

Modal Verbs in

Marlowe and Shakespeare

A Semantic-Pragmatic Approach

Monika Skorasińska

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By

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By Monika Skorasińska

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THIS BOOK IS DEDICATED TO MY BELOVED PARENTS

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INTRODUCTION

Modality is a very complex, excessively studied, and yet not fully explored area of language. It is one of the three categories of the clause, in addition to tense and aspect, but it is distinct in that it is not concerned directly with the event, situation, action, state, etc., but refers simply to the status of the proposition (Palmer 2001, 1). Since tense and aspect seem to be the most deeply investigated grammatical categories of the clause, scholars have recently shown an increased interest in modality, which has resulted in extensive, though not exhaustive, literature published on this issue. Therefore, in consideration of the demand for further studies, this book is intended to match the needs of the current research programme.

A full study of English modal verbs cannot be accomplished without a thorough investigation of their origins and the previous stages of their development. Hence, the need to submerge the research into the historical context with a particular focus on the times in which the shaping of the modern English modal system took place. It is the Early Modern English (EModE) period when a series of linguistic changes led to the isolation of Middle English (ME) pre-modals as a separate class of verbs, and the emergence of the modal system as it is in Present Day English (PDE).

The choice of drama for a pragmatic analysis of the modal verbs is justified by the fact that this text type demonstrates high proximity to natural speech behaviour. Following Schneider's (2002, 61) classification of texts according to their fidelity to speech, the tragedies and historical plays, which constitute the study material herein, fall into the category of "invented" texts. Schneider describes this type as "hypothetical, imagined speech, usually thought to be uttered by others than the writer but by speakers with whose real-life models he or she is familiar" (Schneider 2002, 61). Despite some shortcomings, literary sources constituting this category are considered as valid and reliable as other types categorised by Schneider, including recorded, recalled, imagined, observed, and invented texts.

The plays of William Shakespeare constitute the largest and most efficient corpus in terms of the pragmatic use of language, hence it offers the greatest potential for the semantic-pragmatic analysis of EModE modal verbs. Nevertheless, due to the fact that Shakespearian texts have already been thoroughly investigated by scholars, and their faithful representation

of EModE language may be disputable, the corpus is expanded by Christopher Marlowe's plays, which serve not only to control the analysis, but also to draw more general conclusions about the development of modality in the English language.

It needs to be emphasised that Shakespearian language is the language of drama, and, as such, it should not be equated with EModE language. To a certain degree, Shakespearian characters simulate indeed the natural speech typical of the regions which they come from, for instance, in *Romeo and Juliet* "the speech of the serving men and Nurse represents the slang and colloquial talk of lower London," and Mercutio "uses the language of young bloods about town, and occasionally the dialect of provincial courtiers" (Partridge 1971, 172). In general, however, the word choice, the use of rhyme, rhythm, and the rhetoric of the plays are the elements typical of Renaissance drama, hence any generalisations regarding EModE language and based on Shakespearian language alone should be taken with caution.

The primary aim of this book is to discuss the ways in which two Early Modern English dramatists—Christopher Marlowe and William Shakespeare—use modal verbs in order to convey different meanings. In particular, the study is aimed at a semantic-pragmatic comparison of Marlowe's and Shakespeare's language, and illuminating any discrepancies, if such occur, in terms of the incorporation of modal verbs. It is hypothesized that there are no considerable differences either in the distributions or connotations of the modals in the plays of both playwrights.

The secondary aim of this book is to provide a detailed quantitative and statistical analysis of English modal verbs in historical context, complemented by a qualitative description of modal meanings. The volume seeks to shed more light on the use and the interpretations of EModE modal verbs at this unstable stage of their development.

Additionally, the study is intended to conduct a comparative analysis of modal verbs in Shakespeare's tragedies and history plays, as well as to investigate the role and the influence of the genre on the interpretation of modal meanings. The analysis is performed on the corpus compiled of selected Marlowe and Shakespeare's plays, which have been retrieved from the *Collection of Renaissance Materials* of the *Perseus Digital Library*. The texts are parts of *The Works of Christopher Marlowe* and *The Works of William Shakespeare* sections respectively, with the latter being part of the *Perseus Garner* containing editions based on the *Globe*

Shakespeare, the one-volume version of the *Cambridge Shakespeare*¹ (1891–1893).

In order to obtain reliable data, the material under analyses needed to originate from the same or at least the most comparable period of time. In the case of Christopher Marlowe and William Shakespeare, the span of years common for the literary activity of both dramatists is very short and limited to approximately three years (1590–1593). This period embraces the last years of Marlowe's young life, ceased suddenly by his tragic and mysterious death in 1593, and the first years of Shakespeare's literary output, during which the history plays were mainly created. The inclusion of the plays written by the dramatists before 1590 and after 1593 has been motivated by the need of compiling a corpus with a sufficient number of words, which would guarantee the compilation of a broad, solid, and reliable database. As a result, the corpus has been narrowed down to the plays written by the dramatists by the end of the sixteenth century, i.e., between 1585 and 1600, and includes the following plays:

I. Christopher Marlowe

- *Dido, Queen of Carthage* – c.1585–1586
- *The First Part of Tamburlaine the Great* – c.1586–1587
- *The Second Part of Tamburlaine the Great* – c.1587
- *The Jew of Malta* – c.1589
- *Doctor Faustus* – c.1589
- *Edward the Second* – c.1592
- *The Massacre at Paris* – c. 1592

II. William Shakespeare

a) tragedies

- *Titus Andronicus* – 1593–1594
- *Romeo and Juliet* – 1594–1595
- *Julius Caesar* – 1599–1600

b) history plays

- *The First Part of King Henry VI* – 1591–1592
- *The Second Part of King Henry VI* – 1590–1591
- *The Third Part of King Henry VI* – 1590–1591
- *The Tragedy of King Richard II* – 1592–1593

¹ Edited by W. G. Clark, J. Glover, and W. A. Wright. Most probably the first reliable modern reference edition for many works of scholarship.

Additionally, the material under study has been carefully selected and divided into two smaller sub-corpora in order to allow for two parallel analyses. The primary research contrasts modal verbs in the works of both playwrights—Christopher Marlowe and William Shakespeare—whereas the additional study investigates exclusively the verbs in Shakespeare's tragedies and history plays, and allows for a correlation with the particular genre.

All in all, the corpus contains 282,305 words, with 115,131 words in Marlowe's and 167,174 in Shakespeare's plays.

Table 1. Total number of words in the plays of Marlowe and Shakespeare.

Author/title	Words in total
Christopher Marlowe	115,131
<i>Dido, Queen of Carthage</i>	14,642
<i>Tamburlaine the Great 1</i>	18,676
<i>Tamburlaine the Great 2</i>	19,116
<i>The Jew of Malta</i>	20,447
<i>Doctor Faustus</i>	12,815
<i>Edward the Second</i>	18,249
<i>The Massacre at Paris</i>	11,186
William Shakespeare	167,174
Tragedies	68,178
<i>Titus Andronicus</i>	21,658
<i>Romeo and Juliet</i>	25,740
<i>Julius Caesar</i>	20,780
History plays	98,996
<i>The First Part of King Henry VI</i>	22,679
<i>The Second Part of King Henry VI</i>	26,677
<i>The Third Part of King Henry VI</i>	25,833
<i>The Tragedy of King Richard II</i>	23,807

The research involves the analyses of nine verbs which are regarded by Goossens (1987, 113) as "central" English modals, namely, *can*, *could*, *may*, *might*, *shall*, *should*, *will*, *would*, and *must*. The selection of the verbs have been made on the grounds of their distinctive properties, which make them not only a closed category of verbs, but also a distinct set of modals in Present-Day English. The features include the lack of *-s* form, occupying the initial position in a verb phrase, preceding a verb in a bare infinitive form (without *to*), being negated by *not*, and inverting with the

subject in interrogative sentences. Other verbs, such as *be*, *have*, and *do*, called by Palmer (1988, 26) “primary auxiliaries,” or marginal modal verbs, *ought*, *dare*, and *need*, have been excluded from the research since they do not display all the features classifying them as the members of the group of central modal verbs.

Although almost all of the modals, apart from *must*, have their temporal present-past counterparts, each of them has been investigated separately and described individually. This is due to the fact that tense is not the exclusive, but merely one of many aspects taken into consideration during the analysis. All the occurrences of the verbs have been identified and counted manually, without using any specialized software. All archaic morphological and spelling forms of the verbs (e.g., *canst*, *shouldst*, etc.) have been taken into account and analysed.

Initially, each of the nine modal verbs has been processed in terms of its frequencies of occurrence in a given part of the database, that is, in a play or corpus. Due to the fact that the plays differ greatly in terms of their length and the total number of words, the actual numbers (F) had to be normalised in order to obtain more objective figures. Thus, the actual numbers of occurrences have been divided by the number of all words in a given play or corpus, and multiplied by ten thousand. As a result, normalised relative frequencies (henceforth RF) have been obtained. Both actual numbers of observations as well as relative frequencies are given in frequency distribution tables in each section dealing with a particular modal verb. The relative frequencies obtained in this way have allowed to identify distributions, which are the patterns of frequencies of occurrence of each verb, illustrated by means of histograms and generated for each modal verb.

The steps described above, i.e., observing the actual occurrences, calculating relative frequencies, and generating distribution patterns and histograms, have been subsequently repeated for each attested meaning of a particular modal verb. Following this process, the data obtained have been processed statistically.

In order to assess the significance of the revealed differences in the distribution of modal meanings in the corpora, two statistical tests have been applied, namely the chi-square test and the z-test. The former one is a non-parametric test which enables to compare the difference between the actually observed frequencies, extracted from the corpora, and the expected values, based on a theoretical model or a hypothesis (Butler 1985, 112; McEnery et al. 2006, 55). The greater the difference between the two values, the less likelihood that the difference is due to chance (McEnery et al. 2006, 55).

In this study, the chi-square test constitutes a preliminary calculation which allows for a general assessment of the distinction in terms of its statistical significance.

Basically, it has been assumed that:

if $\chi^2 \geq \alpha$ then it is concluded that the difference is statistically significant;

if $\chi^2 < \alpha$ then it is concluded that the difference is not statistically significant.

Once a statistically significant discrepancy is revealed, the next step is to apply the z-test in order to verify and further determine the result. According to Urdan (2005, 33), the z-test helps “to understand where an individual score falls in relation to other scores in the distribution.” The z-test thus offers a complementary analysis which allows for a very accurate location of the discrepancies by pointing out the areas with the most significant incongruity. The z-score has been calculated via the application of the following formula:

$$z = \frac{p_1 - p_2}{\sqrt{\frac{\bar{p} \times \bar{q}}{n}}}$$

where:

$$p_1 = \frac{m_1}{n_1} \text{ and } p_2 = \frac{m_2}{n_2};$$

m_1 = the actual distribution of a modal meaning denoted by a modal verb in Marlowe’s works;

m_2 = the actual distribution of a modal meaning denoted by a modal verb in Shakespeare’s works;

n_1 = the actual distribution of a modal verb in Marlowe’s works;

n_2 = the actual distribution of a modal verb in Shakespeare’s works;

$$\bar{p} = \frac{m_1 + m_2}{n_1 + n_2};$$

$$\bar{q} = 1 - \bar{p}; \text{ and}$$

$$n = \frac{n_1 \times n_2}{n_1 + n_2}.$$

Before the application of the z-test for each modal meaning of a modal verb, a null hypothesis H_0 is set forth. H_0 predicts that there are no significant differences between the use of a modal verb in both corpora. Simultaneously, an alternative hypothesis H_1 is put forward for the distribution of modal meanings being distinct in Marlowe's and Shakespeare's works. The preliminary hypotheses for the z-test predict as follows:

$$H_0: p_1 = p_2;$$

$$H_1: p_1 \neq p_2;$$

H_0 : there is no significant difference in the distribution of modal verbs;

H_1 : there is a significant difference in the distribution of modal verbs;

$$-Z_\alpha < z < Z_\alpha ;$$

$$Z_\alpha = 1.96;$$

H_0 : $-1.96 < z < 1.96$; and

H_1 : $z < -1.96$ or $z > 1.96$

The critical point for the two-directional z-test is 1.96. The null hypothesis cannot be rejected if the z-score is higher than -1.96 and lower than 1.96. If the calculation reveals the z-score lower than -1.96 or higher than 1.96, the null hypothesis is rejected.

Previous studies on the topic

Modality in a language is a very complex and still not fully explored category. It has widely attracted scholars whose attempts at illuminating this notion resulted in a considerable amount of literature addressing the issue.

A large body of publications on modality represent a standard syntactic approach towards the history of English verbs. One of the first such studies is the fourth part, third volume of Otto Jespersen's *A modern English grammar on historical principles*, published in 1931, in which the author discusses syntactic and semantic characteristics of four verbs, that is, *shall*, *should*, *will*, and *would*, supported by numerous quotations from different stages of the development of English language. Another

important contribution to the studies on English historical verb syntax is *A Middle English syntax* (1960) by Tauno Mustanoja. In spite of the time elapsing since its publication, Mustanoja's study continues to be a basic reference volume for historical linguists.

A standard reference work on the evolution of English verb phrase from Old to Modern English is Frederik Theodoor Visser's *Syntactical units with two verbs* constituting part three, first half of *An historical syntax of the English language*, published first in 1969. Visser (1969) investigates each modal verb separately, dealing with their typical forms in a chronological order. The forms are complemented with a number of quotations, and followed by the discussions of their syntactic implications and lexical meanings in the times when they were most commonly used. Another work, devoted exclusively to the history and development of sentence patterns in English, is *A history of English syntax* (1972) by Elizabeth Closs Traugott. Throughout her work, Traugott (1972) investigates different sentence types and traces their development across subsequent periods in the history of English language.

Other, equally influential studies illuminating the history of English grammar include David Lightfoot's *Principles of diachronic syntax* (1979), Frans Plank's *The modals story retold* (1984), Raymond Bruce Mitchell's *Old English syntax* (1985), Louis Goossens's *The auxiliaryization of the English modals: A functional grammar view* (1987), David Denison's *English historical syntax: Verbal constructions* (1993), or, devoted entirely to the history of auxiliary verbs, *English auxiliaries. Structure and history* (1993) written by Anthony Warner.

In more recent years, a number of publications, be it single articles or full-length volumes, have continued to address the history of English modals, offering a new, modern view on the subject, including Silvia Molina-Plaza's *Modal change: A corpus study from 1500 to 1700 compared to current usage* (2002), Johnny Butler's *A minimalist treatment of modality* (2003) and David Lightfoot's *Cuing a new grammar*, published in 2006 as a chapter in *The handbook of the history of English*.

In general, there is a considerable degree of consensus between the scholars as for the direction of changes which affected English modal verbs. The view that the verbs underwent the transition from main verbs to modals, is widely supported and well documented in the literature (Lightfoot 1979; Traugott 1989, 1995; Goossens 1987; Denison 1993). When regarded in terms of grammaticalization, the development of modals is a huge process involving not only a shift from full verbs to auxiliaries, but also a greater movement towards subjectification of their meanings, that is, from deontic to epistemic modality (Fischer et al. 2000, 19). Whilst

this transition is a well evidenced process, the scholars still have contradictory views on the nature of these changes. Initially, the dispute was motivated by Lightfoot's (1979) theory of *radical re-analysis*, according to which a series of syntactic changes taking place early in the history of English language led to the radical isolation and re-structuring of the verbs as a new category in the sixteenth century.

Whilst Lightfoot's theory faced a considerable degree of criticism in terms of the catastrophic manner of the re-analysis and his theory opened a heated scholarly debate on the issue, little disagreement has been manifested regarding the time of the greatest transitions in the development of modals. Although some scholars (e.g., Goossens 1987) claim that the changes already began in Old English, linguists generally seem to agree that Early Modern English is the most important period in the development of English modal verbs. Lightfoot claims that at this time the pre-modals were "firmly established as a unique class inflectionally, syntactically and semantically," and, consequently, they "were re-analysed as a new category, which we can call 'modal'" (1979, 110). Similarly, Warner discusses "the rapid sharpening" of the properties of auxiliaries in EModE, which results in the status of modals and auxiliaries being "substantially clarified" (2009, 198). Indeed, it is the EModE period, unlike any other, which is considered the crucial time for the evolution of English auxiliaries.

The studies which in a particular way are concerned with EModE period are numerous. One of the first attempts of exploring the field is taken by Madeline Ehrman in *The Meanings of the Modals in Present-Day American English* (1966). Although included only as supplementary chapters, the analyses constitute a valuable contribution to the study of EModE modals. In Appendix A of her book, Ehrman deals with the semantics of the modal auxiliaries in Shakespeare's plays, whereas in Appendix B, she discusses the modals in Dryden's works and makes a comparison with Shakespeare's usage.

Ehrman's (1966) study is soon followed by others, in particular Piotr Kakietek's *Modal verbs in Shakespeare's English* (1972). The more recent studies exploring EModE modal verbs include, among others, Roberta Facchinetti's *Can vs. may in Early Modern English* (1993), Merja Kytö's *On the use of the modal auxiliaries indicating 'possibility' in Early American English* (1987) together with her later work *Variation and diachrony, with Early American English in focus: Studies on 'can/may' and 'shall/will'* (1991), Maurizio Gotti's *Pragmatic uses of 'shall' future constructions in Early Modern English* (2003), and the most recent, Minako Nakayasu's *The pragmatics of modals in Shakespeare* (2009).

To sum up, the diachronic study of English modals is a topic well documented in the literature. Various studies addressed the issue with a different perspective, including a syntactic, semantic, pragmatic, or a blended approach. The first standard philological studies were soon followed by the research within generative and functional grammar, cognitive linguistics, computerised corpus-based analyses, and, most recently, historical pragmatics. Despite the impressive bulk of literature touching on the history of English modal verbs, there is a constant demand for the studies shedding more light on this—still not fully explored—area of the history of English language.

LIST OF ABBREVIATIONS

- C.M. – Christopher Marlowe
DF – *Doctor Faustus*
DQ – *Dido, Queen of Carthage*
ES – *Edward the Second*
F – frequency
JC – *Julius Caesar*
JM – *The Jew of Malta*
KH I – *The First Part of King Henry VI*
KH II – *The Second Part of King Henry VI*
KH III – *The Third Part of King Henry VI*
KR II – *The Tragedy of King Richard II*
MP – *Massacre at Paris*
RF – relative frequency
RJ – *Romeo and Juliet*
T1 – *The First Part of Tamburlaine the Great*
T2 – *The Second Part of Tamburlaine the Great*
TA – *Titus Andronicus*
W.Sh. – William Shakespeare

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1. MODALITY

Definition and types of modality

The notion of modality is a broad and complex category which poses some difficulties in defining it. What scholars seem to agree on when they attempt to define modality is the necessity to differentiate between its logical and linguistic notion.

Portner indicates that “logic is the study of systems of reasoning. Modal logic is the area of logic which specifically focuses on reasoning involving the concepts of necessity and possibility” (2009, 10). The umbrella of modal logic covers also other modal concepts, such as *epistemic logic*, concerning the logic of knowledge, and *deontic logic*, regarding the logic of obligation and permission. The two notions, necessity and possibility, are the key terms defining *aletheutic*, or as widely adopted in the literature—*alethic*—modality. Portner explains that this type of modality deals with “the concepts of necessary and possible truths” (2009, 10), whilst for Cruse (2006, 109) alethic modality “is concerned with notions of necessity and possibility and their interrelations.”

Modality as a linguistic area has been widely studied by a number of scholars, for instance, Coates (1983), Aijmer (1985), Palmer (1990, 2001), Bybee and Fleischman (1995), Papafragou (2000), Cruse (2006), Warner (2009), Portner (2009), and Kiefer (2009), to name but a few. The complexity of modal categories and the diversity of their meanings require investigations of the issue to be thorough and systematic. In spite of numerous approaches to modality and a variety of terminology employed to describe the phenomenon, some universal concepts have been accepted by the linguists and have become the basis for further inquiries.

To begin with, modality is a complex issue. Instead of stating what modality actually is, its definitions typically explain what modality is concerned with or what its connections with other related grammatical categories are. For instance, Cruse (2006, 109) indicates that modality “is concerned with a speaker’s expressed attitude to an expressed proposition.” In linguistic studies, modality is inevitably related to the words and expressions which serve to signify such modal concepts as necessity or possibility. While language expressions of modality (modal verbs, affixes,

etc.) are generally ignored in modal logic, they constitute the subject and the core of analysis in linguistic modality. In other words, a modal logician focuses on modal concepts and the related system of reasoning, whereas a linguist examines modal expressions used to denote modal concepts, and their function within a natural language.

The significance of both logical and linguistic notions of modality is appreciated by Portner (2009), who points out that they are complementary since both of them have some practical value and differ considerably from non-modal concepts. According to him, a semantic theory which attends to modality is more reliable and accurate in describing the nature of meaning than the theory which does not.

Palmer (1990, 2) adopts the definition by Lyons (1977, 452) pointing out that “modality is concerned with the ‘opinion and attitude’ of the speaker.” Languages of the world differ in their ways of expressing modal notions. Some of them have developed a modal verb system, while others make use of mood to serve this function. Mood and a modal verb system are two mutually exclusive subtypes of formal modality. The English language has developed a very complex modal system consisting of a number of modal verbs. Lightfoot (1979) demonstrates that the subjunctive mood had been present in English language before it was taken over by the modal system. Traugott (1972, 149) points out that the dawn of the modal system should be dated to the OE period, although some subjunctive inflections may also be found throughout the ME, and even EModE period. The development of modality is further discussed in a separate chapter.

English modality has been traditionally divided into two most distinctive types, that is epistemic and non-epistemic, also termed as *root* modality. For Kiefer (2009, 245), this distinction is semantically well-founded since epistemic modality can be construed in terms of logical relations, whereas root modals are based on practical inferencing. Similarly, Coates (1983, 247) supports the recognition of epistemic and root categories, whose distinct meanings “are kept apart by distinct syntactic and prosodic patterns.”

As for epistemic modality, it is considered the most distinct, complete, internally regular, and the simplest type of modality (Palmer 1990, 50). It serves to make assumptions about the actuality of the proposition in relation to reality. For Palmer, epistemic modality is the modality of propositions, whose function “is to make judgments about the possibility, etc., that something is or is not the case” (Palmer 1990, 50). Warner (2009, 14) explains that “epistemic modality typically involves a statement of the speaker’s attitude towards the status of the truth of a proposition: that the

proposition is necessarily true, probably true, predicted to be true, etc..” Such statements, according to Warner (2009, 14), may involve “an assessment based on logical inference from evidence (commonly unstated) [...], and a paraphrase in such terms or in terms of the speaker’s confidence in the truth of the proposition is often reasonable.” Coates in turn indicates that epistemic modality “is concerned with the speaker’s assumptions or assessment of possibilities and, in most cases, it indicates the speaker’s confidence (or lack of confidence) in the truth of the proposition expressed” (1983, 18), whereas Aijmer (1985, 11) defines epistemic modality as “the speaker’s qualification of the truth of what is said.”

Papafragou (2000, 7) argues for “metarepresentation hypothesis for epistemic modality,” according to which epistemic expressions mark a logical relation between the speaker’s beliefs and the complement of the modal. As a result, in order to use and understand epistemic utterances, it is necessary to possess “the ability to conceive of evidential relations between propositions which form the content of beliefs, and is thus linked to the human capacity to metarepresent” (Papafragou 2000, 7).

According to Papafragou (2000, 8), the originality of her approach lies in the assumption that the metarepresentation hypothesis, combined with both semantic and pragmatic considerations, offers an effective way of dealing with various puzzling aspects, and is thus favoured over other accounts of modality. In order to illustrate this thesis, Papafragou (2000, 8) considers in the first place the arguments which pose obstacles for unitary semantic analyses of English modal verbs, including the syntactic features of modal interpretations, the relation between the interpretations and truth-conditional content, and the modal constructions exhibiting fixed and indistinct semantic and pragmatic properties. In the second place, Papafragou considers the way in which her account interconnects with the child’s acquisition of modal meanings while learning a language. The author provides evidence for close correlation between epistemic modality and human metacognitive abilities, such as mentalising (Papafragou 2000, 8).

According to Coates (1983, 20), epistemic modality is a category relatively distinct from any other due to the following characteristics exhibited by epistemic modal verbs:

- a. each epistemic modal may be assigned “a comprehensive definition such as ‘epistemic modality expresses the speaker’s reservations about asserting the truth of the proposition’” (Coates 1983, 20);
- b. epistemic modals disclose certain grammatical features including:

- negation affecting the proposition, not the modality (does not apply to suppletive *can't*);
- *have + en* also affecting the proposition, not the modality;
- the co-occurrence with some syntactic forms (*have + en, be + ing, etc.*);
- the lack of past tense forms (apart from *might* for *may* in reported speech).

As for the latter, Palmer explains that the English epistemic modals are mainly non-factual devices whose function is to “make a judgement about the truth of the propositions” (Palmer 1990, 10), hence the lack of the past forms. Indeed, it seems impossible to make a judgement in the past, although it is logical and possible to make a present judgement about a past proposition, as in:

‘John may have been there yesterday’ = ‘I judge it is possible that John was there yesterday’ (Palmer 1990, 10).

Palmer categorises epistemic modals as the ones indicating possibility (*may*), or necessity (*must*, a semi-modal *be bound to*), and devotes some special attention to the tentative forms *might, would, and should*, as well as to the modal *will* indicating a reasonable conclusion (1990, 50–60).

The modal *may* denoting epistemic possibility is interpreted by Palmer (1990, 51) as “possible that” and indicates:

1. states in either the present or the future;
2. action in progress (both present and future);
3. habitual activity;
4. a single future action;
5. future time with the progressive form regardless the duration of an action;
6. concession.

Epistemic necessity, on the other hand, serves to express the speaker’s strong belief in the truth of what is being uttered. Palmer (1990, 53) paraphrases epistemic *must* as “The only possible conclusion is that...,” or with a double negation “It is not possible that... not...” Epistemic *must*, according to Palmer (1990) is used in reference to:

1. the states or activity in the present;
2. habitual activity; and
3. future time (where the context makes epistemic interpretation more likely).

Due to biased assumptions made by the speaker, epistemic modality exhibits its fundamental feature, subjectivity, which is discussed further in this chapter.

Coates (1983, 19) represents epistemic modal verbs on a two-scale model which includes both the inferential and non-inferential element on one scale, as well as confidence and doubt placed on the two extremes of the other scale. According to her, *must* (inferential) and *will* (non-inferential) are confident modals, whereas inferential *should* and *ought*, as well as *may*, *might* and *could* (non-inferential) are considered doubtful modals. Coates (1983, 19) offers the following interpretation of epistemic modals:

- *must* = from the evidence available I confidently infer that...
- *should*, *ought* = from the evidence available I tentatively assume that...
- *will* = I confidently predict that...
- *may*, *might*, *could* = I think it is perhaps possible that...

Palmer (1990, 57) points out that epistemic *will* denotes neither possibility nor necessity, but “refers to what it is reasonable to expect. It can be roughly paraphrased as ‘A reasonable inference is that...’” According to Palmer, epistemic *will* most commonly indicates present time, and when it refers to the future, it evokes an obscurity between epistemic *will* and the *will* of futurity, as in:

“John will go to London tomorrow” (Palmer 1990, 57).

This ambiguity is very difficult and at times even impossible to clarify, but it may be disentangled to indicate epistemicity by putting the following verb into the progressive form, without the indication of continuity, e.g.:

“John will be going to London tomorrow” (Palmer 1990, 57).

The tentative forms *might*, *would*, and *should* also receive some special attention from Palmer (1990, 58), according to whom *might* is used in exactly the same way as its unconditional form *may*, but with a slightly more uncertainty about the possibility.

Palmer (1990, 58) interprets *would*, the tentative form of *will*, as “I should think that...” or “It would be reasonable to conclude that...” *Should* serves to denote extreme likelihood, or a reasonable assumption or

conclusion rather than necessity, however, many cases remain ambiguous, between epistemic and dynamic interpretation.

The linguists generally seem to agree on the fact that epistemic modality is the most distinctive and the easiest type of modality to characterise. Other types, collectively called *non-epistemic* or *root* modality, are more difficult to distinguish and cover a few other types, including deontic modality, dealing with expectations, norms and laws; dispositional modality, which is based on the agent's dispositions; circumstantial modality, stemming from a variety of external and internal circumstances; and boulomaic modality as the expression of the speaker's wishes and desires (Kiefer 2009, 242). Palmer (1990; 2001) and Warner (2009) discuss the classification of non-epistemicity in terms of deontic and dynamic modality.

According to Coates (1983, 21), the essential feature of root modality which differentiates it from epistemic modality is gradience. While the epistemic modals differ only in terms of subjectivity (with objective cases being very rare), the root modals differ not only in terms of subjectivity, but also in terms of a strong-weak continuum. Other important features indicated by Coates which are associated with root modality include some syntactic patterns, such as animate subject, agentive verb, and passive voice, as well as prosodic features, including stress and intonation.

Semantically, what differentiates epistemic modality from deontic is that the former is based on the speaker's knowledge, whereas the latter on physical or mental states or outer circumstances (Kiefer 2009, 241). According to Warner (2009, 15), deontic modality concerns obligation and permission, or what is necessary and possible in relation to moral values or some authority. The source of obligation varies depending on the type of a sentence. The obligation is imposed or the permission is granted by the speaker in declaratives, whereas in interrogatives the permission is requested from the hearer (Warner 2009, 15).

Deontic modality, according to Palmer (1990, 69), is *performative*, or *discourse-oriented*, in that a speaker, by using a deontic modal verb, performs a certain action, such as giving permission (by means of *may* or *can*), laying an obligation (*must*), or making a promise or threat (*shall*). Apart from being performative, deontic modal verbs do not have past tense forms for the reason that the act is performed at the moment of speaking (Palmer 1990, 70).

Palmer (1990, 70–74) considers this type of modality in terms of deontic possibility and necessity. Although the former consists primarily of giving permission, an extension of *can* and *may* to indicate a command, “often of a brusque or somewhat impolite kind,” has also been observed

by Palmer (1990, 71–72). This use of *can* and *may*, however, differs from that of *must*. “*Must* has some implication of authority on which the speaker relies, or at least the implication that he can impose his authority. By contrast *can* and *may* merely make very confident, and in the case of *can*, sarcastic suggestions” (Palmer 1990, 72). However, quite contrary to what may be assumed, the status of these two modals, according to Palmer (1990, 72), is not equal. Although both are used to express possibility, the only clearly deontic modal is *may*, whereas *can* is used to express dynamic possibility. Nevertheless, expressing possibility is often implying that the speaker will give his permission (Palmer 1990, 72), hence frequent employment of *can* in permissive contexts.

The modal *must* serves to express deontic necessity, in which, according to Palmer (1990, 73), it is the speaker who is responsible for the imposing of the compulsion. Laying the obligation is closely connected with being in a position of some authority, therefore deontic necessity would be inappropriate in invitations, in which making demands, giving orders, or using one’s authority in any other way should not take place (Palmer 1990, 73). However, since a number of examples encountered by Palmer (1990, 73) do involve deontic *must* used for invitations, the author further explains that being insistent in the situations when the addressee is the beneficiary from the action is indeed polite.

As for dynamic modality, Warner (2009, 15) defines it as the modality which “evaluates the occurrence of events or the existence of states of affairs as necessary, important, advisable, possible, desirable, etc. within a circumstantial frame of reference (commonly not stated)” such as “the abilities or volition of the subject.”

Palmer (1990, 83) distinguishes between neutral dynamic, also called circumstantial, and subject oriented dynamic modality. *Can* used for neutral possibility indicates that an event or situation is possible, hence Palmer (1990, 84) offers to paraphrase dynamic *can* as “It is possible for...” The term *circumstantial possibility* is preferred by Palmer (1990, 84) when the circumstances making an event possible are clearly indicated.

English modal verbs

English modal verbs are generally assigned to the group of auxiliary verbs thanks to some distinctive properties which govern their grammatical behaviour and differentiate them from lexical verbs.

Palmer (1988, 26) makes a distinction between primary and secondary (or modal) auxiliaries on the basis of NICE properties proposed by Huddleston (1976, 333, as cited in Palmer 1988, 14):

- (a) ●ccurrence with a negative particle *not* (-*n't*);
- (b) Inversion with the subject (the order: auxiliary + subject + full verb);
- (c) “Code” (repetition in the “... and so ...” phrases); and
- (d) ●ccurrence in emphatic affirmation.

In the group of modals (secondary auxiliaries), Palmer (1988, 26) lists *will*, *shall*, *can*, *may*, *must*, *ought*, *dare*, and *need*, with the two latter modals also functioning as full verbs.

