 'to encourage e.o.' b. ⁰*xiāng-miǎn* (same).

2. Compounds with *xiāng-* that are preferred by native speakers or do not have correlates with *hù-* at all, e.g.:

- (158) *zhuàng* 'to hit' → a. *xiāng-zhuàng* 'to collide' b. ²*hù-zhuàng* (same)
ràng 'to give in' → a. *xiāng-ràng* 'give in to e.o.' b. ²*hù-ràng* (same)
ài 'to love' → a. *xiāng-ài* 'to love e.o. passionately' b. ⁰*hù-ài* (same)
ràng 'to give in' → a. *xiāng-ràng* 'give in to e.o.' b. ²*hù-ràng* (same).

6.5.3 Relationship between *hù-*, *xiāng-*, and *hùxiāng*

This naturally concerns only those compounds with *hù-* and *xiāng-* that are accepted by native speakers. The following relationship is typical of the data: substitution of *hùxiāng* for *hù-* or *xiāng-* is determined by replacement of a monosyllabic verb by the synonymous disyllabic verb. Note that the middle derivatives in (159) and (160) are accepted by native speakers both with disyllabic verbs given in the third column but in other patterns listed in the final paragraph of 1.2.4.

- (159) ²*hù-miǎn* 'to encourage e.o.' – **hùxiāng miǎn* (same) – *hùxiāng miǎn-lì* (same)
hù-zhù 'to help each other' – **hùxiāng zhù* (same) – *hùxiāng bāng-zhù* (same)
hù-lì 'to be mutually beneficial' – **hùxiāng lì* (same) – *hùxiāng yóu-lì* (same).
(160) *xiāng-ài* 'love e.o. passionately' – ²*hùxiāng ài* (same) – *hùxiāng ài-liàn* (same)
xiāng-jiàn 'see each other' – ²*hùxiāng jiàn* (same) – *hùxiāng jiàn-miàn* (same)
xiāng-ràng 'give in to e.o.' – ²*hùxiāng ràng* (same) – *hùxiāng qiān-ràng* (same)
xiāng-zhuàng 'collide' – ²*hùxiāng zhuàng* (same) – *hùxiāng pèng-zhuàng* (same).

As a rule, the informants prefer disyllabic verbs with *hùxiāng* though the set compound *xiāng-zhuàng* 'to collide' is preferable to its disyllabic correlate *hùxiāng pèng-zhuàng*. True, there is a subtle semantic difference between them: the former usually implies an unintentional action and the latter lacks this implication (Fengxiang Li, p.c.).

7. Lexical reciprocals with recurrent components of verbal origin

7.1 Introductory

This section is concerned with compound lexical reciprocals whose initial components are in their turn lexical reciprocals as well (at least in one of their meanings). These components may combine with both lexical reciprocals and non-reciprocal verbs to which they add reciprocity (see 5.1.2). The choice of the nine components listed below is determined by their primary meanings and high enough productivity, as they form from 11 to 79 compounds. Out of 334 compounds considered here 220 are verbs and 114 are nouns (see

(161a)). Nominal compounds are given due space here. Note that *hùxiāng* does not collocate with nouns at all (unless they are nominalized verbs; cf. 3.3), and *hù-* and *xiāng-* are rather rare (cf., however, (155b) and (156)). Nominal compounds are derived mostly with the help of the initial adjectival components *qīn* and especially *tóng* (as mentioned, adjectives are traditionally viewed as a subclass of verbs). Valency correlations of verbal compounds with base verbs here are basically the same as those of compounds with *hù-* and *xiāng-*. The base valency is either retained (especially in the case of two-place intransitive bases; cf. (85)) or decreases (especially if the base is not a lexical reciprocal; cf. (87)–(88)). The use of these compounds in simple and discontinuous constructions is treated in 5.2.2 above. What we claim in 6.3.1 for compounds with *xiāng-* also applies to the material of this section. Therefore these characteristics are not considered here. They may sometimes differ slightly from those in Sections 5.2.2 and 6.3.1. There are some individual relations between the base and reciprocal constructions but we cannot dwell on them here. In compounds, there occur bound morphemes which do have a lexical meaning but have dropped out of use as free units.

Attention is centered on lexical groups of the compounds with both non-reciprocal and reciprocal base verbs (see 7.2.1.1 and 7.2.1.2) and also on the ratio of the initial components in these lexical groups. By way of repeating ourselves, we stress that the existence of disyllabic lexical reciprocal compounds is not specific to reciprocals, being a reflection of a more general tendency towards disyllabicity. Of special interest are the initial components that repeat with different verbs and make up compound patterns, and also the cases where reciprocity is marked by the initial component only.

The discussion of compound reciprocals in this section is of preliminary nature: their investigation requires more space and should be done within the framework of a broader investigation of compounds in general.

General characteristics (see 7.1.1–7.1.3) are followed by a discussion of

- Verbal compounds with verbal bases (7.2).
- Verbal compounds with nominal bases (7.3).
- Compound nouns (7.4).

The lexical groups of compounds in this section are basically the same as among the verbs in *xiāng-*. Sometimes, we observe a synonymy of compounds with the same base verb, cf. *hǎo* ‘to be friends’ → *xiāng-hǎo/jiāo-hǎo* ‘to be friends’; *mà* ‘to scold sb’ → *hù-mà/xiāng-mà/duì-mà* ‘to squabble, scold each other’, *wěn* ‘to kiss sb’ → *xiāng-wěn/jiē-wěn* ‘to kiss each other’. It is but natural that these formations, being compounds, like formations with *xiāng-*, do not allow any adverbs or other words between the components. Note that reciprocals with the adverb *hùxiāng* do allow even an object before the verb (see (65a) and (67a)).

7.1.1 *The list of the initial components and their productivity*

In Section 7 the meanings of compounds with nine initial recurrent components are chosen for analysis. Their brief description is followed by the number of reciprocal compounds registered in dictionaries with each of them; it is but natural that they do not re-

flect the real number of these compounds, because they are easily formed *ad hoc* in speech. It is important to show their relative productivity. Some of them form non-reciprocal compounds as well, but these are not taken into account though partly illustrated in 7.1.2.

(161a) is a list of the recurrent components which are also used as monosyllabic verbs with the meanings translated below. Note, again, that the figures are meant as an approximate reference-point in the highly complicated domain of the use of the initial components in different types of compounds. Three recurrent components (*jiē*, *jié*, *hé₁*) denote connecting, joining proper, one (*jiāo*) denotes intersecting, one (*duì*) position opposite some object in space, another (*bǐ*) signifies comparison, i.e. a kind of mental joining of things, or competition; three components (*hé₂*, *qīn*, *tóng*) denote spiritual, kinship and proximity relations and some other shared features. Roughly speaking, the meaning of connecting (literal locative or figurative mental) subsumes all these meanings. The meaning of these initial components may undergo modification in compounds. They are mostly used in intransitive compounds though most of them (except *jiē*, *qīn* and *tóng*) are also registered in transitive compounds as well; naturally, *bǐ* in the meaning ‘to compare sth with sth’ is used in transitive compounds only. Practically all of them are polysemous, but we mention only those meanings that are characteristic of them in reciprocal compounds.

In (161a) the recurrent are listed in the alphabetical order, and the figures (some are approximate) indicate the number of registered verbal and nominal compounds and the number of subject- and object-oriented reciprocals among verbal compounds. When listing the compounds in (163), (164) and further on, the compounds are arranged in the alphabetical order of the initial compounds, and within each group with the same initial component they are arranged in the alphabetical order of the base verbs. The numbers that follow the verbs in (161) indicate the examples where they are used as free units.

(161) a. Table 1. The number of initial components in verbal and nominal compounds

	Verbal compounds		Nominal compounds (see 7.4)	Total
	Sb-oriented (see 7.2 and 7.3)	Obj-oriented		
<i>bǐ</i> ‘to compare, compete’ (109a)	10	9	1	20
<i>duì</i> ‘to face’, ‘to be opposite’ (98)	29	8	9	46
<i>hé₁</i> ‘to connect/be connected, join’ (97)	30	6	5	41
<i>hé₂</i> ‘(to be) in concord, harmonious’ (100c)	20	5	4	29
<i>jiāo</i> ‘to intersect/cross, join’ (8), (141a)	48	3	1	52
<i>jiē</i> ‘to tie/be tied, come into contact’ (104c)	23	–	–	23
<i>jié</i> ‘to tie/get tied, bind’ (104e)	9	2	–	11
<i>qīn</i> ‘close, (blood) relation’ (99c)	11	–	22	33
<i>tóng</i> ‘alike, same’ (100d)	7	–	72	79
Total	187	33	114	334

The tables below show the approximate number of the compounds with the initial components listed in Table 1, firstly, used in subject and object-oriented constructions

(see Tables 2 and 3 respectively) and, secondly, the number of constructions where reciprocity is encoded by the initial component *only* (marked with the word “only” in the tables) or *both* are reciprocal in meaning (marked with “both”). The figures in the tables include compounds considered in the sections bracketed in the first column. The lexicalized compounds from Sections 7.2.1.3 and 7.2.2.3 (13 and 8 compounds respectively) are not reflected in Tables 2 and 3. To repeat, the term lexicalization is used here in the same sense as above, for those compounds whose meaning differs drastically from the sum of meanings of the components.

(161) b. **Table 2.** The number of compounds with verbal bases used in subject-oriented constructions

	<i>bǐ</i>	<i>duì</i>	<i>hé₁</i>	<i>hé₂</i>	<i>jiāo</i>	<i>jiē</i>	<i>jié</i>	<i>qīn</i>	<i>tōng</i>	Total
“only” (7.2.1.1)	–	14	11*	–	11	1	3	–	4*	44
“both” (7.2.1.2)	3	8	9	10	14	10	2	9	–	65
Total	3	22	20	10	25	11	5	9	4	109

* 5 compounds with *hé₁* and all the 3 with *tōng* are sociative in meaning.

(161) c. **Table 3.** The number of compounds with verbal bases used in object-oriented constructions

	<i>bǐ</i>	<i>duì</i>	<i>hé₁</i>	<i>hé₂</i>	<i>jiāo</i>	<i>jiē</i>	<i>jié</i>	<i>qīn</i>	<i>tōng</i>	Total
“only” (7.2.2.1)	–	–	2	1	–	–	–	–	–	3
“both” (7.2.2.2)	6	4	3	2	3	–	2	–	–	20
Total	6	4	5	3	3	–	2	–	–	23

(161) d. **Table 4.** The number of compounds with nominal bases used in subject-oriented constructions*

	<i>bǐ</i>	<i>duì</i>	<i>hé₁</i>	<i>hé₂</i>	<i>jiāo</i>	<i>jiē</i>	<i>jié</i>	<i>qīn</i>	<i>tōng</i>	Total
“only” (7.3.1.1)	4	3	7	2	12	7	1	1	2	39
“both” (7.3.1.2)	1	3	1	4	6	4	2	–	1	22
Total	5	6	8	6	18	11	3	1	3	61

* We have only two object-oriented compounds in our data; see 7.3.2.

An interesting point is the selectivity of the initial components and base verbs in different syntactic and semantic groups of compounds and the nature of lexicalization and its range of meanings. This pertains to both compounds attested in Modern Chinese and those that have gone out of use. In general, all this is typologically relevant and requires further investigation. As one can easily see, some of the initial components preferably occur in lines “only” or “both” and some occur in both with more or less equal regularity (cf. 7.5).

The elements that are used as initial components may also combine with one another and thus they can also function as base verbs. Here is a list of these compounds (they are also entered in the lists below, especially in 7.2.1.2 and 7.2.1.3): *duì-bǐ*, ^o*hé₁-bǐ*, ^o*hé₂-bǐ*, ^o*bǐ-duì*, *jié-hé₁*, *jiē-hé₁*, ^o*hé₂-hé₁*, ^o*qīn-hé₂*, ^o*hé₁-hé₂*; *jiāo-jié*, ^o*qīn-jiē*, *duì-jiē*; ^o*hé₁-qīn*, *hé₂-qīn*; ^o*hé₂-tóng*. There is formal overlapping of compounds with recurrent initial and recurrent final components (cf. Section 8).

7.1.2 Compounds with non-reciprocal meanings

As among compounds with *xiāng*- (see (134)), there are compounds with the initial component from the list above that are not reciprocal in meaning.

- (162) ^o*hé₁-lǐ* 'rationally' (*lǐ* 'norm')
^o*hé₁-yí* 'as necessary, as it should be' (*yí* 'necessary')
^o*hé₁-fǎ* 'lawful(ly)' (*fǎ* 'law')
^o*hé₁-bào* 'to clasp' (*bào* 'to take into one's hands, embrace')

7.1.3 Combinability with *hùxiāng*

Combinability of lexical reciprocals with this adverb has been considered in 5.3, where numerous compounds dealt with in Section 7 are also cited. Here, we suggest some tentative observations concerning the tendencies of combinability with *hùxiāng* and compounds with different initial components. So far, the semantic motivation of these tendencies remains rather unclear.

1. Compounds with the initial *duì* usually can be modified by *hùxiāng*; e.g. *duì-huà* 'to have a dialogue', *duì-lěi* 'to stand opposite *each other's* armies', *duì-děng* 'of equal value', *duì-zhào* 'to compare', etc.

2. Most of the compounds with the initial *jiāo* can be modified by *hùxiāng*, e.g. *jiāo-liú* 'to communicate', *jiāo-tán* 'to converse', *jiāo-wǎng* 'to associate with, be in contact with', *jiāo-huàn* 'to exchange', *jiāo-cuò* 'to entangle', *jiāo-chā* 'to collide'; an exception is *jiāo-zhàn* 'to be at war, fight each other'.

3. Some of the compounds with the initial *jiē*, e.g. *jiē-qià* 'to arrange with', take up a matter with', can be modified by *hùxiāng*; while some, e.g. *jiē-wěn* 'to kiss each other', cannot.

4. Most of the compounds with the initial *jié* can be modified by *hùxiāng*; e.g. *jié-bài* 'to become sworn brothers or sisters', *jié-bàn* 'to go with', *jié-hé* 'to combine, unite'; an exception is *jié-méng* 'to form an alliance'.

For some of the compounds, e.g. *jiē-wěn* 'to kiss each other', combinability with *hùxiāng* is not outruled but it is rare enough.

7.2 Verbal compounds with verbal bases

7.2.1 Subject-oriented reciprocals

7.2.1.1 *Compounds with the reciprocal meaning coded by a recurrent component only.* This type comprises more than 40 compounds. To make it more transparent and show the semantic domains covered by this type of reciprocals, we shall divide the verbs into lexical

groups. In some cases the distribution of compounds between the groups is arbitrary. A verb may have features of two groups and be intermediate between them. Three main groups can be distinguished according to the meaning of the compounds:

- A. Reciprocals denoting social relations.
- B. Spatial reciprocals of joining together.
- C. Relations of equality.

Adjacent to these are sociative compounds entered here to complete the picture though they are not properly reciprocal.

In these types, the first component of a compound functions as a kind of reciprocal marker, and the second component bears the lexical meaning, i.e. the function of the first component here is similar to that of such specialized markers as *hùxiāng*, *hù-*, *xiāng-* (cf. 6.2.1.1, 6.3.1.2), i.e. the recurrent component marks a more or less standard reciprocal opposition. It is not accidental that compounds of this group are mostly translated into English as ‘each other’ added to the translation of the second component when there is no respective lexical reciprocal in English. It is likely that the reciprocal use of the initial components is a result of the reanalysis of their meaning when they form compounds with synonymous components.

The bases are mostly two-place transitives or two-place intransitives. Compounds with one-place intransitives increase either their valency or the number of the participants (cf. *lì* ‘to stand’ in (164) and (166), *liú* ‘to flow’ in (166), *zuò* ‘to work’ in (168)). Some of the bases occur with several initial components, and the meanings of compounds with the same base may differ (cf. *duì-lì* and [?]*tóng-lì* in (164) and (166)) or, as mentioned above, they may be synonymous (cf. *hé₁-liú* and *jiāo-liú* in (166), ^o*duì-ràng* and ^o*jiāo-ràng* in (163)). The same bases may also occur with these components and with *hù-* and *xiāng-* in synonymous compounds (cf. the cited compounds from (163) and *hù-ràng* in (120) and *xiāng-ràng* in (142)). The semantic relationship within the compounds is not always purely compositional, if we take the initial component to mean ‘each other’ (cf. [?]*daò* ‘to speak’ → [?]*jiāo-daò* = ‘to associate’, not ‘to speak to each other’; this kind of semantic deviations occurs in reciprocals with standard reciprocal affixes in agglutinating languages). But as a rule the semantic association between the base and the compound is transparent enough.

Not all of the first components are equally productive in this group. Thus, for instance, the dictionaries register 27 reciprocal compounds with the component *jiē* but not one of them belongs to this group. With *hé₂*, 36 compounds are registered, but only one of this group. Without sociative compounds, 32 compounds with different initial components are registered, *duì* (13 units) and *jiāo* (10 units) being prevalent among them. Among sociative compounds *hé₁* is prevalent (7 units), and there are 4 units with *tóng* (verbal compounds with *tóng* are mostly verbalized nouns, *tóng* being used as an attribute).

With regard to the distribution of the initial components among different lexical groups of compounds, note that *duì* is registered in 5 lexical groups (note 8 compounds with *duì* with the meaning of hostile relations) and *jiāo* in 4 groups, which is the most uniformly distributed one among all the groups numerically.

A. *Social relations*a. *Friendly relations*

- (163) *ràng* 'to give in/concede' → °*duì-ràng* 'to give in to each other'
bǎo 'to guarantee' → °*hé₁-bǎo* 'to vouch for each other'
bài 'to bow to sb' → °*jiāo-bài* 'to bow to each other'
 °*fú* 'to trust sb' → °*jiāo-fú* 'to trust each other'
 °*gǎn* 'to feel' → °*jiāo-gǎn* 'to sympathize with each other'
ràng 'to concede/give in to sb' → °*jiāo-ràng* 'to give in to each other'
wěn 'to kiss' → °*jiē-wěn* 'to kiss each other'
 °*tuō* 'to rely on sb' → °*jié-tuō* 'to rely on each other'.

b. *Hostile and competitive relations*

- (164) *kàng* 'to resist' → °*duì-kàng* 'to be opposed'
lì 'to stand' → °*duì-lì* 'to oppose each other'
mà 'to scold' → °*duì-mà* 'to squabble with one another'
shè 'to fire, shoot' → °*duì-shè* 'to exchange shots'
shuō 'to speak, try to persuade' → °*duì-shuō* 'to compete in eloquence, argue'
 °*zhì* 'to rise above sth' → °*duì-zhì* 'to oppose each other'
yǎo 'to gnaw' → °*duì-yǎo* 'to fight' (of animals)
 °*wù* 'to hate' → °*jiāo-wù* 'to hate each other'
 °*zé* 'to reproach' → °*jiāo-zé* 'to squabble'
hèn 'to hate' → °*jié-hèn* 'to hate each other'
xiān 'to suspect' → °*jié-xiān* 'become suspicious of each other'.

c. *Communication*

- (165) *kàn* 'to look' → °*duì-kàn* 'to exchange glances'
shì 'to look' → °*duì-shì* 'to look at each other'
 °*dào* 'to speak' → °*jiāo-dào* 'to associate'
shè 'to mention' → °*jiāo-shè* 'to negotiate'.

B. *Spatial relations (joining, contact, etc.)*

- (166) °*kāi* 'to set out on a journey' → °*duì-kāi* 'to set out to meet each other'
lěi 'to build fortifications' → °*duì-lěi* 'stand opposite each other (of armies)'
chéng 'to turn into/become' → °*hé₁-chéng* 'to blend/merge together'
liú 'to flow' → °*hé₁-liú* 'to flow together'
liú 'to flow' → °*jiāo-liú* 'to flow together/interflow'
róng 'to melt' → °*jiāo-róng* 'to get mixed'
zhī 'to weave/spin' → °*jiāo-zhī* 'to interweave'.

C. *Relations of equality*

- (167) °*xiào* 'to sell, spend' → °*duì-xiào* 'to balance income and expenditure'
dá 'to answer' → °*hé₁-dá* 'to correspond'.

D. *Sociative compounds*

- (168) *bàn* 'to set up' → °*hé₁-bàn* 'to set up together' (of spouses)
jī 'to attack' → °*hé₁-jī* 'to attack sb together'

yǎn 'to perform' (of actors)	→	hé ₁ -yǎn 'to perform together'
°yíng 'to govern'	→	hé ₁ -yíng 'to govern together'
yì 'to discuss'	→	hé ₁ -yì 'to discuss jointly, negotiate'
zhù 'to live'	→	hé ₁ -zhù 'to live together'
zuò 'to work'	→	hé ₁ -zuò 'to work together'
°jū 'to live'	→	tóng-jū 'to live together'
lì 'to stand'	→	°tóng-lì 'stand next to each other/side by side'
shì 'to work, serve'	→	tóng-shì 'work, serve together', 'colleagues'
xíng 'to go/walk'	→	tóng-xíng 'to go/walk together'.

7.2.1.2 *Both components are reciprocal in meaning.* These components may be synonymous or non-synonymous but close enough in meaning. The lexical groups here are noticeably different from the above type discussed in 7.2.1.1. Moreover, this class is much more numerous (about 65 units). But not all the lexical groups have increased. While the group of verbs of hostile relations is slightly smaller in comparison with the analogous group in 7.2.1.1 (12 vs. 8), the lexical groups of denoting friendly relations and spatial relations have increased (7 to 34 and 7 to 12 respectively). No sociative compounds are registered in this class (which is only natural because non-derived sociatives are very rare). The number of synonymous compounds with meanings like 'to be harmonious', 'to be friends', 'to quarrel', 'to fight', 'to come to an agreement', 'to join', is really astonishing, especially in view of the fact that analogous meanings are also expressed by compounds with *hù* and *xiāng*, not to mention other compounds with non-recurrent initial components considered above in 5.2.

A. Social relations

a. Friendly and neutral relations

(169) °bì 'to draw together'	→	hé ₁ -bì 'to be at one'
hé ₂ 'to be harmonious'	→	°hé ₁ -hé ₂ 'to be harmonious'
qīn 'to be close relatives'	→	hé ₁ -qīn 'make peace by marriage' (of clans)
hǎo 'to be friends'	→	hé ₂ -hǎo 'to be friends', 'to get reconciled'
hé ₁ 'to correspond'	→	°hé ₂ -hé ₁ 'to be harmonious'
lì 'to get settled (of sth)'	→	hé ₂ -lì 'to live in peace'
mì 'close, tight'	→	°hé ₂ -mì 'to become close (friends)'
°mù 'to be at peace'	→	hé ₂ -mù 'to live in peace with each other'
qīn 'to be close relatives, friends'	→	hé ₂ -qīn 'to become relatives, friends'
tiáo 'to be in harmony'	→	°hé ₂ -tiáo 'to be in harmony'
tóng 'alike, similar'	→	°hé ₂ -tóng 'to harmonize with each other'
xié '(to be) in concord'	→	hé ₂ -xié '(to be) in concord'
°yuē 'to come to an agreement'	→	hé ₂ -yuē 'to come to an agreement'
°gòu 'to mate/couple'	→	jiāo-gòu 'to copulate'
hǎo 'to be friends'	→	jiāo-hǎo 'to become friends'
°jiù 'to draw together'	→	°jiāo-jìu 'to be friends'
°yǒu 'to associate'	→	jiāo-yǒu 'to be friends', 'to make friends'
hǎo 'to be friends'	→	°jiē-hǎo 'to be friends / get reconciled'
jiāo 'to be friends'	→	jiē-jiāo 'to make friends'
jìn 'close/nearby'	→	jiē-jìn 'to be near, become friends'

°qià 'to come to an agreement'	→	jiē-qià 'to negotiate for an agreement'
qīn 'close'	→	jiē-qīn 'to become relatives'
shí 'to be acquainted with sb'	→	jiē-shí 'to strike an acquaintance'
yuē 'to come to an agreement'	→	°jiē-yuē 'to come to an agreement'
yuē 'to come to an agreement'	→	°jié-yuē 'to come to an agreement'
°bì 'to draw together'	→	°qīn-bì 'to draw together/[be friends]'
hé ₂ 'to be harmonious'	→	qīn-hé ₂ 'to be friends'
jiē 'to join together'	→	°qīn-jiē 'to draw together.'
jìn 'close'	→	qīn-jìn 'to be intimately close'
°jiù 'to draw together'	→	°qīn-jiù 'to be friends'
mì 'close'	→	qīn-mì 'close'
nì 'close'	→	qīn-nì 'close'
°xí 'to become freinds'	→	°qīn-xí 'to become friends'
°xiá 'to be friends'	→	°qīn-xiá 'to get used/become close'.

b. Hostile and competitive relations

(170) sài 'to compete'	→	bǐ-sài 'to compete'
°dāng 'to stand face to face'	→	°duì-dāng 'to compete'
zhàng 'to fight'	→	°duì-zhàng 'to fight'
°zhàn 'to fight'	→	°hé ₁ -zhàn 'to fight'
hòng 'to quarrel'	→	°jiāo-hòng 'to quarrel'
°zhàn '(to be at)war'	→	jiāo-zhàn 'to be at war'
zhēng 'to quarrel/fight'	→	°jiāo-zhēng 'to enter into battle'.

c. Communication

(171) tōng 'to communicate'	→	°hé ₁ -tōng 'to enter into a relation'
°dài 'to associate' (vi)	→	°jiāo-dài 'to associate' (vi)
tán 'to converse, talk'	→	jiāo-tán 'to converse'
chù 'to contact'	→	jiē-chù 'to enter into contact'.

B. Spatial relations (joining, contact, etc.)

(172) lián 'to connect/get connected'	→	°bǐ-lián 'to border'
°zhào 'to be in contact'	→	duì-zhào 'to compare'
bìng 'to join together'	→	hé ₁ -bìng 'to join together'
huì 'to assemble/gather'	→	°hé ₁ -huì 'to meet', 'to assemble'
lǒng 'to join'	→	hé ₁ -lǒng 'to join, put together'
chā 'to intersect/cross'	→	jiāo-chā 'to intersect/cross'
°cuò 'to interlace'	→	jiāo-cuò 'to interlace/become entangled'
pèi 'to be a pair'	→	jiāo-pèi 'to crossbreed, to mate'
°róng 'to cross, get mixed'	→	jiāo-róng 'to merge, get mixed (together)'
zá 'to mix'	→	°jiāo-zá 'to interlace/be(come) entangled'
hé ₁ 'to join together'	→	°jiē-hé ₁ 'to join together'
hé ₁ 'to join together'	→	jié-hé ₁ 'to join together'.

C. Relations of equality (including non-equality)

(173) qí 'equal'	→	°bǐ-qí 'alike'
bǐ 'to compare'	→	duì-bǐ 'to contrast'

°děng ‘of equal value’	→	<i>duì-děng</i> ‘of equal value’
<i>píng</i> ‘equal’	→	° <i>duì-píng</i> ‘of equal value’
°yìng ‘to correspond to sth’	→	<i>duì-yìng</i> ‘to correspond to each other’
<i>zhào</i> ‘to illuminate’	→	<i>duì-zhào</i> ‘to contrast’
°dàng ‘to correspond’	→	° <i>hé₁-dàng</i> ‘to correspond’
<i>qì</i> ‘to be related/connected’, ‘spirit’	→	° <i>jiē-qì</i> ‘to coincide’.

7.2.1.3 *Lexicalized compounds with the reciprocal meaning.* Some compounds considered above display certain slight semantic changes of non-compositional nature, and here we have included compounds with a significant shift in meaning. With the exception of two or three units, the base verb is not a lexical reciprocal. All the compounds of this group denote friendly or hostile relations, or communication, i.e. they are close to Group A above.

a. Friendly and neutral relations

(174) <i>pāi</i> ‘press one’s palms together’	→	<i>hé₂-pāi</i> ‘to be in accord with each other’
<i>bǐ</i> ‘to compare’	→	° <i>hé₂-bǐ</i> ‘to live in peace’
<i>lí</i> ‘to move off’	→	° <i>hé₂-lí</i> ‘to get divorced by mutual consent’
<i>xī</i> ‘to breathe’	→	° <i>hé₂-xī</i> ‘to get reconciled with each other’
<i>jié</i> ‘to tie, be tied’	→	<i>jiāo-jié</i> ‘to be friends’
<i>wāng</i> ‘to go away/leave’	→	<i>jiāo-wāng</i> ‘to be in contact’
° <i>yóu</i> ‘to amuse oneself/travel’	→	<i>jiāo-yóu</i> ‘to have many connections’
<i>bài</i> ‘to bow’	→	<i>jié-bài</i> ‘to pledge brotherhood’
° <i>jiù</i> ‘to draw together’	→	° <i>qīn-jiù</i> ‘to become friends’.

b. Hostile and competitive relations

(175) ° <i>shì</i> ‘to check’	→	<i>bì-shì</i> ‘to compete’
<i>dǎ</i> ‘to beat’	→	<i>duì-dǎ</i> ‘to compete/rival’.

c. Communication

(176) <i>dài</i> ‘to treat sb’	→	<i>jiāo-dài</i> ‘to get acquainted’
<i>jié</i> ‘to tie (up)’	→	° <i>jiāo-jié</i> ‘to keep company’.

7.2.2 *Object-oriented reciprocals*

As well as in the cases with *hù-*, *xiāng-* and *hùxiāng* (see 6.2.2 and 6.3.2), the number of object-oriented reciprocals is much smaller (31 units) than that of subject-oriented reciprocals. Object-oriented reciprocals, being mostly two-place transitives with a plural object or three-place transitives, may be related to subject-oriented reciprocals in two ways: 1) the same compound can be used both transitively and intransitively, e.g. *hé₁-bìng* ‘to unite/join’ (vi/vt), *hùn-hé₁* ‘to mix, get mixed’ (vt/vi), as in the type illustrated by (33) and (104d); 2) they are embedded subject-oriented reciprocals, especially with the causative auxiliary *shǐ*, as in the type illustrated by (34). The remainder of object-oriented reciprocals do not have same-stem subject-oriented correspondences, cf. *féng* ‘to sew’ → °*hé₁-féng* / *féng-hé₁* ‘to sew sth together, join seams’. True, the verb ‘to sew’ denotes piecing together fabric, and in combination with the spatial adverb *zài yīqǐ* ‘together’ may denote joining together of two objects, i.e. it functions as an object-oriented reciprocal

(see (104b)). The function of this adverb in association with *féng* and the function of *hé₁* in the compound °*hé₁-féng* are similar (cf. (212)).

The expression of reciprocal arguments does not differ from that in 5.2.2.2. In the simple construction, *hùxiāng* or the adverb *yìqǐ* ‘together’ (or its synonym) is possible. The plural object usually has the preposition *bǎ* and precedes the predicate (cf. (104a–b), (115)).

In this type of constructions we find verbs with the components *bǐ-* (7 units), *duì-* (8 units), *hé₁-* (6 units), *hé₂-* (5) and *jiāo-* (3 units).

7.2.2.1 Compounds with the reciprocal meaning indicated by the recurrent component only.

There are only three reciprocals of this type in our database. They denote *joining* things together and causation of *friendly relations* (‘to reconcile sb and/with sb’).

- | | |
|-------------------------------------|--|
| (177) <i>féng</i> ‘to sew sth’ | → ° <i>hé₁-féng</i> ‘to sew sth together, join seams’ |
| <i>zàng</i> ‘to bury sb’ | → <i>hé₁-zàng</i> ‘to bury spouses together’ |
| <i>quàn</i> ‘to try to persuade sb’ | → ° <i>hé₂-quàn</i> ‘to reconcile sb and/with sb’. |

7.2.2.2 Both components are reciprocal in meaning. The main meanings in this group of 16 units are ‘to compare’, ‘to exchange’, ‘to join sth together’, ‘to mix sth’.

a. Friendly relations

- | | |
|---|--|
| (178) <i>tiáo</i> ‘be harmonious, in harmony’ | → <i>hé₂-tiáo</i> ‘bring sth into harmony’. |
|---|--|

b. Comparison

- | | |
|---|--|
| (179) <i>bìng</i> ‘to join sth and sth’ | → ° <i>bǐ-bìng</i> ‘to compare sth with sth’ |
| <i>duì</i> ‘to collate’ | → <i>bǐ-duì</i> ‘to collate sth with sth’ |
| <i>jiāo</i> ‘to join’ | → <i>bǐ-jiāo</i> ‘to compare sth with sth’ |
| <i>jiào</i> ‘to compare sth with sth’ | → <i>bǐ-jiào</i> ‘to compare sth with sth’ |
| ° <i>ní</i> ‘to compare sth with sth’ | → ° <i>bǐ-ní</i> ‘to compare sth with sth’ |
| ° <i>yù</i> ‘to compare sth with sth’ | → <i>bǐ-yù</i> ‘to compare sth with sth’ |
| <i>bǐ</i> ‘to compare sth with sth’ | → <i>duì-bǐ</i> ‘to compare sth with sth’ |
| <i>dài</i> ‘to take’ | → <i>duì-dài</i> ‘to take sb for sb’ |
| <i>duì</i> ‘to collate’ | → <i>hé₁-duì</i> ‘to collate sth with sth’. |

c. Exchange

- | | |
|-------------------------------|---|
| (180) <i>huàn</i> ‘to change’ | → <i>duì-huàn</i> ‘to exchange sth’ |
| <i>huàn</i> ‘to change’ | → <i>jiāo-huàn</i> ‘to exchange sth’ |
| <i>yì</i> ‘to change’ | → <i>jiāo-yì</i> ‘to change sth for sth’. |

d. Spatial relations

- | | |
|--|--|
| (181) <i>jiē</i> ‘to join sth and sth’ | → <i>duì-jiē</i> ‘to join sth and sth together’ |
| <i>bìng</i> ‘to join sth and sth’ | → <i>hé₁-bìng</i> ‘to join sth together’ |
| <i>lǒng</i> ‘to mix’ | → <i>hé₁-lǒng</i> ‘to join sth together’ |
| ° <i>wèi</i> ‘to have taste’ | → ° <i>hé₂-wèi</i> ‘to mix products when cooking’ |

<i>chā</i> ‘to intersect’	→	<i>jiāo-chā</i> ‘to put sth crosswise’
<i>hé₁</i> ‘to join’	→	<i>jié-hé₁</i> ‘to combine sth with sth’
<i>lián</i> ‘to join sth’	→	<i>jié-lián</i> ‘to join, fasten together’.

7.2.2.3 *Lexicalized compounds with the reciprocal meaning.* The same lexical groups are distinguished here as in 7.2.2.2. In these instances a sharp change of meaning takes place. With one or two exceptions, the base verbs are not reciprocal in meaning, and this meaning is signified by the first component.

a. Friendly relations

(182) ° <i>xī</i> ‘to stop, rest’	→	° <i>hé₂-xī</i> ‘to reconcile sb.’
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b. Comparison

(183) <i>zuò</i> ‘to become’	→	<i>bǐ-zuò</i> ‘to liken’
<i>jǔ</i> ‘to raise’	→	° <i>duì-jǔ</i> ‘to compare’
<i>zhào</i> ‘to light’	→	<i>duì-zhào</i> ‘to compare’
<i>zhèng</i> ‘to confirm’	→	<i>duì-zhèng</i> ‘to compare/collate’
<i>pāi</i> ‘to clap/applaud’	→	<i>hé₁-pāi</i> ‘to co-ordinate’.

c. Exchange

(184) <i>diào</i> ‘to remove/move’	→	<i>duì-diào</i> ‘exchange places of two things’.
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d. Spatial relations

(185) <i>yún</i> ‘to even/smooth out’	→	° <i>hé₂-yún</i> ‘to mix sth well’.
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7.3 Verbal compounds with nominal bases

In the formation of these compounds, the same initial components are used as above, and they make up the same lexical groups. 68 of these compounds are subject-oriented and only two are object-oriented. The main type of these compounds are “*verb + postposed object*” collocations (cf. (17)). This type of compounds formally coincides with syntactic constructions of the same structure, and the borderline between them is not rigid, which means that they comprise a kind of continuum. Nevertheless, this type is traditionally registered in the Chinese dictionaries and spelt as one word if they contain Latin transliterations along with ideograms. It is this feature that served as basis for selecting the data for this section. This type of compounds is characterized as follows in a standard reference Chinese grammar by Li & Thompson (1981:73):

There are several conditions under which a verb-object construction is classified as a compound in traditional Chinese grammar (see Chao Yuen Ren 1968:415). Any one of these properties will render a verb-object construction a compound:

1. One or both of the constituents being bound morphemes.
2. Idiomaticity of the meaning of the entire unit.
3. Inseparability or limited separability of the constituents.

In the material below the following bound morphemes occur: *bì* ‘arm’, *tí* ‘body’, *hūn* ‘marriage’, *wǔ* ‘martial art’, *wù* ‘thing’, *xí* ‘mat’, etc. (cf. the list of bound morphemes in Packard 2000:90–3). The degree of idiomaticity of compounds varies from weak (like *zuǐ* ‘mouth’ → *qīn-zuǐ* ‘to kiss each other’) to higher (cf. *tóu* ‘head’ → *jiē-tóu* ‘to come into contact, enter into negotiations’). The associative link between the meaning of the final constituent and that of the compound is usually clear enough. As regards the third property, complete fusion of the constituents is rare, and many compounds allow an aspectual marker between the constituents (cf. (5b)). As a rule, this property displays itself in the fact that the final constituent cannot be placed in the sentence-initial position as a topic (Li & Thompson 1981:73).

7.3.1 Subject-oriented reciprocals

7.3.1.1 Compounds with the reciprocal meaning rendered by the recurrent component only.

In the formation of this class of compounds the role of the initial components is particularly prominent. The most common initial component here is *jiāo* (12 units out of 39). Some of the initial components are synonymous and thus form synonymous compounds from semantically close nouns (cf. °*jiāo-chún* and *qīn-zǔi* in (186)) and even from the same bases (cf. °*hé₁-bīng* and *jiē-bīng*, °*hé₁-rèn* and *jiāo-rèn* in (187)).

A. Social relations

a. Friendly and neutral relations

(186)	<i>gǔ</i> ‘share’	→	<i>hé₁-gǔ</i> ‘to have shares in the same enterprise’
	° <i>hūn</i> ‘marriage/wedlock’	→	<i>hé₁-hūn</i> ‘to exchange horoscopes before marriage’
	<i>xīn</i> ‘heart’	→	<i>hé₂-xīn</i> ‘to be in concord’
	<i>chún</i> ‘lips’	→	° <i>jiāo-chún</i> ‘to kiss each other’
	<i>huān</i> ‘sympathy’	→	° <i>jiāo-huān</i> ‘to sympathize with each other’
	° <i>qíng</i> ‘feelings’	→	<i>jiāo-qíng</i> ‘to become friends’
	<i>yán</i> ‘words’	→	° <i>jié-yán</i> ‘to come to an agreement/understanding’
	<i>zuǐ</i> ‘mouth’	→	<i>qīn-zuǐ</i> ‘to kiss each other’.

b. Hostile and competitive relations

(187)	<i>quán</i> ‘fist’	→	<i>bī-quán</i> ‘to box’
	° <i>wǔ</i> ‘martial arts’	→	<i>bī-wú</i> ‘to compete in martial arts’
	<i>bīng</i> ‘weapon(s)’	→	° <i>hé₁-bīng</i> ‘to give battle’
	<i>qì</i> ‘anger, air’	→	° <i>hé₁-qì</i> ‘to quarrel’
	<i>rèn</i> ‘blade’	→	° <i>hé₁-rèn</i> ‘to cross swords’
	<i>zuǐ</i> ‘mouth, beak’	→	° <i>hé₁-zuǐ</i> ‘to quarrel’
	° <i>bì</i> ‘arm’	→	° <i>jiāo-bì</i> ‘to fight’
	<i>bīng</i> ‘weapon(s)’	→	<i>jiāo-bīng</i> ‘to cross swords’
	<i>huǒ</i> ‘fire’	→	<i>jiāo-huǒ</i> ‘to exchange fire’
	<i>fēng</i> ‘edge/point/spike’	→	<i>jiāo-fēng</i> ‘to cross swords’
	<i>rèn</i> ‘blade’	→	<i>jiāo-rèn</i> ‘to cross swords’
	<i>shǒu</i> ‘hand’	→	<i>jiāo-shǒu</i> ‘to fight’
	<i>bīng</i> ‘weapon(s)’	→	<i>jiē-bīng</i> ‘to join battle’
	<i>huǒ</i> ‘fire’	→	<i>jiē-huǒ</i> ‘to open an exchange of fire’.

c. Communication

- (188) *huà* 'words' → *duì-huà* 'to have a dialogue'
jiǔ 'alcohol' → *duì-jiǔ* 'to drink alcohol together (of two)'
°róng 'face' → *jiē-róng* 'to establish personal contact'
tóu 'head' → *jiē-tóu* 'to come into contact, enter into negotiations'
xiàn 'thread' → *jiē-xiàn* 'to get in touch by telephone'.

B. Spatial relations

- (189) *°zhōng* 'goblet/glass' → *duì-zhōng* 'to clink glasses'
yī 'one' → *hé₁-yī* 'to become one/merge together'
jǐng 'neck' → *jiāo-jǐng* 'interlace necks' (like ducks; of conjugal love)
suǒ 'lock' → *°jiāo-suǒ* 'to intersect/alternate'
tóu 'head' → *°jiāo-tóu* 'to touch with heads/bring heads together'
biān 'side' → *jiē-biān* 'adjacent, contiguous'
°xī 'knee' → *°jiē-xī* 'to bring knees into contact'
dì 'ground' → *°tóng-dì* 'live on the same territory' (lit. 'same ground')
°xí 'mat' → *tóng-xí* 'to sit at the same table at a banquet'.

C. Relations of equality

- (190) *jiān* 'shoulder' → *bǐ-jiān* 'be equal in height', lit. 'compare shoulders'
°tǐ 'body', 'position' → *°bǐ-tǐ* 'to be equal in status'
xiàn 'string' → *°hé₂-xiàn* 'to sound in unison'.

7.3.1.2 *Compounds with both reciprocal components.* The first component in these compounds (22 units in our list) is a kind of semantically more or less empty verbalizer, as in the patterns 'friend' → 'to be friends', 'chess' → 'to play chess'.

A. Social relations

a. Friendly relations

- (191) *luó* 'net, connection' → *°hé₂-luó* 'to combine with harmony'
qià 'harmony' → *hé₂-qià* 'to live in peace'
tiáo 'agreement' → *°hé₂-tiáo* 'to be in harmony'
°xiá 'harmony' → *hé₂-xiá* 'to live in peace with each other'
°péng 'friend' → *jiāo-péng* 'to be friends'
yì 'friendship' → *jiāo-yì* 'to be friends', 'friendship'
°yǒu 'friend' → *jiāo-yǒu* 'to make friends'
°hūn 'marriage/wedlock' → *jié-hūn* 'to enter into wedlock/marry'.

b. Hostile and competitive relations

- (192) *°chóu* 'enemy' → *°duì-chóu* 'to be enemies'
°chóu 'enemy' → *jiē-chóu* 'to be enemies'
zhàn 'battle' → *°jiē-zhàn* 'to battle'
°chóu 'enemy' → *jié-chóu* 'to be enemy'.
- (193) *jú* 'chess' → *duì-jú* 'to play a game of chess, ball, etc.'
yì 'chess, checkers' → *duì-yì* 'to play chess, checkers'.

c. *Communication*

- (194) *yuē* ‘agreement/contract’ → *hé₁-yuē* ‘to sign an agreement/contract’
 °*yì* ‘border, juncture’ → *jiāo-yì* ‘to associate’
 °*yán* ‘words’ → °*jiāo-yán* ‘to enter into conversation’.

B. *Spatial relations*

- (195) *jiè* ‘border/frontier’ → *jiāo-jiè* ‘to border’, ‘to associate’
 °*jìng* ‘border’ → *jiē-jìng* ‘to border’
 °*rǎng* ‘earth’ → *jiē-rǎng* ‘to be limitrophe, touch at’.