Similarly, Huddleston and Pullum (2005, 39) adopt the term “modal auxiliaries” and indicate features (two inflectional and one syntactic), exclusive for this subclass of verbs, namely:

- 1) a lack of secondary (a plain, gerund-participle, past-participle) form;
- 2) a lack of distinct 3rd singular agreement form in the present;
- 3) bare infinitival complement.

The set of modal auxiliaries according to Huddleston and Pullum (2005, 37–40) overlaps with Palmer’s list (*can*, *may*, *must*, *will*, *shall*, *ought*, *need*, and *dare*). Likewise, the two latter verbs, *need* and *dare*, together with *do* and *have*, are dually classified as both auxiliary and lexical verbs, depending on their behaviour in given grammatical circumstances.

Leech (2006, 64) offers a slightly modified set of modal auxiliaries and groups them in pairs in reference to their historical present/preterite forms: *will/would*, *can/could*, *may/might*, *shall/should*, and *must*. The basis for the classification of modals is the set of their distinctive properties, which, according to Leech (2006, 64), differentiate the modals from other verbs in that they always act as operators and occupy the first position in a verb phrase. ●ther properties include forming a construction with a bare infinitive, the lack of other morphological forms, such as *-s* forms, *-ing* forms, or *-ed* forms, occurring before the subject in questions and before *not* in negative sentences (Leech 2006, 64).

Terminology and criteria of classification

The criteria of classification of English modal auxiliaries are numerous, depending on the approach adopted by the scholars. The approaches most widely favoured by linguists assume the analysis of the modals in terms of binary features arranged in sets of the opposite pairs, such as epistemic vs. root (following the generative grammar in Chomsky's tradition), epistemic vs. deontic (Lyons 1977; Coates 1983), possibility vs. necessity (Palmer 1990, 2001), speaker-oriented vs. agent-oriented (Bybee et al. 1994), participant-internal vs. participant-external (van der Auwera and Plungian 1998). Other, equally acknowledged, approaches towards the categorisation of modal verbs include: monosemantic (Ehrman 1966; Perkins 1980; Papafragou 2000) and polysemantic (Palmer 2001; Kytö 1987).

An alternative approach is represented by Joos (1964, 149), who provides the classification of modal meanings in terms of relations between the event and the factual world. A set of eight specific relations corresponds to the eight modal verbs (*will, shall, can, may, must, ought to, dare, and need*). Additionally, according to Joos (1964, 149), modal meanings can be divided in respect to the three kinds of differences they exhibit, i.e., casual/stable, adequate/contingent, and assurance/potentiality.

Casual modal verbs include *will, shall, can, and may*. These modals, according to Joos (1964, 150), derive the relation from the "minimal social matrix of events," where the factual world is populated by the items governed by chance and whim. Joos (1964, 150) defines the minimal matrix as the reality which is gradually discovered and mentally absorbed during the lifetime. The individual is fully aware of this comprehension process and, as one grows older, expects some changes to occur in the nearest areas. The near is the minimal and is dependent on the position of the individual. "The minimal social matrix of events always has a centre, and the occupant of the centre determines its extent and boundary" (Joos 1964, 150).

On the other hand, the stable modals, such as *must, ought to, dare, and need*, come from the "maximal social matrix of events" with the determining factors constituting traditional customs and moral attitudes of a community, thus "eternal and omnipresent" (Joos 1964, 150). In this case the individual is unaware of the learning process and the assimilation of the community mores.

Completeness is the characteristics of the factors determining adequate modals, such as *will, can, must, and dare*, whereas deficiency is the feature exhibited by the factors contributing to contingent modal verbs, including *shall, may, ought to, and need*. Both features, completeness and

deficiency, are dependent on the type of the matrix (minimal or maximal), and thus can be of two kinds. Assurance, typical of *will*, *shall*, *must*, and *ought to*, relates to “penalties” resulting from the lack of success in performing an action, whilst potentiality, characteristic of *can*, *may*, *dare*, and *need*, is derived from “immunity” provided the event is successfully brought to completion (Joos 1964, 150). Penalties and immunity also fall into two kinds depending on the type of the modal (casual or stable).

The set of the above mentioned features constitute a survey of the modal system proposed by Joos (1964, 153) and becomes the basis for defining the modal meanings of each of eight verbs:

will: adequate casual assurance
shall: contingent casual assurance
can: adequate casual potentiality
may: contingent casual potentiality
must: adequate stable assurance
ought to: contingent stable assurance
dare: adequate stable potentiality
need: contingent stable potentiality” (Joos 1964, 153).

Bybee et al. (1994, 176–181) propose a classification of modal categories based on the place of accommodation of the enabling conditions (agent or speaker), which leads to the distinction between agent-oriented, speaker-oriented, epistemic, and subordinating modality.

Agent-oriented modality “reports the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate” (Bybee et al. 1994, 177). As they point out, this type of modality entails necessity, obligation, ability, desire, willingness, intention, and root possibility.

As for the speaker-oriented modality, it is the speaker who imposes conditions on the addressee. The subtypes of speaker-oriented modality include directive (a term taken from Lyons 1977), imperative, prohibitive, optative, hortative, admonitive, and permissive (Bybee et al. 1994, 179).

The third type of modality, epistemic, concerns assertions and indicates to what extent the speaker is committed to the truth of the proposition (Bybee et al. 1994, 179). Epistemic modality accommodates the set of three categories: possibility, probability, and inferred certainty. The latter indicates that the belief of the speaker concerning the truth of a sentence is based on some knowledge, experience, or facts which allow the speaker to make assumptions.

A monosemantic approach towards the analysis of modal auxiliaries is adopted by Ehrman (1966), whose primary interest lies in defining the most general modal meanings applicable to the majority of occurrences of modal auxiliaries. The basis of this approach is built upon the assumption that a basic meaning of a modal verb generates its subsidiary meanings called *overtones*. The overtones do not delete the basic meaning from which they are derived, but invoke its different interpretation thanks to the inclusion of a new element.

Palmer (2001, 1), on the other hand, adopts a polysemantic approach, and assumes that “modality is concerned with the status of the proposition that describes the event.” His classification of the main typological categories is based on the distinction between *propositional* and *event* modality.

According to Palmer (2001, 8), propositional modality is concerned with the speaker’s attitude to the factual status of the proposition, whereas event modality applies to merely potential events which have not taken place. The differentiation between these two types of modality gives rise to further divergence of propositional modality into epistemic (expressing the speaker’s judgment) and evidential (indicating the speaker’s evidence) modality.

The epistemic judgment may be of three kinds, depending on the knowledge and the basis of conjecture, namely speculative, deductive, and assumptive. Speculative modality relies merely on the bare assumptions of the speaker, lacking any substantiation and thus characterised by a great deal of uncertainty. Deductive judgment is supported by some kind of evidence, whereas assumptive (or expectational) is based on the past experience of the speaker and may be paraphrased as “it is reasonable to assume that ...” (Palmer 2001, 8).

Evidential modality is concerned with the evidence upon which the speaker bases the judgment. Consequently, it may be further divided into sensory modality, related to the following senses: visual – seeing, non-visual – any other, and auditory – hearing; and reported modality, concerned with the evidence coming not from the speakers themselves. Within reported modality one may distinguish between reported (2) – second-hand evidence, reported (3) – third-hand evidence, and reported (general knowledge) – evidence from folklore (Palmer 2001, 22).

It has been already mentioned that event modality refers only to a potential hypothetical action. Within this type of modality, two sub-types can be further distinguished, namely deontic and dynamic modality. Palmer (2001, 9) differentiates between the two on the basis of

conditioning factors which are either external (deontic modality) or internal (dynamic modality) to the relevant individual.

Deontic modality, according to Palmer (2001, 9–10), may be either permissive, when the speaker grants permission, or obligative, when the speaker lays an obligation on the addressee. In both types of modality, the action or behaviour is imposed by some kind of external force, usually the speaker exhibiting authority over the addressee or the necessity imposed by regulations. As for dynamic modality, it includes abilitive modality, denoting abilities and skills, and volitive, indicating the willingness of the subject.

Although the classification of English modal verbs offered by Palmer (2001) seems very precise and clear-cut, the author admits that sometimes it is very difficult to define accurately the semantic range of the category of modality. “The vagueness and indeterminacy of the semantic system seems to lead to some lack of clear determination in the formal system, and gives the investigator no very clear guidelines concerning where to set the limits” (Palmer 1990, 3).

A prototype approach towards the typology of modality is offered by Salkie (2009). The criteria for typology proposed in his framework comprise a set of features which the author considers central to the modal category. Salkie (2009) does not fully reject the criteria of categorisation adopted by other scholars (van der Auwera and Plungian 1998; Palmer 2001; Verstraete 2001), but argues for the need of extracting and aggregating those criteria which secure a high degree of modality. Consequently, a set of criteria proposed by Salkie (2009, 88) comprises those which are typical for the core members, and excludes those which are found on the periphery of the modal category. In this case, only the following four criteria are relevant:

- A. “They express possibility or necessity.
- B. They are epistemic or deontic.
- C. They are subjective, involving
 - (i) commitment by the speaker,
 - (ii) primary pragmatic processes,
 - (iii) a sharp distinction between the modal expression and the propositional content.
- D. They are located at one of the extremes of a modal scale” (Salkie 2009, 88).

Members of the modal category are checked against these four criteria. The more criteria are met, the higher degree of modality is exhibited by a

given item. On the basis of this prototype approach, Salkie (2009, 100) argues that some auxiliaries, such as *can*, *should*, and *will*, often fail one or more of the criteria and thus display a low degree of modality, whereas other, e.g., *must* and *may*, are either core members meeting all the criteria and thus revealing high degrees of modality in some uses, or peripheral members meeting only some of the criteria in others.

Subjectivity

Utterances may be subjective, marked in terms of the personal preferences, intentions, will, or the knowledge of the speakers, or objective, merely reporting other peoples' beliefs or commands without the personal involvement of the speakers. Theories of semantic change put forward the hypothesis that meanings undergo the process of *subjectification* (a term introduced by Langacker (1985)) and with time tend to acquire more and more subjectivity. *Subjectivity* and *objectivity* are thus two plausible dimensions of a modal interpretation estimating the speaker's commitment in the utterance. The distinction is applicable to both types of modality, epistemic and deontic, although there is some disagreement on the issue among the scholars.

The terminology was first introduced by Lyons, who admits that there is no clear-cut division observable in the common use of language, so the distinction is rather vague and "its epistemological justification is, to say the least, uncertain" (1977, 797). According to Lyons (1995, 330), subjectivity is concerned with the speaker's "expressing either their own beliefs and attitudes or their own will and authority, rather than reporting, as neutral observers, the existence of this or that state of affairs." In spoken everyday language, subjective modality seems to be more common than objective.

The interpretation of epistemic and deontic meanings in terms of the two dimensions, subjective and objective modality, is a key interest of Lyons (1977, 797–809). His research is based on Hare's (1952) tripartite analysis of declarative, jussive, and interrogative sentences (or more precisely utterances), and the terminological differentiation of their components between the *phrastic*, the *tropic*, and the *neustic* ones. Phrastic components constitute the propositional content of sentences, whereas tropic components correspond to "the kind of speech-act that the sentence is characteristically used to perform: it is what Hare calls 'a sign of mood'" (Lyons 1977, 749). As for the neustic elements, they serve to express "the speaker's commitment to the factuality, desirability, etc., of the propositional content conveyed by the phrastic" (Lyons 1977, 750).

Furthermore, certain meanings are assigned to two of these components, namely “I-say-so” is neustic and “it-is-so” is *tr*opic, and the combination of both is a factor constituting their illocutionary force. Within the *tr*opic component, an additional meaning “so-be-it” is extracted exclusively for commands, thus indicating a distinction between categorical assertions (“it-is-so”) and commands (“so-be-it”).

This *tr*ipartite analysis constitutes a basis for Lyons’s assumption that “the main difference between subjectively and objectively modalized utterances is that the latter, but not the former, contain an unqualified, or categorical, I-say-so component” (1977, 799). While performing an act of telling, the speaker commits to the factuality of the information given to the addressee. Subjectively modalized statements, on the other hand, “are statements of opinion, or hearsay, or tentative inference, rather than statements of fact; and they are reported as such” Lyons (1977, 799). Furthermore, the author compares the illocutionary force of subjectively modalized statements to the one of questions, in that both are non-factive.

What may be regarded as a common quality of both subjectively and objectively modalized statements is that “there is an overt indication of the speaker’s unwillingness or inability to endorse, or subscribe to, the factuality of the proposition expressed in his utterance; and both of them may well originate, ontogenetically, in the same psychological state of doubt” (Lyons 1977, 800).

Verstraete (2001) offers a different approach towards the differentiation of modal meanings. In order to define a basic distinction between subjective and objective dimensions of modal auxiliaries, the author applies three criteria—conditionality, interrogation, and tense—to the three categories of modality: epistemic, deontic, and dynamic. The results show that only one type of modality—deontic—reveal both subjective and objective functions. As Verstraete (2001, 1525) claims, some “uses of deontic modality clearly serve to encode the speaker’s commitment to the necessity / permissibility of an action (...). In addition to these subjective uses, there is also an objective category of deontic modality, which merely predicates the existence of some necessity without actually committing the speaker to it.” As for the epistemic modality, the author rejects Lyons’ (1977) assumption about the duality of its function, and holds that epistemic modals are always subjective, and never objective. What is more, Verstraete’s (2001) conclusions regarding dynamic modality support the traditional assumption about this type of modality being always objective.

Palmer (2001, 75) considers subjectivity in terms of deontic modal verbs which either assign responsibility to the speaker (*must*, *should*) or

leave the speaker independent of the obligation imposed on the addressee (*have to, be supposed to*). As an example, Palmer (2001, 75) contrasts the sentences:

- a. “You *must* come and see me tomorrow.
- b. You *have to* come and see me tomorrow.
- c. You *should* go to London tomorrow.
- d. You *are supposed to* go to London tomorrow” (Palmer 2001, 75).

According to Palmer (2001, 75), the most plausible analysis of sentence a. is in terms of an invitation or even persistence on the part of the speaker, whereas in sentence b. the speaker is an independent passive reporter of the obligation imposed by a third part. Similarly, the use of the modal *should* in sentence c. implies that the charge flows partly or fully from the speaker’s commitment, whilst in sentence d. the obligative force of the utterance, driven by the will and intentions of the speaker, is alleviated by the use of *be supposed to* (Palmer 2001, 75).

Additionally, Palmer talks about certain modal meanings which are always marked in terms of subjectivity, and explains why a subjective modal verb *must* lacks the past tense form: “Inferences and conclusions are essentially subjective and performative. They are actually made by the speaker, at the time of speaking. They cannot be made in the past, although it is perfectly possible to report them in the past with lexical verbs, e.g., *Mary thought that...*, *Mary concluded that...*, etc.” (Palmer 2001, 33). This peculiarity of the modal *must* may be overcome by the use of a non-modal non-subjective *have to* (and its past tense form *had to*), as in: *I found the book at last – in the bookcase – it had to be there* (Palmer 2001, 33).

Traugott (1989, 36) casts doubt on the existence of truly objective modality, especially the epistemic modality, hence she regards subjectivity in terms of gradience and talks of “less” and “more,” or “weakly” and “strongly” subjective modality. The author thus restates Lyons’ (1982, 109, as cited in Traugott 1989, 36) ambiguity of the sentence “You must be very careful” as:

- a. “You are required to be very careful. (deontic, weakly subjective)
- b. I require you to be very careful. (deontic, strongly subjective)
- c. It is obvious from evidence that you are very careful. (epistemic, weakly subjective)
- d. I conclude that you are very careful. (epistemic, strongly subjective)” (Traugott 1989, 36).

The expressions which Traugott (1989, 36) regards as “more subjective” include “I think that” and “I conclude that,” whereas “It is possible that,” “It is to be concluded that,” “It appears that,” and “It is said that” are classified as “less subjective.”

According to Coates (1983, 20), the epistemic category does not exhibit a great deal of indeterminacy as “the overwhelming majority of cases are unambiguously subjective.” Following Coates’s terminology, subjectivity constitutes the core of epistemic modality, whereas objectivity, represented by just few examples, is placed at the periphery. Palmer seems to support this view and states that “epistemic modals are normally subjective, *ie* that the epistemic judgement rests with the speaker” (1990, 50). Similarly, Visser (1978, 1768) points out to the “subjective possibility,” whose reference is “an eventuality, contingency or the admissibility of a supposition” with “an element of uncertainty, and occasionally a slight tinge of permission.”

Evidentiality

Definitions of evidentiality provided by linguists focus mostly on the sources of data supplying evidence on which the speaker’s knowledge is based. According to Aikhenvald (2004, 3), “evidentiality is a linguistic category whose primary meaning is source of information,” including the way in which the information was obtained and regardless the degree of speaker’s certainty towards the truth of the statement. DeLancey (2001, 369) relates evidentiality “to the grammatical marking of the source of evidence for a proposition,” whereas Porter (2009, 263) defines evidentiality as “the speaker’s assessment of her grounds for saying what she does.” For McCready and Ogata (2007, 150), “an evidential expression is one that states that there is some evidence for some information and specifies the evidence type,” whilst for Palmer (2001, 8), evidential modality serves to indicate the evidence the speaker has for the factual status of the proposition.

The sources of information available to the speaker are of various kinds, depending on their origin. Plungian (2001, 351–352) summarises the classification of the sources typically found in literature:

- i. “A direct visual observation.
- ii. A direct non-visual observation.
 - a. the observer’s eyes are not used, a ‘sensoric’ value;
 - b. the observer’s eyes are not needed, ‘unobservable things are described,’ an ‘endophoric’ value.

- iii. Lack of a direct observation but access to other kinds of information.
 - a. a direct observation + interpretation, a ‘inferentive’ or ‘inferential’ value;
 - b. a belief in the probability of a situation, a ‘presumptive’ value;
 - c. reported speech, generalized second-hand information, tradition or common knowledge” (Plungian 2001, 351–352).

Interestingly, Plungian (2001) does not find this classification of evidential values fully satisfactory and offers a classification based on a tripartite distinction between *direct*, *reflected*, and *mediated* knowledge:

- A. “Direct evidence:
 - visual (seeing),
 - sensoric (hearing, smelling, testing, etc.),
 - endophoric (feeling, speaker’s inner state).
- B. Reflected evidence (personal indirect access):
 - synchronous inference (observing some signs of a situation; e.g., *He must be hungry*),
 - retrospective inference (observing some traces of a situation, e.g., *He must have slept there*),
 - reasoning.
- C. Mediated evidence (other people’s statements):
 - quotative (reported speech)” (Plungian 2001, 354).

A particularly interesting discussion centres on the place of evidentiality within a grammatical area and particularly its inclusion into the domain of modality. Dendale and Tasmowski (2001, 341–342) point out to three kinds of relations pursued by the scholars who are engaged in the debate on the issue:

- a. *disjunction* (the notions are distinct and in opposition to each other),
- b. *inclusion* (one notion is included into the semantic scope of the other), and
- c. *overlap* (the notions partly intersect).

Disjunction is the kind of relation in which both notions are regarded as distinct grammatical categories and a relationship between them is

denied (DeLancey 2001; Aikhenvald 2004). This approach is defended by Aikhenvald (2004), who claims that “evidentiality is a category in its own right, and not a subcategory of any modality. (...) That evidentials may have semantic extensions related to probability and speaker’s evaluation of the trustworthiness of information does not make evidentiality a kind of modality” (Aikhenvald 2004, 7–8).

Inclusion places evidentiality within the scope of epistemic modality (Palmer 2001; McCready and Ogata 2007). According to Palmer (2001) and his classification of modality, both epistemic and evidential modality are engrossed by a larger notion of propositional modality.

McCready and Ogata (2007) argue for the analysis of evidentiality as a kind of epistemic modality and derive their argument from the evidential system of Japanese language. According to them, the difference between the “true” modal verbs and evidentials is that the latter, but not the former, indicate the sources of information explicitly, although both are used on the basis of available evidence. “Although speakers do not make epistemic claims (truly) without evidence – an assertion of *might* without any evidence for the claim is a deviant use – what that evidence might be is not indicated in any way by the modal” (McCready and Ogata 2007, 149). Though the authors acknowledge that modality and evidentiality are indeed different in that they do not encode the same things, they also claim that “there is nothing that says that a single form cannot encode both types of meaning” (McCready and Ogata 2007, 151). The authors base their assumption on the proof emanating from Japanese epistemic modal verbs *kamoshirenai* and *daroo*, the counterparts of English *may* and *might*, and the analysis of Japanese inferential evidentials, *mitai*, *yoo-da*, *inf+soo-da*, and *rashii*, which may behave as both modal and evidential verbs.

Another approach towards the relationship between evidentiality and modality is a partial intersection of both, hence “overlapping,” as adopted by van der Auwera and Plungian (1998, 86, as cited in Dendale and Tasmowski 2001, 342). In this type of a relation, the interface between these two notions is “occupied by the evidential value ‘inferential’ (or ‘inferential evidentiality’),” which, according to the authors, is the same as the modal value of epistemic necessity (van der Auwera and Plungian 1998, 86, as cited in Dendale and Tasmowski 2001, 342).

Indeterminacy

Indeterminacy is a notion as closely related to modality as subjectivity or evidentiality, and “an understanding of indeterminacy is crucial to an understanding of modality” (Coates 1983, 11). In her study on modal

auxiliaries, Coates (1983) identifies and discusses in greater detail three types of indeterminacy, namely *ambiguity*, *merger*, and *gradience*.

A token is ambiguous when it may be assigned to either category X or Y, allowing for more than one interpretation of its meaning. This type of indeterminacy, however, is rare and it may be overcome by contextual clues. Contrary to ambiguity, which emerges from either-or relationship, merger is the type of indeterminacy based on a both-and relationship. It also evokes more than one interpretation of the meaning, however, the meanings are mutually compatible, and so closely related that they do not exclude each other (Leech and Coates 1980). In merger thus two parallel meanings exist forming an intersection between the two fuzzy sets. Gradience, on the other hand, emerges when an intermediate token is set on the scale between two extreme categories and can be clearly assigned to neither of these two categories (Bolinger 1961). As a result, the token does not possess enough qualities to be fully a member of either category, however, it resembles both to a certain degree.

Coates argues that dealing with indeterminacy “is not simply a case of adopting or rejecting discrete categorisation, or of preferring a monosemantic or a polysemantic approach” (Coates 1983, 11). She claims that “neither models which assume discrete categories nor those which assume indeterminacy are wholly satisfactory for an analysis of modal meaning” (Coates 1983, 10). For example, her analysis of data indicates that the root-epistemic distinction is a discrete one due to the following features: (i) the existence of ambiguous cases; (ii) the co-occurrence of the two categories, root and epistemic, with distinct syntactic and semantic features; (iii) the possibility of distinct paraphrases. However, according to the author, the indeterminacy is revealed in both epistemic and root modality. Examples assigned to both the root and the epistemic category cover a range of meanings. Additionally, in the epistemic category the continuum extends from the subjective to objective meaning, whereas in the root category the parallel continuum exists from strong to weak meaning (Coates 1983).

Nevertheless, Coates believes that “it is surely not impossible to be precise about indeterminacy” (Coates 1983, 10), and argues for the synthesis of two approaches. She concludes that an adequate complete description of modal meanings must accommodate both categorical and non-categorical approaches. Initially, Coates (1983) tries to tackle the problem of indeterminacy by implementing a gradience model, in which one needs to meet the requirement of quantifying, e.g., defining how far a given token is or is not a member of a category. Such a grade is extremely difficult, if not impossible, to define in case of modal meanings, and

Coates finds this model inadequate to describe her findings (Coates 1983, 10–11). As a result, she resorts to the fuzzy set theory in which the need for quantifying is eliminated.

The fuzzy sets theory was introduced and developed by Lotfi Zadeh in 1965. It is based on mathematical formulations of sets. It found its application in different areas of science, such as logic, engineering, computational intelligence, medicine, finance, and, finally, linguistics. According to Zadeh, the fuzzy set is “a class in which the transition from membership to non-membership is gradual rather than abrupt” (Zadeh 1972, 4). Three basic terms are vital for the understanding of the theory: core, skirt, and periphery. As already mentioned, the fuzzy sets theory excludes the necessity of detailed quantifying. According to Coates (1983, 12), it is possible to define the members of a core and a periphery in terms of opposites. If a member of a core possesses qualities (A, B, C), the member of the periphery then must possess qualities (not A, not B, not C). The core area includes the meanings which are first learned by children and correspond to the cultural stereotype (the meanings which are likely to be indicated by most people randomly stopped in the street and asked to indicate the meaning). Surprisingly, the core area constitutes a relatively small number of tokens in comparison to the skirt and periphery, in which the tokens are most numerous.

Concluding remarks

It has been shown that the concept of modality, and, in particular, linguistic modality, which is the subject of this research, is a complicated category. The definitions, as well as the classifications of modality, are numerous, depending on the approach adopted by an individual scholar. The standard categorization includes two types of modality, epistemic and root modality. There is a considerable consensus among the linguists that epistemic modality is the most discrete and the easiest to define type of modality. On the other hand, root modality is broader and more complicated, and it includes different non-epistemic types, such as deontic, dynamic, dispositional, circumstantial, or boulomaic.

As we have seen, the detailed classification of modal verbs is no less complex. In recent literature, they are regarded either in terms of the binary features (epistemic vs. deontic, possibility vs. necessity, speaker-oriented vs. agent-oriented, participant-internal vs. participant-external), or discussed within the monosemantic and polysemantic perspective. The latter enables a detailed classification of modal verbs with a distinction between propositional and event modality. Propositional modality includes

epistemic (speculative, deductive, and assumptive) and evidential (sensory modality: visual, non-visual, auditory; and reported: second-hand evidence, third-hand evidence, and evidence from folklore). Event modality entails deontic (permissive and obligative), and dynamic (abilitive and volitive).

Moreover, two notions—subjectivity and objectivity—have been discussed as the important properties attributable to both epistemic and deontic modality, and evaluating the speaker's commitment.

Finally, different views on the relationship between evidentiality and modality have been presented in a separate subsection.

It needs to be emphasised that the chapter does not cover all aspects that may relate to the broad notion of modality, nor exhausts the entire, extensive literature devoted to the concept. Nevertheless, the most relevant issues have been selected.

2. HISTORICAL BACKGROUND²

The study of EModE modal verbs could not be carried out in isolation from their historical background. The understanding of their origin and the processes which governed their development at the very early stages are crucial for understanding their position in Early Modern English language. This chapter provides an overview of etymology and evolution of nine English modal verbs which constitute the subject of this research, i.e., *can*, *could*, *may*, *might*, *will*, *would*, *shall*, *should*, and *must*.

In the first section, the evolutionary path of each verb is described in terms of its prototype, the transitions of its meanings from pre-modal to modal, and the processes which triggered its development, from Old to Early Modern English period, with a particular focus on the latter.

The second section of the chapter deals exclusively with different meanings denoted by each modal in Shakespeare's plays, and gives a review of the current knowledge and studies on this topic.

Development of modality

Can

The OE preterite-present verb *cunnan* is considered a prototype of the PDE modal verb *can*. *Oxford English Dictionary* (henceforth *OED*) indicates that the Proto-Germanic senses of *cunnan* include “to know,” “to know how,” and “be mentally or intellectually able,” and *Online Etymology Dictionary* (henceforth *OnEtD*) lists “to have learned” and “to have carnal knowledge.” Mitchell and Robinson (2012, 117) as well as Culpeper (2005, 64) give an example of *cunnan* meaning “know how to” observed

² Aspects of it were earlier discussed in: Skořasińska, Monika. “*Can* in Shakespeare and Marlowe.” *Studia Anglica Posnaniensia* 49, no. 1 (2014): 31–55.
Skořasińska, Monika. “Epistemic modal verbs in Shakespeare and Marlowe.” In *Subjectivity and Epistemicity. Corpus, Discourse, and Literary Approaches to Stance*, edited by Dylan Glynn and Mette Sjölin, 91–105. Lund: Lund University, 2014.

in *Cædmon's Hymn* (1) (emphasis—in italics—mine in this and in the subsequent examples).

(1) Ne *con* ic noht singan

“I do not know how to sing”

(*Cædmon's Hymn* after Mitchell and Robinson 2012, 117; Culpeper 2005, 64)

Traugott (1972, 171) and Facchinetti (1993, 209) point out that *cunnan* is used to translate Latin *scire* meaning “have the intellectual power to” or “to be intellectually able to.” Although Mitchell and Robinson (2012, 117) argue that in the sense of “to be able to” *cunnan* very often comes close to *magan*, Visser (1978, 1734) and Lightfoot (1979, 100) indicate the need for a semantic distinction between OE *cunnan*, denoting mental abilities, and OE *magan* (PDE *may*), meaning “to have the physical capability to,” which at this stage are often contrasted in the same sentence. The Proto-Germanic sense of *cunnan* expressing mental ability constitutes the original meaning which undergoes a series of processes leading to the subjectification of the verb and the emergence of epistemic *can* in EModE period.

According to Goossens (1987 in Harris and Ramat 1987, 121), OE *cunnan* always takes an animate NP subject and typically an NP object. The evolution of the verb involves a gradual transition of its sense from mental ability to general physical capacity. According to Traugott (1972, 171), this process is due to ME *koun* (OE *cunnan*) being used with nonhuman subjects, as in (2):

(2) porveythe therfor that thei mow be squarid there, and sentte hedre,
for here *can* non soche be hadde in this conttre

“see-to-it therefore that they (the joists) may be squared there and sent hither, for here *can* none such be had in this part-of-the-country”

(1445 *The Paston Letters* II.73.27, after Traugott 1972, 171)

Since knowledge is considered to be exclusively a quality of humans, the partial loss of the reference to knowledge and the introduction of the sense “be able to” seems a natural and a logical transition (Denison 1993, 303). Another step in the evolution of the verb is the extension of the sense of ability onto the human subject (Traugott 1972, 171).

By the ME period, “ability” becomes a prevailing meaning of *can*. Visser (1978, 1735) defines the reference of the ME verb as “natural or

acquired capacity or ability” and lists its plausible meanings: “‘to be able to’, ‘to have the power, ability, capacity, fitness or expertness to’, ‘to be in a position to’, ‘to be endowed with a talent for (-ing)’, ‘to be a good hand at’ [...], ‘to have virtue of (-ing), ‘to be efficacious in (-ing), [...].” The transition to a verb denoting ability is a subtle process and the first instances from OE texts are rather tentative (Visser 1978, 1735). In her corpus study of EModE texts, Facchinetti (1993, 213) observes the OE meanings of the verb fading away and increasingly merging into the dynamic capability sense. The vast majority of instances attested by Facchinetti (1993, 213) represent dynamic capability with a person as subject, as in (3).

- (3) And if it be that *you can make any frinds...*
(E1 XX CORP WLUMPT 235 after Facchinetti 1993, 213)

As Blake (2002, 128) explains, the confusion of *can* and *may* is under way by the Elizabethan period, although some attempts are made to assign physical ability to *can* and mental or moral possibility to *may*. Kakietek observed that at this stage both verbs are “employed by Shakespeare interchangeably” (1972, 54). Evolutionary alterations within the senses of *may* are paralleled with the further development of *can* towards general ability. During Early Modern English, the rivalry between *can* and *may* indicating ability is finally resolved with the former winning and overtaking almost completely the sense “be able to” (Traugott 1972, 172). Facchinetti (1993, 212) observes that EModE *can* displays extreme instability in that it is still exhibiting its Old English values, and simultaneously taking on new meanings and properties such as preceding verbs of perception (*see, hear, perceive*, etc.) in idiomatic structures.

- (4) ... any man may with his saluacion come to, *as farre as I can see*,
and is bounden if he see peryll to examine his conscience... .
(E1 XX CORP MORELET 547 after Facchinetti 1993, 212)

What is more, some instances of the original meaning of *can* (“to have knowledge or skill”), although infrequent, are traced back by Abbott (1870, 218) in the study of Shakespearian language. Additionally, as Coates (1983, 93) indicates, the Early Modern English period witnesses the emergence of two new meanings of *can*, i.e., possibility, meaning “external circumstances allow me to do,” and permission, denoting “human authority, rules and regulations allow me to do.” The permissive meaning, according to Traugott (1972, 172), is finally established in the

nineteenth century although Facchinetti's (1993, 215) examples, such as (5), prove that deontic *can*, at least in negative contexts, starts to be used much earlier, in the EModE period, presumably as the negative counterparts of the deontic *may*.