C. *Relations of equality*

- (196) °*kàng* ‘pair’ → °*bǐ-kàng* ‘to make up a pair’
 °*qì* ‘contract’ → °*tóng-qì* ‘to coincide’.

7.3.1.3 *Lexicalized compounds with the reciprocal meaning.* Verbs of this group are subject-oriented and they vary in meaning, though within the lexical boundaries as above, three verbs denoting *equality* and one being *sociative*:

- (197) *wù* ‘thing’ → °*bǐ-wù* ‘to be equal’
qì ‘credential, tally’ → °*hé₁-qì* ‘to relate/correspond to each other’
qí ‘chess’ → *hé₁-qí* ‘to make a draw’
 °*chì* ‘wing’ → °*jiē-chì* ‘to pass an exam together’.

7.3.2 *Object-oriented reciprocals*

There are only a few compounds with the reciprocal meaning rendered by the recurrent component only. As many other object-oriented reciprocals considered above, these compounds denote *comparison*:

- (198) *lèi* ‘type’ → *bǐ-lèi* ‘to compare sth and sth by type/classify’
xíng ‘form’ → *bǐ-xíng* ‘to compare sth and sth by form’.

7.4 Compound nouns

This group comprises about 112 items. Two groups of nouns can be distinguished here, one of them denoting non-persons and the one other persons. Compound nouns are formed with the same initial components as verbs, but the more productive among them are the components *tóng* and *qīn*. The base and the compound are often synonymous, though sometimes there is a sharp difference in meaning. For a number of reasons, the compounds below are not divided into the types “only” and “both”, as is done, for instance, in 7.2.1.1 and 7.2.1.2.

7.4.1 *Nouns denoting non-persons (actions, states, objects)*

This group is smaller (about 20 items) than that denoting persons and semantically it is highly heterogeneous, though the prevalent meanings are social relations between humans

and to a lesser degree relations between objects. Many of the bases are lexical reciprocals. The most common initial components are *tóng-*, *hé₂-* and *hé₁-*.

(199) <i>lì</i> ‘analogy, rule’	→	<i>bǐ-lì</i> ‘ratio, correlation’
° <i>ǒu</i> ‘pair’	→	<i>duì-ǒu</i> ‘pair’
<i>tái</i> ‘stage/boards’, <i>xì</i> ‘play’	→	<i>duì-tái-xì</i> ‘competition of two theatrical groups’
° <i>bì</i> ‘nephrite disk’	→	<i>hé₁-bì</i> ‘medley, jumble’, ‘pair’
<i>ǒu</i> ‘pair, spouses’	→	<i>hé₁-ǒu</i> ‘pair, wedlock’
° <i>zōng</i> ‘union’	→	<i>hé₁-zōng</i> ‘union of North and South (against Qin)’
<i>mǎi</i> ‘to buy’	→	<i>hé₂-mǎi</i> ‘transaction on agreement’
<i>qí</i> ‘chess’	→	<i>hé₂-qí</i> ‘a draw’
<i>yù</i> ‘harmony’	→	<i>hé₂-yù</i> ‘harmony, concord’
<i>xián</i> ‘string’	→	<i>hé₂-xián</i> ‘chord’
<i>wěi</i> ‘tail’	→	<i>jiāo-wěi</i> ‘coupling’
<i>jū</i> ‘to live’, <i>guān-xi</i> ‘liaison’	→	<i>tóng-jū-guān-xi</i> ‘cohabitation’
<i>kē</i> ‘category’	→	<i>tóng-kē</i> ‘of the same category’
° <i>pín</i> ‘category’	→	° <i>tóng-pín</i> ‘of the same category’
° <i>yì</i> ‘meaning’, <i>cí</i> ‘words’	→	<i>tóng-yì-cí</i> ‘synonyms’
<i>yīn</i> ‘sound’, <i>cí</i> ‘word’	→	<i>tóng-yīn-cí</i> ‘homonyms’
<i>zú</i> ‘family, kin’, <i>cí</i> ‘words’	→	<i>tóng-zú-cí</i> ‘related words’.

7.4.2 Nouns denoting persons (class membership)

Below, the compound nouns are loosely divided into 8 lexical subgroups combined into 3 larger groups, namely:

- Group A with typical meanings ‘relative’, ‘friend’, ‘enemy’.
- Group B meaning ‘neighbour’, ‘contemporary’, ‘namesake’.
- Group C meaning ‘co-religionist’, ‘colleague’.

Compounds with *qīn* commonly denote persons related by family ties, and those with *duì* and especially with *tóng* denote persons involved in all kinds of social relations or persons sharing some common feature. Some of the compounds may denote both persons and corresponding relations. The adjectives *qīn* and *tóng* function in these formations as a kind of attribute, and the total meaning of most of the compounds, though not all of them, is of compositional nature. The bases are mostly nouns and sometimes verbs. The semantic relations between the bases and respective compounds are rather varied, but generally transparent enough; not infrequently, the base noun is synonymous with the compound (cf. *shǔ* ‘to belong’, ‘class’ → *qīn-shǔ* ‘to belong’; cf. the type “both” above) or denotes the shared feature (cf. *zhǒng* ‘race’ → *tóng-zhǒng* ‘people of the same race’; cf. the type “only” above), etc. Sometimes, the semantic association between the base and the compound is rather whimsical (cf. *xué* ‘boots’ → *tóng-xué* ‘lovers of the same woman’, cf. lexicalized reciprocals above).

Needless to say, nouns with the meanings like those listed below are also formed with the initial components besides those contained in the compounds below; cf. °*pèi-shòu* ‘partner in a game’, *pèi-bàn* (same), *huǒ-bàn* ‘companion’, *bàn-lǚ* (same), °*tán-bàn* ‘interlocutor’, etc.

A. Personal relations

a. Family relations

(200) <i>běn</i> ‘root’, ‘partner’	→ ° <i>qīn-běn</i> ‘parents’ (in crossbreeding)
° <i>duàn</i> ‘kin, relatives’	→ ° <i>qīn-duàn</i> ‘kin, relatives’
<i>jiā</i> ‘family’	→ <i>qīn-jiā</i> ‘an in-law’
° <i>juàn</i> ‘family, kin’	→ <i>qīn-juàn</i> ‘family, kin’
° <i>qī</i> ‘relative’	→ <i>qīn-qī</i> ‘relative’
<i>rén</i> ‘man’	→ <i>qīn-rén</i> relative, kin’
<i>táng</i> ‘clan’	→ ° <i>qīn-táng</i> ‘nearest relations’
<i>yà</i> ‘son/brother-in-law’	→ ° <i>qīn-yà</i> ‘son/brother-in law’
<i>yīn</i> ‘in-laws’	→ <i>qīn-yīn</i> ‘in-laws’
<i>yìn</i> ‘in-laws’	→ ° <i>qīn-yìn</i> ‘in-laws’
<i>zhī</i> ‘to know’	→ <i>qīn-zhī</i> ‘relatives and acquaintances’
<i>zú</i> ‘family, tribe’	→ <i>qīn-zú</i> ‘relatives’
<i>gēn</i> ‘root’	→ <i>tóng-gēn</i> ‘(person) of the same root’
<i>mǔ</i> ‘mother’	→ <i>tóng-mǔ</i> ‘brothers and sisters born of one mother’
° <i>qīn</i> ‘blanket’, <i>gòng</i> ‘common’, <i>zhěn</i> ‘pillow’	→ <i>tóng-qīn gòng zhěn</i> ‘spouses’
<i>táng</i> ‘hall’, ‘tribe/family’	→ <i>tóng-táng</i> ‘classmate’, ‘cousins’
<i>xuè</i> ‘cave, grave’	→ ° <i>tóng-xuè</i> ‘devoted spouses’
<i>yuán</i> ‘source’	→ <i>tóng-yuán</i> ‘to be of the same origin’
<i>zú</i> family, kin’	→ <i>tóng-zú</i> ‘(persons) of the same family’
° <i>zōng</i> ‘ancestor’	→ <i>tóng-zōng</i> ‘(persons) of the same family/tribe’.

b. Friendly relations

(201) <i>gǔ ròu</i> ‘bones and muscles’	→ <i>qīn-gǔ ròu</i> ‘close friends, to be friends’
<i>jìn</i> ‘close (man/person)’	→ <i>qīn-jìn</i> ‘close (person)’
<i>jiù</i> ‘old’	→ ° <i>qīn-jiù</i> ‘old friends’
° <i>péng</i> ‘friend’	→ ° <i>qīn-péng</i> ‘friend’
° <i>xí</i> ‘to be on friendly terms’	→ ° <i>qīn-xí</i> ‘friend’
<i>xiá</i> ‘to be friends’, ‘friendship’	→ ° <i>qīn-xiá</i> ‘friend’, ‘friendship’
° <i>yǒu</i> ‘friend’	→ <i>qīn-yǒu</i> ‘friend’
<i>jūn</i> ‘army’	→ ° <i>tóng-jūn</i> ‘ally’
<i>méng</i> ‘union’	→ <i>tóng-méng-zhe</i> ‘ally’
° <i>zhì</i> ‘will’	→ <i>tóng-zhì</i> ‘comrade’.

c. Hostile and opposite relations

(202) ° <i>dí</i> ‘enemy’	→ <i>duì-dí</i> ‘enemy’
<i>fāng</i> ‘side, direction’	→ <i>duì-fāng</i> ‘opponent’
<i>shǒu</i> ‘hand’	→ <i>duì-shǒu</i> ‘rival’
<i>tóu</i> ‘head’	→ <i>duì-tóu</i> ‘rival’
° <i>zhí</i> ‘foot, sole’	→ ° <i>duì-zhí</i> ‘antipode’.

B. Persons sharing a feature that does not involve any kind of activity

a. Persons in spatial proximity or sharing a place

(203) ° <i>lín</i> ‘neighbour’	→ ° <i>duì-lín</i> ‘neighbour across the road’
<i>mén</i> ‘gate’	→ <i>duì-mén</i> ‘the neighbour across the road’

°lín 'neighbour'	→	qīn-lín 'close neighbour'
°bāo 'belly', 'cell'	→	tóng-bāo 'compatriot'
dì 'ground, soil'	→	tóng-dì 'fellow-countryman'
guó 'country'	→	°tóng-guó 'compatriot'
°jīng 'well'	→	°tóng-jīng 'neighbour'
shì 'room'	→	tóng-shì 'roommate'
xiāng 'village'	→	tóng-xiāng 'fellow-villager'

b. Persons of the same age

(204) dài 'epoch'	→	tóng-dài 'a contemporary'
°gēng 'age'	→	tóng-gēng '(person) of the same age'
jiǎ 'cyclic sign'	→	°tóng-jiǎ '(person) of the same age'
bèi 'generation'	→	tóng-bèi 'persons of the same generation'
°líng 'age'	→	tóng-líng '(persons) of the same age'
nián 'year', 'age'	→	tóng-nián '(persons) born in the same year'
sui 'year'	→	tóng-sui '(persons) born in the same year'

c. Persons with other shared features

(205) bān 'class, group, shift'	→	tóng-bān '(persons) of the same class, group, shift'
guāng 'shine'	→	?tóng-guāng '(persons) sharing fame/glory'
háng 'profession'	→	tóng-háng 'persons of the same profession'
jí 'rank'	→	tóng-jí '(persons) of the same rank'
mìng 'fate'	→	tóng-mìng '(persons) of the same fate'
míng 'name'	→	tóng-míng '(persons) bearing the same name'
°wèi 'position, place'	→	tóng-wèi '(persons) of the same status, equals'
xìng 'sex, character'	→	tóng-xìng '(persons) of the same sex, homogeneous'
xìng 'surname'	→	tóng-xìng '(persons) bearing the same surname'
xíng 'form, type'	→	tóng-xíng '(persons) of the same type'
zhǒng 'race'	→	tóng-zhǒng 'people of the same race'

C. Persons sharing a state of mind or an activity

a. Persons with a common spiritual feature

(206) °zhì 'will'	→	°hé ₁ -zhì 'like-minded persons', 'like-mindedness'
fāng 'side, direction'	→	?tóng-fāng 'like-minded persons'
diào 'melody'	→	tóng-diào 'like-minded persons'
hào 'to love'	→	tóng-hào '(persons) sharing the same tastes'
jiào 'faith'	→	tóng-jiào 'coreligionists, of the same faith'
qì 'spirit'	→	°tóng-qì 'like-minded persons'

b. Persons engaged in joint activity

(207) zhù 'to compose/create'	→	°hé ₁ -zhù 'co-author'
bǎng 'list of examinees'	→	tóng-bǎng 'persons on the same list of examinees'
°cān 'monastic group'	→	°tóng-cān 'disciples of the same tutor'
°chóu 'enemy'	→	tóng-chóu '[to have] the same enemy'
chuāng 'window'	→	tóng-chuāng 'schoolmate'
dǎng 'party'	→	tóng-dǎng 'persons in the same party'
àn 'table'	→	tóng-àn 'table-companions'

°bàn ‘companion’	→	tóng-bàn ‘companion’
°chái ‘colleagues’	→	°tóng-chái ‘colleagues’
°é ‘evil’	→	°tóng-é ‘accessory in a crime’
fàn ‘to break a law’	→	°tóng-fàn ‘accomplice’
guān ‘department’	→	°tóng-guān ‘colleague’
huǒ ‘colleague’	→	tóng-huǒ ‘companion’
°láo ‘sacrificial cattle’	→	°tóng-láo ‘table-companions’
°liáo ‘colleague, companions’	→	tóng-liáo ‘colleagues, companions’
liè ‘rank, row’	→	°tóng-liè ‘colleague’
lù ‘road’	→	tóng-lù ‘fellow-travellers’
mén ‘gate’	→	°tóng-mén ‘pupils of the same teacher’
móu ‘plan’	→	tóng-móu ‘accomplice’
rén ‘man’	→	tóng-rén ‘colleague, companion’
xiào ‘school’	→	tóng-xiào ‘schoolmate’
xué ‘to study’	→	tóng-xué ‘schoolmate’
xué ‘boots’	→	tóng-xué ‘lovers of the same woman’
yàn ‘inkstand’	→	tóng-yàn ‘school-fellow’
yè ‘affair/business’	→	°tóng-yè ‘colleague’
zuì ‘guilt’	→	tóng-zuì ‘accomplice’.

Sentences with these compounds in predicate position contain no copula, unless the components of these compounds are perceived as one unit; cf.:

- (208) a. Wǒ hé nǐ tóng-lù.
 I and you same-road
 ‘We are fellow travellers.’ (‘I take the same road as you.’)
- b. Wǒ hé tā tóng-xìng, bù tóng-zōng.
 I and he same-surname NEG same-ancestor
 ‘He and I have the same surname, but we are not relatives.’
- c. Wǒ hé tā tóng-suì.
 I and he same-age
 ‘He and I are of the same age.’

If a compound composed of *tóng* and a noun is perceived as one unit the copula *shì* is obligatory:

- d. Wǒ hé tā shì tóng-shì.
 ‘He and I are colleagues’, lit. ‘He and I are same service/work.’

Some nouns of this type have undergone verbalization, and in this case they are naturally entered elsewhere (there are also a number of verbal compounds with *tóng* derived with verbal bases, cf. *tóng-xíng* ‘to go, walk together’ in (168)). An example:

- (209) Wǒ hé tā tóng guo shì.
 I and he same EXP affair
 ‘We were colleagues’, lit. ‘I and he (shared) the same job.’

7.5 Quantitative characteristics of the initial components

As mentioned, the verbal compounds considered here came into being owing to the tendency towards disyllabicity. In this process that covers hundreds and hundreds of verbs and which is very active yet, a tendency is observed to create series of compounds with the same initial components, including reciprocal compounds. Most of these initial components have a concrete lexical meaning which is clearly distinguishable in the compounds and thus the choice of a given initial component is semantically motivated. Some of them reveal more complex relations with the bases – of non-compositional nature and their selectivity may be not obvious. The fact that at least 330 verbal and nominal compounds contain only 9 initial recurrent components shows that the main lexical load falls on the final component, the initial one naturally expressing a more general lexical meaning. This accounts for our attempt to look for the peculiarities (some trivial, some non-trivial) of the employment of the initial components.

For the reader's convenience, here again are the main meanings of all the 9 initial components (see also (91)) which are given in the subsequent description without translation: *bǐ* 'to compare', 'to compete'; *duì* 'to face', 'to oppose, be opposite', 'true'; *hé₁* 'to connect, be connected, join'; *hé₂* 'to be in concord, harmonious'; *jiāo* 'to intersect, interweave, join'; *jiē* 'to come into contact, tie, be tied'; *jié* 'to bind, tie, be tied'; *qīn* 'to be relatives', 'close'; *tóng* 'same, alike'. As we see, there is a kind of semantic overlapping between their meanings.

We realize the insufficiency of the data for a convincing quantitative analysis, but even provisional figures may be useful. By way of partly repeating the material of Section 7 introduced above, we shall consider the initial components from the viewpoint of the quantitative characteristics of their use in: (1) verbal and nominal compounds; (2) deverbal and denominal verbal compounds; (3) subject- and object-oriented compounds; (4) compounds of types "only" and "both" (see Table 2 in (161b) and the text above it); and also (5) "polysemy" of the initial components.

1. *Verbal and nominal compounds.* In our corpus, the verbal and nominal compounds number 223 and 113 units respectively. In the formation of reciprocal nouns (not nominalized verbal compounds), with a few exceptions, three initial components are used: *tóng*, *qīn* and *duì*. The component *qīn* forms nouns with positive connotations (kinship or friendly relations; see (200)–(201)), *duì* adds negative connotations (or it is neutral in the case of spatial meanings; cf. (202)–(203)), *tóng* does not have any of these connotations. The elements *tóng* and *qīn* are opposed to the other 7 components as these occur mostly in verbal compounds (see (161a), Table 1). There are 7 verbal and 72 nominal compounds with *tóng*, 11 and 22 respectively with *qīn*, and 37 and 9 with *duì*. Nominal compounds of this type seem to be preferable in the predicative function; cf. (208)–(209). This material is considered in Section 7.4.

2. *Deverbal and denominal verbal compounds.* The terms *deverbal* and *denominal* serve as shorthand labels for compounds with a final verbal or nominal component respectively (denominal compounds, i.e. the type illustrated by (19), are considered in Section 7.3; see also Table 4 in (161d)). The initial components differ in the number of compounds they serve to form. In Table 5 the initial components are listed in the diminishing order of the

predominance of the compounds with verbal bases over the compounds with nominal bases. The overall ratio of deverbal and denominal compounds including lexicalized ones in the data at our disposal is **2 to 1** (153 and 67). In reality, the ratio varies between **10 to 1** and **0.9 to 1**. Note the surprisingly high share of denominal compounds here. The vertical line divides the reciprocals into two groups: on the right hand the share of compounds with verbal bases is less than 2 to 1.

(210) a. **Table 5.** Distribution of compounds with verbal and nominal bases among compounds with the same initial components

	<i>qīn</i>	<i>duì</i>	<i>hé₂</i>	<i>hé₁</i>	<i>jié</i>	<i>jiāo</i>	<i>bǐ</i>	<i>tóng</i>	<i>jiē</i>	Total
verbal base	10	31	19	26	8	33	11	4	11	153
nominal base	1	6	6	10	3	18	8	3	12	67
Total	11	37	19	36	11	41	19	7	23	220

3. *Subject- and object-oriented compounds.* The relevant material is considered in Tables 2–3 under (161b–c) and also in Sections 7.2.1, 7.2.2, 7.3.1 and 7.3.2. The overall ratio of subject-oriented and object-oriented verbal compounds is **4.7 to 1** (the number of object-oriented compounds may be greater as many subject-oriented units may also be used as object-oriented, as in (33), but the ratio does give a general idea of their productivity). The vertical line divides the reciprocals into two groups: on the right hand the share of subject-oriented compounds is less than 4.7 to 1.

(210) b. **Table 6.** Distribution of compounds with verbal and nominal bases among subject- and object-oriented reciprocals

	<i>jiē</i>	<i>qīn</i>	<i>tóng</i>	<i>jiāo</i>	<i>hé₁</i>	<i>jié</i>	<i>hé₂</i>	<i>duì</i>	<i>bǐ</i>	Total
subj.-oriented	23	11	7	48	30	9	20	29	10	187
obj.-oriented	–	–	–	3	6	2	5	8	9	33
Total	23	11	7	51	36	11	25	37	19	220

4. *Compounds of types “only” and “both”.* Note that (a) the initial component may be the *only* constituent encoding reciprocity (type “only” in Tables 2–4, (161b–c–d), see also 7.2.1.1, 7.2.2.1, 7.3.1.1) or (b) both components are reciprocal in meaning, making a lexical reciprocal disyllabic (type “both” in the same tables, see also 7.2.1.2, 7.2.2.2, 7.3.1.2); and there are also a number of compounds that are termed lexicalized reciprocals above as their meaning is not elementally reducible to that of both components (see 7.2.1.3, 7.2.2.3 and 7.3.1.3; they are not included in Table 7). The overall ratio of types (a) and (b) is roughly **0.8 to 1** (85 and 114), but units with different initial components deviate from this ratio in the range of **6 to 1** and **0.1 to 1**. The vertical line divides the reciprocals into two groups: on the right hand the share of type “only” compounds is less than 6 to 1.

(210) c. Table 7. Distribution of compounds with verbal and nominal bases among subject- and object-oriented reciprocals

	<i>tóng</i>	<i>hé₁</i>	<i>duì</i>	<i>jiāo</i>	<i>jié</i>	<i>jiē</i>	<i>bǐ</i>	<i>hé₂</i>	<i>qīn</i>	Total
“only”	6	20	17	23	4	8	4	3	1	86
“both”	1	13	15	23	6	14	10	16	9	107
Total	7	33	32	46	10	22	14	19	10	193

5. “Polysemy” of the initial components. The term *polysemy* is used here to refer to the ability of the initial component to be used in different lexical groups of compounds. Note that 5 main lexical groups are distinguished above (below they are referred to by the first word if the name consists of two or more words): of “friendly relations”, “hostile relations”, “communication”, “spatial relations”, “relations of equality”, and also two additional groups for object-oriented compounds, viz. “comparison” and “exchange”, and one additional for subject-oriented, viz. sociative. Depending on their broader or narrower meaning, the initial components are used in a greater or smaller number of lexical groups of compounds. It goes without saying that the lexical meaning of the initial component determines its occurrence in certain lexical groups.

(210) d. Table 8. Distribution of the initial components among lexical groups of verbal compounds

	“friend-ly”	“host-ile”	“communi-cation”	“spatial”	“equal-ity”	“sociat-ive”	“compar-ison”	“ex-change”	Total
<i>bǐ</i>	–	4	–	1	5	–	9	–	19
<i>duì</i>	1	14	4	5	6	–	5	2	37
<i>hé₁</i>	6	5	2	10	4	7	2	–	36
<i>hé₂</i>	22	–	–	2	1	–	–	–	25
<i>jiāo</i>	17	11	8	13	–	–	–	2	51
<i>jiē</i>	8	4	4	5	1	1	–	–	23
<i>jié</i>	5	3	–	3	–	–	–	–	11
.....									
<i>qīn</i>	11	–	–	–	–	–	–	–	11
<i>tóng</i>	–	–	–	2	1	4	–	–	7
Total	70	41	18	41	18	12	16	4	220

The largest number of compounds contains the component *jiāo* with the main meaning of crossing and interweaving, i.e. the closest interaction of the participants. Other productive components are *duì* and *hé₁* with the main spatial meaning, too. Each of these three initial components is registered in at least five lexical groups.

To conclude, these reciprocal compounds should be investigated in detail on the basis of more exhaustive material, both in present-day usage and gone out of use, and in the context of the entire class of verbal and nominal compounds. This pertains to the types of semantic relations between the components within compounds.

8. Lexical reciprocals with a recurrent final component

This type of compounds with a final recurrent component is considered here in bypassing because it is much less common among reciprocals than compounds with the initial recurrent component. Both components seem to be lexical reciprocals (in particular more or less synonymous; cf. (14)) in a much greater number of the compounds than in the compounds considered in Section 7, and the final component adds reciprocity in only a few instances. In some cases, the meaning of a compound is retained if the components are reversed; in our data this is especially characteristic of the component *hé*₁ in compounds some of which have gone out of use; cf.: *hé*₁-*liú* / °*liú*-*hé*₁ ‘to flow together’, °*hé*₁-*féng* / *féng*-*hé*₁ ‘to sew together’, *hé*₁-*hù* / *hù*-*hé*₁ ‘to assemble, gather’, *hé*₁-*shì* / *shì*-*hé*₁ ‘to correspond’, °*hé*₁-*hé*₂ / °*hé*₂-*hé*₁ ‘to be harmonious’, °*hé*₂-*tiáo* / *tiáo*-*hé*₂ ‘to reconcile, get reconciled’.

Most of the reciprocal compounds with a recurrent final component in our corpus denote joining. This type is illustrated below by compounds (mostly) with those final components that appear as initial components in Section 7. When a final component is combined with a verb that may function as a recurrent initial component, i.e. in the formations just mentioned, the status of the modifying and the modified components is not always obvious.

Many of the compounds below function both as intransitive and transitive verbs; in the latter case the object usually precedes the predicate and has the preposition *bǎ*. First, we shall consider spatial compounds and next non-spatial ones.

8.1 Spatial compounds. Verbs and adverbs of joining

The following cases can be distinguished here: (a) the final recurrent component may denote the state resulting from the action named by the first component, (see (211a)); (b) it repeats (parts of) the meaning of the first component and, sometimes, in a way intensifies it (cf. (211b)). There is no clearcut borderline between these two cases. The latter type is contiguous to coordination of two synonymous verbs. Here are lists of compounds with *hé*₁ and *jiē* (with the main meanings of joining).

- | | | | |
|----------|-------------------------------------|---|--|
| (211) a. | <i>féng</i> ‘to sew, stitch’ | → | <i>féng</i> - <i>hé</i> ₁ ‘to join by sewing sth together’ |
| | <i>huà</i> ‘to turn into sth’ | → | <i>huà</i> - <i>hé</i> ₁ ‘to join, combine (chem.)’ |
| | <i>jiāo</i> ‘to glue’ | → | <i>jiāo</i> - <i>hé</i> ₁ ‘to join by glueing sth together’ |
| | <i>lián</i> ‘to tie together’ | → | <i>lián</i> - <i>hé</i> ₁ ‘to become joined/combined’ |
| | <i>zhǎng</i> ‘to grow’ | → | <i>zhǎng</i> - <i>hé</i> ₁ ‘to knit together (of bones)’ |
| | ° <i>chán</i> ‘to wind (sth) round’ | → | ° <i>chán</i> - <i>jiē</i> ‘to entangle’ |
| | <i>duàn</i> ‘to hammer (metal)’ | → | <i>duàn</i> - <i>jiē</i> ‘to join sth by hammering’ |
| | <i>hàn</i> ‘to weld’ | → | <i>hàn</i> - <i>jiē</i> ‘to join by welding’ |
| | <i>róng</i> ‘to weld’ | → | <i>róng</i> - <i>jiē</i> ‘to join by welding’ |
| | <i>tuán</i> ‘to lump’ | → | ° <i>tuán</i> - <i>jiē</i> ‘to press into a lump’. |
| b. | <i>huì</i> ‘to meet’ | → | <i>huì</i> - <i>hé</i> ₁ ‘to assemble’ |
| | <i>hùn</i> ‘to mix, get mixed’ | → | <i>hùn</i> - <i>hé</i> ₁ ‘to mix, get mixed’ |

<i>jí</i> 'to gather/assemble'	→	<i>jí-hé₁</i> 'to gather/assemble'
<i>jiē</i> 'to join'	→	<i>jiē-hé₁</i> 'to knit together' (of bones)
<i>jié</i> 'to tie, connect'	→	<i>jié-hé₁</i> 'to combine'
<i>hùn</i> 'to mix, get mixed'	→	<i>hùn-hé₁</i> 'to mix, get mixed'
<i>lián</i> 'to join (together)'	→	<i>lián-jiē</i> 'to fasten.'

In case (a) the meaning of compounds approximates the meaning of resultative compounds (see (15)). True, among more than 150 recurrent components of resultative compounds listed in Li Fengxiang (1993:53–4) the verbs *hé₁* and *jiē* are not mentioned (and in general this list contains only 17 verbs, the remainder being adjectives).

Functionally, the meaning of the final component in a compound can be expressed by the adverbs *zài yīqǐ* and *yīqǐ* with the spatial (non-sociative) meaning 'together' (we have cited examples with these adverbs co-occurrent with lexical reciprocals of joining; cf. (90c), (101), (104a–b), (115a–c)) and with some compounds they may be used pleonastically. These adverbs may denote joining together by themselves, being thus, in a way, used instead of the corresponding component, and they may also be used pleonastically with the latter, e.g.:

- (212) *hùn-hé₁* / *hùn zài yīqǐ* / *hùn-hé₁ zài yīqǐ* 'to mix, get mixed'
féng-hé₁ / *féng zài yīqǐ* / *féng-hé₁ zài yīqǐ* 'to sew together'
jié-hé₁ / *jié zài yīqǐ* / *jié-hé₁ zài yīqǐ* 'to combine, tie the ends of sth.'

8.2 Non-spatial compounds

This type is illustrated here by compounds with the component *hé₂* which usually means 'to be in concord, peace', etc. (see (213a)), sometimes mixing sth (cf. *jiǎo-hé₂* 'to stir, mix' ← *jiǎo* 'to whisk'). Among non-spatial compounds, units with a kind of resultative meaning are also possible, but we have no clear cases, unless (213a) is interpreted as achieving peace by talks. More commonly, *hé₂* combines with synonymous initial constituents (see (213b)).

- (213) a. *jiǎng* 'to speak, talk' → *jiǎng-hé₂* 'to make peace with, get reconciled'
yán 'words' → *yán-hé₂* 'to get reconciled'
- b. *tiáo* 'harmonious' → *tiáo-hé₂* 'to reconcile, get reconciled'
xié 'to be in concord' → *xié-hé₂* 'to be in concord'.

There are also other units that are attested as final recurrent components. One of them is the bound morpheme *bié* 'different', 'to differentiate', 'to part, separate' (in our material, it is registered both in the initial and final position; cf. *lí-bié* = *bié-lí* 'to separate'). It serves to form compounds with the general meaning 'to distinguish' (which is contiguous to the meaning 'to compare' very common among object-oriented reciprocals considered in Section 7) when combined with verbs with a close meaning (see (214a)) or by adding this meaning (see (214b)). With words denoting speech this component signifies the meaning 'to say goodbye' (see (214c)). Examples:

- | | | | |
|----------|--------------------------------|---|---|
| (214) a. | <i>chā</i> ‘to differ’ | → | <i>chā-bié</i> ‘to distinguish’ |
| | <i>fēn</i> ‘to divide’ | → | <i>fēn-bié</i> ‘to divide, distinguish’ |
| | <i>lí</i> ‘to part, separate’ | → | <i>lí-bié</i> ‘to distinguish’, ‘to part’ |
| | <i>qū</i> ‘to distinguish’ | → | <i>qū-bié</i> ‘to distinguish’, ‘to separate’ |
| | ° <i>biàn</i> ‘to distinguish’ | → | <i>biàn-bié</i> ‘to distinguish’ |
| b. | <i>shí</i> ‘to know’ | → | <i>shí-bié</i> ‘to distinguish’ |
| c. | ° <i>gào</i> ‘to speak’ | → | <i>gào-bié</i> ‘to say goodbye’ |
| | <i>huà</i> ‘words’ | → | <i>huà-bié</i> ‘to say goodbye’. |

9. Reciprocals with reduplicated or double auxiliary components

In this section, three types of reciprocal marking are considered. In the first type (215a), the reciprocal marker *hù* of adverbial origin is reduplicated; in the second type (215b) the lexical verb is repeated, first with the verb *lái* ‘to come’ and second with *qù* ‘to go’, i.e. verbs in antonymous relations (the main meaning of this pattern is that of iterativity and durativity; see beneath (222b)). In these two types the formation is a compound. The third type has two variants: the first one is (215c”) with the four-syllabic rhythmic pattern rather similar to (215a) and (215b). (215c’) is more complicated structurally: the personal pronouns *nǐ* ‘you.sg’ and *wǒ* ‘I’ are repeated in reversed order. The three cases cover all the logical variants of the position of two auxiliary components relative to the reduplicated verb; cf.:

- | | | |
|-----------|-------------------------------|--------------------------|
| (215) a’. | <i>hù-Verb-hù-Verb</i> | see (216b), (217) |
| a”. | <i>xiāng-Verb-xiāng-Verb</i> | see (126) |
| b. | <i>Verb-lái-Verb-qù</i> | see (218), (221), (223b) |
| c’. | <i>nǐ Verb wǒ Verb</i> | see (229), (230a) |
| c”. | <i>nǐ Verb wǒ, wǒ Verb nǐ</i> | see (226), (228) |

These three cases differ in the characteristics of the notional verbs used in these patterns: in pattern (215a) disyllabic verbs are used, and the reciprocal marker *hù* is preposed to each component of the verb; in pattern (215b) mostly monosyllabic verbs are used, and each component of the reciprocal marker *-lái ... -qù* follows the same repeated stem; (215c”) seems to have the weakest restrictions on the range of verbs used with regard to the mono- or disyllabic structure of the base verb (though monosyllabic verbs are prevalent); and synonymous or semantically close verbs can be used instead of a repeated verb. Besides, in (215c”) an adverbial can be inserted between the reciprocal markers (see (226b)).

In (215b) and (215c’) one may see a certain similarity in the use of deictic complementary (contrasting) words as the source of the reciprocal meaning; cf. *-lái – nǐ ... [wǒ]* on the one hand and *-qù – wǒ ... [nǐ]* on the other. This pattern is only one of many semantically diverse structures (usually containing the semantic component ‘each...’) formed by contrastive pairs not only as those listed above but also by *zuǒ-yòu* ‘left-right’, *dōng-xī* ‘east-west’, *héng-shù* ‘horizontal-vertical’, *sǐ-huó* ‘dead-live’, *zhè-nà* ‘this-that’, etc. (see He Zili 1990: 155–6, 161).

9.1 Types *hù-Verb-hù-Verb* and *xiāng-Verb-xiāng-Verb* lit. ‘mutually-Verb-mutually-Verb’

This section is meant to amplify 6.2.3. It concerns constructions of type (216b) derived from two-place transitives. Note, however, that reciprocals with *hùxiāng* (see (216c)) are more productive than this type and the other two types under consideration:

- (216) a. *Tāmen chángchang miǎn-lì wǒ.*
 they often encourage I
 ‘They often encourage me.’
 b. *Tāmen chángchang hù-miǎn-hù-lì.*
 ‘They often encourage each other.’
 c. *Tāmen chángchang hùxiāng miǎn-lì.*
 (same).

Here, we shall discuss type (215a’). Examples of type (215a’’) are given above (see (126a, b)).

There are significant restrictions on type (216b) constructions. Note, for instance, that out of a set of 13 sentences of type (216b) construction one informant (N. Zhang, p.c.) found acceptable only one sentence (with the verb *bāng-zhù* ‘to help’), another (Yang, p.c.) accepted two, with *bāng-zhù* ‘to help’ and *miǎn-lì* ‘to encourage’; another yet (M. Hoa) accepted three sentences, with the verbs *miǎn-lì* ‘to encourage’ and, with reservations, *pèng-zhuàng* ‘to collide’ and *qī-piàn* ‘to deceive’; a fourth one (Wang Huihui, p.c.) found acceptable four sentences (with the verbs *bāng-zhù* ‘to help’, *lái-wǎng* ‘to contact’, and, with reservations, *miǎn-lì* ‘to encourage’ and *pèng-zhuàng* ‘to collide’), two more (Ma Lin and Jinsheng Li, p.c.) accepted five sentences (with the verbs *bāng-zhù* ‘to help’ and, with reservations, *miǎn-lì* ‘to encourage’, *pèng-zhuàng* ‘to collide’, *fāng-wèn* ‘to visit’ and *zhēng-chǎo* ‘to quarrel’). And one of the informants (Fengxiang Li, p.c.) accepts as correct “though not preferred” *bāng-zhù* ‘to help’ and *miǎn-lì* ‘to encourage’, and with reservations *pèng-zhuàng* ‘to collide’, and all the other compounds (except those with the second nominal element, see the next paragraph) he considers acceptable “very marginally, only under special circumstances”. Despite the differences, certain verbs repeat in these lists.

Our informants reject the forms with *hù* of compound verbs if the second component is descended from a noun; e.g.: *tán-huà* ‘to talk’, lit. ‘to converse+words’, *chǎo-zuǐ* ‘to quarrel’, lit. ‘to shout+mouth’, *chuàn-ménr* ‘to go to sb’, lit. ‘to string+door’. Besides these three verbs, no one accepted the following ones, including those that were accepted as very marginal: *pī-píng* ‘to criticise’, *màn-mà* ‘to insult’, *biàn-lùn* ‘to argue’, *zhào-gu* ‘to take care of’.

In the opinion of Fengxiang Li (p.c.), “in natural conversation, one would definitely use *hùxiāng* followed by a compound verb”, and he considers the use of the “very marginal” reciprocals as possible “under special circumstances. For instance, if the context requires the use of this pattern to either achieve a special effect or a rhythmic pattern”.

Semantic motivation for this type of reciprocals is suggested by Lu Dzu-Jyan (p.c.) who claims that the underlying verbs should denote “positive” actions. He also acknowledges the verb *pèng-zhuàng* ‘to collide’ if it is used figuratively, for instance, to describe a

collision between family members (esp. children, brothers and sisters), rather than literally to describe a physical collision. He added here the verb *dǎ-nào* ‘to make noise, squabble’. He illustrates his claim with six reciprocals (three with the indication of the source) which he regards both acceptable and frequently used:

- (217) a. *hù-jìng-hù-ài* ‘to respect and love each other’ (*Xiàndài Hànyǔ cídiǎn, xiū dīngběn*, Shāngwù yīnshūguān. 1998. Peking, p. 534)
 b. *hù-jīào-hù-xué* ‘to teach each other and learn from each other’ (*Xīn Hàn-Dé cídiǎn*, Shāngwù yīnshūguān. 1996. Peking, p. 341)
 c. *hù-liàng-hù-ràng* ‘to show mutual understanding and courtesy’ (*Xīn Hàn-Dé cídiǎn*, Shāngwù yīnshūguān. 1996. Peking, p. 341)
 d. *hù-jìng-hù-zhòng* ‘to esteem and respect each other’
 e. *hù-zūn-hù-zhòng* ‘to value highly and respect each other’
 f. *hù-huì-hù-lì* ‘to be useful to each other’
 g. *hù-téng-hù-ài* ‘to love each other passionately (lit. painfully)’ (*téng* ‘be ill’).

Most likely, the semantic motivation in these verbs finds support: unlike the previous test with randomly chosen 13 reciprocals where the number of accepted units varied between 1 and 5, most of these 6 reciprocals were accepted. A native speaker (Xiaoxong Zhang, p.c.) accepted 4 reciprocals, and rejected (217d) and (217e); another native speaker (M. Hoa) accepts five (though (217d) with reservations) and does not accept (217e). This coincidence is meaningful, though the reason is not clear to us.

It would be interesting to establish if the reciprocal double morpheme *hù-...-hù-...* is a relic of a fully productive pattern or, on the contrary, a newly developing tendency.

9.2 Type *Verb-lái-Verb-qù* lit. ‘Verb-come-Verb-go’

The data in this section are almost entirely borrowed from Liu Meichun ((1999: 124–32); namely, examples (218), (219), (220), (223)) who considers this type of reciprocals quite productive. Previously, the reciprocal usage of this form was not mentioned in specialist literature, though its non-reciprocal (more common and productive) usages were. It differs from the previous type in that if a compound is used it is repeated entirely (see (222)). The omission of the direct object in (218c) and (218d) is probably not accidental and indicates the tendency to avoid this object if the base verb is three-place.

- (218) a. *Nǐmen dǎ-lái-dǎ-qù zuò-shénme?*
 you.PL hit-come-hit-go do-why
 ‘Why do you fight with each other?’, lit. ‘You fight with each other, what for?’
 b. *Lǎo-niú hé shīzi mà-lái-mà-qù, yǐnlái xǔduō dòngwù wéiguān.*
 old-bull and lion scold-come-scold-go attract many beast observer
 ‘The old bull and the lion called each other names, attracted many bystanders.’
 c. *Liǎng jú-zhǎng xiàng tī pīqiú yíyàng, tī-lái-tī-qù.*
 two office-chief alike hit ball how hit-come-hit-go
 ‘The two bureau directors threw (the problem) to each other as if kicking a ball.’

- d. *Sān ge dānwèi tuī-lái-tuī-qù. shuí dōu bù yuànyì chéngdān*
 three item organization push-come-push-go which all NEG want assume
zérèn.
 responsibility
 ‘The three offices pushed (the case) to each other, as no one wanted to assume the responsibility.’

Evidence of the productivity of this pattern is formation from nouns, even though from two nouns with the meanings ‘eye’ and ‘eyebrow’ only (see Liu Meichun 1999: 131):

- (219) *Tāmen méi-lái-yǎn-qù.*
 they eyebrow-come-eye-go
 ‘They looked seducingly at each other.’

This type of reciprocals may collocate with the adverb *hùxiāng / xiānghù*:

- (220) a. *Dàjiā xiāng-hù dèng-lái-dèng-qù (...)*
 people mutually stare-come-stare-go
 ‘People mutually stare at each other.’
 b. *Tiàowú-de rén hù-xiāng cǎi-lái-cǎi-qù.*
 dancer-ATR man mutually step-come-step-go
 ‘The dancers were stepping on each other’s feet.’

Some native speakers (L. Renzhi, p.c.) claim that there are restrictions on the use of the following two verbs in this pattern (is it accidental that both base verbs are lexical reciprocals and intransitive, though requiring more than one participant?; see also (228) where these very verbs in combination with *nǐ... wǒ* are also rejected by some native speakers):

- (221) a. **Tāmen tán-huà-lái-tán-huà-qù.*
 (intended meaning:) ‘They talk with each other.’
 b. **Tāmen lái-wǎng-lái-lái-wǎng-qù.*
 (intended meaning:) ‘They are in contact with each other.’

This restriction is hardly due to the disyllabic character of the verbs: as the following example obtained from an informant, disyllabic verbs can also be used in this pattern.

- (222) a. *Tāmen bāng-zhù-lái-bāng-zhù-qù háishì méi yǒu hǎo jiéguǒ.*
 they help-help-come-help-help-go but NEG have good result
 i. ‘They helped each other but they did not obtain good results.’
 ii. ‘They helped someone repeatedly and for a long time.’
 b. *Tāmen zhēng-biàn-lái-zhēng-biàn-qù.*
 ‘They argue with each other.’

As mentioned above, this pattern may also code non-reciprocal meanings. The most prominent is the iterative/durative meaning which is particularly distinct if the subject is singular (see (223a), cf. (218a) where the reading is reciprocal), but contextual manipulation may neutralize the most likely reciprocal meaning even if the subject is plural (see (223b) where the reciprocal meaning of the compound is blocked by the second part of the sentence; cf. (218b) where this very compound is reciprocal). Of course, the reciprocal reading is out of the question if the base verb is intransitive, as is shown in (223c) with

the meaning of repeated motion in opposite directions, which closely reflects the lexical meaning of the verbs *lái* ‘come’ and *qù* ‘go’. Iterativity or durativity is based, as Liu points out, on this latter meaning (see Liu Meichun 1999: 126, 129). Reciprocity is also outruled if the derived sentence retains the syntactic structure of the underlying one, cf. (224a) and (224b) where the object *duì wǒ* is retained; see also (224c) where the meaning is reciprocal. And, lastly, needless to say, the reciprocal meaning is outruled on two-place verbs with a non-human object (cf. (225)). In the latter case retention of the underlying structure in the derived one is only to be expected.