- (5) Whyther I goo, *thyther can ye not come*.
 (E1 XX BIBLE TYNDNEW VIII, 20, after Facchinetti 1993, 212)

Could

According to the *●ED*, the preterite form of *●E cunnan* is *cūþe* ("to have learnt"). The *●nEtD* refers to the same form, which acquired the standard English ending *-d(e)* in the 14th century, and, eventually, the excrescent silent *-l-* in the 15th-16th century to match *would* and *should*.

According to Visser (1978, 1742), in *Old, Middle, and Modern English*, *could* "expresses intellectual, mental and physical power, ability, capacity as well as the absence of prohibitive circumstances, in a period of time that is now viewed as the past." The first instances of the prototypical meaning of the verb are traced back by Visser to the *●E* period, with the earliest example found in the King Alfred the Great's *Preface to Gregory's Pastoral Care* (6):

- (6) feawa wæron behionan Humbre, þe hiora þeninga *cūþen*
understandan.
 "few were behind the Humber who their services *could*
understand."
 (Alfred's *Preface to Gregory's Pastoral Care* 15, after Visser 1978,
 1743)

Andrews's (1993) analysis reveals that all the instances of the past indicative uses of *cunnan* found in *Beowulf* are followed by an infinitive or take a direct object indicating either a person (7), or an abstract entity such as "usage," "purpose," "sorrow," "power," and "fate."

- (7) ne wiston hie Drihten God, ne hie duru heofena Helm herian ne
cūþon, (182)
 "they knew not [the] Lord God, nor, indeed, [the] Heaven's
 Protector knew they [how] to praise ..."
 (*Beowulf* after Andrews 1993)

The ME period introduces two innovations in the use of the modal verb. The first one, as Andrews (1993) claims, regards *couth* indicating past hypothetical meanings, as in (8). The other one, as in (9), concerns the use of the verb in rhetorical questions, where “it is blended with emotions of diffidence, doubt, or uncertainty” (Visser 1978, 1745).

(8) So god as Gawayn gaynly is halden,
 And cortaysyse is closed so clene in hymseluen,
Couth not lyztly haf lenged so long wyth a lady
 Bot he had craued a cosse bi his courtaysye ... (1295)
 “As gallant as Gawain rightly is considered
 If chivalry is contained so completely in himself
 [He] could not easily have lingered so long with a lady
 Unless he had craved a kiss for his courtesy...”
 (*Sir Gawain and the Green Knight* after Andrews 1993)

(9) Who *koude telle*, but he hadde wedded be,
 The joye ... That is betwixe an housbondeand his wyf?
 (Chaucer, *Canterbury Tales*, *Franklin's Tale*, 803, after Visser
 1978, 1745)

In the EModE period, *could* is primarily used in hypothetical contexts, which, as Andrews (1993) claims, refer to “actions or states of being that may or may not take place in the future,” as in (10). As Andrews’s research shows, the use of *could* to indicate ability and past possibility, exemplified by (11), decreases drastically and is residual.

(10) Had I but time as this fell sergeant Death
 Is strict in his arrest, o I *could* tell you (3555–6)
 (W. Shakespeare, *Hamlet*, after Andrews 1993)

(11) but long it *could* not be
 Till that her garments heauy with theyr drinke,
 Puld the poore wretch from her melodious lay
 To muddy death (2956–9)
 (W. Shakespeare, *Hamlet*, after Andrews 1993)

May

The modal verb *may* originated from the OE verb *magan*, denoting physical ability. Its lexical meanings provided by the *onEtD* are limited

only to “be able to,” however, the *●ED* lists many more, including “to be strong,” “to have power or influence,” as well as “prevail,” “support” or “endure,” “avail” (in *●E* medical recipes), “to be able to go” (with a verb of motion), and “to be able to do or be.” As the *●ED* indicates, at this early stage, the central value of the modal is dynamic, indicating power or ability, or objective possibility or opportunity, as in (12). This view is shared by Mitchell and Robinson (2012, 117) as well as Traugott (1972, 72), who point out that “be able to” (13) is the primary meaning of the modal in *●E* although occasionally it may be interpreted as permissive (12). According to Mitchell and Robinson (2012, 117), sometimes it is very difficult to distinguish between different shades of meanings of *magan*, and the accurate interpretation in terms of ability or permission is not possible.

(12) ne miht þu leng tuncscire bewitan
 “you may no longer hold the stewardship.”
 (Luke 16:2 after Mitchell and Robinson 2012, 117)

(13) ælc wiht *mæg* bet wið cyle þonne wið hæte
 “each creature prevails better against cold than against heat.”
 (Or. 24.29 after Traugott 1972, 72)

Visser (1978, 1754) draws the attention to the fact that ability, capacity, capability, and power expressed by *magan* with the infinitive do not depend on outward circumstances or conditions but on inward qualities of an individual. In this sense *may* is synonymous to *can*, and it continues to be used as such until the end of the seventeenth century (Visser 1978, 1754). Similarly, Mitchell and Robinson (2012, 117) claim that in the sense of “be able to” *magan* very often comes close to *cunnan*.

In the later *●E* period, *may* denoting ability occurs next to *may* expressing “objective possibility, opportunity, or absence of prohibitive conditions” (Visser 1978, 1756). Although the *●ED* does not list any epistemic senses of *●E mæg*, Warner (1990, 166) gives some examples, such as (14), arguing that “*mæg* could be used in epistemic contexts, even if this did not form an important part of its meaning and was partly restricted to contexts which neutralized the epistemic-dynamic distinction” (Warner 1990, 166). Facchinetti (1993 as quoted in Gotti 1993, 216) also mentions the epistemic meanings of the verb in *●E*, which, together with the deontic and dynamic senses, cause *may* to overlap with *can* and even oust it in some contexts.

- (14) and hi ða ealle sæton, swa swa *mihte* beon fifþusend wera
 “And they then all sat, so that (there) *might*-have been five thousand (of) men”
 (ÆCHom. i.182.16 Cf. John 6.10: numero quasi quinque millia, after Warner 1990, 166)

From early ME onwards, some instances of *may* referring to future possibility are encountered, as well as some clearer examples of epistemic and deontic (with both general and subjective uses) meanings (Warner 1993, 176). *May* starts to signify permission or sanction, and refer to “what is allowed by authority, law, rule, morality, etc., or a person’s will” (Visser 1978, 1765).

The semantic transition of *may* expressing objective possibility to *may* expressing permission is not hard to account for, because it may be assumed that the idea of absence of prohibitive conditions inherent in an objective possibility automatically developed into the idea of absence of an actual prohibition, and this again into the idea of the existence of permission or sanction. (Visser 1978, 1765)

At this stage, the semantic distinction between *magan* (“to have the physical capability”) and *cunnan* (“to have the mental capability”) is lost and *may* begins to develop a permissive meaning (Lightfoot 1979, 100), which gives rise to the shift of meaning from objective or permissive connotation towards eventuality. “When a person has an opportunity or is free to perform a certain action, there automatically arises an element of uncertainty about the actual performance of the action” (Visser 1978, 1756). Consequently, many instances of *may* + infinitive can be paraphrased as “perhaps will” + infinitive: “‘They may go now’ = ‘they can = are at liberty to go now’ > ‘they perhaps will go now’” (Visser 1978, 1756). According to Visser (1978, 1768), this subjective possibility denoted by *may*, “i.e. an eventuality, contingency or the admissibility of a supposition,” naturally bears a tint of uncertainty, and occasionally permission, and refers either to the future or present, as in (15).

- (15) The stok [of the true cross] that stode within the erthe ... was of cedre ...
 For cedre *may* not in erthe ne in water rote.
 (Mandeville 6, 20, after Visser 1978, 1757)

In the EModE period, *may* demonstrates the increased tendency towards the epistemic sense (Facchinetti 1993 as quoted in Gotti 1993,

217). Warner (1990, 181) argues for the decline of dynamic *may* and the increase of its epistemic and deontic meanings, as well as the loss of the subject-oriented sense “be able” to the modal *can*. Moreover, at this stage, the use of optative *may* expressing “a wish whose realisation depends on conditions beyond the power or control of the speaker” (Visser 1978, 1785) becomes established. It is also common to employ *may* in clauses introduced by *that* or *lest*, and depending on *fear*, *afraid*, *dread*, etc. (Visser 1978, 1784).

Might

The origins of the past tense of *may* are traced back to the OE *mihte* or *meahte* (●nEtD). Throughout the ME period, *might* followed by an infinitive expresses “objective possibility, opportunity, or absence of prohibitive conditions in the past” (Visser 1978, 1758), as in (16).

- (16) She was a ladi of Fraunce,
that *might* spende more thanne fyue hundred pounde bi yeere.
(*Knight de la Tour-Landry* (EETS) 23, after Visser 1978, 1758)

In ME, *might* starts to indicate permission in the past, the first instances of which Visser (1978, 1767) traces back to the fifteenth century:

- (17) Who-so that wolde, frely *myghte* goon into this park.
(c1430 John Lydgate *The Complaint of the Black Knight* VI,
after Visser 1978, 1767)

The EModE period witnesses the introduction of *might* in the structures in which the verb is directly followed by an infinitive or *have* + past participle, and is “used to make a suggestion which amounts to a request, to express a, mostly mild, reproach or protest, or to convey a kind of complaint” (Visser 1978, 1764).

- (18) As for these gentlemen, ... I think they might show a little more respect for their benefactors.
(1748 T. Smollett, *The Adventures of Roderick Random* XLV p.287
after Visser 1978, 1764)

Might of this type may be considered an innovation of EModE, since Visser (1978, 1764) finds merely one example dating back to the ME

period. Similarly to *may*, *might* throughout all periods commonly occurs in clauses which depend on verbs expressing wish, hope, pray, desire, demand, beseech, etc., but is not found earlier than in ME with the verb *fear* and the nouns such as *fear*, *dread*, *afraid*, etc. (Visser 1978, 1783–1784).

Will

●E *willan* is the predecessor of PDE *will*. Mitchell and Robinson (2012: 119) claim that the original function of ●E *willan* is the expression of wish or intention, as in *ic wille sellan* “I wish to give” and *he wolde adraefan anne æþeling* “he wanted to expel a princeling.” Similarly, according to Traugott (1972, 53), at this stage of the development, *will* (*willan*) denotes almost exclusively volition, the intention of the speaker to perform certain action, as in (19). The verb *will* thus serves the function of a main verb in a sentence meaning “want, desire, have a will,” and requires a human subject. Aijmer (1985, 11) defines this ●E sense of the verb as its genuine prototypical semantic meaning from which the modality is later derived.

- (19) Beowulf is min nama. *Wille ic asecgan sunu Healfdene, ...*
 gif he us geunnan wile, þæt we hine ... gretan moton.
 (*Beowulf* after Visser 1978, 1677)
 Beowulf is my name. I wish to speak about my quest, with
 Healfdene's son, ...
 if he will grant now this request in grace and favour at his board.
 (trans. after Peter H. Cole 2001)

When the modal occurs in questions with the second person subject, it indicates a request, mostly courteous, sometimes even with a hint of impatience (Visser 1978, 1679). Additionally, at this stage, *will* is also used “to express habitual action as a consequence of a natural or inborn disposition or propensity,” which may be paraphrased as “have the habit,” “be addicted to,” “be accustomed to” (Visser 1978, 1680). The findings of Visser (1978, 1680–83) prove that ●E *will* of this type occurs with three different kinds of subjects: a human being, an animal, and a thing or an abstract notion.

Due to the extension of the human over the nonhuman animate subject, the verb starts to denote futurity. As Aijmer (1985, 16) claims, at this stage of the development of *will*, the vagueness between “pure” future and volition can be observed, and the differentiation between the two meanings is not always possible. Similarly, Wischer (2008, 140) notices

that “futurity is never completely free of modal meanings. It always implies some kind of epistemic modality in combination with the future reference.” However, Visser (1978, 1698) attempts at drawing line between futuristic and modal *will*, and echoes the ●ED claiming that “purely futuristic *will* is used in the second and third persons to express a contingent event, or a result to be expected, in a supposed case or under particular conditions (●ED) [as in (20)]. These conditions may be expressed by a conditional, temporal, or imperative clause, or may be otherwise implied.”

(20) Myne hole herte *woll to-breke*

But I of him be awreke.

(c 1475 *Siege Troy* (EETS) 205, 1654, after Visser 1978, 1698)

In the ●E period, *will*, when associated with the abstract subject, is used for personification. The further extension of the subject from the first onto the second person enhances the transition of the meaning from futurity to deonticity. On top of that, according to Aijmer (1985, 17), during the final stage of the development, *will* begins to denote a high degree of certainty, and its temporal meaning is lost in order to give way to epistemic meaning.

Traugott (1972, 199) offers a slightly different approach to the semantic development of the verb *will*, emphasizing the emergence and continuity of each meaning rather than the fluent transition of one into another. The (prototypical) function of *will* meaning “want” or “desire” originates in the ●E period and, though with a diminishing frequency, it is continuously used throughout all periods. The modal function denoting volition emerges around 1100 A.D. and has been preserved mainly in negative sentences as refusals. Another use of *will*, as indicated by Traugott (1972, 199), is “promise,” “resolve,” which also originates around the same time but slightly earlier than volitional *will*. The last use to emerge is “prediction,” with its beginnings dated at around 1160 A.D.. Wischer (2008, 125–143) focuses on the development of the verb in terms of the interrelation of modality and futurity. The author argues for the development of *will* from volition to hypothesis/habit to prediction.

As Wischer (2008, 140) further explains, the meanings expressed by the verb at the intermediate stage (hypothesis/possibility or habit) may be also interpreted in terms of a prediction of future events as they reach beyond the moment of speech. The results of the analysis carried out by Wischer (2008) show that this semantic change of the verb starts in the third-person subject contexts and spreads onto the first- and second-person contexts.

According to Traugott (1972, 114–117), during the EModE period, *will* is interchangeable with *shall* in order to indicate prediction and promise. The preference of one verb rather than the other is dominantly conditioned by the subject of a sentence. *Will*, thus, is mainly used to indicate promise for the first person singular. Traugott (1972, 117) points out that “even though *shall* and *will* could sometimes be interchanged, it is quite clear (...) that a conscious distinction was usually made between *shall* and *will* in predictions and promises,” as in (21)–(22):

- (21) Nay, it *will* (predictive) please him well, Kate;
 it *shall* (promissory) please him, Kate.
 (W. Shakespeare, *Henry V*, V.ii.262, after Traugott 1972, 117)
- (22) Sic. It is a mind / That *shall* remain a poison where it is, / Not
 poison any further.
 Cor. *Shall* remain! / ... mark you / His absolute “*shall*”?
 (W. Shakespeare, *Cor.* III.i.85, after Traugott 1972, 117)

Would

The prototype of PDE *would* is the OE preterite form *wolde*, which at this stage “is used almost exclusively to signal volition of the subject in the past, just as *wylle* was used to express volition in the present” (Bybee 1995, 505).

- (23) *wolde self cyning* symbol picgan.
 The king himself wished to join in the banquet.
 (*Beowulf* 1010, after Bybee 1995, 505)

As Bybee (1995, 505) claims, by the ME period, *wolde*, especially with first and second person subject, starts to denote present context, as shown in (24).

- (24) I *wolde* yowre wylnyng worche at my myȝt
 ‘I am willing to do your desire as far as I can...’
 (*Sir Gawain and the Green Knight* 1546 after Bybee 1995, 505)

Bybee (1995, 505–508) accounts for this extension of the context by pointing out to the unique property of modal verbs and the fact that they fail to imply the completion of the action or event denoted by the infinitive

which follows the modal. Consequently, the possibility rises that the past state is prolonged into the present.

As stative verbs, the past forms of modals assert that a state existed before the moment of speech, but they do not say whether that state still exists in the present or not. Thus past modals offer two areas of vagueness: (i) whether or not the predicate event was completed; and (ii) whether or not the modality remains in effect. A modal in past time, then, leaves open the possibility that some conditions on the completion of the main event were not met, and therefore the modality may still be in effect. (Bybee 1995, 506)

Moreover, the employment of the past tense modal verb in a conditional sentence evokes a hypothetical interpretation of the sentence. According to Bybee (1995), the reason for this lies in the conditional relation which has existed in the past, but the failure to meet the condition promotes the suggestion that it may never be met. Bybee claims that in the ME text *Sir Gawain and the Green Knight*, the semantic content of hypothetical *wolde* is basically the same as the one of *wyl*, namely the conditions are explicit, whereas with the present uses of *wolde*, they are only implied. In addition, some examples, such as (25), provided by Bybee (1995, 509–512) indicate that hypothetical *wolde* may retain some of its lexical meaning, that is hypothetical willingness.

- (25) And I *wolde* loke on that lede, if God me let *wolde*.
 ‘And I want to see that knight, if God would let me.’
 (*Sir Gawain and the Green Knight* 1063 after Bybee 1995, 509)

In the EModE period, the uses of *would* in present and hypothetical contexts increase, while the past use of the verb diminishes to nearly total exclusion (Bybee 1995, 511). The research conducted by Bybee (1995, 512) reveals that at this stage *would* in present contexts is volitional, denoting the willingness of the subject, and mostly include the first person singular subject, as in (26). Similarly, *would* occurring in if-clauses tends to maintain its volitional meaning.

- (26) If every ducat in six thousand ducats
 Were in six parts, and every part a ducat,
 I *would* not draw them, I *would* have my bond.
 (W. Sh., *The Merchant of Venice* after Bybee 1995, 512)

When occurring with the third person subject, *would* is deprived of the volitional content and conveys a purely conditional sense (Bybee 1995, 512), as in (27). This use, however, does not seem an innovation of the EModE period as Bybee (1995, 512) traces an example of conditional *would* back to Middle English period (28).

(27) Believe me sir, had I such venture forth,
 The better part of my affections *would*
 Be with my hopes abroad.
 (W. Sh., *The Merchant of Venice* after Bybee 1995, 512)

(28) Bot who-so knew the costes that knit ar therrine,
 He *wolde* hit prayse at more prys, paraurenture; (1849-50)
 ‘But whoever knew the qualities that are knit into it,
 He would value it more highly, perhaps.’
 (*Sir Gawain and the Green Knight* after Bybee 1995, 512)

Shall

The primary function of OE pre-modal *sculan*, the antecedent of the PDE modal verb *shall*, is to express obligation or necessity (Mitchell and Robinson 2012, 118; Culpeper 2005, 62). Hence, according to Mitchell and Robinson (2012, 118), it should be paraphrased as “must.” Other possible translations of *sculan* include “to have an obligation” or “to be bound to.” Similarly, Amovick (1999, 61) points out that OE *sculan* followed by the infinitive conveys “a sense of the subject’s obligation toward the future.”

The original meaning of ‘he sceal[...] may have been something like ‘he has done something (probably committed an offence or a crime) in consequence of which he now (OE) ‘is scyldig’ (...). The meaning of ‘beon scyldig’ developed to ‘agan to gielðanne,’ ‘to be liable for a debt,’ ‘to be bound by an obligation,’ so that *sceal* was often collocated with a complement expressing the character or amount of the debt (...) (Visser 1978, 1581).

According to Mitchell and Robinson (2012, 119), OE *sculan* can also refer to what is customary, as in (29):

(29) And ealle þa hwile þe þæt lic bið inne, þær sceal beon gedrync
 and plega
 “And all the time the body is within, there shall be drinking and
 playing”
 (Mitchell and Robinson 2012, 119)

As Goossens (in Harris and Ramat 1987, 127) notices, given that at this stage the verb is almost always combined with the infinitive phrase, it is justified to believe that *sculan* is no longer a full verb in the OE period. According to Visser (1978, 1581), it is the infinitive that carries the information what the subject of a sentence is obliged to do. “He sceal” is thus synonymous to ModE phrases expressing obligation: “he must,” “he has to,” and “he ought to.” Visser (1978, 1582) explains that at the early stage of the development of the modal the obligation is imposed by gods or God making the events “predestined or providentially decreed.” Later, the concept of divine interference diminishes and is gradually replaced by the impact of fate, general necessity, or the events happening “independently of anybody’s will” (Visser 1978, 1582). Other overtones of OE *sceal* indicated by Visser (1978) include:

- “what is right or becoming” (Visser 1978, 1586) = ‘ought to’, succeeded by *should* in ME, (30);
- “what is appointed or settled to take place” (Visser 1978, 1587) = ModE ‘am to’, ‘is to’ + infinitive, (31);
- “what the speaker feels is bound to happen in the natural course of events, especially as subjects to the inexorable moral law of the universe; it is used for prophetic or oracular announcements of the future and for solemn assertions of the certainty of a future event” (Visser 1978, 1590).

(30) Swa *sceal* geong guma gode *gewyrcean*...

(*Beowulf* 20, after Visser 1978, 1586)

‘So becomes it a youth to quit him well’

(trans. by Francis B. Gummere, Harvard Classics, 1910)

(31) *lecturus sum cras ic sceal raedan to merigen*

‘I shall read tomorrow’

(Ælfric, Grammar XXIV, 136, after Visser 1978, 1587)

According to Goossens (as quoted in Harris and Ramat 1987, 127), in the OE period the verb *sceal/scealt* is somewhere in the middle of its way towards the grammaticalization, exhibiting in a majority of instances a mixture of necessity and futurity meaning. Visser (1978, 1582) explains that OE *sceal* followed by an infinitive has a time-less meaning “I am indebted to,” “I have to,” “I owe,” and he further comments on the development of the future meaning, as follows:

Since, however, present obligation or volition automatically implies future action, there was in the majority of cases in which *sceal* (*shall*) was

collocated with an infinitive a notion of futurity in the collocation as a whole. (...) A similar development may be seen in the combination of *will* with an infinitive, in which combination *will* originally expressed nothing but a present determination to perform the action denoted by the infinitive, but in which subsequently, in many contexts, the notion of futurity gradually displaced, partly or wholly, that of determination. (Visser 1978, 1582)

During the ME period *shall* starts to denote “mere or pure futurity [in which] the idea of volition is absent” (Visser 1978, 1592). The rivalry with the verb *will* is “at its keenest in the seventeenth century,” and leads to a decline of futuristic *shall* in the ModE period. Two meanings of *shall* have been used simultaneously from the earliest times, namely non-emphatic predictive (32) and non-emphatic promissory “*I shall*” (Visser 1978, 1603).

(32) Ye *shull* se me ... in so many gises
That *I will not be knowe* of no man.
(c1450 Merlin 377, after Visser 1978, 1604)

As Visser (1978, 1604) notices, “since neither of the two types [(‘I promise you) *I shall help* you’ and (‘I promise you) *I will help*] have shown a tendency to give way to the other, it must be inferred that there was a difference in meaning,” however, too subtle to define it adequately. For more detailed discussion on the rivalry between *shall* and *will*, see Visser (1978, 1603–1606).

Should

Should is originally a descendant of OE *sceolde*, a past form of *sceal* (OE *ED*). In the OE period, *sceolde* signals “destiny, duty or obligation of the subject in the past, corresponding to *sceal*, which has the same meaning in the present” (Bybee 1995, 504). Visser (1978) mentions the following meanings of OE *should*:

- “a former obligation or necessity” (Visser 1978, 1632) = “was bound to;” “had to;”
- “what was formerly intended or settled to take place” (Visser 1978, 1633) = “was to;” “was about to;”
- “what habitually happened in the past” (Visser 1978, 1635) = “usually had to;” “usually was to;”

- “moral or social obligation, duty or propriety, are common in all periods” (Visser 1978, 1636).

The evolution of the modal verb *should* is similar to the one of *would* in that it undergoes the extension of its context onto the hypothetical use. Bybee (1995, 509) explains that what triggers this development is the lack of clear indication as for the completion of the action.

Schulde refers to what was to be and carries the same vagueness of implication as the other modalities: the action may or may not have been completed; the modality may or may not still be in effect. In Middle English we find many uses of *schulde* to refer to what was to take place, without any implication that it did take place [...]. As with *wolde*, all the conditions necessary for the completion of the main predicate may not be met, so the use of *schulde* is appropriate in a hypothetical conditional. (Bybee 1995, 509)

In her study, Bybee (1995) comes across a number of examples, such as (33), which show that at this stage the modality implied by *schulde* may continue from the past into the present.

- (33) At þis tyme twelmonyth þou toke þat þe falled,
 And I *schulde* at þis Nwe ȝere ȝeþly þe quyte. (2243–4)
 “At this time a year ago you took what fell your lot,
 And I am/was obliged at this New Year to promptly repay you.”
 (*Sir Gawain and the Green Knight* after Bybee 1995, 510)

During the ME period, the original lexical meaning of *should* denoting obligation or destiny weakens considerably in hypothetical contexts (Bybee 1995, 510). The verb itself does not indicate a past sense unless it is supported by auxiliary *have*. Some examples of *should* expressing epistemic of necessity and coming from the end of this period are found by Visser (1978, 1636).

- (34) *it shold be* often in your Remembraunce to defende you from
 falling to sinne.
 (c1479 Earl Rivers, *The Cordyal* (ed. Mulders) 102, 27,
 after Visser 1978, 1638)

In the EModE period, *should* is increasingly common in present and hypothetical contexts. The former use includes the first person singular question and the second person singular statement of obligation (Bybee

1995, 510). According to Bybee (1995, 511), an innovation at this stage is “the occurrence of *should* in complement clauses where no past time is signalled or implied,” as in (35).

- (35) You teach me how a beggar *should* be answer'd.
(W. Sh., *The Merchant of Venice* IV.1.436 after Bybee 1995, 512)

A purely conditional or hypothetical sense is conveyed by *should* in conditional sentences, frequently in the first person and *if*-clauses, and rarely in the second or third person *then*-clauses (Bybee 1995, 512–513). The evolution of *should* results in the verb expressing weak obligation, a meaning that is close to its present counterpart *shall*.

Must

The ancestor of ModE *must* is *mōste* “to be allowed to,” the preterite of *mōtan* (Mitchell and Robinson 2012, 118). According to Mitchell and Robinson (2012, 118), the prevailing sense of OE *mōtan* is “to be allowed to,” “may.” Sometimes, however, “it may be a very formal and ceremonious extension of the permissive use, perhaps with ironical overtones: ‘The Danes bid me say that they are graciously pleased to allow you to send tribute in exchange for protection’” (Mitchell and Robinson 2012, 118) (Me sendon to þe sæmen snelle, heton ðe secgan þæt þu most sendan raðe beagas wið gebeorge (Battle of Maldon, ll. 30–32).

During the first stage of its development, *must* undergoes the process of progressive strengthening of the meaning from weak permission to strong obligation. As Traugott and Dasher point out, the meaning of OE *motan* is “have come to be able” and its “meanings were inherited from Gothic and Early Germanic **mot-* ‘ability, measure, have room for’” (Traugott and Dasher 2002, 122).

In terms of ability, one may observe two different participant-oriented domains, namely the participant-internal and the participant-external ability. In view of Traugott and Dasher (2002, 122), the former is rather rare, and it is the participant-external ability where the more common examples are found. The participant-internal ability is the original and primary meaning of the verb, which had arisen before the participant-external meaning of permission emerged. The latter one had developed by Early Germanic and, as Traugott and Dasher (2002, 122) further explain, was the result of “a generalization of meaning” and “the invited inference that what is internally unrestricted may have been so by some external force or regulation, whether divine or social.”

According to Visser (1978), from c1275 the verb *mote* used in permissive meaning appears in “syntactical units expressing a wish, which often take the form of asseverative exclamations of the type ‘So mote I (he, she, we, you, etc) + infinitive’.” Visser traces back the relations of the verb to Gothic *gamot*, and the examination of a considerable number of instances has allowed him to observe that “in some contexts *mote* is equivalent to “is allowed,” “is permitted,” and that in other contexts this idea of permissibility is tinged with an idea of objective possibility” (1978, 1791–1793). Visser’s research reveals the plausible “shades of meaning” denoted by OE *motan*, and follows the direction of development of OE meanings of the verb as suggested by Standop (1957, 67–93, after Visser 1978, 1793): “Fate has allotted to me to do this” > “Fate has granted me the freedom to do this” > “Fate has granted me the opportunity to do this” (bordering on *magan* = *can*) > “Fate has given me the power, faculty, ability, to do this.”

Traugott and Dasher (2002) consider this period the first stage of the historical development of modal meanings of *must*, during which the preterite-present verb *mote* is used mainly in reference to ability and permission. Although in the OE and ME periods the permissive meaning is still much more frequent than ability, its appearance starts to be limited mostly to the formulae for blessings, prayers, curses, and oaths. From the second half of the thirteenth century this meaning is becoming more and more restrained, to be at last fully succeeded by *may* (OE *magan* “have the physical ability”) during the later OE and the beginning of the ME period (Traugott and Dasher 2002; Visser 1978).

Warner (1993, 174) points out that throughout the OE and ME periods *motan* is found in both epistemic and deontic contexts, with the latter ones, including subjective deontic, becoming more numerous in early ME. Later, in late ME, the verb *motan* is gradually pushed out of the common usage by the verb *must* (Warner 1993, 174). As Visser (1978, 1797) admits, this acquisition of the sense “is obliged” has not yet been fully explained by scholars. The OED suggests that this meaning may have originated in the negative contexts where “may not” and “must not” are nearly coincident. Visser (1978, 1797) seems to support Standop’s (1957) hypothesis that the two meanings of *mote*, “is obliged” and “is allowed,” arose from the originally underlying sense: “I have got it ‘meted out’ (measured) to me by Fate.”

It is in fact not unreasonable to suppose that the ‘meting out’ of a favour, a grant, an opportunity, a possibility to perform an act, came under certain conditions to be apprehended as the imposing of a kind of task. This

development of the idea of obligation might then have been furthered by the [...] use in negative contexts. (Visser 1978, 1797)

Visser suggests that since *mote* is not the only OE auxiliary denoting obligation (*sculan* being the other one), it may be restricted to the obligation not imposed by another person. As he further indicates, *mote* “is remarkably often accompanied by the adverb *nedes*, *needs*, *nede*, *nedely*” (Visser 1978, 1797).

- (36) The consequence is open ...
 that *nedes* goode folk *moten be* myghty and shrews feble.
 (c1380 Chaucer, Boece 4 pr. 2, 135, after Visser 1978, 1798)

According to Warner (1990, 181), modals reveal a general tendency “to lose past-referring uses of their preterite forms, so that the tense relationship becomes more opaque.” As a result, the rule of the preterite form *must* used to refer to the present is standardised. The prevailing senses of EModE *must* include epistemic and subjective deontic (Kakietek 1972, 63–66). The beginnings of the former ones are traced back by Warner (1990, 180) to the late ME period.

Synthesis of modal verbs in Shakespeare in other studies

Can

According to Ehrman (1966, 78–79) the basic meaning of the modal *can*, “nothing in surrounding circumstances prevents the predication,” is well established by Shakespeare’s time, and it constitutes nearly half of all the instances of the verb encountered by her. This type of *can* expresses possibility (37) which results from “gaps in the subject’s ignorance” (Ehrman 1966, 79). Similarly, Visser defines this type of *can* (38) as indicating “possibility: the person or thing denoted by the subject is viewed as being permitted or enabled by the conditions of the case to perform the action denoted by the infinitive” (Visser 1978, 1739).

- (37) Hee hath Ribbons of all the colours i'th Rainebow;
 Points, more then all the Lawyers in Bohemia, *can* learnedly
 handle,
 though they come to him by th'grosse:
 (W. Sh., *Winter's Tale*, IV iv 230 as quoted in Ehrman 1966, 79)

- (38) I prithee, gentle sir,
 if that love or gold *Can* in this desert place buy entertainment.
 Bring us where we may rest ourselves and feed.
 (W. Sh., *As You Like It*, IV. 69. as quoted in Visser 1978, 1739)

Although Visser uses the term “permitted,” Ehrman’s analysis reveals no clear instances of permissive *can*. The overtones of the modal include “know (how to)” and “internal.” The former one is the original meaning of the verb with reference to knowing a fact or how to act, and constitutes only about a quarter of all the instances of *can* in Ehrman’s (1966) research. Similarly, Abbott (1870, 218) notices that this original meaning of *can*, “to have knowledge or skill,” is very rare in Shakespeare. Blake (2002, 129) identifies such instances (39)–(40) as lexical verbs and paraphrases the meaning in (39) as “they know how to ride well,” whereas Abbott as “they are well skilled.”

- (39) I’ve seen myself and served against the French,
 And they *can* well on horseback.
 (W. Sh., *Hamlet*, IV. 7. 85. as quoted in Abbott 1870, 218; Blake 2002, 129)
- (40) the strongest suggestion, Our worser Genius *can*,
 “the most seductive temptation our basest nature knows”
 (W. Sh., *The Tempest*, 4.1.26–7 as quoted in Blake 2002, 129)

Kakietek (1972, 54) specifies *can* in terms of the set of the following features, which it shares with the modal verb *may*: intentional, potential, non-external, non-conditional, and non-past. According to Kakietek, the primary sense of *can* observed in Shakespeare states that nothing prevents the subject from performing the action indicated by the main verb, and the “ability” of the subject to act is directly related to the subject’s inherent capacities (41)–(42).