- (223) a. *Wǒ/nǐ/tā dǎ-lái-dǎ-qù, tā hái shì bù tīng.*
I/you/he hit-come-hit-go he still NEG listen
‘I/you/he fought several times (or for a while), but he still does not hear.’
- b. *Lǎoshī-men mà-lái-mà-qù, xuéshēng hái shì bù tīng.*
teacher-PL scold-come-scold-go students still NEG listen
‘The teachers kept scolding (the students), (but) the students were still not listening.’
- c. *Tā zài wūzi-lǐ zǒu-lái-zǒu-qù.*
he at room-inside walk-come-walk-go
‘He’s walking back and forth in the room.’
- (224) a. *Tāmen duì wǒ hěn zhùyì*
they to I very be.careful
‘They pay attention to me.’
- b. *Tāmen duì wǒ zhùyì-lái-zhùyì-qù, hái shì méi fāxiàn shénme.*
they to I be.careful-come-be.careful-go today NEG open something
‘They watch me in vain, they have not found out anything.’
- c. *Tāmen liǎng ge jīngcháng zhùyì-lái-zhùyì-qù.*
they two CLF often be.careful-come-be.careful-go
‘They two of them often take care of each other.’

On the basis of a corpus of about 200 textual usages, Liu Meichun (1999: 124, 127, 131) claims that monosyllabic verbs are prevalent in this pattern (he regards it as a phonological restriction) and he cites only such instances in his paper. It was pointed out above that collocations of monosyllabic verbs like *dèng* ‘to stare’ with *hùxiāng* are usually rejected by the informants (see 4.5.3). Therefore one may see a tendency towards complementary distribution of reciprocal markers here: monosyllabic verbs tend to occur in this pattern and disyllabic verbs – with *hùxiāng* (cf. **hùxiāng dǎ* ‘to hit each other’ – *dǎ-lái-dǎ-qù* ‘to hit each other’ in (218a)). However, this tendency does not seem to be rigid. Thus, according to our data elicited from the informants (Dzu Jyan Lu, p.c., among others) and cited above and below (see (222), (224b, c), (225)), disyllabic verbs can also be used freely in this pattern (both with a reciprocal and non-reciprocal reading, the latter being prevalent) and this possibility by no means contradicts the tendency.

- (225) *biān-jí-lái-biān-jí-qù* ‘to edit sth repeatedly’
[?]*biān-pái-lái-biān-pái-qù* ‘to arrange sth in order repeatedly’
[?]*biān-shěn-lái-biān-shěn-qù* ‘to edit and screen sth repeatedly’
biān-zào-lái-biān-zào-qù ‘to fabricate sth repeatedly’
[?]*biān-zhī-lái-biān-zhī-qù* ‘to knit sth repeatedly’
[?]*chuán-bō-lái-chuán-bō-qù* ‘to disseminate sth repeatedly’

9.3 Type *nǐ Verb wǒ* [, *wǒ*] Verb [*nǐ*], lit. ‘you Verb me[, I] Verb [you]’

This polysemous pattern is introduced above as two equivalent subtypes under (215c”) and (215c’). As it seems, this type of reciprocal marking differs from the patterns under (215a) and (215b) in greater rhythmic freedom, though phonetically pattern (215c”) may coincide with compounds of types (215a) and (215b). It is this type that is cited by Wang Liaoyi (1954:63) who claims that “In modern colloquial language (lit. ‘the man in the street’) the word *xiāng* slowly goes out of use, and common people usually express reciprocity by means of simultaneous parallel use of the personal pronouns *nǐ* ‘you.sg’ and *wǒ* ‘I’ rather than by the pronoun *xiāng* ‘mutually.’” He also asserts that though at first sight, the units *wǒ* and *nǐ* seem to be 1st and 2nd person pronouns, they in fact indicate the 3rd person. Note that in this pattern *wǒ* and *nǐ* each are repeated twice (ibid, p. 64). This case differs from the previous two types (discussed in 9.1 and 9.2) in that other units, e.g. adverbials, may be added to the verbs (cf. *qiǎo qiǎo* and *àn’ àn-di* in (226b)); besides, a direct object can be used with the verb, and also a noun instead of a verb, but in the material at our disposal the latter two instances have occurred when the reading is non-reciprocal; cf. (233)). In this pattern, usually synonymous or near-synonymous monosyllabic verbs are used instead of a repeated verb, as in the case with *lái-...-qù* (cf. (208a, b)), though the informants also accept a repeated disyllabic verb, as in (226d). Here are relevant examples ((226a, b) are borrowed from Wang Liaoyi (1957:59); most of other examples, viz. (226c) and (229)–(233), are borrowed from He Zili (1990:153–62)):

- (226) a. *Hòulái liǎnge zhēnshí nǐ téng wǒ, wǒ ài nǐ.*
 afterwards two really you.sg be.ill I I love you.sg
 ‘Then they both fell in love with *each other*.’
 lit. ‘Then they two really *you* love *me*, *I* love *you*.’
- b. *Zhòng zīmèi, dìxiōng nǐ qiǎo qiǎo chě wǒ yíxià. wǒ àn’ àn-di*
 all sisters brothers you on.the.sly pinch I once I surreptitiously
niē nǐ yì-bǎ.
 pinch you.sg once
 ‘The brothers and sisters on the sly gave a pinch to each other.’
 lit. ‘Brothers and sisters on the sly *you* pinch *me* once, *I* pinch *you* once.’
- c. *Tāmen nǐ kàn wǒ, wǒ kàn nǐ, méiyǒu shuōhuà.*
 they you look.at me I look.at you not speak
 ‘They looked at one another, didn’t say a word.’
- d. *Tāmen zǒngshì nǐ bāng-zhù wǒ, wǒ bāng-zhù nǐ.*
 they always you.sg help-help I I help-help you.sg
 ‘They always help each other.’

It is likely that this pattern is used predominantly with transitive verbs. At least for some informants (Li Renzhi, p.c., and M. Hoa) the use of this device with the verbs *tán-huà* ‘to talk’, *lái-wǎng* ‘to be in contact’ is unacceptable and they motivate it by their intransitivity, though these verbs do require at least two participants (cf. (221) where these very verbs in combination with *lái-qù* are also rejected).

- (227) a. **Tāmen nǐ tán-huà wǒ, wǒ tán-huà nǐ.*
 (intended meaning:) ‘They talk with each other.’

- b. **Tāmen nǐ lái-wǎng wǒ, wǒ lái-wǎng nǐ.*
(intended meaning:) ‘They are in contact with each other.’

As for the person of the subject, all the examples at our disposal contain either a (semantically) plural noun or the 3PL pronoun as subject. The use of the 2PL pronominal subject unexpectedly turned out to be unacceptable for one of our informants (L. Renzhi, p.c.); this restriction is not quite clear in view of the fact that this very informant does accept the same sentence with the 1PL and 3PL subject.

- (228) *Wǒmen/ Tāmen/ [²Nimen] chángcháng nǐ jiāo wǒ, wǒ jiāo nǐ.*
we they you.PL often you.SG advise I I advise you.SG
‘We/They/[You] often advise each other.’

As regards the 1PL pronominal subject, in a suitable discourse situation one can see an iconic reflection of a reciprocal situation; cf. ‘we advise each other’ = ‘I advise you, you advise me’. If the subject is the 3PL pronoun the words *nǐ* and *wǒ* naturally lose their referential meaning and serve to render other meanings, the reciprocal among them. The question is whether these pronouns can restore their proper meaning if the subject is the 1PL pronoun.

Type (215c’), i.e. pattern *nǐ Verb wǒ Verb*, is considered in detail in a special paper (He Zili 1990: 153–62). In this paper the number of examples of this type significantly prevails over the (215c”) pattern, which seems to be significant: it shows that the simpler pattern is much more productive than the more complicated variant illustrated by (226). Note that the verb *téng-ai* ‘to love’ is used in (229a) without the pronouns repeated in the reversed order (cf. (226a) which is a variant of (215c’’)).

- (229) a. *Fūqī nǐ téng wǒ ài.*
husband.wife you love I love
‘The couple loves each other.’
- b. *Yǒu hǎochù dàjiā nǐ zhēng wǒ qiǎng; yǒu kùnnán dàjiā wǒ tuī*
exist benefits all you contend I contend exist difficulties all I yield
nǐ ràng.
you yield
‘For benefits, one vies with another; when it comes to difficulties, one yields to another.’
- c. *nǐ qiǎng wǒ duó.*
you snatch I seize
‘vie with each other for sth.’
- d. *nǐ zhuī wǒ gǎn.*
you catch.up I catch.up
‘overtake each other (in friendly emulation).’

There is a stylistic difference between reciprocals with *hùxiāng* and the patterns with *nǐ Verb wǒ, wǒ Verb nǐ*. He Zili (1990: 159–60) claims that the sentences cited here as (230a) and (230b) are denotationally synonymous but the former is stylistically informal and more casual-sounding than the latter and therefore preferable in colloquial speech, when common everyday activities are talked about; cf.:

- (230) a. *Háizi-men zài lóudào li nǐ tuī wǒ sāng.*
 kids-PL in corridor inside you push I shove
 ‘The kids were pushing and shoving each other in the corridor.’
 b. *Háizi-men zài lóudào li hùxiāng tuī sāng.*
 kids-PL in corridor inside mutually push shove
 (same translation).

The expression with *hùxiāng* alone is appropriate in formal style, when abstract and serious matters are spoken about, *hùxiāng* collocating with bookish words (He Zili 1990: 160):

- (231) a. *hùxiāng yī-cún* ‘to be interdependent’ (*yī-cún* ‘to depend’)
 b. *hùxiāng pái-chì* ‘to be mutually exclusive’ (*pái-chì* ‘to exclude’).

Among other meanings of the patterns considered in He Zili (1990), there is a *distributive* and also an *alternative* meaning (see (232) and (233) respectively). The latter meaning is represented below by an example where a noun phrase with a numeral is used instead of a verb, the reciprocal pattern being used in an adverbial position.

- (232) *Háizi-men nǐ duǒ wǒ shǎn bùgǎn jiàn-rén.*
 kid-PL you dodge I dodge not.dare see-people
 ‘Every kid was hiding, afraid to be seen.’ (He Zili 1990: 153)
 (233) *Yī wǎn jiǔ sì gè rén nǐ yì kǒu wǒ yì kǒu-de hē.*
 one bowl wine four items guys you one sip I one sip-ATR drink
 ‘Four guys took turns sipping a bowl of wine.’

10. Etymology and genetic relations of the reciprocal markers

By way of partly repeating ourselves, we shall point out the following.

The adverb *hùxiāng* is composed of two synonymous components and its literal meaning is ‘mutually-mutually’. The component *hù* which seems to have once been productive in the meaning ‘each other’ also had the meaning ‘to intertwine’. Note that this latter meaning is one of the meanings of the Modern Chinese verb *jiāo* which has also retained the meaning ‘each other’ in some compounds. Note in this connection that in Ancient Chinese there was an adverb *jiāo* ‘between themselves, with each other, mutually, each other’, i.e. a unit with both a sociative and a reciprocal meaning. It was very close to the unit *xiāng* in its reciprocal meaning but it was much less commonly used than the latter (see Yakhontov, Ch. 48, §10). Without touching upon the proper etymology of *xiāng* we consider it expedient to mention the words *xiàng* ‘similar, alike’ (lexical reciprocal) and *xiǎng* ‘to resound’ (response action) because they are homophonous to *xiāng* (though they have other tones) and seem to be close in meaning to ‘each other’ and therefore may be genetically related to it.

Three markers of reciprocity are based on converse spatial-deictic relations:

- (a) *bǐcǐ*, where *bǐ* = ‘that (one)’ and *cǐ* = ‘this (one)’ (cf. 4.2);
 (b) *V-lái-V-qù*, where *lái* = ‘come’ and *qù* = ‘go’ (cf. 9.2);
 (c) *nǐ V wǒ V*, where *wǒ* = ‘I’ and *nǐ* = ‘you’ (SG).

In (b) we clearly observe the direction of semantic development of the reciprocal meaning from the meanings of repeated motion in opposite directions and iterative-durative meaning (a similar polysemy is observed in some other languages, e.g. Tongan (Churchward 1953:256).

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Authorized translation from Russian by E. Geniušienė

PART VIII

Another perspective on reciprocals

Further remarks on reciprocal constructions

Martin Haspelmath

In view of the breathtaking scope of the comparative research enterprise led by Vladimir P. Nedjalkov whose results are published in these volumes, I have no choice but to select and highlight a few topics that I find particularly interesting and worthy of further comment and further study. I will focus here on conceptual and terminological issues and on some phenomena that have been discussed in the literature but are not so well represented in this work. I will also try to summarize some of the major known generalizations about reciprocals, as discussed in this work and elsewhere, in the form of twenty-six Greenberg-style numbered universals.

1. Reciprocal, mutual, symmetric

Let us begin with a terminological discussion of the most basic term, **reciprocal**. In the present volumes, this term is used both for meanings (e.g. *reciprocal situation*, *reciprocal event*) and for forms (e.g. *reciprocal construction*, *reciprocal marker*, *reciprocal predicate*). In most cases, the context will disambiguate, but it seems to be a good idea to have two different terms for meanings and for forms, analogous to similar contrasts such as *proposition/sentence*, *question/interrogative*, *participant/argument*, *time/tense*, *multiple/plural*. Since all reciprocals express a situation with a mutual relation, I propose the term **mutual** for the semantic plane, reserving the term *reciprocal* for specialized expression patterns that code a mutual situation. A similar terminological distinction is made by König & Kokutani (2006) and Evans (2007), but these authors propose the term *symmetric* for meanings, reserving *reciprocal* for forms.

There are several problems with the term *symmetric* that make it less suitable, in my view, than the term *mutual*:

(i) The term *symmetric(al) predicate* has been widely used, following Lakoff & Peters (1969), for lexical reciprocals like *Pedro and Aisha are similar*; these would have to be renamed to “underived symmetric predicates”;

(ii) Dimitriadis (2007b) uses the term to differentiate between reciprocals of the type *Pedro and Aisha kissed* (=symmetric reciprocals) and *Pedro and Aisha kissed each other* (=non-symmetric reciprocals);

(iii) mutual situations are rarely fully symmetric (cf. Kemmer 1993:256, n. 65);¹

(iv) the term comes from the realm of logic and mathematics, and human language seems mostly to require concepts having to do with human actions and feelings rather than with mathematics.

A **mutual situation** can be defined as a situation with two or more participants (A, B, ...) in which for at least two of the participants A and B, the relation between A and B is the same as the relation between B and A. Thus, in (1) we have a non-mutual situation, because Aisha is the agent of an action affecting Pedro, and Pedro is the patient. By contrast, in (2a–b) Aisha is both agent and patient, and so is Pedro, so the situations qualify as mutual.

- (1) *Aisha pinched Pedro.*
 (2) a. *Aisha and Pedro pinched each other.*
 b. *Aisha pinched Pedro, and Pedro pinched Aisha.*

In (3), there are three participants, and a mutual relation exists only between two of them (Lisi and Aisha), but this is sufficient to make the examples qualify as mutual situations.

- (3) a. *Pedro told Aisha and Lisi a secret about each other.*
 b. *Pedro told Aisha a secret about Lisi, and he told Lisi a secret about Aisha.*

In reciprocal constructions expressing transitive events such as (2a), and also in more complex events such as (3a), both participants play two identical roles, but there are also mutual situations where there is just a single role: In *Aisha and Pedro are cousins*, both play the role ‘cousin of’ with respect to each other. In fact, in this example it seems better to speak about a **mutual configuration**. Mutual situations and events are then just special cases of mutual configurations. Mutual configurations can also be expressed by noun phrases, such as *Humboldt’s and Cuvier’s articles about each other*.

For the participants standing in a mutual relation to each other, I propose the neologism **mutuant**. (Nedjalkov and some other authors in this work use the term *reciprocant* for participants of a mutual situation, but given that we want to restrict the term *reciprocal* to the expression plane, we should not use *reciprocant* for the semantic plane.)

In general, the mutuant is expressed by the arguments of a reciprocal construction, but most languages also allow the expression of mutual situations in which only one of the mutuant is expressed overtly. In (4a), the second mutuant must be inferred from the context (it must be a definite null participant, e.g. ‘different from my previous proposal’), whereas in (4b) the second mutuant remains completely implicit (‘married to someone’).

- (4) a. *Your proposal is very different.*
 b. *My friend Pedro got married.*

1. For example, Huddleston & Pullum (2002:1500) distinguish between two different uses of *one... the other* in English: symmetric (e.g. *They were sitting one beside the other*) and asymmetric (e.g. *They were placed one on top of the other*).

2. Major ways of expressing mutual configurations

Mutual configurations can be expressed explicitly, as in all the examples seen so far, but they can also be left implicit, as in (5) and (6).

- (5) a. *Hector and Achilles fought obsessively.*
 b. *Lisi and Aisha are in love.*
- (6) To'aba'ita (Lichtenberk, Ch. 36, p. 1554)
Kero musu-a babali-daro'a.
 3DU.FACT kiss-3.OBJ cheek-3DU.POSS
 'The two of them kissed them/themselves/each other on the cheek.'
 (Lit. '...kissed their cheeks.')

These sentences have one interpretation on which they express mutual relations, but they also have a non-mutual interpretation. For example, in (5a) Hector might have fought against Menelaus and Achilles against Memnon, and in (5b), Lisi might be in love with Fatima and Aisha with Ram. In (6), the two could have kissed the cheeks of some other pair of people.

Implicit expression of mutual situations is apparently not common. Most mutual situations are expressed explicitly, either by free non-specialized and fully compositional combinations of clauses in discourse (as in 2b, 3b),² or by specialized patterns, called **reciprocal constructions**.

The boundary between free and specialized expressions of mutual situations mostly coincides with the boundary between multiclausal and monoclausal expression, but there are some intermediate cases. Multiclausal expressions may be abbreviated by omitting the verb in one of the clauses ("gapping"), so that we do not have full clauses anymore:

- (7) a. *Aisha pinched Pedro, and Pedro Aisha.*
 b. *Lisi is in love with Ram, and Ram with Lisi.*

Since the second parts of these examples are still very clause-like, one would not say that the examples are monoclausal. But (8) is fairly similar to (7):

- (8) *Aisha pinched Pedro, and vice versa.*

This construction is clearly specialized and is thus an instance of a reciprocal construction, although one could say that it is still biclausal, with *vice versa* as a kind of "pro-clause" (an anaphoric clause substitute).

Another multiclausal construction that can perhaps be said to express mutuality is the *back* construction seen in (9).

2. Another non-specialized way of expressing mutual situations is by means of universal quantifiers (cf. Maslova 2007:§3.2):

- (i) *Each participant knows all the others well.*
 (ii) *The participants each know the others well.*

Here, too, a mutual interpretation is only one possibility, though of course the most likely one.

(9) *Aisha pinched Pedro, and Pedro pinched her back.*

Here *back* apparently requires an identical response action. Constructions of this kind are considered “non-grammaticalized” by Nedjalkov (Ch. 3, §2.1), but since they are specialized and not fully compositional, they are included in the category “reciprocal constructions” here. However, most reciprocal constructions are monoclausal, and the remainder of this paper (just like 99.9% of this work) will be devoted to monoclausal reciprocals.

Figure 1 summarizes various ways in which languages can deal with mutual situations.

Most papers in this work deal only with monoclausal reciprocals, which can be divided into grammatical reciprocals and lexical reciprocals. **Grammatical reciprocals** have traditionally been at the center of syntacticians’ attention, and often lexical reciprocals are ignored completely in discussions of reciprocal constructions. This is normal: In a similar way, studies of causative constructions often ignore lexical causatives and concentrate entirely on grammatical causatives. But when one starts with the semantic side of the phenomena (as one must in typology), it is necessary to include lexical causatives (and analogously lexical reciprocals) as well.

Lexical reciprocals (also called *allelic predicates* in §7 below) can be defined as predicates that express a mutual configuration by themselves, without necessary grammatical marking. They consist of a semantically restricted set of predicates whose meanings generally fall into the class of social actions and relations (‘marry’, ‘quarrel’, ‘friend’), spatial relations (‘adjoin’, ‘next to’), and relations of (non-)identity (‘same as’, ‘different from’, ‘resemble’).

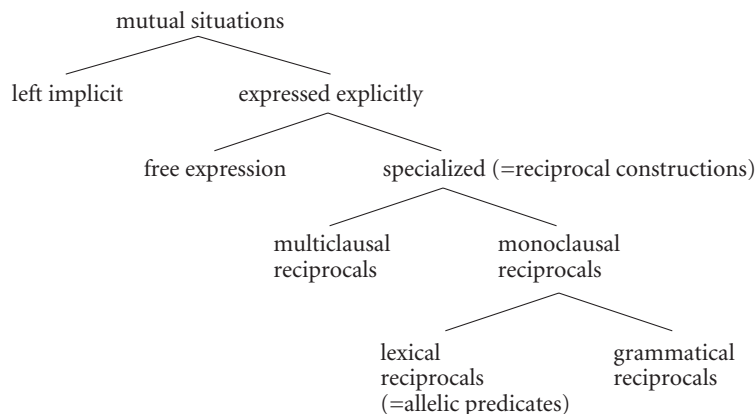


Figure 1. Ways of expressing mutual situations

3. Basic properties of monoclausal reciprocal constructions

Monoclausal reciprocals are quite diverse, and the pages of this work are filled with details of their cross-linguistic diversity. However, there are also some ways in which they are remarkably uniform. Somewhat trivially, we can start by making the following generalization:³

Universal 1:

In all languages, monoclausal reciprocal constructions are at least as complex formally as the corresponding non-reciprocal constructions denoting simple events.

More interestingly, languages show a strong tendency to express the set of mutuanes in a single argument.

Universal 2:

In all languages with reciprocal constructions, there are constructions in which the mutuanes are expressed in a single (nonsingular) argument of the predicate.