- (41) I *can* call Spirits from the vastie Deepe.
 (W.Sh., *Henry the Fourth, Part One*, III.1.50 as quoted in Kakietek 1972, 54)
- (42) ...beside she hath prosperous Art
 When she will play with reason, and discourse,
 And well she *can* perswade.
 (W.Sh., *Measure for Measure*, I.2.189 as quoted in Kakietek 1972, 54)

Ehrman defines the “internal” overtone of *can* as “absence of deficiency in the subject,” and assumes that a very high distribution of “internal” *can* in Shakespeare’s language may be the result of transition from the old to the new meaning (Ehrman 1966, 79). Although she observes that the verb occurs with either personal, personalised, or non-personal subjects (43)–(44), Kakietek (1972, 54), recognizes “relatively few” instances of the verb with impersonal subjects.

(43) My ears are stopt, & *cannot* hear good news,
So much of bad already hath possess them.
(W. Sh., *Two Gentlemen of Verona*, III i 206 as quoted in Ehrman 1966, 79)

(44) And (which is more then all these boasts *can* be)
I am belou’d of beauteous Hermia.
(W. Sh., *Midsummer’s Night’s Dream*, I i 112 as quoted in Ehrman 1966, 79)

Another overtone of the verb indicated by Ehrman is “occurrential” *can* with merely two instances (45)–(46) identified in Shakespeare’s plays:

(45) How happy some, ore othersome *can* be?
(W. Sh., *Midsummer’s Night’s Dream*, I i 240 as quoted in Ehrman 1966, 80)

(46) But by bad courses may be vnderstood,
That their euent *can* neuer fall out good.
(W. Sh., *Richard II*, II i 220 as quoted in Ehrman 1966, 80)

In some cases, Shakespeare does not seem to use the modal *can* to denote ability, but to refer to the emotional state of the speaker. *Can* is frequently incorporated in rhetorical questions (47) in order to express wonder, astonishment, vexation, or even intense perplexity or bewilderment (Visser 1978, 1736–1737).

(47) Alas! my lord. How *can* she be with him?
(W. Sh., *Cymbeline*, III, v, 89, as quoted in Visser 1978, 1737)

Similarly, the collocations of *can* (48) with verbs of perception (*hear*, *see*) do not indicate capability, ability, or power, but, as Palmer (1965, 9 as cited in Visser 1978, 1737) explains, rather the actual fact of sensation

(hearing, feeling, etc.) being perceived by the speaker. Kakietek also observes that the sentences containing the modal followed by a verb of sensation always imply “that the action is in progress at the time of speaking” (1972, 57), as in (49). According to Kakietek, this is due to the fact that such sentences as (50) do not include time indicators, e.g. time adverbials.

(48) list if thou *can* heare the tread of Trauellers.

(W. Sh., *Henry the Fourth, Part One*, II, ii, 35, as quoted in Visser 1978, 1738)

(49) Harke, *canst* thou heare me?

(W.Sh., *othello*, V.2.249 as quoted in Kakietek 1972, 57)

(50) I *cannot* now speak: I will hear you soon.

(W.Sh., *Henry the Fourth, Part Two*, V.5.93 as quoted in Kakietek 1972, 57)

According to Visser (1978, 1741), the negative *cannot* is mostly the expression of prohibition (51). Ehrman (1966, 80), on the other hand, claims that “in all cases the meaning of negated *can* is ‘something prevents the predication’” (52).

(51) I may neither choose whom I would nor refuse whom I dislike;
so is the will of a living daughter curbed by the will of a dead
father.

Is it not hard, Nerissa, that I *cannot* chose one, nor refuse none?

(W. Sh., *The Merchant of Venice*, I, ii, 22, as quoted in Visser 1978, 1741)

(52) And built so sheluing, that one *cannot* climbe it

Without apparant hazard of his life.

(W. Sh., *Two Gentlemen of Verona*, III i 115 as quoted in Ehrman 1966, 80)

Although Ehrman (1966, 80) does not identify any examples of permissive *can* in her study, Kakietek observes at least two cases of the verb used in the permissive sense. In (53), he notices the meaning of *can* coming close to that of *should* or *must* and paraphrases it as “We *should* (must) *not* weigh our brother with our selfe.”

- (53) We *cannot* weigh our brother with our selfe,
 Great men may iest with Saints; 'tis wit in them,
 But in the lesse fowle prophanation.
 (W.Sh., *Measure for Measure*, II.2.126 as quoted in Kakietek
 1972, 58)

According to some authors (Blake 2002, 128; Kakietek 1972, 54), in Elizabethan period the meanings of *can* and *may* are often confused and used interchangeably without any considerable shift of meaning. However, not all meanings of the verbs overlap. According to Ehrman (1966, 80), the absence of permissive *can* from the material means that the meanings of *can* and *may* are more distinct in Shakespeare's language than in PDE.

Could

Visser considers *could* a preterite form of *can* expressing "intellectual, mental and physical power, ability, capacity as well as the absence of prohibitive circumstances, in a period of time that is now viewed as the past" (1978, 1742) (54).

- (54) there was never yet philosopher
 That *could* endure the toothache patiently
 (W. Sh., *Much Ado about Nothing*, V, i, 35, as quoted in Visser
 1978, 1743)

Ehrman (1966, 80) points out that in Shakespeare's language *could* indicates remoteness either in time or from immediately perceptible reality, hence hypothetical *could*. According to Ehrman (1966, 80), almost all overtones of *could*, as well as its basic meaning, appear with reference to both, past time and hypothesis. The exception is occurrential *could*, which is attested as hypothetical only. Visser (1978, 1746) encounters hypothetical *could* frequently, though not exclusively, in the apodosis of hypothetical utterances which incorporate either expressed or implied conditional clauses. Similarly to *can*, the modal is found in collocations with sensual and private verbs (Visser 1978, 1743), for instance with *feel* (55).

- (55) Spake he so doubtfully, thou *couldst* not feel his meaning?
 -Nay, he struck so plainly, I *could* too well feel his blows.
 (W. Sh., *The Comedy of Errors*, II, i, 50, as quoted in Visser 1978,
 1743; Kakietek 1972, 60)

Kakietek shows (55) that in Shakespeare's plays, unlike in PDE, *could* is sometimes deprived of its habitual aspect, and is used to refer to a single particular action instead of a repeated or continuous action in the past. Blake (2002, 129) in turn emphasises the overlap of *could* and *might* in terms of expressing "a hypothetical ability or permission, especially in connection with conditional clauses," as in (56).

(56) The hand *could* plucke her back, that shou'd her on.

"could have restrained her"

(W. Sh., *Antony and Cleopatra*, 1.2.120, as quoted in Blake 2002, 129)

May

According to Visser, *may* in Shakespeare still frequently denotes its oldest function of *magan* expressing "ability, capacity, capability and power not depending on outward circumstances or conditions" (Visser 1978, 1754), e.g. (57)–(58), and is employed interchangeably with *can*.

(57) Construe my speeches better, if you *may*.

(W. Sh., *Love's Labour's Lost*, V, ii, 342, as quoted in Visser 1978, 1756)

(58) I never *may* believe

These antique fables, nor these fairy toys.

(W. Sh., *A Midsummer Night's Dream*, V, i, 2, as quoted in Visser 1978, 1756)

The overlap of *may* and *can* is also observed by Kakietek (1972, 46) in (59) and 0. The most general meaning of *may* assumed by Kakietek is "there is nothing in the way of the subject to perform the action implied by the main verb." A considerable number (nearly one third) of the instances of *may* are associated with the following features: intentional, potential, non-external, non-conditional, and non-past.

(59) we haue lost our labour, they are gone a contrarie way harke, you *may* know by their Trumpets.

(W. Sh., *All's Well That Ends Well*, III.5.9, as quoted in Kakietek 1972, 45)

- (60) The exhalations, whizzing in the syre, Giue so much
light, that I *may* reade by them
(W.Sh., *Julius Caesar*, II.1.48, as quoted in Kakietek 1972, 45)

It is best to represent the meaning of Shakespearian *may* on a two-dimensional continuum with extremes being represented by “the basic meaning of *can* and by an occurrential statement something like ‘the non-occurrence of the predication is not guaranteed’” (Ehrman 1966, 81). The meaning which consists of both dimensions in almost equal proportion is called by her a “balanced meaning.” Furthermore, Ehrman’s research reveals the most common overtones of the verb including circumstantial, occurrential, and balanced *may*.

Abbott admits that the unambiguous identification of the meaning of *may* is very often difficult since it may refer either to “lawfulness” or “possibility.” This is caused by the changes within the modal *can*, which overtakes the meaning “to be able” and thus forces *may* to drift away from “ability” to “lawfulness” or “possibility” (Abbott 1870, 219).

Kakietek also investigates some cases where more than one meaning of *may* is equally possible. For example, in (61) the ambiguity derives from the interpretation of the source of the speaker’s ability to perform an action, that is, either from the military or social position occupied by the speaker which entitles him to exercise some power or from the support of his family called by Kakietek (1972, 46) a “family sentiment.”

- (61) Pray lead on, At eury hause Ile call,
(I *may* command at most) get Weapons (hoa)...
(W. Sh., *Othello*, I.1.189, as quoted in Kakietek 1972, 46)

According to Abbott (1870, 219), Shakespeare uses *may* with “various shades of the meaning of ‘permission’ and ‘possibility’.” Visser similarly discusses the type of *may* expressing “objective possibility, opportunity, or absence of prohibitive conditions” (1978, 1756), which is frequently patterned by Shakespeare with “*may* + be + past participle” (62).

- (62) (Tranio:) You will be schoolmaster. And undertake the teaching
of the maid.
(Lucentio:)... *may* it be done?
(W. Sh., *The Taming of the Shrew*, I, i, 192, as quoted in Visser
1978, 1757)

The connotation of permission is sometimes, but not very often, carried by the structures in which *may* is followed by an infinitive (63).

(63) if it sort not well, you *may* conceal her ...

In some reclusive and religious life.

(W. Sh., *Much Ado about Nothing*, IV, i, 242, as quoted in Visser 1978, 1756)

In (64)–(65) *may* indicates “what is allowed by authority, law, rule, morality, etc., or a person’s will” (Visser 1978, 1765).

(64) Navarre hath made a vow,

Till painful study shall out-wear three years,

No woman *may* approach his silent court.

(W. Sh., *Love’s Labour’s Lost*, II, i, 22, as quoted in Visser 1978, 1766)

(65) You *may* not come, fair princess, in my gates.

(W. Sh., *Love’s Labour’s Lost*, II, i, 171, as quoted in Visser 1978, 1766)

Ehrman (1966, 83) offers separate terminology for what is granted directly by oneself (66) and by law or rule (67). The former is termed “personal,” whereas the latter “impersonal” permissive *may*.

(66) I am good Friends with my Father, and *may* do any thing.

(W. Sh., *Henry the Fourth, Part One*, III iii 190, as quoted in Ehrman 1966, 83)

(67) But though thou art adjudged to the death,

And passed sentence *may* not be recal’d

(W. Sh., *Comedy of Errors*, I i 148, as quoted in Ehrman 1966, 83)

Occasionally, Shakespeare employs *may* to denote a wish “whose realisation depends on conditions beyond the power or control of the speaker” (Visser 1978, 1785) (68). Similarly, the optative use of the verb is reported by Abbott (1870, 222), who points out to the modal signifying a wish or preference, as well as (the present subjunctive) purpose.

(68) Long *may* they kiss each other for this cure!

(W. Sh., *Venus and Adonis*, 505, as quoted in Visser 1978, 1786)

The modal *may* is also used to express “a subjective possibility, i.e. an eventuality, contingency, or the admissibility of a supposition. There is as a rule an element of uncertainty, and occasionally a slight tinge of permission” (Visser 1978, 1768). Interestingly, *may* expressing eventuality is employed by Shakespeare not only with reference to the future (69), but also in relation to the present (70)–(71).

(69) let us thither;

this *may* prove food to my displeasure.

(W. Sh., *Much Ado About Nothing*, I, iii, 61, as quoted in Visser 1978, 1769)

(70) Deliver me the key:

Here do I choose, and thrive I as I *may*!

(W. Sh., *The Merchant of Venice*, II, viii, 59, as quoted in Visser 1978, 1770)

(71) I am now in great haste,

as *may* appear unto you.

(W. Sh., *Much Ado About Nothing*, V, iii, 50, as quoted in Visser 1978, 1770)

Other Shakespearian uses of *may* attested by Visser (1978, 1770–1772) include the structures *may well* (sometimes *may safely*) emphasising “the reasonableness of a statement” (72), and *you may as well* followed by an infinitive (73).

(72) once before he won it of me with false dice,

therefore your Grace *may well* say I have lost it.

(W. Sh., *Much Ado About Nothing*, II, i, 275, as quoted in Visser 1978, 1772)

(73) You *may as well* go stand upon the beach,

And bid the main flood bate his usual height;

You may as well use question with the wolf,

Why he hath made the ewe bleat for the lamb.

(W. Sh., *The Merchant of Venice*, IV, i, 71, as quoted in Visser 1978, 1773)

When used with a negative, *may* acquires the meaning of *must* (=must not) (Abbott 1870, 220; Blake 2002, 129; Visser 1978, 1765), as in

(74)–(76). Kakietek (1972, 47) offers the interpretation of such cases as “something prevents the subject from carrying out the action.”

(74) Navarre hath made a vow,
 Till painful study shall out-wear three years,
 No woman *may* approach his silent court.
 (W. Sh., *Love's Labour's Lost*, II, i, 22, as quoted in Visser 1978,
 1766)

(75) You *may not* come, fair princess, in my gates.
 (W. Sh., *Love's Labour's Lost*, II, i, 171, as quoted in Visser 1978,
 1766)

(76) You *may not* passe, you must returne:
 (W. Sh., *The Tragedy of Coriolanus*, 5.2.7., as quoted in Blake
 2002, 129)

Might

According to Kakietek (1972, 52), *might* in Shakespeare's language carries either time reference to the past or conditional interpretation. Abbott (1870, 221) observes in the plays the original sense of *might* (past tense of *may*), namely “was able” or “could.” Similarly, Visser (1978, 1754) relates *might* to the oldest meaning of *magan* (*may*), as in (77) and (78).

(77) Alas! and would you take the letter of her.
Might you not know she would do as she has done?
 (W. Sh., *All's Well That Ends Well*, III, iv, I, as quoted in Visser
 1978, 1756)

(78) which till to-night I ne'er *might* say before
 (W. Sh., *Othello*, II, iii, 227, as quoted in Visser 1978, 1756)

Similarly, Ehrman's (1966) analysis reveals that the past modal *might* displays the same range of meanings as *may*, but almost all the instances attested in Shakespeare are hypothetical (permissive, circumstantial, occurrential, and balanced) and only two have a past-time meaning (permissive-past and circumstantial-past). An example of (past-sequence) permissive *might* is given in (79), (past-time) circumstantial in (80),

(either past-time or hypothetical) occurrential in (81), and (hypothetical) balanced in (82) (1966, 84–85).

(79) Thus did he answer me: yet said heereafter,
I *might* know more.

(W. Sh., *Cymbeline*, IV ii 54, as quoted in Ehrman 1966, 84)

(80) in that days feates,
When he *might* act the Woman in the Scene,
He prou'd best man i'th' field

(W. Sh., *The Tragedy of Coriolanus*, II ii 108, as quoted in Ehrman 1966, 84)

(81) who wrought with them:
And all things else, that *might*

... Say, Thus did Banquo.

(W. Sh., *Macbeth*, III i 82, as quoted in Ehrman 1966, 85)

(82) And speake of halfe a dozen dang'rous words,
How they *might* hurt their enemies, if they durst.

(W. Sh., *Much Ado About Nothing*, V i 109, as quoted in Ehrman 1966, 85)

Visser (1978, 1758) points out that the objective possibility in the past conveyed by the verb is frequently expressed by the structure “*might* + *be* + past participle” or “*might* + infinitive” (83).

(83) I thought to close mine eyes half an hour, When, lo! ...
I *might* behold address The king and his companions:

warily I stole into a neighbour thicket by,
And overheard what you shall overhear.

(W. Sh., *Love's Labour's Lost*, V, ii, 90, as quoted in Visser 1978, 1758)

Might, similarly to *may*, is used to express permission or sanction, but with reference to the past (Visser 1978, 1767; Kakietek 1972, 52), as in (84)–(85), or in conditional clauses (Blake 2002, 129). However, according to Kakietek (1972, 52), “the use of *might* as a past equivalent of the permissive *may*” is very rare, with only two instances found in the plays, (86)–(87).

- (84) importun'd me That his attendants ...
Might bear him company.
 (W. Sh., *The Comedy of Errors*, I, i, 126, as quoted in Visser 1978, 1767)
- (85) So please my lord, I *might* not be admitted.
 (W. Sh., *Twelfth Night*, I, i, 24, as quoted in Visser 1978, 1767)
- (86) I neuer did offend you in my life: neuer lou'd
 Cassio, But with such general warrantie of Heauen
 As I *might* loue, I neuer gaue him Token.
 (W. Sh., *●thello*, V.3.64, as quoted in Kakietek 1972, 52)
- (87) The Moore replies, That he you hurt is of
 great Fame in Cyprus, And great Affinitie:
 and that in wholesome Wisdome He *might* not
 but refuse you.
 (W. Sh., *●thello*, III.1.45, as quoted in Kakietek 1972, 52)

Will

The primary meaning of *will* as a lexical verb is volition or wish (Blake 2002, 122). Although it is used by Shakespeare in affirmative sentences (88), the most striking instances are observed by Blake (2002, 122) in negatives (89). According to Nakayasu (2009, 128), the instances of *will* used as a main verb are very limited. Only ten cases (2.3%) have been observed by Nakayasu (2009, 128) in Shakespeare's plays, with two instances of *will* in a subordinate clause (90).

- (88) Thinke what you *will*:
 (W. Sh., *Richard II*, 2.1.210, as quoted in Blake 2002, 122)
- (89) Soft, soft, *wee'l* no defence,
 (W. Sh., *Cymbeline*, 3.4.79, as quoted in Blake 2002, 122)
- (90) Ant. Now let it work. Mischief, thou art afoot,
 Take thou what course thou *will*!
 (W. Sh., *Julius Caesar*, 3.2.261, as quoted in Nakayasu 2009, 128)

According to Ehrman (1966, 85), the basic meaning of *will* is "the occurrence of the predication is assured." Similarly, Kakietek (1972, 23)

defines the most general meaning of *will* as “the occurrence of the action implied by the main verb is assured,” when the assurance of the speaker is based on the knowledge of the subject. In short, he refers to the meaning as “prediction,” but with no reference to what is generally understood by “futurity.”

Ehrman (1966) observes that the primary meaning of *will* has two overtones, the sequential and the volitional one. In the case of the sequential *will*, the guaranteeing factor is “logical necessity, or laws of cause-and-effect,” whereas in the volitional *will* the guarantee is given by “the subject’s willingness, intention, or desire” (Ehrman 1966, 85). Visser specifies that the latter indicates “voluntary action, or conscious intention directed towards the doing of what is denoted by the principal verb” (1978, 1679) with no reference to the future, as in (91).

- (91) If... you *will* returne and soioume with my sister...,
 come then to me.
 (W. Sh., *King Lear*, II, iv, 207, as quoted in Visser 1978, 1680)

Some instances of *will* represent what Visser (1978, 1680) calls “a weaker form of *will* expressing volition.” This type of *will* denotes habitual behaviour which is performed due to a natural or innate inclination or propensity, and lacks the idea of intention. The meaning may be paraphrased as “have the habit,” “be addicted to,” or “accustomed to,” with the subject denoting (in Shakespeare) either a human being (92) or a thing, namely sea (93). In the case of the latter, assigning personal features to an inanimate object serves as a rhetorical figure. Visser presents no Shakespearian instances of this meaning of *will* with the subject denoting an animal.

- (92) Very good orators, when they are out, they *will* spit.
 (W. Sh., *As You Like It*, IV, i, 68, as quoted in Visser 1978, 1681)

- (93) The sea *will* ebbe and flow.
 (W. Sh., *Love’s Labour’s Lost*, IV, iii, 216, as quoted in Visser 1978, 1683)

Other usage of *will* attested in Shakespeare by Visser (1978, 1683–1700) include:

- potentiality, capacity, sufficiency (Visser 1978, 1684), (94)–(96);
- (94) an ell and three quarters,
will not measure her from hip to hip.
 (W. Sh., *Comedy of Errors*, III, ii, 116, as quoted in Visser 1978, 1684)
- (95) But all in vaine, good Queene, it *will* not bee.
 (W. Sh., *Venus and Adonis*, 607, as quoted in Visser 1978, 1684)
- (96) If it *will* not be, I'll leave you.
 (W. Sh., *Much Ado About Nothing*, II, i, 200, as quoted in Visser 1978, 1684)
- strong determination, insistence, persistence (Visser 1978, 1684–5), (97)–(98);
- (97) Wo shall hinder me? I *will* despair,
 and be at enmity With cozening hope.
 (W. Sh., *Richard II*, II, ii, 67, as quoted in Visser 1978, 1684)
- (98) what he hath taken away from thy father perforce,
 I will render thee again in affection:
 by mine honour, I *will*.
 (W. Sh., *As You Like It*, I, ii, 19, as quoted in Visser 1978, 1685)
- volition emphasized by the addition of the adverb *needs* (in order to prevent confusion with purely futuric *will*) (Visser 1978, 1685), (99)–(100);
- (99) My Lord Protector *needs will* have it so.
 (W. Sh., *Richard III*, III, i, 141, as quoted in Visser 1978, 1685)
- (100) her moode *will needes* be pittied
 (W. Sh., *Hamlet*, IV, v, 3, as quoted in Visser 1978, 1685)
- ironical or critical remark in response to another's opinion (Visser 1978, 1686), (101);
- (101) This is a Riddling Merchant for the nonce,
 He *will* be here, and yet he is not here.
 (W. Sh., *Henry the Sixth, Part One*, II, ii, 58, as quoted in Visser 1978, 1686)

- immediate intention (with the first person singular subject “I *will*” = “I am now going to,” “I proceed at once to” (Visser 1978, 1691), (102);
- (102) Sit, sir, I *will* recount it to you.
(W. Sh., *Pericles, Prince of Tyre*, V, i, 63, as quoted in Visser 1978, 1691)
- a decision uttered in response to an invitation directed at one or more people to share an action (=let us) (Visser 1978, 1691), (103);
- (103) Peace: *we’ll* heare him.
(W. Sh., *The Two Gentlemen of Verona*, IV, i, 9, as quoted in Visser 1978, 1691)
- a voluntary act or choice in a supposed case, or a conditional promise or undertaking (Visser 1978, 1699), (104)–(105);
- (104) *He* see thee hang’d on Sunday first.
Hark, Petruccio; she says she’ll see thee hang’d first.
(W. Sh., *The Taming of the Shrew*, II, i, 301, as quoted in Visser 1978, 1699)
- (105) He hath neither Latine, French nor Italian,
and you *will* come into the Court & swear
that I haue a poore pennie-worth in the English.
(W. Sh., *The Merchant of Venice*, I, xii, 75, as quoted in Visser 1978, 1699)
- a supposition, a deduction, or an inference with the notion of futurity obscured or lost (Visser 1978, 1701), (106)–(107);
- (106) [Music playing]: [Julia:] That *will* be music. Hark! hark!
(W. Sh., *The Two Gentlemen of Verona*, IV, ii, 36, as quoted in Visser 1978, 1701)
- (107) I was once of Clements Ime;
where (I thinke) they will talke of mad Shallow yet.
(W. Sh., *Henry the Fourth, Part Two*, III, ii, 16, as quoted in Visser 1978, 1701)

Some occurrences of time-neutral basic meanings have also been attested in Shakespeare's language. They characterise the subject of the verb, and thus are called by Ehrman (1966, 36) "descriptive." The basic meaning of *will* as well as its all overtones appear with reference to both neutral and future time. Abbott (1870, 226–227) argues that Shakespeare sometimes uses *will* with the first person to convey a meaning of purpose, and with the second person to denote an imperative, an ironical imperative, or simply irony.

Visser (1978, 1679) highlights that when *will* meaning "be willing or disposed" is used in interrogative sentences (108) or after expressions like *desire, beg, etc.*, (109), then the modal denotes a courteous request.

(108) *Will you shogge off?*

(W. Sh., *Henry the Fifth*, II, i, 47, as quoted in Visser 1978, 1679)

(109) On my knees I begge,

That *you'll* vouchsafe me Rayment, Bed, and Food.

(W. Sh., *King Lear*, II, iv, 157, as quoted in Visser 1978, 1679)

Will

Would, being the preterite of *will*, denotes the same meanings as the latter, namely wish and volition, but with reference to the past or something hypothetical (Kakietek 1972, 34; Blake 2002, 123). Ehrman (1966, 88) observes that *would* represents all meanings and overtones of the modal verb *will* in hypothetical, time-neutral instances, as well as prediction, volition, and characterization in past-time examples with both time functions. Similarly, Visser (1978, 1705) refers to *would* as the past equivalent of *will*, meaning "wished to," "intended to" (110).

(110) She that *would* be your wife, now ran from you.

(W. Sh., *Comedy of Errors*, IV, iv, 152, as quoted in Visser 1978, 1706)

The modal *would* can be also used in "weakened sense, when it is nearly *did*," as in (111).

(111) I mine own gain'd knowledge should profane,

If I *would* time expend with such a snipe.

(W. Sh., *Othello*, I, iii, 390, as quoted in Visser 1978, 1709)

A striking fact about *would* in Shakespeare's corpus is high distribution of volitional instances with both time-neutral (112) and time-future (113) reference.

(112) Our feares in Banquo sticke deepe,
 And in his Royaltie of Nature reignes that
 Which *would* be fear'd.
 (W. Sh., *Macbeth*, III i 48, as quoted in Ehrman 1966, 89)

(113) Say to the King, I *would* attend his leysure,
 For a few words.
 (W. Sh., *Macbeth*, III ii 3, as quoted in Ehrman 1966, 89)

Abbott (1870, 232–233) points out that Shakespeare often uses *would* to mean “liked,” “was accustomed,” as well as “pretended,” or “wished to prove.” Nakayasu (2009, 167) observes four cases of *would* denoting repeated actions in the past, e.g. (114). An example of the verb expressing a habitual action is given also by Blake (2002, 123–4) (115).

(114) Cleo. (...) Broad-fronted Caesar,
 When thou wast here above the ground, I was
 A morsel for a monarch; and great Pompey
Would stand and make his eyes grow in my brow;
 There *would* he anchor his aspect, and die
 With looking on his life.
 (W. Sh., *Antony and Cleopatra*, 1.5.32, 33, as quoted in Nakayasu 2009, 167)

(115) why she *would* hang on him,
 As if encrease of Appetite had growne
 (W. Sh., *Hamlet*, 1.2.143–4, as quoted in Blake 2002, 124)

Would denoting “desire” is infrequent with a noun as its object (116), and when “a wish” is applied to inanimate objects, it becomes “a requirement,” as in (117).

(116) If, duke of Burgundy, you *would* the peace.
 (W. Sh., *Henry the Fifth*, v. 2. 68., as quoted in Abbott 1870, 233)

(117) And so he goes to heaven,
 And so am I revenged. That *would* be scann'd.
 (W. Sh., *Hamlet*, iii. 3. 75., as quoted in Abbott 1870, 232)

Shall

Shall originally denoted obligation or necessity. Although in Shakespeare's plays Blake (2002, 125) does not encounter any instances of *shall* as a main verb, Nakayasu (2009, 72) observes some cases although in a very limited number (6 instances, equal to 1.7%). All such examples are found in main clauses implying a direction of movement, as in (118).

- (118) Caes. Caesar *shall* forth; the things that threaten'd me
 Ne'er look'd but on my back; when they shall see
 The face of Caesar, they are vanished.
 (W. Sh., *Julius Caesar*, 2.2.10, as quoted in Nakayasu 2009, 72)

Blake (2002, 125) points out that *shall* partially overlaps with *will*, especially in the cases when the sense of obligation is weak and the verb indicates "little more than futurity" (119). Kakietek (1972, 36) also observes some instances of *shall* where it occurs as a realization of the interpretation expressed by *will* in other parts of the text (120).

- (119) whose Fortunes shall rise higher Caesars or mine?
 (W. Sh., *Antony and Cleopatra*, 2.3.15, as quoted in Blake 2002, 125)

- (120) I *shall* neuer moue thee in French,
 vnless it be to laugh at me.
 (W. Sh., *Henry the Fifth*, V.2.201, as quoted in Kakietek 1972, 36)

According to Abbott (1870, 223), *shall* is used by Shakespeare with all three persons to signify destiny, inevitable futurity, without any reference to *will* meaning desire. This view seems to be supported by Ehrman (1966, 90) according to whom the modal refers almost exclusively to future. Visser also mentions the absence of volition in purely futuric instances of *shall* (121). Interestingly, such cases, when used in negative or interrogative (122) sentences, often have the meaning "will be able" (1978, 1593).

- (121) This jest *shall* cost me some expense.
 (W. Sh., *The Comedy of Errors*, III, i, 123, as quoted in Visser 1978, 1593)

- (122) How with this rage *shall* beauty hold a plea?
 (W. Sh., *Sonnets*, lxxv, as quoted in Visser 1978, 1593)

The most common meaning of *shall* is its basic meaning, i.e. a prediction supported by the speaker's knowledge or authority (a compulsive meaning). Another main meaning of the modal in Shakespeare's language is a straight prediction displaying only one overtone, namely predictive-sequential (Ehrman 1966, 90). Abbott (1870, 224) claims that the modal conveys a meaning with or without the notion of necessity. An example of *shall* denoting a necessary condition is given in (123). Here *shall* indicates an action which must be performed before the event expressed in the *ere*-clause is to happen. The modal indicates also what is appointed or settled, in other words, what "is to" take place (Visser 1978, 1587).

- (123) You *shall seek* all day ere you finde them
 (W. Sh., *The Merchant of Venice*, I, i, II6, as quoted in Visser 1978, 1587)

A weakened sense of obligation is inferred from examples (124) and (125). This sense of obligation may be transferred onto the future to refer to what is inevitable. *Shall* then is used for prophetic announcements made by the speaker who believes in the natural course of events which are bound to happen. Moreover, it is also used to refer to hypothetical experience or situation.

- (124) *Your Grace shall understand*
 (W. Sh., *The Merchant of Venice*, IV, i, I49, as quoted in Visser 1978, 1589)

- (125) Your Grace *shall* pardon me
 (W. Sh., *King John*, V, ii, 78 in Visser 1978, 1589)

Other meanings of *shall* attested by Visser (1978) include the meaning of *ought to* signifying what is right or becoming. In addition, Abbott (1870, 224) notices that *shall* is also "often used in the replies of inferiors to superiors" (126), whereas Blake (2002, 125) observes some cases in which *shall* implies repeated action, particularly under pressure of circumstances, as in (127).

- (126) King Henry. Collect them all together at my tent :
 I'll be before thee.
 Erpingham. I *shall* do't, my lord.
 (W. Sh., *Henry the Fifth*, iv. 1. 305., as quoted in Abbott 1870, 224)

- (127) Men shall deale vnaduisedly sometimes,
Which after-houres giues leisure to repent.
(W. Sh., *Richard the Third*, 4.3., as quoted in Blake 2002, 125)

Should

According to Nakayasu (2009, 102), in Shakespeare's times the modal verb *should* is highly grammaticalised. Merely two instances of *should* used as a main verb (1.4%) have been observed in Shakespeare's plays, e.g. in (128).

- (128) Bru. Alas, good Cassius, do not think of him.
If he love Caesar, all that he can do
Is to himself - take thought and die for Caesar;
And that were much he *should*, for he is given
To sports, to wildness, and much company.
(W. Sh., *Julius Caesar*, 2.1.188, as quoted in Nakayasu 2009, 102)

According to Ehrman, *should* conveys the same meanings and overtones as *shall*, but they "are simply past-marked, either for unreality or for past time" (1966, 93). Abbott (1870, 229) also encounters the instances where *should* is simply the past tense of *shall*, meaning "is to." Consequently, the verb occurs in direct questions to refer to the past, where *shall* is used to indicate the future. Similarly, the occurrence of the verb in a subordinate sentence is conditioned by the preceding tense. After a simple past tense, *should* occurs in a subordinate clause, whereas *shall* is used "after a simple present, a complete present, or a future" (Abbott 1870, 230). What is more, Shakespeare commonly uses *should* where *ought* is used in PDE.