Such constructions are called **simple reciprocal constructions** by Nedjalkov (Ch. 1, §7), and they account for the overwhelming majority of reciprocals in this work. As Maslova (Ch. 6, p. 336) notes, “instead of encoding symmetry, languages encode role identity between the reciprocal participants”.

It seems that one of the main reasons for using reciprocal constructions is that one wants to present the mutual situation from the point of view of the entire set of mutuanes, not just from one mutuanes’s point of view. Moreover, one also wants to express the joint participation of the mutuanes in a single coherent situation (cf. Evans 2006). Thus, (10b) is the most usual reciprocal counterpart of the free mutuality expression in (10a).

(10) German (Wiemer & Nedjalkov, Ch. 10, p. 47)

- a. *Hans schlägt Paul, und Paul schlägt Hans.*
‘Hans hits Paul, and Paul hits Hans.’
- b. *Hans und Paul schlagen sich.*
‘Hans and Paul hit each other.’
- c. *Hans schlägt sich mit Paul.*
‘Hans and Paul hit each other.’ (Lit. ‘Hans hits each other with Paul.’)

However, some languages also allow reciprocals in which the mutuanes are expressed by two different arguments, as in (10c). Such constructions are called **discontinuous reciprocal constructions** by Nedjalkov (Ch. 1, §7) (see also Dimitriadis 2004). Crucially for

3. Interestingly, in some Western Austronesian languages there are reciprocal constructions which lack a verbal affix that is obligatorily present in the corresponding non-reciprocal construction: In Madurese (Davies 2000), ‘hit’ is *m-okol* (with the active-voice nasal prefix *m-* that makes the root-initial consonant of the root *pokol* ‘hit’ disappear), while ‘hit each other’ is *saleng pokol*, where there is no voice prefix. This construction is not a counterexample to Universal 1, however, because the reciprocal word *saleng* is obligatory in the construction.

Universal 2, all languages with discontinuous reciprocals also have simple reciprocals. Moreover, it seems that in discontinuous reciprocals, one of the arguments is always an oblique (most commonly a comitative) argument.

Universal 3:

No language has a reciprocal construction in which there are two mutuant-expressing arguments that are coded like the A (most agent-like argument) and the P (most patient-like argument) of a typical transitive clause.

Thus, we do not in general find reciprocals of the sort shown schematically in (11):

- (11) *The girl-NOM kissed-REC the boy-ACC.*
 ‘The girl and the boy kissed (each other).’

However, there are some exceptions to Universal 3. Most obviously, lexical reciprocals are sometimes transitive verbs (e.g. English *to marry*, *to resemble*, Nivkh *η̄zi* ‘be of the same size’, *η̄tə* ‘be of the same age’). And occasionally one finds transitive grammatical reciprocals such as (12) from Yakut:

- (12) Yakut (Nedjalkov & Nedjalkov, Ch. 26, p. 1130)
Kini bu kihi-ni bil-si-bet etc.
 he this man-ACC know-REC-NEG AUX.PAST
 ‘He and this man did not know each other.’
 (Lit. ‘He did not know-mutually this man.’)

In Yakut, this is a completely unproductive pattern, but reciprocals of the type (11) have been reported to be productive in the northern Australian language Iwaidja (Evans 2007). Here reciprocals are formed in a way that is reminiscent of the *vice versa* construction in (8), though Evans explicitly says that the construction is monoclausal.

- (13) *anb-uku-n lda wamin a-ngurnaj*
 3PL.A>3PL.P-give-NPST and 3PL.REC 3PL-name
 ‘They used to give each other their (clan) names.’
 (Lit. ‘They gave them, and mutually, their names.’)

What languages typically do instead is to express the set of mutuants as a single argument occupying one of the two syntactic positions in which the mutuants are in the corresponding non-reciprocal clause pair. This argument will be called the **reciprocator** here. The other syntactic position will be called the **reciprocee**.⁴ The reciprocee position is either unfilled or is filled by a **reciprocal anaphor**, i.e. a noun phrase whose reference is dependent on and derivative of a nearby referential expression. The (metaphorically speaking)

4. Normally, there is only one reciprocee position per clause, though clauses with two reciprocee positions are possible when there are two reciprocal constructions:

- (i) *The participants introduced each other to each other.*
 (ii) *They put each other’s spoons on each other’s plates.*

process of transforming an “underlying” non-reciprocal construction into a reciprocal construction, and in particular the change brought about in the reciprocatee position, is called **reciprocalization**.

We see both subtypes of reciprocal constructions in (14)–(15), where the (a) example shows the corresponding non-reciprocal clause pair, and the (b) example shows the reciprocal construction.

- (14) reciprocatee is unfilled: Cashinahua (Camargo, Ch. 45, p. 1869)
- a. *paku-n haidu diti-ai. haidu-n paku diti-ai.*
Paco-ERG Jairo hit-PROGR Jairo-ERG Paco hit-PROGR
‘Paco is hitting Jairo, Jairo is hitting Paco.’
- b. *paku inun haidu diti-nanan-ai-bu.*
Paco and Jairo hit-REC-PROGR-PL
‘Paco and Jairo are hitting each other.’
- (15) reciprocatee is filled by an anaphor: Vietnamese (Bystrov & Stankevich, Ch. 47, p. 1943)
- a. *Lan yêu Hồng. Hồng yêu Lan.*
Lan love Hong Hong love Lan
‘Lan loves Hong. Hong loves Lan.’
- b. *Lan và Hồng yêu nhau.*
Lan and Hong love each.other
‘Lan and Hong love each other.’

In (14b), the object argument is reciprocalized, which means that it is not overtly expressed. The verbal reciprocal marker indicates it. In (15b), again the object argument is the reciprocatee, and here this is marked by the presence of the reciprocal anaphor *nhau*.

The discontinuous reciprocal construction is exemplified by (16a–c).

- (16) a. Polish (Wiemer, Ch. 11, p. 526)
Widzisz się z babcią dwa razy w tygodniu.
see.2SG REC with grandma two times in week
‘You and grandma meet (‘see each other’) twice a week.’
- b. Yakut (Nedjalkov & Nedjalkov, Ch. 26, p. 1128)
Kini aya-tə-n kəttə kuust-uh-a tūs-t-e.
he father-his-ACC with hug-REC-CONV AUX-PAST-3SG
‘He and his father hugged (each other) quickly.’
- c. Venda (Bantu; Maslova, Ch. 6, p. 344)
musidzana u khou rw-an-a na mutukana
girl 3SG PRES.CONT hit-REC-FV with boy
‘The girl and the boy are hitting each other.’
(Lit. ‘The girl is hitting each other with the boy.’)

The use of such discontinuous reciprocals is usually quite restricted lexically. It is only possible with verb-marked reciprocals (as noted by Nedjalkov, Ch. 1, §7.1, Ch. 3, §3.2; Dimitriadis 2007a):

Universal 4:

Only verb-marked reciprocals allow a discontinuous reciprocal construction.

4. Reciprocal anaphors

4.1 Anaphoric reciprocal constructions

A large class of reciprocal constructions contains two arguments that both refer to the entire set of mutuanants. Typical examples are (17a–d).

- (17) a. English
The friends trust each other.
- b. Lezgian (Haspelmath 1993:415)
Cükwer-a-ni Sajran-a čp-i-čeb qužaxlamiš-na.
 Cükwer-ERG-and Sajran-ERG selves-ERG-selves(ABS) embrace-AOR
 ‘Cükwer and Sajran embraced each other.’
- c. Bamana (Vydrine, Ch. 46, p. 1917)
Mūsà ní Fántà yé njǵn bǵɔ.
 Musa and Fanta PFV each.other strike
 ‘Musa and Fanta struck each other.’
- d. Polish (Wiemer, Ch. 11, p. 515)
Janek i Franek pomaga-l-i sobie.
 Janek.NOM and Franek.NOM help-PAST-PL self.DAT
 ‘Janek and Franek helped each other.’

In these four cases, the reciprocator gives a description of the set of mutuanants (either a conjoined NP or a nonsingular NP), and the reciprocee is represented by an **anaphoric expression** (or short: an *anaphor*) that refers to the same set.⁵ The anaphoric expression can be a “bipartite quantifier” (as in English and many other European languages), a non-quantifier bipartite expression (as in Lezgian),⁶ a single-part element that looks like a noun (as in Bamana; cf. Evans’s 2007 category “reciprocal nominal”), or a single-part element that looks like a pronoun (as in Polish). What all these have in common is that the anaphoric expression refers to the same set of entities as the reciprocator, but compared to reflexive constructions (which express simple situations), the coreference in the parallel permuted situations expressed by reciprocals is more complicated: The coreference obtains not between the sets as wholes, but between the individual members of the sets (in (17a), member A of {the friends} trusts member B of {each other}, member B

5. Nedjalkov uses the older term “reciprocal pronoun” for all of these forms, including those that look more noun-like than pronoun-like (e.g. in that they have no person distinctions).

Note that I am not using the term *anaphor* in the generative sense (where it contrasts with “pronominals” in the context of the Binding Theory), but in a more general sense for all anaphoric expressions. (However, in the context of reciprocal anaphors this difference is irrelevant, because all anaphoric reciprocal expressions in my sense are also reciprocal anaphors in the generative sense, so there is no danger of misunderstanding.)

6. In the typologies of König & Kokutani (2006) and Evans (2007), there seems to be an implicit assumption that bipartite reciprocal anaphors are “quantificational” in some sense, while single-word items are not. But the Lezgian example shows that bipartite anaphors need not have anything to do with quantification (see also the chapters on Yakut, Even, Evenki and Udehe in this work), and anaphors with a quantificational sense need not be bipartite (e.g. Finnish *toinen*, see (24) below).

of {the friends} trusts member A of {each other}, etc.). For this constellation, Nedjalkov sometimes uses the felicitous term **cross-coreference**.

Reciprocal constructions that include a reciprocal anaphor which is cross-coreferential with its antecedent will be called **anaphoric reciprocal constructions** here.⁷ A first universal about them is:

Universal 5:

All reciprocal constructions with two arguments that both refer to the set of mutuants are anaphoric reciprocal constructions.

That is, reciprocal constructions where the noun phrase denoting the set of mutuants is simply repeated, as in (18), are excluded by this universal.⁸

(18) **Taro and Jiro phoned Taro and Jiro.*

In anaphoric reciprocal constructions, an important question is what restrictions there are on the syntactic positions of the antecedent and the anaphor. This issue is only partially dealt with in the contributions to this work, but it has received considerable attention in the generative literature. We can start with Universal 6:

Universal 6:

In all languages, there are prominence-related restrictions and locality-related restrictions on the relation between an antecedent and a reciprocal anaphor.

4.2 Prominence-related restrictions on antecedent-anaphor combinations

Let us first look at the prominence relations. In canonical reciprocals, the antecedent must be the (more prominent) subject and the anaphor must be the (less prominent) object:

- (19) a. English
 **Each other pinched Aisha and Pedro.*
 b. Basque (Hualde & Ortiz de Urbina 2003:608)
 **Elkarr-ek Epi eta Blas maite ditu.*
 each.other-ERG Epi and Blas love AUX
 ‘Each other love(s) Epi and Blas.’

More generally, we can formulate:

7. An alternative term is *argumental reciprocal constructions*, which is based on the fact that anaphors behave like arguments of the verb.

8. Universal 5 can be taken to follow from Chomsky’s (1981) Binding Theory (Principle C), which says that “r-expressions are free” (= not bound). However, this presupposes that the peculiar cross-coreferential semantic relation of mutual situations falls under “binding”, and defining this concept in such a way as to apply equally to coreference and to cross-coreference is not straightforward.

Universal 7:

The more clearly two arguments differ in prominence, the easier it is for the more prominent argument to antecede the anaphor. Less prominent arguments cannot antecede more prominent arguments.

What exactly counts as “prominence” is a difficult question, and languages differ in this regard. For instance, in some languages it appears that the anaphor can occur in the subject position. Shkarban & Rachkov (Ch. 22, p. 922) give the following example from Tagalog:

- (20) *Nag-pasalamat-an ang isa't isa.*
 AG.REC.PFV-thank-REC NOM one.and one
 ‘[They] thanked each other.’ (lit. ‘Each other was thanked by them.’)

In Tagalog, the “subject” relation is notoriously problematic in that the typical subject properties of European languages are split among two argument types, the (nominative) *ang*-argument and the actor *ng*-argument. As noted in Schachter (1976), the *ang*-argument tends to have the reference-related subject properties, and the actor *ng*-argument tends to have the role-related subject properties.⁹ In (20), it is the (omitted) actor argument that antecedes the anaphor, suggesting that anteceding a reciprocal anaphor is a role-related property.

This is confirmed by some facts from English: Note that it is typically the case that the passive agent cannot be a reciprocal anaphor, as seen in (21).

- (21) English
 ??*Aisha and Pedro were kissed by each other.*

This would suggest that prominence on a semantic-role hierarchy (e.g. agent > recipient > patient) is also relevant, not just prominence on a syntactic-function hierarchy (subject > object).

The situation is similar in ditransitive constructions. In many cases, the direct object is clearly more prominent than the indirect object, so that only the latter can be expressed anaphorically:

- (22) English
 a. *I introduced my colleagues to each other.*
 b. **I introduced each other to my colleagues.*
- (23) German
 a. *Ich zeigte die Kinder einander auf dem Foto.*
 ‘I showed the children (ACC) to each other (DAT) on the photo.’
 b. **Ich zeigte einander den Kindern auf dem Foto.*
 ‘I showed each other (ACC) to the children (DAT) on the photo.’

9. In this paper, I follow Nedjalkov’s practice of using the terms “subject”, “direct object”, and “indirect object” in a semantic sense: The subject is the S/A-argument, the direct object is the P-argument, and the indirect object is the R-argument (see Dryer 2007 for the definition of these semantic role-types).

(24) Finnish (Kaiser 2002:3)

- a. *Minä esittel-i-n Liisa-n ja Mari-n toisi-lle-en.*
 I introduce-PAST-1SG Liisa-ACC and Mari-ACC each.other-ALL-3
 'I introduced Liisa and Mari to each other.'
- b. **Minä esittel-i-n toise-nsa Liisa-lle ja Mari-lle.*
 I introduce-PAST-1SG each.other-3 Liisa-ALL and Mari-ALL
 '*I introduced each other to Liisa and Mari.'

But when the recipient is more topical than the theme and precedes it, the reciprocal construction becomes much worse:

(23) German

- c. **Ich zeigte einander die Kinder auf dem Foto.*
 'I showed to each other (dat) the children (acc) on the photo.'

(24) Finnish (Kaiser 2002:4)

- c. [?]*Minä esittel-i-n toisi-lle-en Liisa-n ja Mari-n.*
 I show-PAST-1SG each.other-ALL-3 Liisa-ACC and Mari-ACC
 'I showed to each other Liisa and Mari.'

4.3 Locality-related restrictions on antecedent-anaphor relations

Now let us take a brief look at locality relations. Again, so far we can formulate a universal only in very general terms:

Universal 8:

If the antecedent and the reciprocal anaphor are coarguments of the same predicate, all languages with reciprocal anaphors allow the construction (unless it is pre-empted by some even more grammaticalized construction). The less local the relationship between the antecedent and the recipient is, the less likely it is that it is acceptable.

The following implicational scale can be set up as a first attempt (see also Nedjalkov, Ch. 1, §12.4):

- (25) coargument > possessor of coargument > subject of complement clause > nonsubject of complement clause

The contrast between a coargument and a possessor can be illustrated by German, which does not allow its reciprocal anaphor *einander* to occur as a possessor, in contrast to English:

- (26) *Aischa und Pedro telefonierten mit-einander.*
 'Aisha and Pedro talked to each other on the phone.'
- (27) *Aischa und Pedro telefonierten mit {*einander's Müttern/ ??den Müttern von-einander}.*
 'Aisha and Pedro talked to each other's mothers on the phone.'

English at least marginally allows *each other* to occur as the subject of a complement clause, as in the following examples (see also Haas 2007:44–45):

- (28) a. *Miss C. and I are going to find out what each other are like.* (Jespersen 1924:224)
 b. *?The twins wanted to know what each other were/was doing.* (Quirk et al. 1985:365)
 d. *John and Mary haven't decided what each other should do.* (Everaert 1999:74)

In Japanese, not only a subject, but also an object of a complement clause can be in the appropriate domain (Nishigauchi 1992:159–160):

- (29) *John to Mary-ga [otagai-ga Bill-o seme-ta to] omot-ta (koto)*
 John and Mary-NOM each.other-NOM Bill-ACC accuse-PAST that think-PAST that
 'John and Mary thought that each other accused Bill.'
 (30) *John to Mary-ga [kono ziken-ga otagai-o kizutuke-ta to] omot-ta*
 John and Mary-NOM this incident each.other-ACC hurt-PAST that think-PAST
 (koto)
 that
 '*John and Mary thought that this incident would hurt each other.'

However, Nishigauchi notes that (30) is possible only because the subject is inanimate. The equivalent of **John and Mary thought that Bill accused each other* is impossible in Japanese as well.

Even in English, less local examples have occasionally been cited in the literature:

- (31) a. *They₁ think it bothered each other₁ that the pictures are hanging on the wall.* (Kuno 1987)
 b. *[Bush and Dukakis]₁ charged that General Noriega had secretly contributed to each other's₁ campaign.* (Pollard & Sag 1992)

When the subject of the complement clause is coreferential with a main-clause argument, a long-domain interpretation can be found even for languages that are otherwise much more restrictive:

- (32) a. Russian (Knjazev, Ch. 15, ex. 92)
Dmitrij i Ivan pokljalis' pogubit' odin drug-ogo.
 Dmitri and Ivan swore ruin one other-ACC
 '[Dmitri and Ivan]₁ swore to ruin each other₁.'
 b. German
Dmitrij und Iwan schworen, einander zu ruinieren.
 '[Dmitri and Ivan]₁ swore to ruin each other₁.'

Since it is unlikely that Dmitri and Ivan wanted to be ruined, these sentences are most naturally interpreted as 'Dmitri swore to ruin Ivan, and Ivan swore to ruin Dmitri'. This is possible not only with infinitival complement clauses, but also with finite ones:

- (33) a. English
John and Mary think they like each other. (Heim et al. 1991:65)
 'John thinks that he likes Mary, and Mary thinks that she likes John.'
 b. Hebrew (Siloni 2007, ex. 4b)
Dan ve-Ron ?amru ?e-hem nicxu ?ehad ?et ha-šeni b-a-gmar.
 Dan and-Ron said that-they defeated one ACC the-second in-the-finale
 'Dan and Ron said that they defeated each other in the finale.'

It seems that in general, less grammaticalized reciprocal anaphors have fewer locality constraints. Thus, as noted by Knjazev, in example (32) the Russian anaphor *odin drugogo* is used (rather than the more grammaticalized *drug druga*), and in Basque, only the anaphor *bata bestea* ‘one the other’ can be used outside the immediate clause of the antecedent, while the more grammaticalized *elkar* cannot:

- (34) Basque (Hualde & Ortiz de Urbina 2003:613)
*Epi-k eta Bert-ek ez dakite {*elkarr-ek/ bata bestea-k} zer egin duen.*
 Ernie-ERG and Bert-ERG not know each.other-ERG one other-ERG what do AUX.COMP
 ‘Ernie and Bert don’t know what each other will do.’

5. Verb-marked reciprocals

Verb-marked reciprocals have a verbal marker that is closely associated with the verb but is not a reciprocal anaphor, i.e. does not behave like an argument of the verb in any way. Two examples are given in (35) and (36).

- (35) Japanese (Alpatov & Nedjalkov, Ch. 25, p. 1032)
Taroo to Akiko wa aisi-at-te-iru.
 Taro and Akiko TOP love-REC-CONT-NPAST
 ‘Taro and Akiko love each other.’
- (36) Chukchi (Nedjalkov, Ch. 40, ex. (1b))
Eqelʔ-an ənkiʔam ətləy-an penrə-wəly-ə-γʔat.
 enemy-ABS and father-ABS attach-REC-AOR.3PL
 ‘The enemy and father attacked each other.’

Verbal markers of this type and reciprocal anaphors are the two most important kinds of **reciprocal markers** (for other types, see Nedjalkov, Ch. 3). Throughout this paper, reciprocal markers are highlighted by boldface in the examples.

Verb-marked reciprocals most commonly signal the reciprocalization of the direct object, as in example (14b) from Cashinahua above, and as in (35)–(36). But in addition to the direct object, also other arguments can be reciprocalized in verb-marked reciprocals. Nedjalkov talks about different **diathesis** types to describe the different positions of the reciprocatee. In addition to the “canonical” diathesis of (35)–(36), he distinguishes an “indirect” diathesis (the reciprocatee is indirect object), a “possessive” diathesis (the reciprocatee is possessor of an argument), and an “adverbial” diathesis.

- (37) Indirect reciprocal: Kolyma Yukaghir (Maslova, Ch. 44, p. 1843)
legul-ek n'e-kes'i-l
 food-FOC REC-bring-1PL.OF
 ‘We have brought each other food.’
- (38) Possessive reciprocal: Yakut (Nedjalkov & Nedjalkov, Ch. 26, p. 1118)
Kiniler oyo-loru-n bil-s-el-ler.
 they child-their-ACC know-REC-PRES-3PL
 ‘They know each other’s children.’

Since the reciprocee is generally not overt in verb-marked reciprocal constructions, it would be helpful if there were some other way of identifying it, e.g. by different reciprocal markers for different syntactic functions or semantic roles of the reciprocee. Surprisingly, this seems to be a rare phenomenon, if it ever happens at all.

Universal 9:

Different verbal reciprocal markers are never used for different diathesis types.

As is noted by Nedjalkov (Ch. 1, §12.1.1.2, p. 56), some languages (such as Ainu) with verb-marked reciprocals do not have reciprocals from intransitive bases, but all have verb-marked reciprocals from transitive bases:

Universal 10:

If a language has verb-marked reciprocals based on intransitive verbs, it also has verb-marked reciprocals based on transitive verbs.