According to Blake (2002, 126), in the main clause *should* is the expression of duty or obligation in hypothetical situations (129) and in a passive form (130), whereas in subordinate clause it implies a weaker than *shall* sense of obligation.

- (129) A Friend *should* beare his Friends infirmities;
(W. Sh., *Julius Caesar*, 2.2.10, as quoted in Blake 2002, 126)
- (130) We *should* be woo'd, and were not made to wooe.
(W. Sh., *A Midsummer Night's Dream*, 2.1.242, as quoted in Blake 2002, 126)

Visser (1978, 1632) provides some instances in which *should* signifies a former obligation or necessity meaning “was bound to,” “had to” (131), or a former intention or plan meaning “was to,” “was about to” (132)–(133).

(131) Thou knew'st too well My heart was to thy rudder tied by the strings,
And thou *should*'sttow me after.
(W. Sh., *Antony and Cleopatra*, III, ii, 58, as quoted in Visser 1978, 1633)

(132) When the priest *should* ask, if Katharine *should* be his wife,
'Ay, by gogs-wouns!' quoth he.
(W. Sh., *The Taming of the Shrew*, III, ii, 158, as quoted in Visser 1978, 1634)

(133) This day my sister *should* the cloister enter,
And there receive her approbation.
(W. Sh., *Measure for Measure*, I, ii, 180, as quoted in Visser 1978, 1634)

Habitual *should* “referring to what habitually happened in the past” (Visser 1978, 1635) is also employed by Shakespeare to denote “usually had to” or “usually was to” (134).

(134) Pity was all the fault that was in me;
For I *should* melt at an offenders tears.
(W. Sh., *Henry the Sixth, Part Two*, III, i, 125, as quoted in Visser 1978, 1636)

Other meanings and usage of *should* attested by Visser (1978, 1636–1663) in Shakespeare's language include:

1. a blend of probability and doubt (Visser 1978, 1636) (135)–0;

(135) As I remember, this *should* be the house
(W. Sh., *Romeo and Juliet*, V, i, 55, as quoted in Visser 1978, 1636)

- (136) If my sight fail not,
 You *should* be lord ambassador from the emperor...
 and your name Capucius
 (W. Sh., *Henry the Eighth*, IV, ii, 109, as quoted in Visser 1978, 1636)
2. necessity, justice, propriety, reasonableness, fitness, usualness, but also wonder, surprise, joy, vexation, sorrow, etc. (in units dependent on the formula *it is* + *adjective* or *noun*) (Visser 1978, 1648) (137);
- (137) 'Tis necessary he *should* die.
 (W. Sh., *Timon of Athens*, III, v, 2, as quoted in Visser 1978, 1648)
3. possibility, probability, expectation (in units dependent on a formula with *it*) (Visser 1978, 1649) (138);
- (138) Is it possible he *should* know what he is?
 (W. Sh., *All's Well That Ends Well*, IV, i, 45, as quoted in Visser 1978, 1649)
4. (co-occurring with the expressions of) joy, sorrow, surprise, shame, wonder, approval, disapproval, complaint, disbelief, hope, fear and kindred ideas ("emotional *should*") (Visser 1978, 1650) (139); Also, Blake (2002, 127) emphasizes the emotional force of *should* as a timeless modal verb. In this sense, the verb has potential to express the speaker's negative attitude and frequently follows verbs denoting displeasure, anger, grief or sorrow, as well as surprise and amazement;
- (139) 'tis a passing shame
 That I, unworthy body as I am,
Should censure thus on lovely gentlemen.
 (W. Sh., *The Two Gentlemen of Verona*, I, ii, 15, as quoted in Visser 1978, 1650)
5. (co-occurring with the expressions of) wishing, desiring, commanding, insisting, praying, asking, suggesting, forbidding, etc. (Visser 1978, 1656) (140);
- (140) my neece is desirous you *should* enter.
 (W. Sh., *Twelfth Night*, III, i, 83, as quoted in Visser 1978, 1656)

6. (as a marker of) something which is considered as unbelievable and preposterous, as false and untrue, or a rumour (Visser 1978, 1661) (141);

(141) thou must know the king is full of grief.

So 'tis said, sir, about his son,
that *should* have married a shepherd's daughter.

(W. Sh., *The Winter's Tale*, IV, iii, 774, as quoted in Visser 1978, 1661)

7. (as a marker of) the purposed or wished-for quality of the person or thing (Visser 1978, 1663) (142);

(142) An he had been a dog that *should* have howled thus,
they would have hanged him.

(W. Sh., *Much Ado about Nothing*, II, iii, 81, as quoted in Visser 1978, 1663)

“*Shall* meaning ‘to owe’ is connected with ‘ought’, ‘must’, ‘it is destined’” (Abbott 1870, 223). As Abbott points out, in Shakespeare’s language the modal is used “with all three persons to denote inevitable futurity without reference to ‘will’ (desire)” (1870, 223).

Must

The main meaning of *must* “is that the predication is required by some aspect or aspects of surrounding circumstance” (Ehrman 1966, 94). The examples include necessity (143), legislation (144), exigencies of individual circumstances 0, laws of “nature” (146), logic (147), or individual make-up (148).

(143) Therefore it *must* with circumstance be spoken

By one, whom she esteemeth as his friend.

(W. Sh., *The Two Gentlemen of Verona*, III ii 37, as quoted in Ehrman 1966, 95)

(144) But Valentine, if he be tane, *must* die.

(W. Sh., *The Two Gentlemen of Verona*, III i 233, as quoted in Ehrman 1966, 95)

- (145) Goe not my Horse the better,
 I *must* become a borrower of the Night,
 For a darke houre, or twaine.
 (W. Sh., *Macbeth*, III i 25, as quoted in Ehrman 1966, 95)
- (146) But small to greater matters *must* giue way.
 (W. Sh., *Antony and Cleopatra*, II ii 14, as quoted in Ehrman 1966, 95)
- (147) if thou neuer saw'st good maners,
 then thy marners *must* be wicked,
 and wickednes is sin, and sinne is danmation:
 (W. Sh., *As You Like It*, III ii 39, as quoted in Ehrman 1966, 95)
- (148) He cannot flatter he,
 an honest mind and plaine, he *must* speake truth,
 and they will take it so, if not, hee's plaine.
 (W. Sh., *King Lear*, II ii 99, as quoted in Ehrman 1966, 95)

For Blake (2002, 130), *must* carries a sense of obligation or necessity (149). Visser (1978, 1801) also acknowledges *must* signifying necessity (150)–(151), and any kind of obligation, synonymous with “had to,” “was obliged to,” or “should or would be obliged to,” or “would of necessity.”

- (149) That may be, *must* be Loue, on Thursday next.
 (W. Sh., *Romeo and Juliet*, 4.1.20, as quoted in Blake 2002, 130)
- (150) there was good sport at his making,
 and the horson *must* be acknowledged.
 (W. Sh., *King Lear*, I, i, 24, as quoted in Visser 1978, 1802)
- (151) Nor did you think it folly
 To keep your great pretences veil'd till when
 They needs *must* show themselves.
 (W. Sh., *Coriolanus*, I, ii, 19, as quoted in Visser 1978, 1802)

The compulsion expressed by *must* comes from various external forces, such as legal prescriptions, regulations, circumstances, etc., or (by) the will of a person (Visser 1978, 1805). Also, *must* very often implies that a particular course of action is proper, fitted, or expected, and in this case is approximately synonymous with *ought to*, as in (152). According to

Kakietek (1972, 65), such cases imply suggestions and the subject perceives the action as necessary under the relevant circumstances (153).

(152) What though you have no beauty-
 ... *Must* you be therefore proud and pitiless?
 (W. Sh., *As You Like It*, III, v, 37, as quoted in Visser 1978, 1806)

(153) I *must* leaue them, and seek some better seruice
 their Villainy goes against my weake stomackie,
 and therefore I must cast it vp.
 (W. Sh., *Henry the Fifth*, III.2.51, as quoted in Kakietek 1972, 65)

Only one overtone of *must* is encountered by Ehrman (1966, 94) in Shakespeare's language, that is "the very high probability of the truth of the predication," also called "logical *must*." Visser (1978, 1810) defines it as "inferred or presumed probability that borders on certainty." Abbott (1870, 222–223) also points out that *must* is sometimes employed by Shakespeare to indicate definite futurity, meaning "is to" or "is, or was, destined," without the notion of obligation. *Must* lacking the compulsive overtone is also employed in satirical or indignant comments which are uttered in reaction to some foolish or annoying action (Visser 1978, 1807), as in (154).

(154) Can you not hate me, as I know you do, But you *must* join in
 souls to mock me too?
 (W. Sh., *Midsummer's Night's Dream*, III, ii, 149, as quoted in
 Visser 1978, 1807)

Some other instances include the emphatic *must* expressing "a firm resolve on the part of the person, or personified thing" (Visser 1978, 1808) and the meaning "cannot omit," "nothing can prevent oneself," "is irresistibly or absolutely compelled to." Example (155) illustrates present context, whereas ● – past context.

(155) Is there no milking-time ..., or kiln-hole,
 to whistle off these secrets,
 but you *must* be tittle-tattling before all our guests?
 (W. Sh., *The Winter's Tale*, IV, iii, 244, as quoted in Visser 1978,
 1808)

(156) Those palates who, not yet two summers younger,
must have inventions to delight the taste,
would now be glad of bread.

(W. Sh., *Pericles, Prince of Tyre*, I, iv, 39, as quoted in Visser
1978, 1808)

To sum up, in Chapter 3, a historical background of modal verbs in English language has been presented. In the first section of the chapter, the origin and development of English modals, from Old to Early Modern English period, have been discussed. It has been shown that the modals took their origins from ordinary non-modal verbs (pre-modals), and subsequently underwent a number of processes which led to the development of their unique characteristics and their final accomplishment of modal status by the end of the Early Modern English period. The second section of the chapter was based on the contribution of other researchers, and provided a review of modal verbs and their meanings in Shakespeare's plays, as evidenced in other studies on the topic.

3. MARLOWE³

Can

Frequency distribution of can

The frequency distribution of the modal verb *can* in the plays of Christopher Marlowe is represented in Table 2. The normalised frequency of the verb fluctuates from 14.45 RF in *Tamburlaine the Great 1* to 28.09 RF in *Doctor Faustus*. The range of the distribution thus is considerably high and equals 13.64 RF.

³ Aspects of it were earlier discussed in:

Skorasińska, Monika. “Deontic modality indicated by *shall* in the works of Christopher Marlowe.” In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka*, edited by Ewa Komorowska, Katarzyna Kondzioła-Pich, and Ewa Panter, 227–234. Szczecin: Vohunina.pl, 2010.

Skorasińska, Monika. “Emotional implications of *should* in Shakespeare and Marlowe.” In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka III*, edited by Ewa Komorowska, Katarzyna Kondzioła-Pich, and Anna Chrymowicz, 339–346. Szczecin: Zapol, 2012.

Skorasińska, Monika. “Emotional colouring by means of selected modal verbs in the plays of William Shakespeare and Christopher Marlowe.” In *Świat Słowian w Języku i Kulturze XIV. Wybrane zagadnienia z języków słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 273–280. Szczecin: Vohunina.pl, 2013.

Skorasińska, Monika. “*Can* in Shakespeare and Marlowe.” *Studia Anglica Posnaniensia* 49, no. 1 (2014): 31–55.

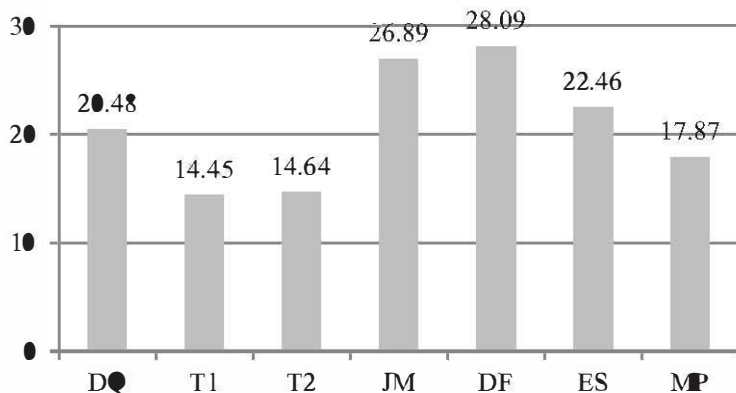
Skorasińska, Monika. “Epistemic modal verbs in Shakespeare and Marlowe.” In *Subjectivity and Epistemicity. Corpus, Discourse, and Literary Approaches to Stance*, edited by Dylan Glynn and Mette Sjölin, 91–105. Lund: Lund University, 2014.

Skorasińska, Monika. “Speech acts performed by means of modal verbs in the plays of Shakespeare and Marlowe.” In *Świat Słowian w Języku i Kulturze XV. Wybrane zagadnienia z języków, literatur i kultur słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 229–238. Szczecin: Vohunina.pl, 2016.

Table 2. Distribution of *can* in the plays of Marlowe.

Title	Words	<i>Can</i> – F	<i>Can</i> – RF
DQ	14,642	30	20.48
T1	18,676	27	14.45
T2	19,116	28	14.64
JM	20,447	55	26.89
DF	12,815	36	28.09
ES	18,249	41	22.46
MP	11,186	20	17.87
Total	115,131	237	20.58

The histogram in Fig. 1 (all values in this and in the subsequent histograms are given in RF) shows that the lowest frequency is found within the two parts of *Tamburlaine the Great* (dated c. 1586/1587), whereas the highest in the two tragedies *The Jew of Malta* and *Doctor Faustus*, from c. 1589. The intermediate group of three tragedies with the relative frequency distribution between 17.87 RF and 22.46 RF include *Dido, Queen of Carthage* (from c.1585/1586), *Edward the Second* (from c. 1592), and *The Massacre at Paris* (also from c. 1592).

Fig. 1. Distribution of *can* in the plays of Marlowe.

Forms and spelling variants

Two different forms of the modal verb *can* have been observed in the tragedies under study, namely *can* and *canst*. The most frequent form found in the database is *can* (11.55 RF), which co-occurs with all personal pronouns. Another numerous form is *canst* (2.69 RF), typically found with EModE personal pronoun *thou*.

Table 3. Distribution of different forms of *can* in the plays of Marlowe.

Title	<i>can</i>	<i>canst</i>	<i>cannot</i>	<i>can not</i>	<i>can't</i>
DQ	18	3	9	0	0
T1	20	1	5	1	0
T2	13	2	12	1	0
JM	30	8	16	0	1
DF	22	6	7	1	0
ES	23	4	14	0	0
MP	7	1	12	0	0
Total F	133	31	75	3	1
Total RF	11.55	2.69	6.51	0.26	0.08

As Table 3 shows, three different variants of the negative verb have been observed, namely: *cannot*, *can not*, and *can't*. The most frequent is *cannot* (6.51 RF). The two other forms, *can not* (0.26 RF) and *can't* (0.08 RF), are very scarce and only traces of them have been detected in the corpus.

Dynamic possibility

Dynamic possibility incorporates two types which are relatively common in the database, namely subject oriented and neutral. The close analysis of *can* in Marlowe's tragedies, however, has revealed the necessity to discriminate one more type, vaguely mentioned by Palmer (1990: 105) but remarkably frequent in the database under study, namely rational possibility. Interestingly, the most numerous *can* denoting dynamic possibility is found in *The Jew of Malta* and *Doctor Faustus*, where it constitutes 100% of its occurrence.

Table 4. Distribution of *can* representing dynamic possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	28	27	26	55	36	39	19	230
RF	19.12	14.45	13.60	26.89	28.09	21.37	16.98	19.97

Ability

In Marlowe, the subject oriented *can* reflects the abilitive function of the verb and may refer either to an animate subject which possesses certain skills or abilities to perform an action, or an inanimate subject which is endowed with special power to act.

Abilitive *can* displays a relative frequency of 3.47 RF in the corpus. As Table 5 indicates, the majority of Marlowe's works reveal a relatively low distribution of ability ranging between 0.89 RF and 4.18 RF. Surprisingly, one play, *Doctor Faustus*, manifests a dramatically higher frequency equal to 13.26RF.

Table 5. Distribution of *can* indicating ability in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	7	8	5	17	5	1	40
RF	1.36	3.74	4.18	2.44	13.26	2.73	0.89	3.47

- (157) The spirits tell me they *can* drie the sea,
 And fetch the treasure of all forraine wrackes (...),
 (C. M., DF, 1)

Power

Power is the feature assigned exclusively to either inanimate objects, such as *stonie walles* (158), or abstract entities like *sickness* or *death* (159).

- (158) What Mortimer? *can* ragged stonie walles
 Immure thy vertue that aspires to heaven?
 (C. M., ES, 3.1.)
- (159) Something Techelles, but I know not what,
 But foorth ye vassals, what so ere it be,
 Sicknes or death *can* never conquer me.
 (C. M., T2, 5.1.)

As Table 6 shows, *can* denoting power of inanimate entities reveals an unsteady distribution between the plays and a fluctuating tendency with a range equal to 2.61.

Table 6. Distribution of *can* indicating power in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	3	5	2	2	2	0	15
RF	0.68	1.60	2.61	0.97	1.56	1.09	0	1.30

Rational can

Rational possibility indicates the rejection of certain facts, events or ideas by the speaker based on the assumption that they are irrational, prejudiced, or harmful, and thus unacceptable.

Table 7. Distribution of *can* indicating rational possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	8	7	6	12	4	15	4	56
RF	5.46	3.74	3.13	5.86	3.12	8.21	3.57	4.86

(160) But leauing off this, let me haue a wife, the fairest maid in
Germany,
for I am wanton and lasciuious, and *can not* liue without a wife.
(C. M., DF, 5)

(161) Cease brother, for I *cannot* brooke these words.
(C. M., ES, 1.1.)

Neutral can

This type of modality indicating a possibility for an event to take place is relatively common in the corpora (10.50 RF) and reveals quite a fluctuating frequency between the plays ranging from 5.35 RF to 17.11 RF.

Table 8. Distribution of *can* indicating neutral possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	18	10	11	35	14	19	14	121
RF	12.29	5.35	5.75	17.11	10.92	10.41	12.51	10.50

(162) KING

Ah curse him not sith he is dead.

● the fatall poyson workes within my brest,

Tell me Surgeon and flatter not, may I live?

SURGEON

Alas my Lord, your highnes *cannot* live.

(C. M., MP, 22)

Deontic modality

This type of modality is infrequent in the database as only seven instances have been found displaying the relative frequency of 0.60 RF.

Table 9. Distribution of *can* indicating deontic modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	0	2	1	1	1	7
RF	1.36	0.00	0.00	0.97	0.78	0.54	0.89	0.60

Forbidding

Directive modality includes giving instructions to the interlocutor regarding their behaviour. This type of modality seems to be very scarce as no more than two cases (0.17 RF) have been found in the corpora, both of them denoting prohibition imposed by the speaker onto the addressee.

As Table 10 shows, forbidding function of the verb is scarcely represented as only two cases (0.17 RF) has been found in the corpus.

Table 10. Distribution of forbidding *can* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	1	1	0	0	2
RF	0.00	0.00	0.00	0.48	0.78	0	0	0.17

In both examples, the verb occurs in a negative form. In (163) it precedes a communication verb *speake*. The analysis of the context reveals that the verb negates modality, not the proposition. The speaker thus refuses granting permission or forbids to speak to his master.

(163) ME.: why sir, what would you? you *cannot speake* with him.

HORS.: But I wil speake with him.

ME.: Why hee's fast asleepe, come some other time.

HORS.: Ile speake with him now, or Ile breake his glasse-
windowes about his eares.

(C. M., DF, 11)

(164) Know therefore, till thy father hath made good

The ruines done to Malta and to us,

Thou *canst* not part: for Malta shall be freed,

Or Selim ne're retume to Ottoman.

(C. M., JM, 5.5.)

Polite request

Can serving the function of a polite request has been detected in only 5 cases (0.43 RF). Interestingly, the communication verb *tell* has been found to collocate with *can* in three instances denoting a polite request.

Table 11. Distribution of *can* indicating a polite request in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	0	1	0	1	1	5
RF	1.36	0.00	0.00	0.48	0.00	0.54	0.89	0.43

(165) Well, Barabas, *canst* helpe me to a Diamond?

(C. M., JM, 2.3.)

(166) But *canst* thou tell who is their generall?

(C. M., MP, 15)

(167) When, *can* you tell ?

(C. M., ES, 2.6.)

(168) Nay, where is my warlike father, *can* you tell?

(C. M., DQ, 4.2.)

Collocations with communicative verbs

Communicative verbs are the verbs which frequently collocate with the modal *can*. Table 12 presents the frequency distribution of the communicative verbs (*tell*, *speak*, *witness*, *answer*, *request*, *call*, *talk*, and *ask*) which have been observed to co-occur with *can* in Marlowe.

Table 12. Distribution of communicative verbs collocating with *can* in the plays of Marlowe.

Title	<i>tell</i>	<i>speak</i>	<i>witness</i>	<i>answer</i>	<i>request</i>	<i>call</i>	<i>talk</i>	<i>ask</i>	Total
DQ	1	0	0	0	0	1	1	1	4
T1	0	1	0	0	0	0	0	0	1
T2	1	0	0	0	0	0	0	0	1
JM	2	0	1	0	1	0	0	0	4
DF	0	1	1	0	0	0	0	0	2
ES	1	1	1	1	0	0	0	0	4
MP	1	1	0	0	0	0	0	0	2
F	6	4	3	1	1	1	1	1	18
RF	0.52	0.34	0.26	0.08	0.08	0.08	0.08	0.08	1.56

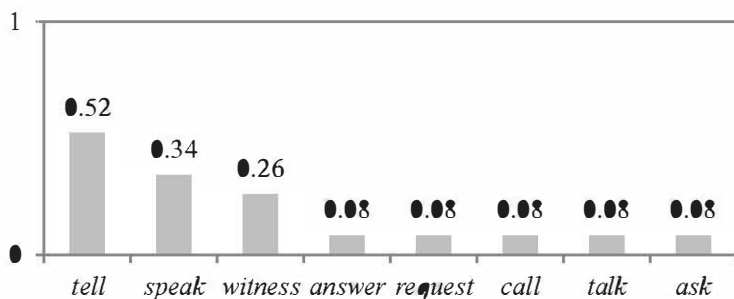


Fig. 2. Distribution of communicative verbs collocating with *can* in the plays of Marlowe.

(169) And more than this, for all I *cannot tell*.

(C. M., T2, 1.3.)

(170) TAMBURLAINE

I would intreat you to *speak* but three wise wordes.

MYCETES

So I *can* when I see my time.

(C. M., T1, 2.4.)

- (171) (...) and what wonders I haue done, al Germany
can witness, yea all the world (...)
 (C. M., DF, 14)
- (172) MORTIMER
 No more then I would answeere were he slaine.
 [Exit Gaveston, attended.]
 EDWARD
 Yes more then thou *canst answer* though he live,
 Deare shall you both abie this riotous deede:
 ●out of my presence, come not neere the court.
 (C. M., ES, 2.2.)
- (173) Well then my Lord, say, are you satisfied?
 You have my goods, my mony, and my wealth,
 My ships, my store, and all that I enjoy'd;
 And having all, you *can request* no more;
 (C. M., JM, 1.2.)
- (174) I thinke some fell Inchantresse dwelleth here,
 That *can call* them forth when as she please,
 And dive into blacke tempests treasure,
 When as she meanes to maske the world with clowdes.
 (C. M., DQ, 4.1.)
- (175) Thy sonne thou knowest with Dido now remaines,
 And feedes his eyes with favours of her Court,
 She likewise in admyring spends her time,
 And *cannot talke* nor thinke of ought but him:
 (C. M., DQ, 3.3.)
- (176) So much have I receiv'd at Didos hands,
 As without blushing I *can aske* no more:
 (C. M., DQ, 3.1.)

Collocations with verbs of sensation

●only three sensation verbs have been found in the corpus to co-occur with *can*, namely *hear*, *see*, and *look*. The latter one is scarce and only one instance of it has been encountered, whereas *hear* is the most commonly distributed verb of sensation with relative frequency of 0.26 RF.

Table 13. Distribution of sensual verbs collocating with *can* in the plays of Marlowe.

Title	<i>hear</i>	<i>see</i>	<i>look</i>	Total
DQ	1	1	1	3
T 1	0	0	0	0
T 2	1	0	0	1
JM	1	1	0	2
DF	0	0	0	0
ES	0	0	0	0
MP	0	0	0	0
Total F	3	2	1	6
Total RF	0.26	0.17	0.08	0.52

As the examples below illustrate, the occurrence of *can* with a given sensation verb (*hear* in this case) does not guarantee to generate the same type of modality in every case. In (177), the combination of the modal with the sensation verb provokes the implication of rational modality, whereas (178) and (179) evoke the meaning in terms of neutral modality.

(177) ● end Aeneas, I *can heare* no more.

(C. M., DQ, 2.1.)

(178) Wel souldiers, Mahomet remains in hell,
He *cannot heare* the voice of Tamburlain,

(C. M., T2, 5.1.)

(179) BARABAS

No, 'tis an order which the Fryars use:
Yet if he knew our meanings, could he scape?

ITHIMORE

No, none *can heare* him, cry he ne're so loud.

(C. M., JM, 4.1.)

Some other examples involving the verbs *see* and *look* include:

(180) What if I sinke his ships? ● heele frowne:
Better he frowne, then I should dye for grieffe:
I *cannot see* him frowne, it may not be:

(C. M., DQ, 4.4.)

(181) For I *can see* no fruits in all their faith,
But malice, falsehood, and excessive pride?

(C. M., JM, 1.1.)

(182) If that your majestie *can looke* so lowe,
 As my despised worts, that shun all praise,
 With this my hand I give to you my heart,
 And vow by all the Gods of Hospitalitie (...)

(C. M., DQ, 4.1.)

Indeterminate cases of can in Marlowe

Due to a high degree of merging of different kinds of modality, some cases develop into mongrel mixtures, which reveal great ambiguity and poses difficulties with defining a type of modality.

Table 14. Distribution of indeterminate cases of *can* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	2	2	1	0	1	0	6
RF	0	1.07	1.04	0.48	0	0.54	0	0.52

Summary of the main findings

As Fig. 3 shows, the most numerous type of modality denoted by *can* in the plays of Christopher Marlowe is dynamic modality (19.97 RF), comprising ‘ability’ and ‘power’ as well as neutral and rational possibility.

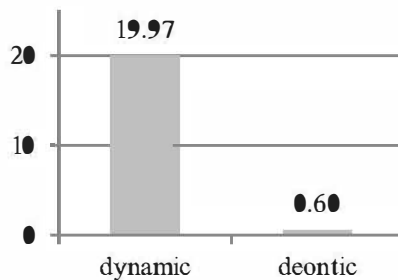


Fig. 3. Distribution of deontic and dynamic modality indicated by *can* in the plays of Marlowe.

The predominant frequency of dynamic modality may be partially due to the distinctive characteristics of individual plays and the aura they invoke.

Abilitive *can*, for instance, reveals an outstandingly high distribution in *Doctor Faustus* (13.26 RF). This may be explained by the peculiar ambience of the tragedy and the spiritual issues it touches on. The main character of the play, Faustus, is obsessed with the desire of supernatural abilities, magic power and knowledge. The text thus naturally abounds with the descriptions of paranormal skills and abilities which are in the possession of devilish beings and which lure mortal Faustus into their demonic realm.

(183) All things that moouē betweene the quiet poles
 Shalbe at my commaund, Emperours and Kings,
 Are but obeyd in their seuerall prouinces:
 Nor *can* they raise the winde, or rend the cloudes:
 But his dominion that exceedes in this,
 Stretcheth as farre as doth the minde of man.
(C. M., DF, 1)

(184) I am Pride, I disdainē to haue any parents, I am
 like to ●uids flea, I *can* creepe into euery comer of a wench,
 some times like a periwig, I sit vpon her brow, or like a fan
 of feathers, I kisse her lippes, indeede I doe, what doe I not?
(C. M., DF, 5)

(185) His faith is great, I *cannot* touch his soule,
 But what I may afflict his body with,
 I wil attempt, which is but little worth.
(C. M., DF, 13)

Polite requests, on the other hand, are the most numerous in *Dido, Queen of Carthage*, which is the tragedy focused on unhappy and obsessive love of Dido for Aeneas. The primary theme of the play is thus reflected in the kindness and sweetness of the language, as in the following example:

(186) Wilt thou kisse Dido? ● thy lips haue swome
 To stay with Dido: *canst* thou take her hand?
(C. M., DQ, 5.1.)

As Fig. 4 shows, the least frequent are the types comprising deontic modality, including permissive (not encountered in Marlowe), forbidding, and polite requests.

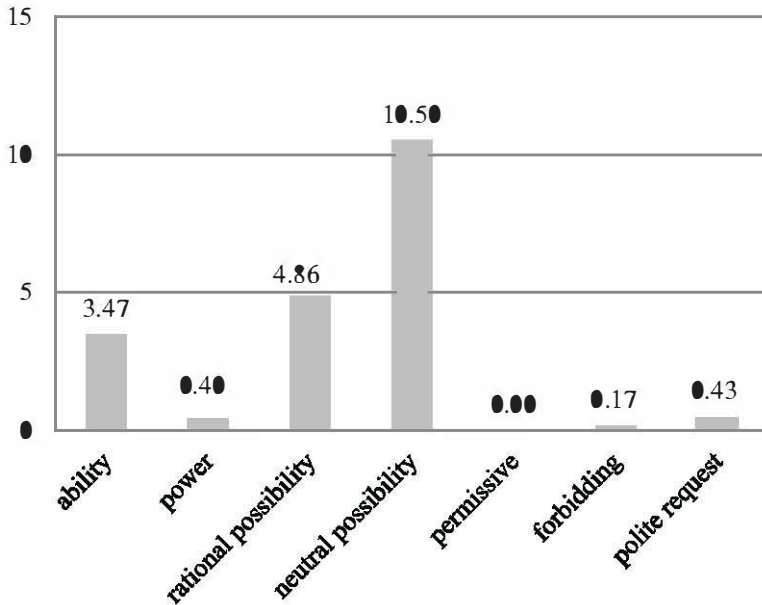


Fig. 4. Distribution of *can* representing different kinds of modality in the plays of Marlowe.

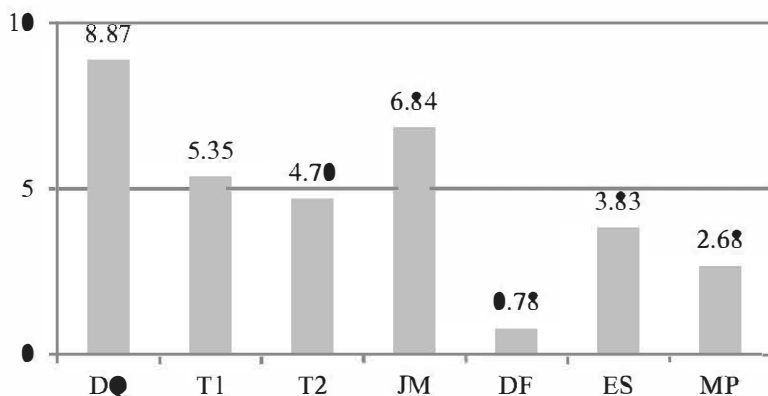
Could

Frequency distribution of could

As can be seen in Table 15, the frequency distribution of the modal verb *could* varies across the plays of Christopher Marlowe, with a range as high as 8.09 RF. The highest occurrence of the verb has been found in *Dido, Queen of Carthage* with a relative frequency of 8.87 RF, whereas the lowest in *Doctor Faustus* with a distribution equal to 0.78 RF.

Table 15. Distribution of *could* in the plays of Marlowe.

Title	Words in total	<i>Could</i> – F	<i>Could</i> – RF
DQ	14,642	13	8.87
T1	18,676	10	5.35
T2	19,116	9	4.70
JM	20,447	14	6.84
DF	12,815	1	0.78
ES	18,249	7	3.83
MP	11,186	3	2.68
Total	115,131	57	4.95

Fig. 5. Distribution of *could* in the plays of Marlowe.

Forms and spelling variants

As can be seen in Table 16, two inflectional forms of *could* have been encountered in the Marlowe's plays. The analysis has revealed that the form *couldst* is favoured (0.34 RF) for the second person singular subject *thou*. *Could* is the form prevailing for all other subjects and, consequently, more numerous (4.60 RF) than *couldst*.