What these four diathesis types share is that the reciprocator (i.e. the overtly expressed argument) is the subject. In Nedjalkov's terminology, they are all **subject-oriented**. There are no verbal reciprocals in which the subject is reciprocalized and a non-subject becomes the reciprocator. Thus, we do not find reciprocals like those shown schematically (39) in any language. In these schematic examples, first the two corresponding non-reciprocal sentences are given, then the (hypothetical, non-occurring) non-subject-oriented reciprocal, and then the corresponding (widely occurring) subject-oriented reciprocal. Here "Ø" stands for the reciprocee position that is unfilled.

- | | | |
|---------|-------------------------------------|--|
| (39) a. | I love you. You love me. | → *Ø Love-REC us.
(OK: We love-REC Ø.) |
| b. | I gave you it. You gave me it. | → *Ø Gave-REC us it.
(OK: We gave-REC Øit.) |
| c. | I hold your hand. You hold my hand. | → *Ø Hold-REC our hand.
(OK: We hold-REC Ø's hand.) |
| d. | I come to you. You come to me. | → *Ø Come-REC to us.
(OK: We come-REC Ø.) |

We can therefore formulate another universal (this relates only to reciprocals in which subject is involved, not to object-oriented reciprocals like (3a) above where the reciprocator is an object and the reciprocee is an oblique participant):

Universal 11:

In verbal reciprocals, the reciprocator is always the subject, and the reciprocee can only be the direct object, the indirect object, the possessor of a co-argument, or an adverbial.

In this respect, verb-marked reciprocals are quite similar to anaphoric reciprocals, where, as we saw, the antecedent has to be in a prominent syntactic position, and the anaphor must be in a less prominent position.

Verb-marked reciprocals also show very rigid locality constraints: they are completely impossible with a non-local reciprocee:

- (40) I think that you are wrong. You think that I am wrong.
 → *We think-REC that Ø be wrong.

For the four occurring diathesis types, Nedjalkov (Ch. 1, §12.4, p. 69) notes that they can be arranged on an implicational scale, from the most common to the least common type:

- (41) Scale of Verb-marked Diathesis Types
 “canonical” diathesis > “indirect” diathesis > “possessive” diathesis > “adverbial” diathesis

The associated implicational universal is:

Universal 12:

If a language has verb-marked reciprocals with one of the diatheses on the Scale of Verb-marked Diatheses Types, it also has all other types to the left.

This is analogous to the implicational scale in (25) above. But verb-marked reciprocals are stricter than anaphoric reciprocals in two further respects. First, object-oriented reciprocals are more rarely verb-marked than subject-oriented reciprocals:

Universal 13:

If a language has a verb-marked object-oriented reciprocal construction, it also has a verb-marked subject-oriented construction.

Most languages with verb-marked reciprocals that are described in this work seem to have only subject-oriented reciprocals. Ainu is an example of a language whose verbal marker (*u-*) can be used both for subject-oriented and for object-oriented reciprocals.

Second, verb-marked “possessive” reciprocals are quite restricted with respect to the position of the co-argument whose possessive modifier is reciprocalized:

Universal 14:

In verb-marked “possessive” reciprocals, the co-argument whose possessive modifier is the reciprocee must be the direct object.

That is, we find reciprocalizations such as (42), but not (43a–b), where the co-argument is a locative and an instrumental, respectively.¹⁰

- (42) I scratched your back. You scratched my back.
 → We scratched-REC Ø’s back.
- (43) a. I slept in your bed. You slept in my bed.
 → *We slept-REC in Ø’s bed.
- b. I cut it with your knife. You cut it with my knife.
 → *We cut-REC it with Ø’s knife.

10. An exception is the Even example cited by Nedjalkov in Ch. 1, p. 55.

6. Verb-marked vs. anaphoric reciprocals

The distinction between verb-marked and anaphoric reciprocals is not always completely straightforward. It is clearest when the reciprocal anaphor behaves like a noun phrase in all relevant respects (e.g. occurring with adpositions, inflecting for case, showing number distinctions), and when the verbal marker behaves like a valency-changing affix in all relevant respects (e.g. occurring between the stem and tense-aspect-mood affixes).

The distinction becomes more problematic when the reciprocal anaphor is a verbal affix, or when the verbal marker is not an affix and varies for person. The former case is illustrated by Adyghe, which has a reciprocal prefix *zə-* that occurs in the same slot as the object agreement marker:

- (44) Adyghe (Letuchiy, Ch. 18, ex. 20a–b)
- a. *tə pxəð-r Ø-tə-gbəstə.*
 we.OBL firewood-ABS 3SG.DO-1PL.A-burn
 ‘We burn firewood.’
- b. *zə-d-gbəstə.*
 REC-1PL.A-burn
 ‘We burn each other/ourselves.’

Here there are no strong reasons not to say that the reciprocal prefix is an anaphoric element,¹¹ but the case of Djaru (Ch. 21) is more problematic, because in this Australian language, the bound reciprocal marker that occurs in the slot of bound pronouns may co-occur with free non-reciprocal pronouns, as in (45):

- (45) Djaru (Tsunoda, Ch. 21, p. 861)
- ngali-ngku nga=li=nyunu ngali nyanya.*
 1DU.INC-ERG CARRIER=1DU.INC.SB=REC 1DU.INC(ABS) see.PAST
 ‘We saw each other.’

Here it is less clear whether =*nyunu* is in an argument position (and hence an anaphor rather than a verbal marker), because *ngali* is clearly an argument.

Verbal markers that are not affixes and that vary for person are found in Romance, Germanic and Slavonic languages, e.g. German *sich* (cf. Ch. 10), Polish *się* (cf. Ch. 11), and French *se* (cf. Ch. 12). Although these *se*-type elements are usually called “reflexive pronouns”, the view is widespread that combinations such as German *sich schlagen* ‘hit each other’, Polish *bronić się* ‘defend oneself/each other’, French *s’aimer* ‘love oneself/each other’ should be regarded as reciprocal verbs rather than as anaphoric reciprocal constructions.

Siloni (2007) claims that reciprocal pronouns always allow long-distance antecedence, as seen earlier in (33). Thus, the fact that (46a–b) from French and Czech are impossi-

11. Note that Nedjalkov (Ch. 1, §2.2.3, Ch. 3, §1.1) uses the term “anaphoric marker” even for elements that have no properties of noun phrases at all (e.g. verbal reciprocal markers such as Chukchi *-wəly* and Evenki *-meet*), as long as they only express reflexive and/or reciprocal meaning. It seems to me that restricting the term *anaphoric* to argument-like elements is more standard than Nedjalkov’s use (the idea behind this is that anaphoric elements are referential, and only argumeent-like elements can carry reference).

ble (or only have a contradictory reading with clause-bound antecedence) would show that French *se* and Czech *se* are not reciprocal pronouns, but rather verbal markers (“operators”).

- (46) a. French
 **Pierre et Jean ont dit qu'ils se sont vaincus à la finale.*
 ‘Pierre and Jean said that they defeated each other in the finale.’
 b. Czech
 **Dan a Petr říkali, že se porazili ve včerejší šachové partii.*
 ‘Dan and Petr said that they defeated each other in yesterday’s chess game.’

Another argument that is frequently made for French is that *se*-verbs are treated as intransitives in causative constructions with *faire* (e.g. Dimitriadis 2004; Siloni 2007). In causatives of intransitives, the causee becomes a direct object (*les* in 47a), while in causatives of transitives, the causee becomes an indirect object (*leur* in 47b). The reciprocal *se*-verb in (47c) behaves like the intransitive in (47a) in requiring a direct-object causee.

- (47) a. *Marie les fait courir.*
 ‘Marie makes them run.’
 b. *Marie les leur fait embrasser.*
 ‘Marie makes them kiss them.’
 c. *Marie les fait s’embrasser.*
 ‘Marie makes them kiss each other.’

For Serbo-Croatian, Zec (1985) argues that *se* is not an argument of the verb, citing its behaviour in comparative constructions (see also Dimitriadis 2004, who provides ex. 18b).

- (48) a. *Petar je branio sebe uspešnije nego Ana.*
 Peter AUX defended himself better than Ana.ACC
 ‘Peter defended himself better than (he defended) Ana.’
 b. **Lekari su se branili uspešnije nego Ana.*
 doctors AUX REC defended better than Ana.ACC
 ‘The doctors defended each other better than (they defended) Ana.’

Following Zec, Mchombo (1993) shows that in the Bantu language Chichewa, the reciprocal suffix *-án* does not behave as an argument with regard to this test, while the reflexive prefix *dzi-* does behave as an argument (which is not surprising, given that *-án* occurs in a position typical of valency-changing markers, while *dzi-* occurs in the object prefix slot). It would be interesting to know whether Adyghe *zə-* also behaves like an argument with regard to this test.

For German, the tests mentioned here are either not applicable or seem to point to an anaphoric status of *sich*. However, Gast & Haas (2007), who highlight the fact that *sich* cannot have reciprocal meaning when it occurs after prepositions, argue that *sich* is a clitic-like element after all (or more precisely, that there are two *sich* items, one clitic verbal marker and one argumental *sich*).

Before leaving the topic of verb-marked vs. anaphoric reciprocals, let us note one additional generalization that concerns a diachronic tendency (cf. Nedjalkov, Ch. 3, §3.2):

Universal 15:

Anaphoric reciprocal constructions show a much greater tendency of being replaced than verb-marked reciprocals. Thus, in almost all languages that have both an anaphoric and a verb-marked reciprocal, the former is younger and etymologically more transparent.

7. **Allelic predicates**

All languages seem to have a substantial number of simple words (verbs, adjectives and nouns) that denote mutual configurations by themselves, without occurring in a special grammatical (morphological or syntactic) construction. They fall into a small number of semantic classes:

- (49) a. verbs of competition: ‘fight’, ‘quarrel’, ‘negotiate’, ‘argue’
 b. verbs of joint action: ‘communicate’, ‘play chess’, ‘consult’
 c. verbs of connecting: ‘combine’, ‘unite’, ‘acquaint’, ‘compare’, ‘mix’
 d. verbs of dividing: ‘separate’, ‘distinguish’
 e. predicates of (non-)identity: ‘same’, ‘similar’, ‘different’, ‘match’
 f. relationship nouns: ‘friend’, ‘colleague’, ‘compatriot’, ‘cousin’.

Such non-derived lexemes denoting mutual configurations are called **allelic predicates** here.¹² Given the definition of *reciprocal* in §1, an allelic predicate is a special kind of reciprocal predicate, and consequently the term **lexical reciprocal**, which is generally used in this work for allelic predicates, is not inappropriate. However, it seems that for a number of reasons a special new non-compound term would be helpful:

(i) Allelic predicates of the type in (49) are more often discussed outside the context of reciprocals (e.g. Lakoff & Peters 1969; Gleitman et al. 1996) than in the context of reciprocals, so that they deserve a special term that is not derived from *reciprocal*.

(ii) The most commonly used term, *symmetric predicate*, is problematic because grammatical reciprocals also express symmetric (= mutual) situations. To address this point, one would have to resort to a clumsy term like *inherently symmetric predicate* (cf. Dixon’s (1991:59) term *inherently reciprocal verb*).

(iii) The term *lexical* is used in a number of different ways. In particular, it is often used for complex derived forms that are supposed to be nevertheless part of the “lexicon” (as opposed to the “syntax”). For instance, according to Reinhart & Sioni (2005), verb-marked reciprocals in Hebrew, Hungarian and Russian are formed in the lexicon (and could thus be described as “lexical reciprocals”).

In the Questionnaire (Nedjalkov & Geniušienė, Ch. 8, p. 413), there is a question “Are there any lexical reciprocals in the language under study?”, but as Knjazev (Ch. 2, p. 117) points out, it is very likely that Universal 16 is true (see also König & Kokutani 2006: 274):

12. Based on Greek *allēlo-* ‘each other, mutual’.

Universal 16:

All languages have allelic predicates (= lexical reciprocal predicates).

It also seems that universally, allelic predicates fall into the semantic classes given in (49) above, and that all languages have both subject-oriented and object-oriented lexical reciprocals (so that the two questions 66–67 in the Questionnaire, p. 414, are likewise redundant).

There is some question about how precisely allelic (=lexical reciprocal) predicates should be defined. According to Nedjalkov (Ch. 1, §2.3, p. 14), “these are words with an inherent reciprocal meaning”, but he includes not only cases of unanalyzable (“non-marked”) predicates (*to argue, to combine, next to, colleague*), but also reciprocal deponents (*reciproca tantum*), i.e. reciprocal predicates with a reciprocal marker whose base form does not occur without this marker (e.g. French *se bagarrer* ‘fight’; **bagarrer* does not exist on its own). This is problematic, because one could argue for such predicates that since the reciprocal marker is present, the root itself does not have a mutual meaning, so that *se bagarrer* would not count as “inherently reciprocal” in meaning. It appears that the term *lexical reciprocal*, as used in this work, should be defined as “a reciprocal predicate that cannot be derived in a regular way from a non-reciprocal base”. This would also take care of “lexicalized” reciprocals, for which a base exists, but where the semantic relationship between the base and the reciprocal is not regular.¹³

Allelic predicates can usually be used both in a simple construction, as in (50), where the set of mutuants is expressed by a single argument, and in a discontinuous construction, as in (51), where there are two arguments.

- (50) a. *Ram and Dolores quarreled.*
 b. *I compared Rubens and Rembrandt.*
 c. *Kurdish and Persian are similar.*
 d. *Lisi and Aisha are colleagues.*
- (51) a. *Ram quarreled with Dolores. (=Dolores quarreled with Ram.)*
 b. *I compared Rubens with Rembrandt. (=I compared Rembrandt with Rubens.)*
 c. *Kurdish is similar to Persian. (=Persian is similar to Kurdish.)*
 d. *Lisi is Aisha’s colleague. (=Aisha is Lisi’s colleague.)*

The members of the two sentence pairs are roughly synonymous, but of course not fully (cf. Gleitman et al. 1996 for some discussion from a psychological point of view). Since the oblique argument of a discontinuous construction is often optional (i.e. can be omitted with an indefinite or definite interpretation), simple constructions like (50) are often

13. Nedjalkov (Ch. 1, §2.3, (iv)) also considers subsuming unproductive (but regular) reciprocals like Russian *obnimat’sja* ‘embrace each other’ under lexical reciprocals. But to do that, one would have to broaden the definition even further, to “reciprocal predicates that cannot be derived productively from a non-reciprocal base”. Unproductive reciprocals are necessarily “lexical” in the sense that speakers must remember them and keep them in their mental lexicon. But speakers probably also have many productively formed reciprocals in their mental lexicon, and presumably nobody would want to define *lexical reciprocal* as “reciprocal predicate that (some? all?) speakers have in their mental lexicon”. So a definition based on unanalyzability or irregularity seems preferable.

ambiguous. Thus, (50a) can also mean ‘Ram and Dolores quarreled with someone else’, and (50c) can also mean ‘Kurdish and Persian are similar to some other contextually given entity’.¹⁴

There are also some allelic predicates that can only be used in the simple construction:

- (52) English (Nedjalkov, Ch. 1, p. 15, 99)
- a. *My father and the neighbor are alike.*
 - b. **My father is alike with the neighbour.*
- (53) German (Wiemer & Nedjalkov, Ch. 10, p. 499)
- a. *Der Rektor versammelte die Professoren und Dozenten.*
‘The rector gathered the professors and instructors.’
 - b. **Der Rektor versammelte die Professoren mit den Dozenten.*
(lit. ‘The rector gathered the professors with the instructors.’)

And some allelic predicates can only be used in the discontinuous construction:

- (54) English (cf. Nedjalkov, Ch. 1, §16.2.2, p. 100)
- a. *Kurdish resembles Persian.*
 - b. **Kurdish and Persian resemble.*

The verb *resemble* is also unusual in that it is transitive. It seems that many languages completely lack such transitive allelic predicates, and even English, where transitive verbs are used very widely, has only relatively few of them (*match*, *marry*, *meet* are further examples).

8. Uniplex vs. multiplex mutual events

Mutual configurations show the mutnants in multiple roles, and this may or may not involve several different sub-events. A clear case with multiple sub-events is (55):

- (55) *Ram and Dolores told each other a secret.*

Here there must be two telling events and two secrets involved, because secret-telling is not an action that can be carried out jointly and in a mutual way, so that a single event would result. By contrast, a clear case where there is just a single event is (56):

- (56) *Pedro and Aisha quarreled (with each other).*

14. This ambiguity is exploited in the joke cited by Evans (2007):

“Receptionist at hotel, as couple checks in: Are you married? Man: Yes. Woman: Me too.”

The receptionist had intended the simple construction, whereas the second answer shows that the discontinuous construction with an omitted argument was understood (‘married to someone (else)’).

This can be paraphrased as ‘Pedro quarreled with Aisha’ or as ‘Aisha quarreled with Pedro’ (depending on the perspective one wants to adopt), but the situation cannot be said to consist of these two sub-events. Example (56) describes just a single event.

The contrast between (55) and (56) can be described by saying that (55) denotes a **multiplex mutual event**, while (56) denotes a **uniplex mutual event** (for the term pair *uniplex/multiplex*, see Talmy 1988: 176).

Uniplex mutual events have been discussed under the heading of *naturally reciprocal events* by Kemmer (1993: §4.1.3), where it is observed that “Naturally reciprocal events are characterized by a low degree of distinguishability of the two events that constitute the relations between the participants” (p. 112). Kemmer notes that in pairs such as (57a–b), (58a–b), the (a) sentence can express two separate kissing actions, while in the (b) sentence there is “almost certainly only one kiss involved; the kissing actions of the two participants are simultaneous and virtually indistinguishable” (p. 111).

(57) English (Kemmer 1993: 111)

- a. *John and Mary kissed each other.*
- b. *John and Mary kissed.*

(58) Modern Greek (Dimitriadis 2004: §1)

- a. *O Jánis ke i María fili-s-an o énas ton alo.*
the Jannis and the Maria kiss-AOR-3PL the one the other
‘Jannis and Maria kissed each other.’
- b. *O Jánis ke i María filí-θik-an.*
the Jannis and the Maria kiss-REC.AOR-3PL
‘Jannis and Maria kissed.’

Dimitriadis (2004) uses the term *irreducibly symmetric event* for the second type, and characterizes it as “expressing a binary relationship whose participants have necessarily identical participation.”

Kemmer notes that the distinction between simultaneous and sequential actions is relevant here in that only multiplex mutual events can express sequential actions. This is shown by the contrast in (59).

(59) English (Kemmer 1993: 113)

- a. *John and Mary kissed each other, one after the other.*
- b. **John and Mary kissed, one after the other.*

Siloni (2002: 391) suggests a further way of showing more clearly how multiplex mutual events differ from uniplex mutual events. When a multiplicative adverbial (‘five times’) is added, it becomes clearer how many events are described:

(60) Hebrew

- a. *Dan ve-Ron nišku ?eħad ?et ha-šeni ħameš pešamim.*
Dan and-Ron kissed one ACC the-other five times
‘Dan and Ron kissed each other five times.’
(i.e. there were five or ten kissing events)

- b. *Dan ve-Ron hit-našku ħameš peʿamim.*
 Dan and-Ron REC-kissed five times
 ‘Dan and Ron kissed five times.’ (i.e. there were five kissing events)

The anaphoric reciprocal construction in (60a) can express a multiplex or a uniplex event, but (60b) can express only a uniplex event (see also Dimitriadis 2004; Siloni 2007).

The distinction between uniplex and multiplex events is also reflected in a reduplicative pattern in Madurese, as discussed by Davies (2000: 128–130). In this western Austronesian language, pre-reduplication of the verb’s final syllable expresses iterative events consisting of separate sub-events, as illustrated by (61) and (62).

- (61) *Ali ban Hasan ger~moger kabungkaan du jam ban nanəm obi.*
 Ali and Hasan ITER~AV.fell tree two hour and AV.plant obi
 ‘Ali and Hasan cut down trees for two hours and (in between) planted obi.’
- (62) *Ali ban Siti biq~nobiq kanaq jhuwa. Ali gik are sənən. Siti gik are*
 Ali and Siti ITER~AV.pinch child that Ali just day Monday Siti just day
səlasa.
 Tuesday
 ‘Ali and Siti pinched that guy (more than once). Ali did so on Monday and Siti did so on Tuesday.’

In (61), the second activity of obi-planting need not follow the entire activity of tree-felling, but the two can occur interleaved with each other, because *germoger kabungkaan* refers to a multiplex event.¹⁵ In (62), the last two sentences show that the multiple pinchings occurred quite separately from each other. Likewise, reduplicated reciprocals express multiplex events:

- (63) *Bambang biq Ita ghuk~teghuk-an tanang du jam ban nendang bal.*
 Bambang and Ita REC~take-REC hand two hour and AV.kick ball
 ‘Bambang and Ita held each other’s hand for two hours and kicked a ball.’
- (64) *Ali biq Hasan rem~kerem-an sorat. Ali ngerem are sənən. Hasan ngerem are*
 Ali and Hasan REC~send-REC letter Ali AV.send day Monday Hasan AV.send day
səlasa.
 Tuesday
 ‘Ali and Hasan sent each other letters. Ali sent his on Monday and Hasan sent his on Tuesday.’

That these are reciprocal is shown by the obligatory *-an* suffix and the lack of the actor-voice morphology on the verb (cf. footnote 3). Reduplicated reciprocals like (63)–(64) contrast with non-reduplicated reciprocals that express uniplex mutual events:

- (65) *Ali biq Hasan a-temo daq taman.*
 Ali and Hasan AV-meet in park
 ‘Ali and Hasan met in the park.’

15. As Davies shows, this contrasts with the durative suffix *-e* (*moger-e*), which expresses a single (uniplex) protracted event.

- (66) *Ita biq Bambang a-seom.*
 Ita and Bambang AV-kiss
 ‘Ita and Bambang kissed (each other).’

Verbs like ‘kiss’ can also reduplicated, and then we have a complex event again:

- (67) *Ita biq Bambang om~seom-an.*
 Ita and Bambang REC~kiss-REC
 ‘Ita and Bambang kissed (each other) (several times).’