Table 16. Distribution of different forms of *could* in the plays of Marlowe.

Title	<i>could</i>	<i>couldst</i>
DQ	13	0
T1	10	0
T2	9	0
JM	11	3
DF	1	0
ES	6	1
MP	3	0
Total F	53	4
Total RF	4.60	0.34

Dynamic possibility

The vast majority of the cases encountered in the corpus denote dynamic possibility displaying the total relative frequency of 4.51 RF. Dynamic *could* has been found to refer either to the ability (animate entity) or the power (inanimate entity) of the subject.

Table 17. Distribution of *could* indicating dynamic possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	13	9	8	13	1	7	1	52
RF	8.87	4.81	4.18	6.35	0.78	3.83	0.89	4.51

Ability

Could denoting the physical or mental ability of an animate subject, usually with reference to the past or hypothetical situation, is very infrequent (0.52 RF) in the plays of Christopher Marlowe. No instances of this function of *could* have been detected in the three tragedies, *Doctor Faustus*, *Edward the Second*, and *The Massacre at Paris*. On the other hand, the most numerous distribution of the modal *could* indicating ability has been attested in *Tamburlaine the Great 1* (1.60 RF).

Table 18. Distribution of *could* indicating ability in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	3	1	1	0	0	0	6
RF	0.68	1.60	0.52	0.48	0	0	0	0.52

(187) Not Hermes Prolocutor to the Gods,
Could use persuasions more patheticall.

(C. M., T1, 1.2.)

(188) When I record my Parents slavish life,
 Their cruel death, mine owne captivity,
 My Viceroyes bondage under Tamburlaine,
 Me thinks I *could* sustaine a thousand deaths,
 To be reveng'd of all his Villanie.

(C. M., T2, 5.1.)

Power

Assigning abilities or skills to inanimate entities would be questionable given that such objects are mindless and unable to influence the surroundings consciously. Nevertheless, some cases allow for the analysis of *could* in terms of special power held by inanimate matter. The necessity to distinguish between *ability* and *power* thus is justified.

Table 19. Distribution of *could* indicating power in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	2	2	1	1	0	8
RF	1.36	0	1.04	0.97	0.78	0.54	0	0.69

Some examples of inanimate matter holding the power to affect the action include:

(189) (...) truly my deare brethren, my maister is within
 at dinner with Valdes and Cornelius, as this wine if it *could*
 speake, it would enforme your worships,

(C. M., DF, 2)

(190) Oh that my sighs *could* tume to lively breath;
 And these my teares to blood, that he might live.

(C. M., JM, 3.3.)

- (191) ● yet this stone doth make Aeneas weepe,
 And would my prayers (as Pigmaliions did)
Could give it life,

(C. M., DQ, 2.1.)

Wishing

Could indicating wishes and longing of the speaker has been detected in merely a handful of cases exhibiting the total relative frequency of 0.43 RF.

Table 20. Distribution of *could* indicating wishing in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	0	1	0	2	0	5
RF	1.36	0.00	0.00	0.43	0.00	1.09	0.00	0.43

The common interjections used to introduce the clauses with emotional *could* denoting desires and ambitions of the speaker are ● (and ●h), as in (192):

- (192) Heavens can witness, I love none but you.
 From my imbracements thus he breakes away,
 ● that mine armes *could* close this Ile about,
 That I might pull him to me where I would,
 ●r that these teares that drissell from mine eyes,
 Had power to mollifie his stonie hart,
 That when I had him we might never part.

(C. M., ES, 2.4.)

Rational could

Rational possibility refers to what the speaker concerns rational, reasonable and acceptable. This type of modality is more often found with a negative verb, rejecting thus the situation as absurd and intolerable. In the works of Christopher Marlowe, merely a trace of the verb denoting this function has been found (0.26 RF). The only three instances of rational *could* have been attested in *Edward the Second* constituting the distribution equal to 1.64 RF in this particular play.

- (193) So well hast thou deserv'de sweete Mortimer,
 As Isabell *could* live with thee for ever,
 In vaine I looke for love at Edwards hand,
 Whose eyes are fixt on none but Gaveston:
 (C. M., ES, 2.5.)
- (194) Father, thy face should harbor no deceit,
 ● hadst thou ever beene a king, thy hart
 Pierced deeply with sence of my distresse,
Could not but take compassion of my state.
 (C. M., ES, 4.7.)
- (195) Forbid not me to weepe, he was my father,
 And had you lov'de him halfe so well as I,
 You *could* not beare his death thus patiently,
 But you I feare, conspird with Mortimer.
 (C. M., ES, 5.6.)

Neutral could

Could denoting neutral modality indicates the lack of obstructions which would impede or retard an event. The action thus regarded in terms of neutral possibility is hypothetically plausible to be taken. Neutral *could* attested in the works of Christopher Marlowe displays the total relative frequency of 2.95 RF, and, given the lack of its instances in *Doctor Faustus* (0.00 RF), the verb reveals very high range equal to 6.82 RF.

Table 21. Distribution of *could* indicating neutral possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	10	6	5	9	0	3	1	34
RF	6.82	3.21	2.61	4.40	0	1.64	0.89	2.95

- (196) Ah, how *could* poore Aeneas scape their hands?
 (C. M., DQ, 2.1.)
- (197) And now I see the Scituation,
 And how secure this conquer'd Iland stands
 Inviron'd with the mediterranean Sea,
 Strong contermin'd with other petty Iles;
 And toward Calabria, back'd by Sicily,
 Where Siracusian Dionisius reign'd,
 Two lofty Turrets that command the Towne.
 I wonder how it *could* be conquer'd thus?
 (C. M., JM, 5.3.)

Emotional could

Could has been scarcely found to express an intensive emotional attitude of a speaker towards a hypothetical action or event. The occurrence of this function is very inconsistent across the plays. A small account of it has been revealed in only three tragedies, namely *Dido, Queen of Carthage* (0.68 RF), *The Jew of Malta* (0.97 RF), and *Edward the Second* (1.09 RF), whereas no trace of clearly emotional *could* has been encountered in the other plays.

Table 22. Distribution of emotional *could* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	0	2	0	2	0	5
RF	0.68	0	0	0.97	0	1.09	0	0.43

Emotional *could* in the works of Christopher Marlowe indicates two different emotional states of the speaker, namely desire and distress. As Table 23 shows, 'desire' is more frequent (0.34 RF), whilst 'distress' is represented by only one case constituting 0.08 RF.

Table 23. Distribution of emotional states denoted by *could* in the plays of Marlowe.

Title	<i>desire</i>	<i>distress</i>
DQ	1	0
T1	0	0
T2	0	0
JM	1	1
DF	0	0
ES	2	0
MP	0	0
Total F	4	1
Total RF	0.34	0.08

Desire indicated by emotional *could* is the expression of extreme regret and helplessness of the speaker in the face of unfavourable circumstances. The desire in this context is mixed with the feelings of deep sorrow and grief, and, importantly, implies the wish of the speaker to change the unwelcome situation. The typical features of emotional *could* expressing desire are the introducing conjunctions *and* or *and*, as in the examples (198),

(199) and (201). Only one representative (0.08 RF) of the verb denoting the distress of the speaker has been attested in the corpus (202).

- (198) Poore soule I know too well the sower of love,
 ● that *Iarbus could* but fancie me.
 (C. M., DQ, 3.1.)
- (199) ●h that my sighs *could* tume to lively breath;
 And these my teares to blood, that he might live.
 (C. M., JM, 3.3.)
- (200) Alas poore soule, would I *could* ease his greefe.
 (C. M. ES, 5.2.)
- (201) Heavens can wittnesse, I love none but you.
 From my imbracements thus he breakes away,
 ● that mine armes *could* close this Ile about,
 That I might pull him to me where I would,
 ●r that these teares that drissell from mine eyes,
 Had power to mollifie his stonie hart,
 That when I had him we might never part.
 (C. M. ES, 2.4.)
- (202) ●h fatall day, to fall into the hands
 ●f such a Traitor and unhallowed Jew!
 What greater misery *could* heaven inflict?
 (C. M., JM, 5.2.)

Conditional could

As can be seen in Table 24, a small number of instances (1.30 RF) of the modal verb *could* have been found in conditional sentences.

Table 24. Distribution of *could* in conditional clauses in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	3	2	5	1	3	0	15
RF	0.68	1.60	1.04	2.44	0.78	1.64	0.00	1.30

The modal *could* has been found in both parts of a conditional sentence. The instances encountered in the protasis (203)–(204) constitute 0.34 RF, whereas those occurring in the apodosis (205)–(206) reveal the distribution equal to 0.95 RF.

- (203) truly my deare brethren, my maister is within at dinner with
 Valdes and Cornelius,
 as this wine if it *could* speake, it would enforme your worships,
 and so the Lord blesse you, preserue you, and keepe you my deare
 brethren, my deare brethren.
 (C. M., DF, 2)
- (204) Goe fetche my fathers hearse, where it shall lie,
 And bring my funerall robes: accursed head,
Could I have rulde thee then, as I do now,
 Thou hadst not hatcht this monstrous treacherie!
 (C. M., ES, 5.6.)
- (205) If they should yeeld their necks unto the sword,
 Thy souldiers armes *could* not endure to
 So many blowes as I have heads for thee.
 (C. M., T1, 3.3.)
- (206) If all the christall gates of Joves high court
 Were opened wide, and I might enter in
 To see the state and majesty of heaven,
 It *could* not more delight me than your sight.
 (C. M., T2, 1.3.)

Hypothetical could

Nearly half of all the instances of the modal *could* have been found to refer to unreal hypothetical situations, and plausible non-existent events. As can be seen in Table 25, hypothetical *could* exhibits the total relative frequency of 2.34 RF.

Table 25. Distribution of hypothetical *could* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	6	7	4	6	1	3	0	27
RF	4.09	3.74	2.09	2.93	0.78	1.64	0.00	2.34

- (207) Queene of Carthage, wert thou ugly blacke,
 Aeneas *could* not choose but hold thee deare,
 Yet must he not gainsay the Gods behest.
 (C. M., DQ, 5.1.)
- (208) Not Hermes Prolocutor to the Gods,
Could use perswasions more patheticall.
 (C. M., T1, 1.2.)

- (209) Rather lend me thy weapon Tamburlain,
 That I may sheath it in this breast of mine,
 A thousand deathes *could* not torment our hearts
 More than the thought of this dooth vexe our soules.
 (C. M., T2, 5.1.)

Past reference

As Table 26 shows, one third of all the cases of the modal verb *could* refer to the past with the distribution equal to 1.56 RF.

Table 26. Distribution of *could* with past reference in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	5	2	4	2	0	4	1	18
RF	3.41	1.07	2.09	0.97	0.00	2.19	0.89	1.56

- (210) The greefe for his exile was not so much,
 As is the joy of his returning home.
 This letter came from my sweete Gaveston,
 What needst thou, love, thus to excuse thy selfe?
 I know thou *couldst* not come and visit me.
 (C. M., ES, 2.1.)
- (211) NAVARRE
 My Lord, they say
 That all the protestants are massacred.
 ANJOY
 I, so they are, but yet what remedy:
 I have done what I *could* to stay this broile.
 (C. M., MP, 7)

Indeterminate cases of could in Marlowe

The cases which reveal high degree of ambiguity cannot be classified and thus remain indeterminate with the total relative frequency equal to 0.34 RF.

Table 27. Distribution of indeterminate cases of *could* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	1	1	0	0	1	4
RF	0.00	0.53	0.52	0.48	0.00	0.00	0.89	0.34

Summary of the main findings

The distribution of the modal verb *could* across the plays of Christopher Marlowe is scarce with no more than 57 instances (4.95 RF). The prevailing type of modality denoted by the verb is dynamic possibility (4.42 RF) with just a trace of dynamic meanings such as ability, power and wishing, the distribution of which is marginal and falls far below 1.00 RF. The modal *could* is commonly used to refer to the action non-existent at the time of the speech, such as past events or hypothetical situations. As for the latter ones, nearly half of all the cases (2.34 RF) follow this tendency. Given that the analysis has disclosed an extremely low frequency of occurrence of the verb, the data seems insufficient to draw any further undisputable and final conclusions.

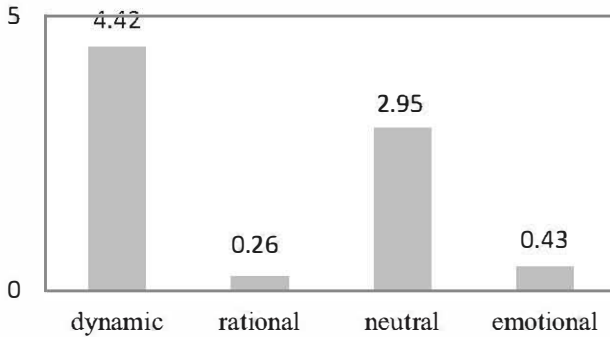


Fig. 6. Distribution of *could* representing different kinds of modality in the plays of Marlowe.

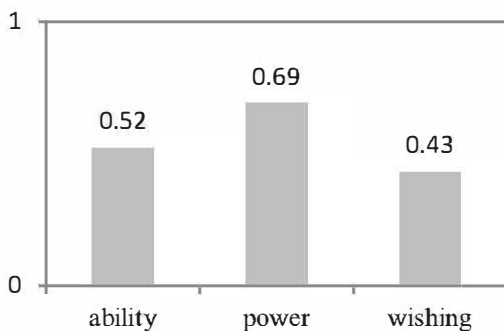


Fig. 7. Distribution of *could* representing different meanings of dynamic modality in the plays of Marlowe.

May

Frequency distribution of may

As Table 28 shows, some discrepancies have been observed in the distribution of the verb *may* across the plays. The total relative frequency of occurrence is 26.49 RF, with the lowest distribution in *The Jew of Malta* (20.05 RF) and the highest in *The Massacre at Paris* (40.22 RF). The range thus is remarkably high (20.17 RF).

Table 28. Distribution of *may* in the plays of Marlowe.

Title	Words in total	<i>may</i> – F	<i>may</i> – RF
DQ	14,642	52	35.51
T1	18,676	51	27.30
T2	19,116	48	25.10
JM	20,447	41	20.05
DF	12,815	31	24.19
ES	18,249	37	20.27
MP	11,186	45	40.22
Total	115,131	305	26.49

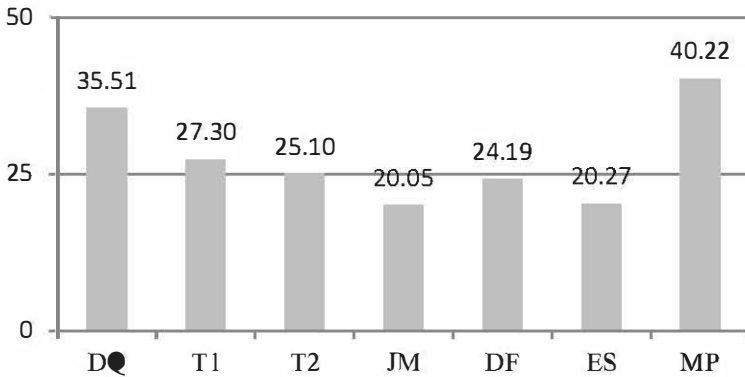


Fig. 8. Distribution of *may* in the plays of Marlowe.

Forms and spelling variants

The most common spelling variation of the verb is *may* with the relative frequency of 25.79 RF. Two forms are used exclusively to refer to the second person singular subject *thou*, namely *maist* (0.52 RF) and *mayst* (0.08 RF). Additionally, one abbreviated form (0.08 RF) of the personal pronoun *it* and the modal *may* has been encountered.

Table 29. Distribution of different forms of *may* in the plays of Marlowe.

Title	<i>may</i>	<i>maist</i>	<i>mayst</i>	<i>'tmay</i>
DQ	50	2	0	0
T1	50	1	0	0
T2	48	0	0	0
JM	38	1	1	1
DF	29	2	0	0
ES	37	0	0	0
MP	45	0	0	0
Total F	297	6	1	1
Total RF	25.79	0.52	0.08	0.08

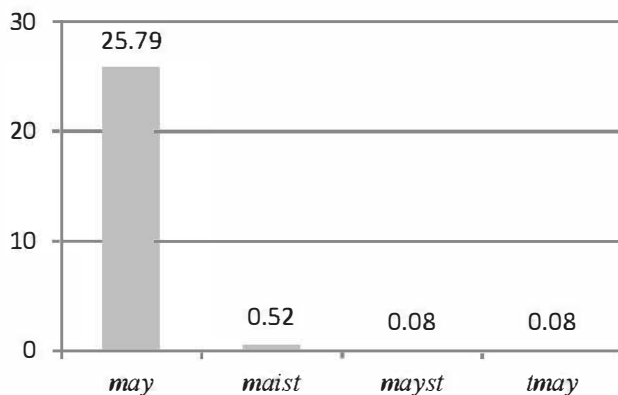


Fig. 9. Distribution of different forms of *may* in the plays of Marlowe.

Epistemic may

Epistemic *may* serves to express the subjective conclusion of the speaker, based on some facts or information. The speaker, however, does not claim that their assessment of the events is infallible, on the contrary, they admit a liability to error and allow for a misjudgement. In the works of Christopher Marlowe epistemic *may* displays the relative frequency of 4.16 RF, with the highest distribution in *Dido, Queen of Carthage* (6.14 RF) and the lowest in *Tamburlaine the Great 2* (2.61 RF).

Table 30. Distribution of *may* indicating epistemic modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	9	9	5	10	5	5	5	48
RF	6.14	4.81	2.61	4.89	3.90	2.73	4.46	4.16

Additionally, the examples 0 and (214) illustrate a very subjective use of the modal *may*, in which the subjectivity of the judgment is strengthened by the use of the verb *hope* 0 and the adverb *likely* (214).

- (212) Returne with speed, time passeth swift away,
 ● Our life is fraile, and we *may* die to day.

(C. M., T1, Li22)

- (213) *I hope* our Ladies treasure and our owne,
May serve for ransome to our liberties:
 (C. M., T1, 1.2.)
- (214) And seeing they are not idle, but still doing,
 'Tis *likely* they in time *may* reape some fruit,
 I meane in fulnesse of perfection.
 (C. M., JM, 2.3.)

Dynamic possibility

Dynamic *may* indicating possibility denotes the set of external physical circumstances which allow for an event to take place. Although in PDE the dynamic *may* is rather unusual in colloquial speech and more likely to be used in a written text (Palmer 1990: 110), the tragedies of Christopher Marlowe exhibit a remarkably high distribution of this meaning (17.89 RF) with the highest distribution in *The Massacre at Paris* (30.39 RF) and the lowest in *The Jew of Malta* (11.73 RF). The range is pretty high and equals 18.66 RF.

Table 31. Distribution of *may* indicating dynamic possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	33	37	36	24	16	26	34	206
RF	22.53	19.81	18.83	11.73	12.48	14.24	30.39	17.89

- (215) Paris hath full five hundred Colledges,
 As Monestaries, Priories, Abbyes and halles,
 Wherein are thirtie thousand able men,
 Besides a thousand sturdy student Catholicks,
 And more: of my knowledge in one cloyster keeps,
 Five hundred fatte Franciscan Fryers and priestes.
 All this and more, if more *may* be comprisde,
 To bring the will of our desires to end.
 (C. M., MP, 2)

Ability

Ability denoted by *may*, and understood as the capacity of an animate being to act, exhibits the total relative frequency of 0.86 RF. As Table 32 shows, in three plays of Christopher Marlowe, *Tamburlaine the Great 1*,

Tamburlaine the Great 2, and *The Jew of Malta*, no instances of this meaning of *may* have been attested.

Table 32. Distribution of *may* indicating dynamic ability in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	0	0	4	3	2	10
RF	0.68	0	0	0	3.12	1.64	1.78	0.86

(216) Each word she sayes will then containe a Crowne,
 And every speech be ended with a kisse:
 I *may* not dure this female drudgerie,
 To sea Aeneas, finde out Italy.

(C. M., DQ, 4.3.)

(217) FAU.

But *may* I raise vp spirits when I please?
 ME.
 I Faustus, and do greater things then these.

(C. M., DF, 5)

(218) Well, I am content, to compasse then some sport,
 And by their folly make vs merriment.
 Then charme me that I *may* be inuisible, to do what I
 please vnseene of any whilst I stay in Rome.

(C. M., DF, 7)

(219) Madam, have done with care and sad complaint,
 Your king hath wrongd your countrie and himselfe,
 And we must seeke to right it as we *may*,
 Meane while, have hence this rebell to the blocke,
 Your lordship cannot privileged your head.

(C. M., ES, 4.6.)

Power

As Table 33 shows, *may* indicating power of inanimate entities displays the total relative frequency of 0.95 RF. No instances of this meaning of *may* have been detected in *Edward the Second* and *The Massacre at Paris*, whereas the highest distribution has been revealed in the second part of *Tamburlaine the Great* (2.09 RF).

Table 33. Distribution of *may* indicating power in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	2	4	2	2	0	0	11
RF	0.68	1.07	2.09	0.97	1.56	0	0	0.95

(220) If any love remaine in you my Lord,
 Or if my love unto your majesty
May merit favour at your highnesse handes,
 Then raise your siege from faire *Damascus* walles,
 And with my father take a frindly tuce.
 (C. M., T1, 4.4.)

(221) And since this earth, dew'd with thy brinish teares,
 Affords no hearbs, whose taste *may* poison thee,
 Nor yet this seer, beat often with thy sighes,
 Contagious smels, and vapors to infect thee,
 Nor thy close Cave a sword to murder thee,
 Let this invention be the instrument.
 (C. M., T2, 4.2.)

Wishing

The modal *may* is also used to express the wish or desire of the speaker. This function of the verb exhibits the total relative frequency of 2.17 RF and exhibits a great inconsistency across the plays. The range of the distribution is unusually high with the value 10.18 RF. The highest distribution has been revealed in *The Massacre at Paris* (10.72 RF) and the lowest in *Edward the Second* (0.54 RF).

Table 34. Distribution of *may* indicating wishing in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	4	3	2	1	1	12	25
RF	1.36	2.14	1.56	0.97	0.78	0.54	10.72	2.17

(222) Long *may* Theridamas remaine with us.
 (C. M., T1, 2.1.)

(223) *May* all good fortune follow Calymath.
 (C. M., JM, 5.2.)

As presented in the example (224), this meaning of the modal *may* has also been found in the contexts where a reference to divine entities is made by the speaker.

(224) Pray thou, and we wil pray that God *may* haue mercy vpon thee.
(C. M., DF, 14)

The sentence in (225) is introduced by the verb *wish*, which states clearly the will of the speaker.

(225) I *wishe* this union and religious league,
Knit in these hands, thus joynd in nuptiall rites,
May not desolve, till death desolve our lives,
(C. M., MP, 1)

Purpose

In a number of cases (5.81 RF) the modal *may* serves to introduce a purpose for which a certain action is undertaken. The highest distribution of this meaning of *may* has been attested in *Tamburlaine the Great 2* (12.55 RF) whereas the lowest in *Doctor Faustus* (0.78 RF).

Table 35. Distribution of *may* indicating purpose in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	9	16	24	7	1	6	4	67
RF	6.14	8.56	12.55	3.42	0.78	3.28	3.57	5.81

(226) Ile set the casement open that the windes
May enter in, and once againe conspire
Against the life of me poore Carthage Queene:
(C. M., DQ, 4.4.)

(227) Returne our Mules and emptie Camels backe,
That we *may* traveile into Siria,
Where her betrothed Lord Alcidamus,
Expects th'arrivall of her highnesse person.
(C. M., T1, 1.2.)

(228) Come Lords, take up the body of the King,
That we *may* see it honourably interde:
(C. M., MP, 22)

Deontic modality

Deontic directive modality is a very infrequent type of modality indicated by *may* (1.04 RF) with merely a couple of instances denoting both permissive and forbidding meanings.

Permission

A handful of cases of *may* (0.69 RF) have been assigned a permissive meaning, used to grant authorization to perform certain actions. No instances of this meaning have been encountered in both parts of *Tamburlaine the Great*.

Table 36. Distribution of permissive *may* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	0	1	3	1	2	8
RF	0.68	0	0	0.48	2.34	0.54	1.78	0.69

(229) The rest that will not goe (my Lords) *may* stay:

(C. M., MP, 1)

(230) You heare your answer, and you *may* be gone.

(C. M., JM, 4.1.)

Forbidding

Forbidding *may*, seeking to prevent the interlocutor from acting, has been attested in merely four cases displaying the total relative frequency of 0.34 RF.

Table 37. Distribution of forbidding *may* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	0	1	2	1	4
RF	0	0	0	0	0.78	1.09	0.89	0.34

(231) I am a seruant to great Lucifer,
 And *may* not follow thee without his leaue,
 No more then he commaunds must we performe.

(C. M., DF, 3)

(232) GUARD

Whither will your lordships?

MORTIMER

Whither else but to the King.

GUARD

His highnes is disposde to be alone.

LANCASTER

Why, so he may, but we will speake to him.

GUARD

You *may* not in, my lord.

MORTIMER

May we not?

(C. M., ES, 2.2.)

Concession

According to Souesme (2009: 163) “*may* serves as a verbal marker opening the way to the validity of another predicative relation which is not impeded by the validity or validation of the previous predicative relation to which *may* has been applied.” The analysis of the data has revealed that *may* introducing the idea of concession displays a very small number of 0.60 RF.

Table 38. Distribution of *may* indicating concessive modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	2	0	0	0	2	2	7
RF	0.68	1.07	0.00	0.00	0.00	1.09	1.78	0.60

The examples (233) and (234) are the typical instances of concessive *may*, which together with the marker *but* gives the utterance its true concessive interpretation.

(233) GUARD

His highnes is disposde to be alone.

LANCASTER

Why, so he *may*, but we will speake to him.

(C. M., ES, 2.2.)

(234) Prince Condy and my good Lord Admiral,

Now Guise *may* storme but doe us little hurt.

(C. M., MP, 1)

Indeterminate cases of may in Marlowe

Some instances (1.21 RF) of the modal *may*, being highly ambiguous, have remained indeterminate.

Table 39. Distribution of indeterminate cases of *may* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	3	3	3	4	0	0	1	14
RF	2.04	1.60	1.56	1.95	0.00	0.00	0.89	1.21

Summary of the main findings

The analysis has shown that the prevailing type of modality denoted by the modal *may* in the works of Christopher Marlowe is dynamic modality (17.89 RF). As Fig. 10 shows, deontic and concessive modalities constitute only a minor part with a very restricted frequency distribution. The verb occupies the domain of possibility within which it indicates either ability (0.86 RF), power (0.95 RF), wishing (2.17 RF), and purpose (5.81 RF). The latter one is the most numerous type, found commonly in the earliest plays of the playwright (1586–1588). Both ability and power are the meanings which reveal their highest frequency distribution in *Doctor Faustus*, and *may* in these contexts overlaps with the meanings of the modal *can* (ability and power).

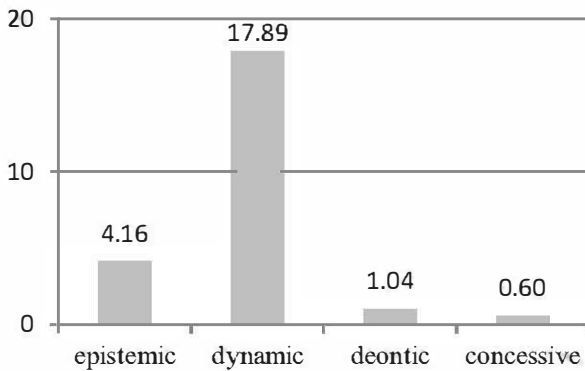


Fig. 10. Distribution of *may* representing different kinds of modality in the plays of Marlowe.

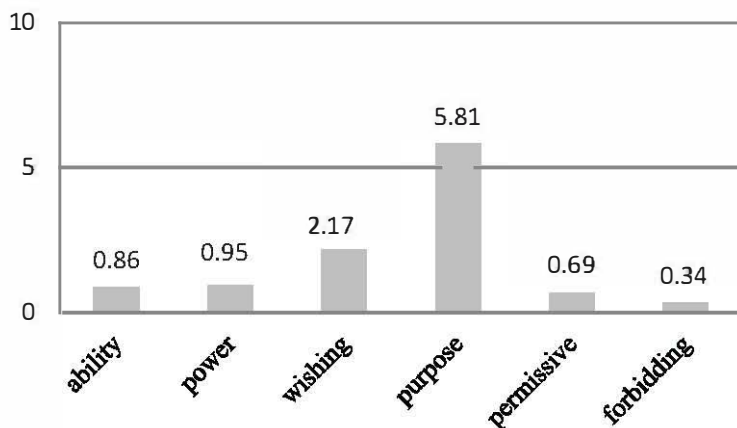


Fig. 11. Distribution of different meanings of *may* in the plays of Marlowe.

Might

Frequency distribution of might

As can be seen in Table 40, the modal *might* is infrequent in comparison to other modal verbs occurring in the plays of Christopher Marlowe. Only 87 instances have been encountered in the database displaying the total relative frequency of 7.55 RF.

Table 40. Distribution of *might* in the plays of Marlowe.

Title	Words in total	<i>might</i> – F	<i>might</i> – RF
DQ	14,642	19	12.97
T1	18,676	15	18.67
T2	19,116	10	5.23
JM	20,447	10	4.89
DF	12,815	14	10.92
ES	18,249	9	4.93
MP	11,186	10	8.93
Total	115,131	87	7.55

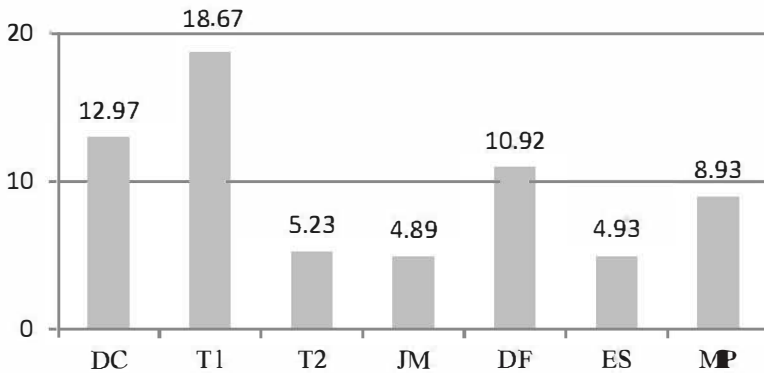


Fig. 12. Distribution of *might* in the plays of Marlowe.

Forms and spelling variants

The analysis of the database has revealed three forms of the modal *might* (7.20 RF), including the form assigned exclusively to the second person singular *mightst* (0.26 RF) and the past form *mought* (0.08 RF).

Table 41. Distribution of different forms of *might* in the plays of Marlowe.

Title	<i>might</i>	<i>mightst</i>	<i>mought</i>
DC	17	1	1
T1	15	0	0
T2	10	0	0
JM	10	0	0
DF	14	0	0
ES	9	0	0
MP	8	2	0
Total F	83	3	1
Total RF	7.20	0.26	0.08

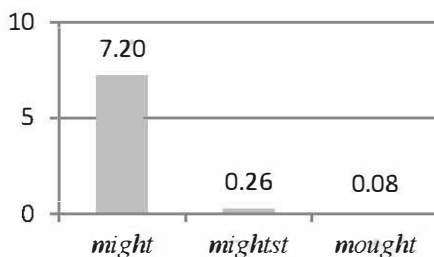


Fig. 13. Distribution of different forms of *might* in the plays of Marlowe.

Epistemic might

Epistemic *might* serves to express the suspicion or personal judgment of the speaker based on available evidence. As can be seen in Table 42, this type of modality is only residual in the plays of Christopher Marlowe, with the total relative frequency of 0.52 RF.

Table 42. Distribution of *might* indicating epistemic modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	3	0	0	1	1	1	6
RF	0.00	1.60	0.00	0.00	0.78	0.54	0.89	0.52

The examples (235), (236), and (237) illustrate epistemic *might* with reference to the present (235), (236), and to the past (237):

(235) Agidas, leave to wound me with these words:

And speake of Tamburlaine as he deserves.

The entertainment we have had of him,

Is far from villanie or servitude.

And *might* in noble minds be counted princely.

(C. M., T1, 3.2.)

(236) What *might* the staying of my bloud portend?

Is it vnwilling I should write this bill?

Why streames it not, that I may write afresh?

(C. M., DF, 5)

(237) The late suspition of the Duke of Guise,

Might well have moved your highnes to beware

How you did meddle with such dangerous giftes.

(C. M., MP, 3)

Dynamic possibility

Dynamic possibility indicates that no potential obstruction or hindrance exists which may impede the performance of an action. It is the most frequent type of modality denoted by *might* with the total relative frequency of 5.03 RF.

Table 43. Distribution of *might* indicating dynamic possibility in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	13	5	9	5	12	5	9	58
RF	8.87	2.67	4.70	2.44	9.36	2.73	8.04	5.03

Ability

Merely a trace of the modal *might* denoting the abilities of animate entities to pursue an action has been revealed during the analysis. No more than two instances (0.17 RF) have been encountered in the database.

Table 44. Distribution of *might* indicating ability in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	0	0	1	0	0	2
RF	0	0.53	0	0	0.78	0	0	0.17

- (238) ●f stature tall, and straightly fashioned,
 Like his desire, lift upwards and divine,
 So large of lims, his joints so strongly knit,
 Such breadth of shoulders as *might* mainly beare
 ●lde Atlas burthen.

(C. M., T1, 2.1.)

- (239) Thankes Mephastophilus, yet faine would I haue
 a booke wherein I *might* beholde al spels and incantations,
 that I *might* raise vp spirits when I please.

(C. M., DF, 5)

Power

Another equally infrequent meaning of *might* is 'power', the ability to affect and pursue the intended course of action, assigned exclusively to

lifeless matter. No more than five instances of power denoted by *might* (0.43 RF) have been detected in the plays of Christopher Marlowe.

Table 45. Distribution of *might* indicating power in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	2	1	0	0	1	0	5
RF	0.68	1.07	0.52	0.00	0.00	0.54	0.00	0.43

(240) In vaine my love thou spendst thy fainting breath,
If words *might* move me I were overcome.

(C. M., DQ, 5.1.)

(241) But most accurst, to see the Sun-bright troope
●f heavenly vyrgins and unspotted maides,
Whose looks *might* make the angry God of armes,
To breake his sword, and mildly treat of love,
●n horsmens Lances to be hoisted up,
And guiltlesly endure a quell death.

(C. M., T1, 5.1.)

Wishing

Might indicating wishes and requests of the speaker is much more numerous than ‘ability’ and ‘power’, and exhibits the total relative frequency of 2.25 RF. The modal denoting this meaning is outstandingly frequent in *Doctor Faustus* (7.02 RF), and *Dido, Queen of Carthage* (4.09 RF).

Table 46. Distribution of *might* indicating wishing in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	6	1	1	3	9	4	2	26
RF	4.09	0.53	0.52	1.46	7.02	2.19	1.78	2.25

(242) ●h that my sighs could tume to lively breath;
And these my teares to blood, that he *might* live.

(C. M., JM, 3.2.)

(243) ●h that ten thousand nights were put in one,
That wee *might* sleepe seven yeeres together aforewe wake.

(C. M., JM, 4.2.)

- (244) ● *might* I see hel, and returne againe, how happy were I then?
 (C. M., DF, 5)
- (245) ● that that damned villaine were alive againe,
 That we *might* torture him with some new found death.
 (C. M., MP, 22)

Purpose

As Table 47 shows, a very limited number of cases (1.21 RF) of the modal *might* indicate the objections or aims of pursuing an intended action.

Table 47. Distribution of *might* indicating purpose in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	●	3	2	5	2	●	14
RF	1.36	●	1.56	●.97	3.90	1.09	●	1.21

Might denoting a purpose is typically found in subordinate clauses introduced by *that*, as in the example (246):

- (246) And here not far from Alexandria,
 Whereas the Terren and the red sea meet,
 Being distant lesse than ful a hundred leagues,
 I meant to cut a channell to them both,
 That men *might* quickly saile to India.
 (C. M., T2, 5.3.)

Conditional might

Sixteen instances (1.38 RF) of the modal *might* have been found to occur in conditional clauses.

Table 48. Distribution of *might* in conditional sentences in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	4	2	4	1	1	1	3	16
RF	2.73	1.07	2.09	●.48	●.78	●.54	2.68	1.38

- (247) ●h Lodowicke! hadst thou perish'd by the Turke,
Wretched Ferneze *might* have veng'd thy death.
(C. M., JM, 3.2.)
- (248) Marry if thou hadst, thou *mightst* have had the stab,
For he hath solemnely sworne thy death.
(C. M., MP, 15)
- (249) Ah, had your highnes let him live,
We *might* have punisht him to his deserts.
(C. M., MP, 22)

The instances of the modal found in the protasis of a conditional clause exhibit the total relative frequency of 0.78 RF. The instances include (250) and (251):

- (250) In vaine my love thou spendst thy fainting breath,
If words *might* move me I were overcome.
(C. M., DQ, 5.1.)
- (251) Leister, if gentle words *might* comfort me,
Thy speeches long agoe had easde my sorrowes,
For kinde and loving hast thou alwaies beene.
(C. M., ES, 5.1.)

Almost equally frequent distribution (0.60 RF) is revealed by the modal verb *might* accommodated in the apodosis of a conditional clause, as in the examples (252) and (253).

- (252) And *might*, if my extreams had full events,
Make me the gastly counterfeit of death.
(C. M., T1, 3.2.)
- (253) KING
How now Mugeroun, metst thou not the Guise at the doore?
MUGEROUN
Not I my Lord, what if I had?
KING
Marry if thou hadst, thou *mightst* have had the stab,
For he hath solemnely sworne thy death.
(C. M., MP, 15)

Hypothetical might

A number of cases of the modal verb *might* (1.38 RF) refer to the situations which are either highly improbable, or constitute the illusions and fancies existing only within the imagination of the speaker.

Table 49. Distribution of hypothetical *might* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	4	2	3	0	1	1	5	16
RF	2.73	1.07	1.56	0	0.78	0.54	4.46	1.38

(254) ●f stature tall, and straightly fashioned,
 Like his desire, lift upwards and divine,
 So large of lims, his joints so strongly knit,
 Such breadth of shoulders as *might* mainely beare
 ●lde Atlas burthen.

(C. M., T1, 2.1.)

(255) If all the christall gates of Joves high court
 Were opened wide, and I *might* enter in
 To see the state and majesty of heaven,
 It could not more delight me than your sight.

(C. M., T2, 1.3.)

Past reference

As can be seen in Table 50, the modal verb *might* used with reference to the past displays the total relative frequency of 1.04 RF. Most commonly these cases indicate a dynamic possibility in the past which may be paraphrased as 'it was possible for' or 'there was possibility for'.

Table 50. Distribution of *might* with past reference in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	3	1	0	2	1	2	3	12
RF	2.04	0.53	0	0.97	0.78	1.09	2.68	1.04

(256) Nature , why mad'st me not some poysonous beast,
 That with the sharpnes of my edged sting,
 I *might* have stakte them both unto the earth,
 Whil'st they were sporting in this darksome Cave?

(C. M., DQ, 4.1.)

Five instances (0.43 RF) of the modal *might* referring to the past precede the structure ‘have + past participle’, as in example (257).

(257) Cut is the branch that *might* haue growne ful straight,
 And burned is Apolloes Laurel bough,
 That sometime grew within this learned man:

(C. M., DF, 14)

Indeterminate cases of might in Marlowe

Some instances (1.30 RF) of the modal *might* remain indeterminate and may be assigned to none of the modal types.

Table 51. Distribution of indeterminate cases of *might* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	5	4	0	4	0	2	0	15
RF	3.41	2.14	0.00	1.95	0.00	1.09	0.00	1.30

Summary of the main findings

As Fig. 14 shows, the most common modality denoted by *might* in the plays of Christopher Marlowe is dynamic possibility with the total distribution 2.81 RF. Dynamic *might* is most numerous in *Dido*, *Queen of Carthage*, *Doctor Faustus*, and *The Massacre at Paris*, in which its distribution mounts to above 8.00 RF. The analysis has merely revealed a trace of epistemic *might* with no more than six instances (0.47 RF).

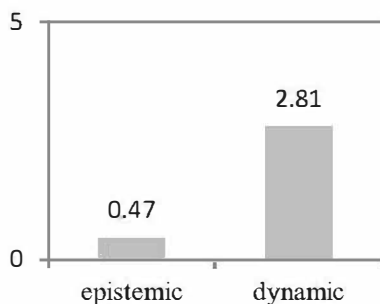


Fig. 14. Distribution of *might* representing different kinds of modality in the plays of Marlowe.

Within dynamic possibility the most numerous meanings denoted by *might* are wishing (1.01 RF) and purpose (0.89 RF). Both disclose the highest frequency distribution in *Doctor Faustus*, the play which is dominated by the themes of greed, excessive ambition, intellectual aspirations, and damnation.

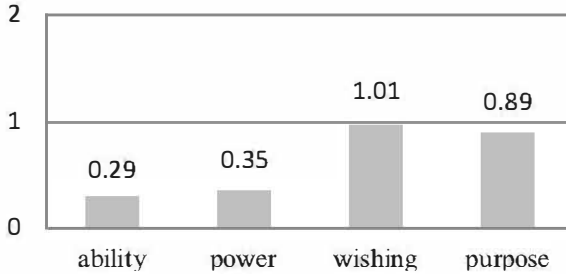


Fig. 15. Distribution of different meanings of dynamic *might* in the plays of Marlowe.

Will

Frequency distribution of will

The modal *will* is a very numerous verb in the plays of Christopher Marlowe. As can be seen in Table 52, the actual total number of instances in the corpus exceeds one thousand, which constitutes the total relative frequency of 89.37 RF. The highest distribution has been observed in *Doctor Faustus* (126.41 RF), with the lowest in both parts of *Tamburlaine the Great* (51.40 RF and 67.48 RF). These discrepancies account for a range equal to 75.01 RF.

Table 52. Distribution of *will* in the plays of Marlowe.

Title	Words in total	<i>will</i> – F	<i>will</i> – RF
DQ	14,642	144	98.34
T1	18,676	96	51.40
T2	19,116	129	67.48
JM	20,447	204	99.77
DF	12,815	162	126.41
ES	18,249	188	103.01
MP	11,186	103	92.07
Total	115,131	1,026	89.37

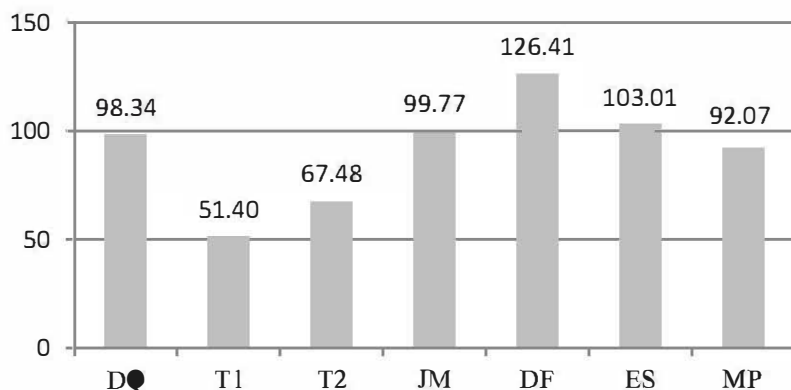


Fig. 16. Distribution of *will* in the plays of Marlowe.

Forms and spelling variants

In the tragedies of Christopher Marlowe the modal verb *will* has been encountered in three different spelling forms, namely *will*, *wil*, and *weele*. The prevailing form is the modern spelling *will* with the frequency of occurrence equal to 49.42 RF, whereas *wil* and *weele* reveal a much lower distribution, 9.81 RF and 1.56 RF respectively.

The analysis has also revealed some instances of the abbreviated forms of the verb. The abbreviations concern the first person singular and plural pronouns, namely *Ile* (16.85 RF), *I'le* (5.55 RF), and the marginal *we'll* (0.26 RF), as well as a second person singular pronoun *youle* (0.43 RF).

Other forms encountered in the corpus include *wilt* (4.95 RF), assigned exclusively to the second person singular subject and most commonly co-occurring with the pronoun *thou*, and two residual forms limited to the third-person-singular subject, namely *wils* (0.60 RF) and *willes* (0.08 RF).

Table 53. Distribution of different forms of *will* in the plays of Marlowe.

Title	<i>will</i>	<i>wil</i>	<i>weele</i>	<i>Ile</i>	<i>I'le</i>	<i>youle</i>	<i>we'll</i>	<i>wilt</i>	<i>wils</i>	<i>willes</i>
DQ	93	0	0	36	0	4	0	10	4	1
T1	71	13	2	4	0	0	0	5	1	0
T2	57	43	0	19	0	0	1	9	0	0
JM	121	5	0	1	64	0	2	10	2	0
DF	32	47	2	65	1	1	0	15	0	0
ES	123	3	14	42	0	0	0	6	0	0
MP	72	2	0	27	0	0	0	2	0	0
F	569	113	18	194	65	5	3	57	7	1
RF	49.42	9.81	1.56	16.85	5.64	0.43	0.26	4.95	0.60	0.08

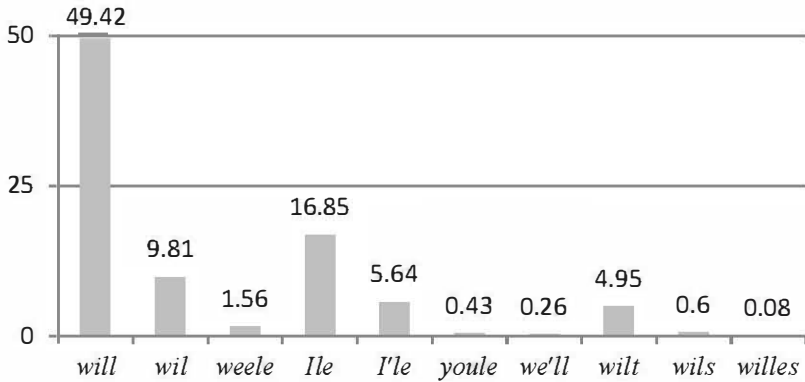


Fig. 17. Distribution of different forms of *will* in the plays of Marlowe.

Predictive will

Predictive *will* refers exclusively to the future and indicates that certain events will take place in the forthcoming time. The speaker foretells the approaching affairs, and this assumption is usually based on the judgement of conjuncture, facts, and knowledge which is in the possession of the speaker. The forecast of the forthcoming events thus is based on the available information and the present circumstances. As Table 54 shows, the distribution of predictive *will* is equal to 27.62 RF.

Table 54. Distribution of predictive *will* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	55	40	39	56	29	65	34	318
RF	37.56	21.41	20.40	27.38	22.62	35.61	30.39	27.62

(258) Anna, runne unto the water side,
 They say Aeneas men are going abourd,
 It may be he *will* steale away with them
(C. M., DQ, 4.4.)

(259) Your tentes of white now pitch'd before the gates
 And gentle flags of amitie displaid.
 I doubt not but the Governour *will* yeeld,
 Offering Damascus to your Majesty.
(C. M., T1, 4.2.)

- (260) But stay a while, summon a parle, Drum,
 It may be they *will* yeeld it quietly,
 Knowing two kings, the friends to Tamburlain,
 Stand at the walles, with such a mighty power.

(C. M., T2, 3.3.)

Declarative will

Declarative *will* also denotes futurity, however, it is more restricted in that it requires the first-person subject, either singular or plural. The modal has been found in the utterances in which the speakers announce or declare their intention and the readiness to act. As can be seen in Table 55, the total relative frequency of declarative *will* is 33.26 RF, with the highest distribution in *Doctor Faustus* (68.66 RF) and the lowest in the first part of *Tamburlaine the Great* (17.13 RF). The range thus is very high, equal to 51.53 RF.

Table 55. Distribution of declarative *will* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	56	32	51	41	88	72	43	383
RF	38.24	17.13	26.67	20.05	68.66	39.45	38.44	33.26

- (261) Sweete Mephastophilis, intreate thy Lord
 To pardon my vniust presumption,
 And with my blood againe I *wil* confirme
 My former vow I made to Lucifer.

(C. M., DF, 13)

- (262) We *will* wait heere about the court.

(C. M., ES, 1.1.)

- (263) As Caesar to his souldiers, so say I:
 Those that hate me, *will* I learn to loath.

(C. M., MP, 2)

Volitive will

As can be seen in Table 56, the total distribution of volitive *will* attested in the works of Christopher Marlowe equals 9.55 RF, including 'willingness' (7.81 RF) and a much less numerous 'agreement' 1.73 RF.

Table 56. Distribution of volitive *will* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total F	Total RF
willingness	14	13	11	10	14	22	6	90	7.81
agreement	0	1	5	2	4	2	6	20	1.73
VOLITION in total	14	14	16	12	18	24	12	110	9.55

Willingness

Willingness is the eagerness of a subject to perform certain action. In the plays of Christopher Marlowe, it's distribution is equal to 7.81 RF.

Table 57. Distribution of *will* indicating willingness in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	14	13	11	10	14	22	6	90
RF	9.56	6.96	5.75	4.89	10.92	12.05	5.36	7.81

Most commonly the verb *will* indicating willingness occupies the position of a main verb following directly the subject and being the only verb of a sentence. The most common phrases in which *will* has been encountered is the structure 'wh word + personal pronoun + *will*' (1.56 RF). The position of wh word in this structure is mostly occupied by what (0.86 RF) and whither (also EmodE spelling alternative whether) meaning 'to what' / 'whatever place' (0.26 RF). In these cases the lexical meaning of the verb *will* is 'to have a desire' or 'to wish'.

- (270) For ballace, emptie Didos treasure,
Take what ye *will*, but leave Aeneas here.
(C. M., DQ, 3.1.)
- (271) Amongst so many crownes of burnisht gold,
Choose which thou *wilt*, all are at thy command.
(C. M., T2, 1.2.)
- (272) well, goe whither he *will*, I'll be none of his
followers in haste.
(C. M., JM, 4.2.)
- (273) So Faustus, now do what thou *wilt*, thou shalt not
be discerned.
(C. M., DF, 7)

Table 58. The most common verb phrases indicating willingness in the plays of Marlowe.

Structure	F	RF
'WH' WORD + PERSONAL PRONOUN + WILL		
what + personal pronoun + <i>will</i>	18	1.56
whither (whether) + personal pronoun + <i>will</i>	10	0.86
which + personal pronoun + <i>will</i>	3	0.26
where + personal pronoun + <i>will</i>	2	0.17
when + personal pronoun + <i>will</i>	2	0.17
PERSONAL PRONOUN + WILL + (PERS. PRON.) + (TO) INFINITIVE	1	0.08
PERSONAL PRONOUN + WILL + IT + SO	6	0.52
WILL + PERSONAL PRONOUN + 'TO' INFINITIVE	3	0.26
AS + PERSONAL PRONOUN + WILL	3	0.26
as + personal pronoun + <i>will</i>	2	0.17
as often as + personal pronoun + <i>will</i>	1	0.08
SO + WILL + NOUN / NOUN PHRASE	2	0.17
PERSONAL PRONOUN + WILL + THAT	2	0.17
PERSONAL PRONOUN + WILL + RATHER + INFINITIVE	1	0.08
<i>will</i> indicating willingness in total:	38	3.30

Agreement

Will has also been found to indicate the agreement of a speaker in response to a request or an order of their interlocutor. Only 20 actual instances (1.73 RF) of this type of volitive *will* have been observed in the corpus, with the highest distribution exhibited in *The Massacre at Paris* (5.36 RF), and no instances in *Dido, Queen of Carthage* (0.00 RF).

Table 59. Distribution of *will* indicating agreement in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	5	2	4	2	6	20
RF	0.00	0.53	2.61	0.97	3.12	1.09	5.36	1.73

As already mentioned, agreement has been mainly found in the phrases which are responses to a suggestion, request or a command. The speaker is often of inferior status in relation to the interlocutor. The forms of oral

address used by the speakers in the plays of Christopher Marlowe include: my (good) Lord (0.86 RF), Madam (0.26 RF), Mistris (0.08 RF), Sir (0.08 RF), and directly the name of the interlocutor (0.17 RF). The structure of the phrase typically consists of three components: 'first person singular + will + form of address', as in (274) and (275).

(274) FAUSTUS

And alwayes be obedient to my wil:
 Goe and returne to mighty Lucifer,
 And meete mee in my study at midnight,
 And then resolute me of thy maisters minde.

MEPHASTOPHILIS

I will Faustus.

(C. M., *Doctor Faustus*.)

(275) DUCHESS

Goe fetch me pen and inke.

MAD

I will Madam.

(C. M., MP, 13)

Table 60. Different forms of oral address in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	F	RF
my (good)	-	1	4	-	1	-	4	10	0.86
Lord	-	-	-	-	-	1	2	3	0.26
Madam	-	-	-	1	-	-	-	1	0.08
Mistris	-	-	-	-	1	-	-	1	0.08
Sir	-	-	-	1	1	-	-	2	0.17
no addressee	-	-	1	-	1	1	-	3	0.26

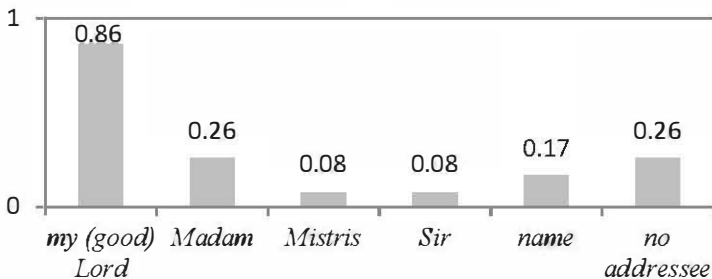


Fig. 18. Different forms of oral address in the plays of Marlowe.

*Deontic modality**Promise*

Promises are similar to willingness in that they express good will and readiness of the speaker to act. However, what differentiates them from the willingness is the guarantee which is granted by the speaker in the act of making a promise. As Table 61 indicates, the total relative frequency of *will* denoting a promise in the plays of Christopher Marlowe is 6.08 RF.

Table 61. Distribution of *will* indicating a promise in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	11	8	8	8	13	16	6	70
RF	7.51	4.28	4.18	3.91	10.14	8.76	5.36	6.08

(276) Here is my hand, beleeve me, Barabas,
I *will* be there, and doe as thou desirest;
When is the time?

(C. M., JM, 5.2.)

(277) HORS.

● Lord sir, let me goe, and *lle* glue you fortie dollers more.

ME.

Where be they?

HORS.

I haue none about me, come to my ●astrie, and *lle* giue them you.

(C. M., DF, 11)

(278) I tell thee Mugeroun we *will* be freends,
And fellowes to, what ever stormes arise.

(C. M., MP, 12)

A marginal amount of *will* denoting a promise have been found in a negative form. In these cases the speaker grants a promise not to act, as in (279) and ●.

(279) I *will* not leave Iarbus whom I love,
In this delight of dying pensiveness:
Away with Dido, Anna be thy song,
Anna that doth admire thee more then heaven.

(C. M., D●, 4.2)

(280) Misericordia pro nobis, what shal I doe? good diuel
 forgiue me now, and *Ile* neuer rob thy Library more.
 Enter to them Meph.

(C. M., DF, 9)

Table 62. Distribution of *will* indicating a promise in a negative form in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	0	1	1	1	0	5
RF	1.36	0.00	0.00	0.48	0.78	0.54	0.00	0.43

Threat

A threat is typically associated with an action which is not only unpleasant or undesired by the addressee, but it also poses a great danger to their life. As can be seen in Table 63, this meaning of the verb has been attested in 45 cases constituting the total relative distribution 3.90 RF.

Table 63. Distribution of *will* indicating a threat in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	6	13	2	6	9	7	45
RF	1.36	3.21	6.80	0.97	4.68	4.93	6.25	3.90

(281) Take it up Villaine, and eat it, or I *will* make thee
 slice the brawnes of thy armes into carbonadoes, and eat them.

(C. M., T1, 4.4.)

(282) Tretcherous Warwicke, traitorous Mortimer,
 If I be Englands king, in laces of gore
 Your headles trunkes, your bodies *will* I traile,
 That you may drinke your fill, and quaffe in blood (...)

(C. M., ES, 3.1.)

(283) Come sirs, *Ile* whip you to death with my pumiards point.

(C. M., MP, 12)

Polite request

A marginal amount (0.95 RF) of the instances of the modal verb *will* has been found in polite requests. In the majority of cases the act of making a

request is strengthened by the use of the verb *please*, which directly follows the modal *wilt*, as in (285), (286), and (287).

Table 64. Distribution of *will* in polite requests in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	3	0	0	1	7	0	0	11
RF	2.04	0.00	0.00	0.48	5.46	0.00	0.00	0.95

- (284) Nurse I am wearie, *will* you carrie me?
(C. M., DQ, 4.5)
- (285) My Lord of Lorraine, *wilt* please you draw neare.
(C. M., DF, 7)
- (286) *wilt* please your highnes now to send for the knight
that was so pleasent with me here of late?
(C. M., DF, 10)
- (287) with the grapes.
here they be madam, *wilt* please you taste on them.
(C. M., DF, 12)

Omission of the following verb

The analysis of the corpus has revealed that in some cases the verb *will* is not followed by a lexical verb. As can be seen in Table 65, the omission concerning the verb *go* displays the total relative frequency equal to 0.43 RF.

Table 65. Distribution of *will* with the omission of the verb *go* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	0	1	0	3	0	5
RF	0.00	0.53	0.00	0.48	0.00	1.64	0.00	0.43

- (288) Meane time my lord of Penbrooke and my selfe,
Will to Newcastell heere, and gather head.
(C. M., ES, 2.2)

(289) GUARD

Whither *will* your lordships?

MORTIMER

Whither else but to the King.

(C. M., ES, 2.2)

(290) QUEENE

Come sonne, and go with this gentle Lorde and me.

PRINCE

With you I *will*, but not with Mortimer.

(C. M., ES, 5.2)

Will as a lexical verb

Some instances (42 items) of *will* point out to the lexical use of the verb and enforce the analysis in terms of the most plausible meaning 'have a desire or wish' (3.64 RF).

(291) Carthage, my friendly host adue,

Since destinie doth call me from thy shoare:

Hermes this night descending in a dreame,

Hath summond me to fruitfull Italy:

Jove *wils* it so, my mother *wils* it so:

Let my Phenissa graunt, and then I goe

(C. M., DQ, 4.3)

(292) *Ile* to the King.

(C.M., ES, 2.2.118)

Will used as a lexical verb has also been encountered in the terminating part of a sentence (293), in questions (294), and with the third person singular subject (295).

(293) Come gentle Ganimed and play with me,

I love thee well, say Juno what she *will*.

(C. M., DQ, 1.1)

(294) What *willes* our Lord, or wherefore did he call?

(C. M., DQ, 4.3)

(295) Then gan they drive into the Ocean,

Which when I viewd, I cride, Aeneas stay,

Dido, faire Dido *wils* Aeneas stay.

(C. M., DQ, 5.1)

Indeterminate cases of will in Marlowe

Only three instances (0.26 RF) of the modal verb *will* remain indeterminate due to high degree of merging the modal meanings.

Table 66. Distribution of indeterminate cases of *will* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	1	0	1	1	3
RF	0.00	0.00	0.00	0.48	0.00	0.54	0.89	0.26

Summary of the main findings

As can be seen in Fig. 19, the prevailing meanings of the modal verb *will* in the plays of Christopher Marlowe are the ones indicating futurity, namely declarative (33.26 RF) and predictive (27.62 RF). Nearly one third of their distribution is revealed by *will* denoting the volition of the speaker (9.55 RF). The least numerous is the modal verb found in polite requests, the distribution of which is only marginal (0.95 RF).

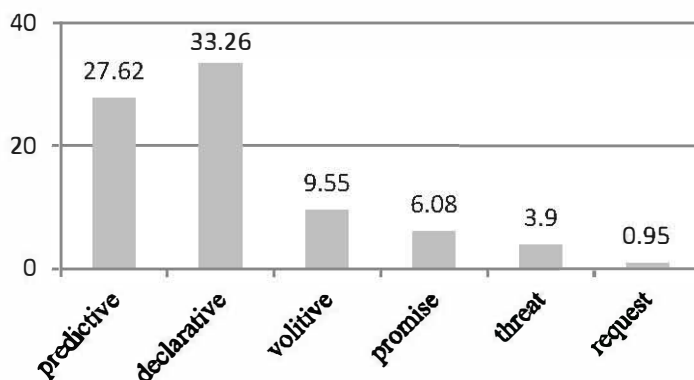


Fig. 19. Distribution of different meanings of *will* in the plays of Marlowe.

Would

Frequency distribution of would

As can be seen in Table 67, the distribution of the modal verb *would* in the plays of Christopher Marlowe is equal to 16.85 RF. The highest frequency of occurrence has been attested in *Dido, Queen of Carthage* (24.58 RF), whereas the lowest in *The Massacre at Paris* (8.93 RF). This discrepancy in the distribution of the modal results in a very high range (15.65 RF).

Table 67. Distribution of *would* in the plays of Marlowe.

Title	Words in total	<i>Would</i> – F	<i>Would</i> – RF
DQ	14,642	36	24.58
T1	18,676	31	16.59
T2	19,116	25	13.07
JM	20,447	29	14.18
DF	12,815	27	21.06
ES	18,249	36	19.72
MP	11,186	10	8.93
Total	115,131	194	16.85

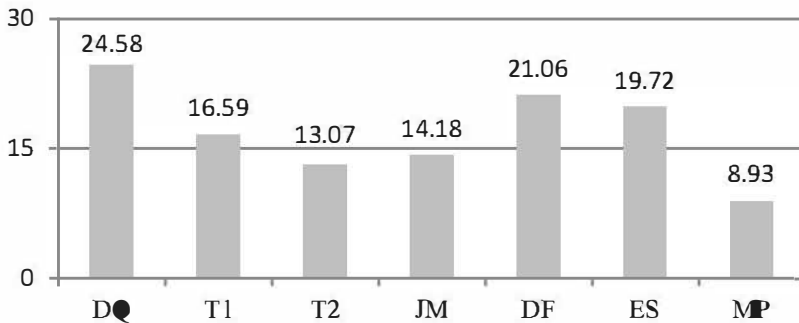


Fig. 20. Distribution of *would* in the plays of Marlowe.

Forms and spelling variants

Three different spelling variants of the modal verb *would* have been encountered in the corpus. The most common is *would* exhibiting the total frequency of occurrence of 15.37 RF. Two other spellings, *woulde*, and *wold*, reveal only residual distribution, 0.17 RF and 0.08 RF, respectively.

Table 68. Forms and spelling variants of *would* in the plays of Marlowe.

Title	<i>would</i>	<i>woulde</i>	<i>wold</i>	<i>wouldst</i>
DQ	32	0	0	4
T1	27	1	1	2
T2	23	0	0	2
JM	29	0	0	0
DF	24	1	0	2
ES	32	0	0	4
MP	10	0	0	0
Total F	177	2	1	14
Total RF	15.37	0.17	0.08	1.21

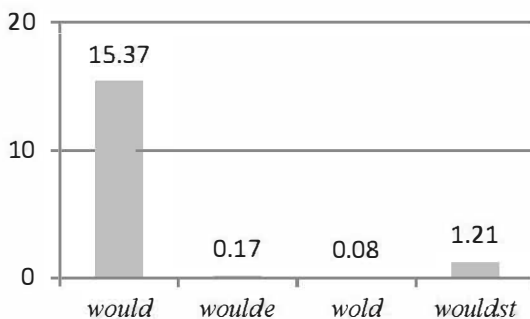


Fig. 21. Forms and spelling variants of *would* in the plays of Marlowe.

The form *wouldst* has been found to display the total relative frequency of 1.21 RF, and is assigned exclusively to the second person singular subject *thou*.

Epistemic modality

Epistemic modality serves to express the assumption which is based on the data available to the speaker such as factual information or previous personal experience. As can be seen in Table 69, epistemic *would* exhibits merely a residual quantity equal to 1.12 RF.

Table 69. Distribution of *would* indicating epistemic modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	5	0	0	3	2	3	0	13
RF	3.41	0.00	0.00	1.46	1.56	1.64	0.00	1.12

(296) Sweete father leave to weepe, this is not he:
For were it Priam he *would* smile on me.

(C. M., DQ, 2.1.)

Volitive would

Willingness

A considerable amount of the instances of the modal *would* indicate the will or the wish of the speaker or the interlocutors. This meaning has been attested in 68 cases displaying the total relative frequency of 5.90 RF. The range of volitive *would* is substantial, with the highest distribution in *Dido, Queen of Carthage* (9.56 RF) and the lowest in *Tamburlaine the Great 2* (1.04 RF).

Table 70. Distribution of *would* indicating willingness in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	14	8	2	12	10	15	7	68
RF	9.56	4.28	1.04	5.86	7.80	8.21	6.25	5.90

Volitive *would* typically refer to the future or unreal hypothetical situations, as in (297), (298), 0, and (300), however, the modal indicating a regret with reference to the past has also been observed, e.g. (301).