Given the distinction between multiplex and uniplex mutual events, we can formulate another universal (cf. Dimitriadis 2004):

Universal 17:

In all languages, all allelic predicates express uniplex mutual events. Multiplex mutual events can only be expressed by grammatical reciprocals.

As Dimitriadis (2004:§3.3) points out, allelic predicates must express uniplex events even if they occur with reciprocal anaphors. In contrast to (60a) above, (68b) can only have a uniplex reading (‘There were a total of five meetings between John and Mary’), and it is synonymous with (68a).

- (68) a. *John and Mary met five times.*
 b. *John and Mary met each other five times.*

9. Reciprocal deponents

As noted by Kemmer (1993:106–107), reciprocal deponents always express “naturally reciprocal events” (see Nedjalkov, Ch. 1, §2.3, p. 14, for examples of reciprocal deponents):

Universal 18:

Reciprocal deponents (i.e. verbs with reciprocal marking and mutual meaning that lack a corresponding unmarked non-mutual base form) always express uniplex mutual events.

This is a special case of Universal 17 if reciprocal deponents are included in the class of allelic predicates, following the general practice of this work.

It is probably useful to distinguish further between **strong reciprocal deponents** and **weak reciprocal deponents**. The former are reciprocals like French *se bagarrer* ‘fight’, where the corresponding base form simply does not exist (**bagarrer*). Weak reciprocal deponents are reciprocals whose meaning cannot be derived in a straightforward way from the corresponding base form. Two examples are given in (69).

(69) weak reciprocal deponents

- a. Turkish *gör-üş-* ‘meet’ (‘see each other’) *gör-* ‘see’
(Haiman 1983:806)
- b. Norwegian *slå-ss* ‘fight’ (‘hit each other’) *slå* ‘hit’
(Kemmer 1993:111)

Weak reciprocal deponents are often called “lexicalized” (e.g. Kemmer 1993:111; Nedjalkov, Ch. 1, §2.3), which is apparently meant to indicate that their origin is still fairly transparent: They started out as regular derived reciprocals, but were used so frequently that some speakers stored them holistically in their mental lexicons. This was the precondition for the semantic shift that occurred, and as a result of the semantic shift, all speakers now need to have these reciprocals in their lexicons. Like strong deponents and other allelic predicates, they cannot express multiplex events:

Universal 19:

Weak reciprocal deponents (i.e. verbs with reciprocal marking and mutual meaning that diverge semantically from their (erstwhile) base form) always express uniplex mutual events.

Again, Universal 19 is a special case of Universal 17, but it is worth stating separately, because it is interesting to ask what the explanation is: Can reciprocals shift their meaning only if they denote uniplex events? Or can grammatical reciprocals become part of a speaker’s mental lexicon (thus fulfilling a precondition for meaning drift) only if they denote uniplex events? Or are only uniplex-event-denoting reciprocals frequent enough to become part of a speaker’s mental lexicon? I leave the issue unresolved here.

Another regularity concerns the reciprocal marker that is used in reciprocal deponents:

Universal 20:

In all languages, reciprocal deponents are verb-marked; anaphoric reciprocal constructions are never deponents.

One might object that markers like French *se*, Polish *się* and German *sich*, which sometimes occur in reciprocal deponents, are in fact reciprocal anaphors. But as we saw in §6, they are not very clear cases of anaphors, and some authors have argued that they are clitic (or even affixal, for French *se*) verbal markers. So if Universal 20 is weakened somewhat (“clear cases of anaphoric reciprocal constructions are never deponents”), it has an excellent chance of being correct.

10. Frequently mutual actions

Although I am not aware of any corpus studies, it is clear that some (expressions of)¹⁶ actions occur more often mutually than others (in terms of relative frequency, i.e. for some actions there is a greater proportion of mutual occurrences among all occurrences than for others). For instance, 'greet' is an action that is typically carried out in a mutual way, while 'poison' is an action that is normally carried out in a non-mutual way. Frequency asymmetries are typically mirrored by formal asymmetries in human languages (cf. Haspelmath 2007), so it is expected that frequently mutual actions will be expressed with less coding (and more cohesive coding) than rarely mutual actions:

Universal 21:

If a language has two reciprocal markers that differ in length, and if this language treats frequently mutual actions differently from rarely mutual actions with respect to these markers, then always the frequently mutual actions are expressed by the shorter marker, and the rarely mutual actions are expressed by the longer marker.

This generalization was originally observed by Haiman (1983:803–806) and highlighted again by Kemmer (1993:103–106). Kemmer's distinction between one-form languages (like many Bantu languages which use the verbal reciprocal marker *-an* for all verbs) and two-form languages (like Hungarian) is too simplistic, because many languages have more than two different reciprocal markers (as seen in many of the contributions to this work), but the basic observation and Haiman's explanation in terms of economic motivation seem to be correct.

However, we still know too little about the extent to which frequency differences correlate with grammatical differences, and since the contributions to this work do not give any frequency information, much further research is needed. However, it does seem to be clear that the Hungarian and Russian way of grammaticalizing frequency differences is not the only one possible. In these languages (and other European languages), the verb-marked reciprocals occur with a highly restricted class of verbs, but it is quite possible that in languages with many more verb-marked reciprocals, frequency differences still play a role.

Haiman and Kemmer are not careful to distinguish between necessarily mutual events (i.e. events expressed by allelic predicates) and frequently mutual events. Haiman talks about "symmetrical predicates" denoting "acts or states which are reciprocal, either necessarily (e.g. *be alike*) or very probably (e.g. *agree*, *meet*), and for which the expected case – that of reciprocity – need not be signaled overtly" (p. 803). But *agree* and *meet* are also allelic predicates, like *be alike*, because it is not possible to say **I met him, but he did not meet me*, or **I agree with her, but she does not agree with me*. Similarly, Kemmer introduces

16. When I talk about actions occurring frequently, this is a shorthand for expressions of actions occurring frequently in speech. It goes without saying that what kinds of actions occur in the world is irrelevant to language.

her “naturally reciprocal events” as “events that are either necessarily (e.g. ‘meet’) or else very frequently (e.g. ‘fight’, ‘kiss’) semantically reciprocal” (p. 102). Her term “naturally reciprocal” suggests that frequency is indeed the decisive criterion for identifying such reciprocals, because “natural” can only be understood as a synonym of “frequent” here. However, from the beginning of her discussion, Kemmer considers the natural reciprocals as an “event type” that is semantically defined, rather than in terms of frequency of use, and she ends up with a definition that is basically identical to my definition of uniplex mutual events (see §8 above).

There is very probably a strong correlation between frequently mutual events and uniplex mutual events, as formulated in Universal 23:

Universal 22:

In all languages, the overwhelming majority of all mutual event expressions denote uniplex mutual events.

However, the two concepts should still be kept separate, because frequently mutual verbs may still be used non-mutually, and this results in the contrast between the uniplex ‘meet’ and the non-uniplex (or not necessarily uniplex) ‘kiss’ that we saw in (57) and (68) above.

Frequency differences also lead to differences in preferred interpretation, as illustrated in (70).

- (70) a. *They talked for an hour.*
 b. *They played for an hour.*

In (70a), the preferred interpretation is that they talked to one another, because mutual talking is much more frequent than non-mutual talking (see also (5a–b) above). In (70b), the interpretation on which they played separately is much more readily available, because solitary playing is quite common as well.

With these verbs, the nonsubject arguments are generally optional, but there are also interesting cases of verbs whose direct object is normally obligatory, but that can omit it with a reciprocal interpretation. Such verbs can be called **zero-explicit** reciprocal verbs. The most widely cited language that has such verbs is English, and the most widely cited verb of this sort is *kiss*. Interestingly, English seems to have few other verbs that are like *kiss* (Levin (1993:201) mentions *court*, *embrace*, *hug*, *pet*). And I am not aware of many other languages that can express mutuality by the simple intransitive use of non-allelic transitive verbs. Kemmer (1993:103) mentions Twi, and Fortescue (Ch. 19, §3.1) says that West Greenlandic Eskimo has this option, though usually the reciprocal anaphor *immiC-* is added to the intransitive verb. Thus, zero-explicit coding of mutual situations seems to be very rare.

11. The Scale of Reciprocal Marker Independence

With some simplification, it is possible to arrange the main types of reciprocal markers on a one-dimensional scale that will allow us to formulate further generalizations:

(71) **Scale of Reciprocal Marker Independence** (“Independence Scale”)

separable bipartite anaphor > inseparable bipartite anaphor > single-part free anaphor > clitic anaphor > affixal anaphor > productive verbal marker > unproductive verbal marker > zero-explicit

A version of this scale was proposed by König & Kokutani (2006:282): “quantificational > pronominal > compound > synthetic”. My scale differs from theirs only in that I ignore the “compound” strategy (for reasons of space) and make further distinctions within their other three types. König & Kokutani note a number of generalizations, e.g. (somewhat trivially, because this is true throughout the language system), “an increase in morphological substance and complexity” as we move from right to left:

Universal 23:

The higher the reciprocal marker is on the Independence Scale, the longer it tends to be.

Moreover, Haiman’s and Kemmer’s discussion of economy-based contrasts between “light” and “heavy” reciprocal markers can probably be generalized to degrees of independence, so that not only Universal 21, but also Universal 24 is true:

Universal 24:

The more frequently a predicate is used mutually, the lower its marker will be on the Independence Scale.

Next, in moving from right to left on the scale, “we find fewer combinatorial restrictions as far as verbs and syntactic environments are concerned” (König & Kokutani 2006:282):

Universal 25:

The higher a reciprocal marker is on the Independence Scale, the fewer restrictions there are on its applicability.

Finally, Nedjalkov (Ch. 1, §3.1) points out a correlation between monosemy/polysemy and this scale: “Monosemous reciprocal markers are typically free morphemes/words (pronouns and adverbs), less frequently affixes... Polysemous reciprocal markers are mostly affixes and clitic pronouns.” Likewise, König & Kokutani note that “the range of possible meanings seems to increase as we move from left to right on the scale,” and they point out that this is just a special instance of a much larger Zipfian regularity. Nedjalkov notes exceptions to his generalization such as the monosemous reciprocal suffix *-wəly* in Chukchi, and the polysemous Polish reflexive-reciprocal free anaphor *siebie*, but the following universal should be true with very few exceptions:

Universal 26:

If a language has two different reciprocal markers that occupy different points on the Independence Scale, and they differ in the amount of polysemy, then the more independent marker will be less polysemous.

Clearly, a lot of empirical cross-linguistic work will have to be done in order to verify these universals. At present, quite a few of them are just more or less speculative claims, but it seems useful to make them explicit in order to instigate further cross-linguistic research.

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Subject index

The general subject index consists of three parts: 1) terminological index; 2) semantic index (including 2a. notional and 2b. ontological indexes); 3) semantico-glossal index.

Three kinds of references are used: to the pages of Introduction (roman page numbers); to the pages of the main text (arabic numbers); to footnotes (thus, a reference like 1393n refers to a footnote on page 1393, etc.).

Indexes 1, 2a and 2b are organized according to nesting principles. The nest heading is marked bold. Its repetition in the initial position of the entry is indicated by the symbol ~. The symbol # denotes that the nest heading term fulfills a non-heading (subordinate) position in the corresponding NP, and that the term following # plays the heading role in the corresponding NP. The symbol * indicates repetition of the nest heading in a non-initial position in the NP.

For technical reasons, singular and plural forms of terms are not lemmatized as one unit; thus, they correspond to different entries.

In compiling these indexes, I used the STARLing software created by the late Prof. Sergej A. Starostin (Moscow) and I use this opportunity to express my deep gratitude to him.

Part 1. Terminological index

Part 1 contains only some selected intralinguistic terms proper. It does not include all the occurrences of the terms but only their significant occurrences.

All elements of “notional fields” and of “semantic ontology” are included in Part 2.

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Part 2. Semantic index

Part 2 consists of (2a) notional semantic index, and (2b) ontological semantic index.

Part 2a. Notional semantic index

Part 2a includes elements of notional fields. It contains words that describe meanings, functions, senses, values, readings, interpretations, etc. of language elements. Thus it is organized as a list of adjectival terms that occur before substantival terms like “function”, “interpretation”, “meaning”, “reading”, “sense”, “value”, etc. I treat such adjectives as semantic centers of the corresponding phrasal nests and, consequently, preserve the real word order of these NPs as they are used in the body of the text rather than use inverted order. The substantival terms like “meaning” in such NPs play the role of syntactic heads, rather than the role of “informationally kernel” components, therefore it is preferable to save the direct word order in the index as a more convenient way of arranging the components.

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Part 2b. Ontological semantic index

Part 2b includes elements of semantic ontology. It contains words that describe reality itself (actions, relations, states, events, etc.) rather than language elements.

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Part 3. Semantico-glossal index

Part 3 includes English lexemes that are used in the translation of original examples from the languages investigated in the monograph (they play a “glossing” role). Thus, it is not a purely lexical index, but rather a kind of semantic index. Hence the heading “semantico-glossal index”.

The index contains mostly translations of reciprocals, both lexical and derived (and their base words), related categories and related vocabulary. Derivatives are entered in two ways: 1) if a derivative and its base are not overfrequent in the body of the book they are usually entered as one item, with *each other* parenthesized; e.g. *recognize (each other)* [...]; 2) if a derivative and its base are very frequent they are entered separately.

The pronoun *each other* also stands for *one another*.

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Abbreviations and symbols

Note that some of the abbreviations have two usages; e.g. IND generally stands for (a) indicative but it means (b) indefinite agreement marker in Alpatov et al. (Ch. 42 on Ainu reciprocals), as is shown in the list below. Or, S generally symbolizes (a) intransitive subject and (b) absolutive agreement marker in Letuchiy (Ch. 18 on Adyghe). The broader application of an abbreviation is listed as (a), and in (b) the chapter where the same abbreviation is used for a different term is mentioned in parentheses.

In some papers special abbreviations are used: they are sometimes not entered in this list if they are explained in the paper.

#	ancestor form (in an extinct language or language stage)	AG	(a) agentive case; (b) agent marker (Ch. 22 on Tagalog)
#	possible (standard) ellipsis	Ag	agent
|	morpheme boundary (in complex words)	AIM	purpose marker
↑, ↓	rising (topicalizing), falling sentence stress	AL	alienable possessive
§	section, subsection	ALL	allative
1	1st person	AN	animate
2	2nd person	ANA	anaphoric pronoun
3	3rd person	ANAPH	anaphoric
A	(a) transitive subject; (b) marker of agreement with agent (= oblique subject; Ch. 18 on Adyghe)	ANOM	action nominal
ABL	ablative	ANT	anterior
ABS	absolutive	AOR	aorist
ABSTR	abstract	APASS	antipassive
ACAUS	anticausative	APPL	applicative
ACC	accusative	ART	article
ACT	active	ASP	aspect
ADD	additive	ASRT	assertive
ADJ	adjective	ASS	assertion
ADV	adverb(ial)	ASS.NR	assertive nominalizer
ADVZ	adverbializer	ASST	assistive
AFFRM	affirmative	AT	aspect-tense
		ATR	attribute
		AUG	augment
		AV	Actor voice
		BEN	benefactive
		BIL	bilocal

CAUS	causative	DYN	dynamic (verb)
C	carrier morpheme	ELAT	elative
Ch.	Chapter	EMPH	(a) emphatic; (b) emphasizer (Ch. 37 on Mundari)
CHAIN	chaining	e. o.	each other
CISL	cislocative	EP	epethentic
CLF	classifier	EQT	equative
CMP	completive	ERG	ergative
CMPR	comparative (degree)	ESS	essive
COLL	collective	EUPH	euphonic
COM	comitative	EVID	evidential
COMP	complementizer	ex.	example
COMPL	completive	EXC	exclusive
COND	conditional	EXP	experiential
CONJ	conjunction	EYEW	eyewitness
CONN	connector	F	feminine
CONT	continuous	FACT	(a) factative; (b) factitive (Nêlêmwa Ch. 34)
CONTM	contemporative	fig.	figurative
CONTR	contrastive	FIN	final marker
CONV	converb	FIN.Q	final question marker
COP	copula	FOC	focus
CS	causee	FUT	future
CW	countword	FV	final vowel
DAT	dative	GEN	genitive
DECL	declarative	GNR	generic
DEF	definite (article)	HAB	habitual
DEICT	deictic	HORT	hortative
DEL	delimitative	i.	intransitive
DEM	demonstrative	IMM	immediative
DEPAT	depatientive	IMMFUT	immediate future
DES	desiderative	IMP	imperative
DEST	destinative	IMP.POL	imperative polite
DETR	detransitive	IMPF	imperfect
DIM	diminutive	IMPL	implorative
DIR	directional	IMPR	impersonal
DISPERS	dispersive	in	intransitive
DISTR	distributive	INAN	inanimate
DMP	discourse-marking particle	INC	inclusive
DO	(a) direct object; (b) marker of agreement with direct object (Ch. 18 on Adyghe)	INCH	inchoative (aspect)
DS	different subject	INCM	incompletive
DU	dual	INCT	incentive
DUR	durative	IND	indicative
DVRS	diversative		

IND	indefinite person agreement marker	MOD	(a) modal; (b) modifier (Ch. 47 on Vietnamese, Ch. 34 on Nêlêmwa)
INDEF	indefinite pronoun	MOM	momentative (aspect)
INDEP	independent pronoun	MP	masculine personal gender
INDF	indefinite person	MULT	multiplicative
INDR	indirect speech	N	neuter
INF	infinitive	NACC	non-accomplished action
INFR	inferred	N.COM	comitative for nouns
INJ	injunctive	NEG	negative, negator, negation
INTRV	introversive	NEG.VB	negative verb
INGR	ingressive	NF	non-feminine
INST	instrumental	N.FACT	non-factative
INT	interrogative	NFUT	non-future
INTENT	intentional mood	NMP	non-masculine personal gender
INTR	(a) intransitive; (b) intransitivizer (Ch. 20 on North Arawak languages and Ch. 30 on Tariana)	NOM	nominative
INTRV	introversive	NP	noun phrase
INTS	intensifier	NPAST	non-past
INTT	intentional	NPOSS	non-possessive
INVL	involutional	NR	nominalizer
INW	inward (motion)	NRPAST	non-recent past
IO	(a) indirect object; (b) marker of agreement with indirect object (Ch. 18 on Adyghe)	NVIS	non-visual
IPFV	imperfective	O	(direct) object
IPS	impersonal passive	O.BEN	object-oriented benefactive
ITER	iterative	OBJ	(a) object; (b) object case (Ch. 30 on Tariana)
KIN	kinship suffix	OBL	oblique
k.o.	kind of	OF	object focus
LAT	lative	ONM	onomatopoeic
LIM	limitative	OPT	optative
LINK	linking morpheme	OR	orientative
lit.	literally	PART	participle, participial
LNK	linker	PASS	passive
LOC	(a) locative; (b) localizer (Ch. 34 on Nêlêmwa)	PAT	patient
LOC.PRED	locative predicate	PAUS	pausal
M	masculine	PC	perfective converb
MALEF	maleficiary	PEJ	pejorative
MDF	modifier	PERF	perfect
MED	middle (medium)	PERS	personal pronoun
		PFV	perfective
		PL, pl.	plural
		POL	polite
		POSS	possessive

PP	past participle	S1	the first argument of a RC
PPS	postposition	S2	the second argument of a RC
PRED	(a) predicate marker; (b) predicator (Ch. 37 on Mundari)	SB	subject
PREF	prefix	sb	somebody
PREP	preposition	SBJ	subject (Ch. 40 on Chukchi and Ch. 45 on Cashinahua)
PRES	present	S.BEN	subject-oriented benefactive
PREV	preverb	SD	sudden discovery
PROGR	progressive	SEQ	(a) sequential; (b) sequential subordinator (Ch. 20 on North Arawak)
PROH	prohibitive	SF	subject focus
PROL	prolative	SG, sg.	singular
PRSP	prospective	SOC	sociative
PRTL	particle	SS	same subject
PRTV	partitive	STAT	stative
Pt	patient	sth	something
PUNC	punctive	SUBJ	subjunctive
PURP	purposive	SUBST	substantive
Q	question (marker)	SUC	successive aspect
QUAL	qualificative	SUFF	suffix
QUOT	quotation	SUP	superlative
R	reciprocal suffix	t.	transitive
RC	reciprocal construction	TH	thematic (affix)
RCPAST	recent past	TOP	(a) topic; (b) topicalizer (Ch. 37 on Mundari)
REC	reciprocal marker	TR	(a) transitive; (b) transitivizer
RECIP	recipient	tr.	transitive
RED	reduplication	TRNSL	translative
REFL	reflexive	v	verb
REL	(a) relative; (b) relator (Ch. 33 on Indonesian); (c) relative clause marker (Ch. 36 on To'aba'ita)	V.COM	verbal comitative
RELTR	relativizer	vb	bitransitive verb
REP	repetitive	vi	intransitive verb
RES	resultative	VIRT	virtual
REVERS	reversive	VOC	vocative
RM	reflexive (polysemous) pronoun (Ch. 11 on Polish)	VR	verbalizer
RMPAST	remote past	VS	verbal substitute
RPRT	reported	vt	transitive verb
s	(a) intransitive subject; (b) absolutive agreement marker (Ch. 18 on Adyghe)		

Note on transliteration of Abkhaz, Abaza, Adyghe, and Kabardian examples

In Nedjalkov (Chapters 1, 3, 5, and 7), Abkhaz, Abaza, Adyghe, and Kabardian examples are cited in Latin transliteration with the Cyrillic letters *ѵ*, *Ѷ*, *ѷ*, and letter *I* of the original alphabet retained. The Cyrillic letters *ш* and *ч* are transposed as *š* and *č* respectively. This mode of transliteration is also used in Letuchiy (Ch. 18 on Adyghe).

In Kazenin (Ch. 17 on Kabardian), phonological transcription is used.

Note on symbols /'/, /'/ and /'/

The symbol /'/' denotes aspiration in Nivkh examples, /'/' denotes palatization in Nivkh, Yakut, Evenki and Even, Itelmen and Yukaghir examples. In the examples of other languages the use of the three symbols follows that of the authors.

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