(297) Wherefore *would* Dido have Aeneas stay?

(C. M., DQ, 3.1.)

(298) Now Faustus, what *wouldst* thou haue me do?

(C. M., DF, 3)

(299) FAU.

Thankes Mephistophilus, yet faine *would* I haue
a booke wherein I might beholde al spels and incantations,
that I might raise vp spirits when I please.

ME.

Here they are in this booke. There tume to them
FAU.

Now *would* I haue a booke where I might see al
characters and planets of the heauens, that I might knowe
their motions and dispositions.

(C. M., DF, 5)

(300) Mother, how like you this device of mine?

I slew the Guise, because I *would* be King.

(C. M., MP, 19)

(301) I cannot speak for greefe: when thou west bome,

I *would* that I had murdered thee my sonne.

My sonne: thou art a changeling, not my sonne.

I curse thee and exclaime thee miscreant,

Traitor to God, and to the realme of France.

(C. M., MP, 19)

In (302) and (303), the volitive quality of the verb is strengthened by the following 'wish me' phrase.

(302) And mought I live to see him sacke rich Thebes,

And bade his speare with Grecian Princes heads,

Then *would I wish me* with Anchises Tombe,

And dead to honour that hath brought me up.

(C. M., DQ, 3.3.)

(303) And might I live to see thee shipt away,

And hoyst aloft on Neptunes hideous hilles,

Then *would I wish me* in faire Didos armes,

And dead to scorne that hath pursued me so.

(C. M., DQ, 3.3.)

Emotional would

The modal verb *would* has been found to indicate the emotional state of the speaker, such as desire and longing. Evaluative *would*, however, is marginal, represented by merely a few instances.

The analysis of the corpus has shown that *would* is used in the emotional utterances revealing the wishes and regrets of the speaker. As can be seen in Table 71, the distribution of the modal in this context is equal to 1.04 RF. No instances of *would* denoting desire and longing have been attested in *Tamburlaine the Great 2* and *The Jew of Malta*.

Table 71. Distribution of emotional *would* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	1	0	0	4	4	1	12
RF	1.36	0.53	0.00	0.00	3.12	2.19	0.89	1.04

Would indicating desire or longing is typically introduced by the interjections *o*, *oh*, *alas*, *yet*, like in the examples (304), (305), and (306).

- (304) Might I but see that pretie sport a foote,
 ● how *would* I with Helens brother laugh,
 And bring the Gods to wonder at the game:
 (C. M., DQ, 1.1.)
- (305) Why, that was in a net, where we are loose,
 And yet I am not free, oh *would* I were.
 (C. M., DQ, 3.4.)
- (306) Alas poore soule, *would* I could ease his greefe.
 (C. M., ES, 5.2.)

Rhetorical questions

As can be seen in Table 72, a handful of instances of the modal *would* have been found in rhetorical questions (0.78 RF).

Table 72. Distribution of *would* in rhetorical questions in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	2	0	2	2	1	0	9
RF	1.36	1.07	0.00	0.97	1.56	0.54	0.00	0.78

Rhetorical questions of this type are commonly introduced by the relative pronoun *who* which is directly followed by the modal *would*, as in the examples 0, (308), (309), and (310).

- (307) ● how these irksome labours now delight,
 And overjoy my thoughts with their escape:
 Who *would* not undergoe all kind of toyle,
 To be well stor'd with such a winters tale?
 (C. M., DQ, 3.3.)
- (308) Who *would* not thinke but that this Fryar liv'd?
 (C. M., JM, 4.1.)
- (309) It may be she sees more in me than I can find in my selfe:
 for she writes further, that she loves me ever since she saw me,
 and who *would* not requite such love?
 (C. M., JM, 4.2.)
- (310) I see theres vertue in my heavenly words,
 Who *would* not be proficient in this art?
 (C. M., DF, 3)

Conditional would

The analysis has shown that the modal verb *would* appears commonly in conditional sentences, exhibiting the total relative frequency of 4.34 RF. The range is high, equal to 7.10 RF, with the highest distribution attested in *Dido, Queen of Carthage* (8.19 RF) and the lowest in *Edward the Second* (1.09 RF).

Table 73. Distribution of *would* in conditional sentences in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	12	9	11	7	7	2	2	50
RF	8.19	4.81	5.75	3.42	5.46	1.09	1.78	4.34

The modal *would* has been found in both the protasis and the apodosis of a conditional sentence. The distribution of the verb in the protasis, as in the example (311), is residual, equal to 0.60 RF.

- (311) This is my minde, and I will have it so.
 Not all the Kings and Emperours of the Earth:
 If they *would* lay their crownes before my feet,
 Shall ransome him, or take him from his cage.
 (C. M., T1, 4.2)

Would occurring in the apodosis, as in (312), (313), and (314), is much more numerous, with the distribution equal to 3.73 RF.

(312) Villain, I tell thee, were that Tamburlaine
 As monstrous as Gorgon, prince of Hell,
 The Souldane *would* not start a foot from him.
 (C. M., T1, 4.1)

(313) If I had wept a sea of teares for her,
 It *would* not ease the sorrow I sustaine.
 (C. M., T2, 3.2)

(314) if I should serue you, *would* you
 teach me to raise vp Banios and Belcheos?
 (C. M., DF, 4)

In some instances, e.g. (315) and (316), the modal verb *would* is accommodated in both the protasis and the apodosis of a sentence.

(315) But if his highnesse *would* let them be fed, it *would*
 doe them more good.
 (C. M., T1, 4.4)

(316) Nay, no such waightie busines of import,
 But may be slackt untill another time:
 Yet if you *would* partake with me the cause
 ●f this devotion that detaineth you,
 I *would* be thankfull for such curtesie.
 (C. M., DQ, 4.2.)

Hypothetical would

Hypothetical *would* denotes the events and the situations which do not exist at the time of the speech and are typically just mental imaginations of the speaker. As can be seen in Table 74, the total relative distribution of hypothetical *would* is equal to 8.33 RF with a considerable range 10.25 RF.

Table 74. Distribution of hypothetical *would* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	13	22	23	12	12	12	2	96
RF	8.87	11.77	12.03	5.86	9.36	6.57	1.78	8.33

(317) And for I see your curteous intent to pleasure me, I wil not hide from you the thing my heart desires, and were it nowe summer, as it is Ianuary, and the dead time of the winter, I *would* desire no better meate then a dish of ripe grapes.
(C. M., DF, 12)

(318) I am Couetousnes, begotten of an olde churle, in an olde leatherne bag: and might I haue my wish, I *would* desire, that this house, and all the people in it were turnd to golde, that I might locke you vppe in my good chest, ● my sweete golde
(C. M., DF, 5)

Indeterminate cases of would in Marlowe

Due to the high degree of ambiguity and merging, 6 instances (0.52 RF) of the modal verb *would* remain indeterminate.

Table 75. Distribution of indeterminate cases of *would* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	0	0	2	0	2	0	6
RF	1.36	0.00	0.00	0.97	0.00	1.09	0.00	0.52

Summary of the main findings

As can be seen in Fig. 22, volitive modality indicating the willingness of the speaker (5.90 RF) is the prevailing meaning denoted by the modal verb *would* in the works of Christopher Marlowe. Epistemic and emotional modalities are equally scarce with the distribution no higher than 1.12 RF. The only emotional states denoted by *would* and attested in the corpus are desire and longing, typically introduced by the interjections *o*, *oh*, *alas* and *yet*. The analysis has revealed a common occurrence of the verb in conditional sentences. More than one fourth of all the instances have been found in either protasis, apodosis, or both parts of conditionals.

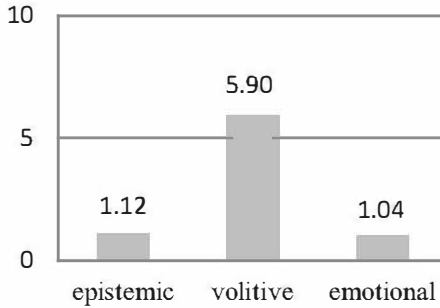


Fig. 22. Distribution of *would* representing different kinds of modality in the plays of Marlowe.

Shall

Frequency distribution of shall

The analysis of the database has revealed that the modal verb *shall* is very numerous in the works of Christopher Marlowe with the total relative distribution 63.92 RF. As can be seen in Table 76, although the range is pretty high (23.70 RF), the frequency of occurrence of the verb across the plays seems to be quite stable. The highest distribution has been found in the two parts of *Tamburlaine the Great* (69.60 RF and 73.76 RF), and the lowest in *The Massacre at Paris* (50.06 RF).

Table 76. Distribution of *shall* in the plays of Marlowe.

Title	Words in total	<i>shall</i> – F	<i>shall</i> – RF
DQ	14,642	90	61.46
T1	18,676	130	69.60
T2	19,116	141	73.76
JM	20,447	118	57.71
DF	12,815	79	61.64
ES	18,249	122	66.85
MP	11,186	56	50.06
Total	115,131	736	63.92

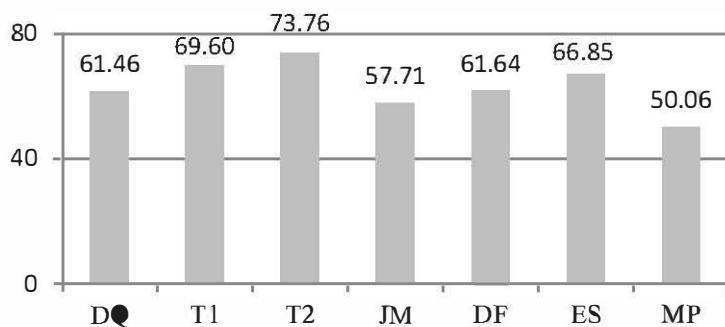


Fig. 23. Distribution of *shall* in the plays of Marlowe.

Forms and spelling variants

As Table 77 indicates, two different forms of the verb *shall* have been encountered in the corpus, namely *shall* (48.46 RF) and *shalt* (6.16 RF). The lower distribution of the later form may be explained by the fact that *shalt* is assigned exclusively to the second person singular subject *thou*, lowering thus the scope of its usage. Additionally, the spelling variation *shal* has been attested in 92 cases displaying the total relative frequency of 7.99 RF, and even more marginal *shalbe*, the obsolete contraction of the verbs *shall* and *be*, revealing an extremely limited distribution equal to 1.30 RF.

Table 77. Forms and spelling variants of *shall* in the plays of Marlowe.

Title	<i>shall</i>	<i>shal</i>	<i>shalt</i>	<i>shalbe</i>
DQ	81	1	8	0
T1	103	15	12	0
T2	84	41	15	1
JM	104	2	12	0
DF	29	32	11	7
ES	104	1	11	6
MP	53	0	2	1
Total F	558	92	71	15
Total RF	48.46	7.99	6.16	1.30

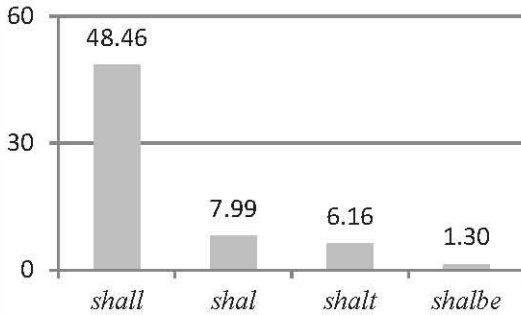


Fig. 24. Forms and spelling variants of *shall* in the plays of Marlowe.

Dynamic modality

Predictive shall

Shall denoting futurity displays the total relative frequency of 45.25 RF. The verb is the most numerous in the two parts of *Tamburlaine the Great* (56.22 RF and 53.88 RF), and the lowest in *The Massacre at Paris* (35.75 RF).

Table 78. Distribution of predictive *shall* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	57	105	103	74	58	84	40	521
RF	38.92	56.22	53.88	36.19	45.25	46.02	35.75	45.25

Some instances of predictive *shall* with a first-, second- and third-person subject include:

(319) Say, he surrenders vp to him his soule,
 So he will spare him 24. yeeres,
 Letting him liue in al voluptuousnesse,
 Hauing thee euer to attend on me,
 To giue me whatsoever I *shal* aske,
 To tel me whatsoever I demaund,
 To slay mine enemies, and ayde my friends,
 And alwayes be obedient to my wil:

(C. M., DF, 3)

- (320) Ile tell you how you *shall* know them, all hee diuels has
homes, and all shee diuels has clifts and clouen feete.
(C. M., DF, 4)
- (321) A poysoned knife? what, shall the French king dye,
Wounded and poysoned, both at once?
(C. M., MP, 22)

Prophecy

Shall used for prophesising constitutes a distinct overtone of predictive meaning. It is especially salient in longer utterances and soliloquies in which the speaker foretells future events. *Shall* indicating a forecast occurs frequently in the plays of Christopher Marlowe and its distribution is equal to 15.72 RF.

Table 79. Distribution of *shall* indicating prophecy in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	18	43	47	16	17	17	23	181
RF	12.29	23.02	24.58	7.82	13.26	9.31	20.56	15.72

- (322) But first in blood must his good fortune bud,
Before he be the Lord of Turnus towne,
●r force her smile that hetherto hath frownd:
Three winters *shall* he with the Rutils warre,
And in the end subdue them with his sword,
And full three Sommers likewise *shall* he waste
In marmaging those fierce barbarian mindes:
Which once performd, poore Troy so long suppress,
From forth her ashes *shall* advance her head,
And flourish once againe that erst was dead:
But bright Ascanius, beauties better worke
Who with the Sunne devides one radiant shape,
Shall build his throne amidst those starrie towers,
That earth-bome Atlas groning underprops:
No bounds but heaven *shall* bound his Emperie,
Whose azured gates enchased with his name,
Shall make the morning hast her gray uprise,
To feede her eyes with his engraven fame.
Thus in stoute Hectors race three hundred yeares,
The Romane Scepter royall *shall* remaine,

Till that a Princesse priest conceav'd by Mars,
Shall yeeld to dignitie a dubble birth,
 Who will etemish Troy in their attempts.

(C. M., DQ, 1.1.)

Deontic modality

The analysis of the corpus has shown that the most common deontic meaning denoted by *shall* is a promise with the relative frequency of 7.38 RF. Other deontic senses of *shall* include threats (4.34 RF) and commands (3.04 RF). *Shall* denoting forbidding has been observed in merely two instances constituting no more than 0.17 RF.

Table 80. Deontic meanings of *shall* in the plays of Marlowe.

	Promises	Commands	Threats	Forbidding
F	85	35	50	2
RF	7.38	3.04	4.34	0.17

Promise

Promises constitute the most copious group of deontic meanings designated by the modal *shall* (7.38 RF). Table 81 shows the distribution of promises in the database. As can be observed, the discrepancies between the plays are remarkable with a range as high as 12.08 RF. The most productive in this respect is *Dido, Queen of Carthage* (12.97 RF) and the least *The Massacre at Paris* (0.89 RF).

Table 81. Distribution of *shall* indicating a promise in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	19	12	15	22	6	10	1	85
RF	12.97	6.42	7.84	10.75	4.68	5.47	0.89	7.38

The differentiation of promise from other contexts such as threat, relies mainly on the judgement whether the action to be taken is desired by or appealing to the interlocutor. The examples of promises occurring in the plays of Marlowe include:

(323) Sleepe my sweete nephew in these cooling shades,
 Free from the murmure of these running streames,
 The crye of beasts, the ratling of the windes,
 ●r whisking of these leaves, all *shall* be still,
 And nothing interrupt thy quiet sleepe,
 Till I returne and take thee hence againe.

(C. M., D●, 2.1.)

(324) I have an ●rtyard that hath store of plums,
 Browne Almonds, Servises, ripe Figs and Dates,
 Dewberries, Apples, yellow ●rrenges,
 A garden where are Bee hives full of honey,
 Musk-roses, and a thousand sort of flowers,
 And in the midst doth run a silver streame,
 Where thou *shalt* see the red gild fishes leape,
 White Swaimes, and many lovely water fowles:

(C. M., D●, 4.5.)

(325) It *shall* be done my lord.

(C. M., ES, 5.2.)

Sometimes they are strengthened by the use of the verb *promise* as in (326).

(326) My lords, because our soveraigne sends for him,
 And *promiseth* he *shall* be safe returnd,
 I will this undertake, to have him hence,
 And see him redelivered to your hands.

(C. M., ES, 3.1.)

Threat

Threats constitute another group of deontic shall with the total relative frequency of 4.34 RF. The distribution of *threat* in the corpus is fluctuating, from 1.36 RF in *Dido*, ●*queen of Carthage* to 8.89 RF in *Tamburlaine the Great 2*.

Table 82. Distribution of *shall* indicating a threat in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	7	17	7	2	9	6	50
RF	1.36	3.74	8.89	3.42	1.56	4.93	5.36	4.34

In contrary to a promise, a threat is a vision of an action which is not only unpleasant for the addressee, but it may also throw their health and life into peril. In the tragedies of Christopher Marlowe threats are usually combined with the verbs die or kill. Typically, threats expressed by *shall* are addressed at a second-person singular thou, as in the following examples:

(327) Lay downe your weapons, traitors, yeeld the king
Matrevis. Edmund, yeeld thou thy self, or thou *shalt* die.
(C. M., ES, 5.3.)

(328) Thinke not that I am frighted with thy words,
My father's murdered through thy treacherie,
And thou shalt die, and on his mournfull hearse,
Thy hatefull and accursed head *shall* lie,
To witnesse to the world, that by thy meanes,
His kingly body was too soone interrde.
(C. M., ES, 5.6.)

Command

Commands display the total relative frequency of 3.04 RF. It has been observed that this type of deontic meaning is also irregularly distributed across the plays with a range 4.69 RF. The highest frequency of occurrence has been attested in *Edward the Second* (5.47 RF), whereas the lowest in *Doctor Faustus* (0.78 RF).

Table 83. Distribution of *shall* indicating a command in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	4	4	3	7	1	10	6	35
RF	2.73	2.14	1.56	3.42	0.78	5.47	5.36	3.04

Commands are frequently, though not exclusively, directed at the second person singular addressee so the form *shalt* is commonly found in

this meaning. Some examples include:

(329) But Tamburlaine, first thou *shalt* kneele to us
And humbly crave a pardon for thy life.
(C. M., T2, 3.5.)

(330) CUPID
Whither must I goe? Ile stay with my mother.
NURSE
No, thou *shalt* goe with me unto my house,
(C. M., DQ, 4.5.)

A command expressed by means of *shall* may be also directed at a third person singular and plural addressee, as in the following examples:

(331) Goe thou away, Ascanius *shall* stay.
(C. M., DQ, 3.1.)

(332) On this condition *shall* thy Turkes be sold.
Goe officers and set them straight in shew.
(C. M., JM, 2.2.)

Forbidding

Shall indicating forbidding reveals extremely residual frequency of occurrence as merely two instances (0.17 RF) has been encountered in the database.

(333) You *shall* not hurt my father when he comes.
(C. M., DQ, 3.1.)

(334) Now serve to chastize shipboyes for their faults,
Ye *shall* no more offend the Carthage Queene.
(C. M., DQ, 4.4.)

Conditions of agreement

Seven instances (0.60 RF) of the modal verb *shall* have been observed in the sentences which constitute conditions of agreements and pacts. This function of the modal verb has been found in only two tragedies of Christopher Marlowe, namely *The Jew of Malta* (1.46 RF) and *Doctor Faustus* (3.12 RF).

Table 84. Distribution of *shall* in conditions of agreement in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	●	●	●	3	4	●	●	7
RF	●	●	●	1.46	3.12	●	●	●.6●

The example (335) regards the terms of the deal made between Faustus and Mephistophilis in the tragedy *Doctor Faustus*. The example (336) contains the list of conditions stipulated by the Turkish sultan in order to collect tribute from the Jews. The situations in both examples are not alike. In (335) the pact is unsolicited and based on mutual benefits, whereas in (336) it is rather a set of unfavourable commands issued without the approval of the Jews and against their will. What is more, these conditions may be also regarded as threats as they refer to the disadvantageous and harmful, from the point of view of the Jews, course of action. Both examples illustrate the use of *shall* in terms and conditions calling for the action which is strongly desired by the speaker and not necessarily approved by the interlocutor.

- (335) Then heare me reade them: on these conditions following.
 First, that Faustus may be a spirit in forme and substance.
 Secondly, that Mephistophilis *shall* be his seruant, and at his commaund.
 Thirdly, that Mephistophilis *shall* do for him, and bring him whatsoeuer.
 Fourthly, that hee *shall* be in his chamber or house inuisible.
 Lastly, that hee *shall* appeare to the said Iohn Faustus at all times, in what forme or shape soeuer he please.
 Iohn Faustus of Wertemberge, Doctor, by these presents, do giue both body and soule to Lucifer prince of the East, and his minister Mephistophilis, and furthermore graunt vnto them that 24. yeares being expired, the articles aboue written inuiolate, full power to fetch or carry the said Iohn Faustus body and soule, flesh, bloud, or goods, into their habitation wheresoeuer.
 By me Iohn Faustus.¹
- (C. M., DF, 5)
- (336) First, the tribute mony of the Turkes *shall* all be levyed amongst the Jewes, and each of them to pay one halfe of his estate. (...)

Secondly, hee that denies to pay, *shal* straight become a Christian. (...)

Lastly, he that denies this, *shall* absolutely lose al he has.

(C. M., JM, 1.2.)

Interrogatives

In interrogative sentences the modal verb *shall* has been found to denote three different meanings, namely: a request for advice, introducing proposals, and a request for permission. As can be seen in Table 85, the most common is a request for advice (1.56 RF), which together with introducing proposals (0.26 RF), constitutes a group of 'interrogatives of equality'. The common feature of these two meanings is the involvement of the speakers representing an equal or similar social status. A request for permission (0.60 RF) is the only member of 'interrogatives of priority', in which one of the interlocutors demonstrates power over the other one.

Table 85. Distribution of *shall* in interrogative sentences in the plays of Marlowe.

	interrogatives of equality		interrogatives of priority
Total F	21		7
Total RF	1.82		0.60
	request for advice	introducing proposals	request for permission
Total F	18	3	7
Total RF	1.56	0.26	0.60

Interrogatives of equality

Interrogatives of equality constitute the total relative frequency of 1.82 RF (21 instances) of the modal verb *shall*, and include two distinct meanings of the verb namely a request for advice and introducing proposals. The former concern requests for *some* advice or opinion of the interlocutor on the action to be taken by the speaker. The total relative frequency of this meaning is 1.56 RF. The highest distribution has been attested in *Doctor Faustus* (4.68 RF) and the lowest in *Tamburlaine the Great 1* (0.00 RF) with no instances.

Table 86. Distribution of *shall* in asking for advice in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	4	0	2	2	6	1	3	18
RF	2.73	0	1.04	0.97	4.68	0.54	2.68	1.56

Such sentences typically contain the first person singular subject and they constitute the biggest group of interrogative sentences (25 out of 53 occurrences) involving the modal verb *shall*. Most frequently such sentences contain a verb *do* as in the following examples:

- (337) What *shall* I doe to save thee my sweet boy?
(C. M., DQ, 1.1.)
- (338) What a blessing has he given't? was ever pot of
rice porredge so sauc't? what *shall* I doe with it?
(C. M., JM, 3.4.)

A request for some advice, however, is also expressed in sentences which involve the first person plural as a subject.

- (339) Now sirra, what *shall* we doe with the Admirall?
(C. M., MP, 9.1)
- (340) What *shall* we doe then?
(C. M., MP, 9.5)
- (341) Come on Mephistophilis, what *shall* we do?
(C. M., DF, 7)

Additionally, the modal verb *shall* is used in interrogative sentences in order to make a proposal or suggestion about some action. *Shall* in this context serves to introduce an offer and seek the approval of the interlocutor at the same time. It is important, however, to emphasise its distinctiveness from the request for advice. In proposals the speaker does not merely expect some suggestions about the potential course of action, but, importantly, introduces his own ideas and expects the approval on the part of the interlocutors.

Table 87. Distribution of *shall* indicating a proposal in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	1	2	0	0	0	3
RF	0.00	0.00	0.52	0.97	0.00	0.00	0.00	0.26

It is important to notice that the proposal of an action is directed not only at the interlocutor but also at the speaker themselves. In all three cases, the subject of a sentence is the first person plural. The speaker thus not merely suggests undertaking an action but actually offers to carry it out together with the interlocutors provided that they express their approval. As Palmer (1990: 79) claims “there is not a request for information, but an invitation for action.” The three instances of the shall used as proposals are the following:

(342) Come, *shall* we goe?
(C. M., JM, 3.3.)

(343) And if she be so faire as you report,
 'Twere time well spent to goe and visit her:
 How say you, *shall* we?
(C. M., JM, 1.2.)

(344) Then let us bring our light Artilery,
 Minions, Fauknets, and Sakars to the trench,
 Filling the ditches with the walles wide breach,
 And enter in, to seaze upon the gold:
 How say ye Souldiers, *Shal* we not?
(C. M., T2, 3.3.)

Interrogatives of priority

The modal verb *shall* attested in the interrogatives of priority is only marginal with seven cases constituting the total relative distribution 0.60 RF, and interpreted as requests for a permission. In this case, the speaker suggests undertaking an action and seeks the approval of the interlocutor. As can be seen in Table 88, only a few cases of this meaning have been encountered, with the highest distribution in *Edward the Second* (1.09 RF) and no instances in *Tamburlaine the Great 2* and *The Massacre at Paris*.

Table 88. Distribution of *shall* in requests for a permission in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	2	0	1	1	2	0	7
RF	0.68	1.07	0	0.48	0.78	1.09	0	0.60

The use of *shall* in this context, is different from the proposal in that it implies the priority of the interlocutor over the speaker, who does not dare to act before the asset is granted. The instances of *shall* indicating a request for permission include:

- (345) This is thy Diamond, tell me, *shall* I have it?
 (C. M., JM, 2.3.)
- (346) *Shall* I not see the king my father yet?
 (C. M., ES, 4.6.)
- (347) And *shall* my Unckle Edmund ride with us?
 (C. M., ES, 5.4.)

Omission of the following verb

As can be seen in Table 89, seven instances (0.60 RF) of the modal verb *shall* are not followed by a lexical verb.

Table 89. Distribution of *shall* with omission of the following verb in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	1	2	0	3	0	7
RF	0.68	0.00	0.52	0.97	0.00	1.64	0.00	0.60

In all of these instances the speech is uttered by someone who exerts power over the interlocutor, the modal thus denotes an order, command or threat. The omitted verb involves *go* (348) and (349), and *be* or *fall* (350).

- (348) To morrow is the Sessions; you *shall* to it.
 Come Ithimore, let's helpe to take him hence.
 (C. M., JM, 4.1.)
- (349) He *shall* to prison, and there die in boult.
 (C. M., ES, 1.1.)
- (350) Go souldiers take him hence, for by my sword,
 His head *shall* off
 (C. M., ES, 2.5.)

Indeterminate cases of shall

No indeterminate cases of the modal *shall* have been encountered in the plays of Christopher Marlowe.

Summary of the main findings

As can be seen in Fig. 25, the prevailing type of modality denoted by *shall* is a predictive modality which is over three times more numerous (44.03 RF) than deontic modality (13.89 RF).

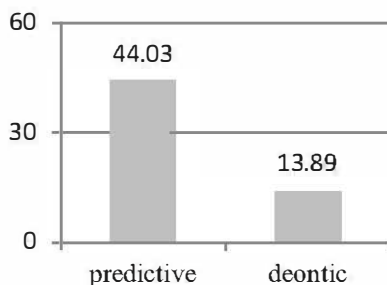


Fig. 25. Distribution of *shall* representing different kinds of modality in the plays of Marlowe.

The modal *shall* reveals a variety of meanings. The verb is most commonly used to foreshadow future events (15.72 RF). The highest distribution of this meaning has been attested in both parts of *Tamburlaine the Great* and *The Massacre at Paris*, the plays whose main themes revolve around religious conflicts, the power of kings and emperors, and their conquests. On the other hand, *shall* denoting forbidding exhibits the lowest frequency of occurrence (0.17 RF) with only two actual instances attested in the corpus.

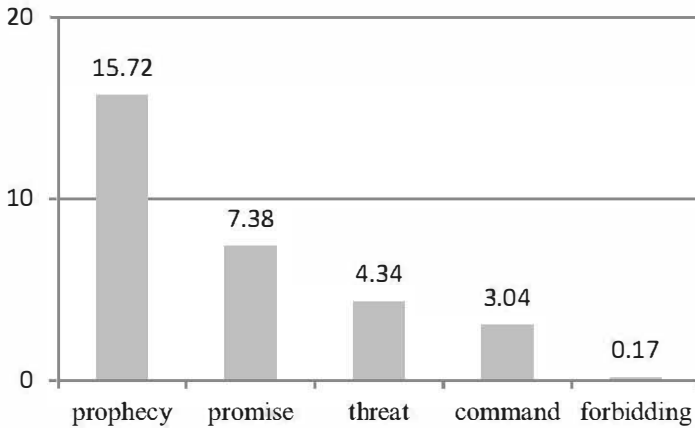


Fig. 26. Distribution of different meanings of *shall* in the plays of Marlowe.

As for interrogative sentences, the modal *shall* is the most numerous in requests for advice (1.56 RF). As can be seen in Fig. 27, other two contexts in which the verb has been attested, namely introducing proposals and a request for permission, are marginal with the distribution much below 1.00 RF.

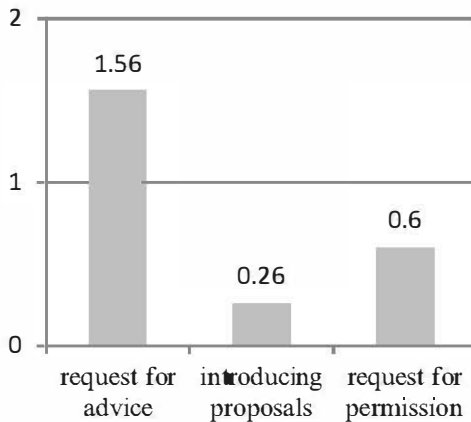


Fig. 27. Distribution of different meanings of *shall* in interrogative sentences in the plays of Marlowe.

Should

Frequency distribution of should

As Table 90 illustrates, distribution of the modal *should* in the plays of Christopher Marlowe varies from relative frequency of 12.60 RF in *Edward the Second* to 20.40 RF in *Tamburlaine the Great 2*. The range is pretty high and equals 7.80 RF.

Table 90. Distribution of *should* in the plays of Marlowe.

Title	Words in Total	<i>Should</i> – F	<i>Should</i> – RF
DQ	14,642	19	12.97
T1	18,676	30	16.06
T2	19,116	39	20.40
JM	20,447	26	12.71
DF	12,815	20	15.60
ES	18,249	23	12.60
MP	11,186	19	16.98
Total	115,131	176	15.28

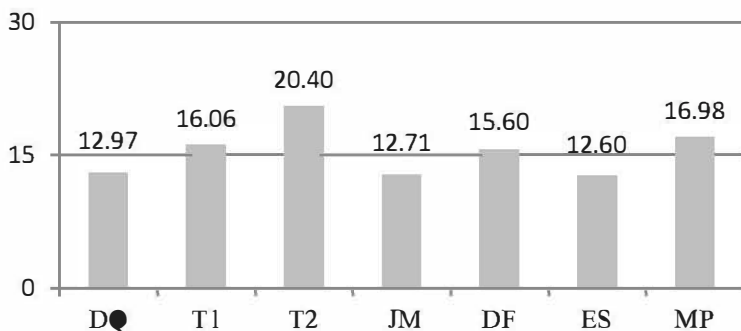


Fig. 28. Distribution of *should* in the plays of Marlowe.

Forms and spelling variants

In the works of Christopher Marlowe four distinctive spelling variants of the verb *should* have been found. The most numerous is the PD spelling *should*. It constitutes the total amount of 161 occurrences (13.98 RF). Each of the three other spelling varieties, *shoulde*, *shold*, and *shuld*, have

only one representative in the Marlowe's tragedies. Table 91 shows the distribution of spelling variants in the corpus.

Table 91. Forms and spelling variants of *should* in the plays of Marlowe.

Title	<i>should</i>	<i>shouldst</i>	<i>shoulde</i>	<i>shold</i>	<i>shuld</i>
DQ	18	1	0	0	0
T1	30	0	0	0	0
T2	37	2	0	0	0
JM	25	0	0	1	0
DF	16	3	0	0	1
ES	17	5	1	0	0
MP	18	1	0	0	0
Total F	161	12	1	1	1
Total RF	13.98	1.04	0.08	0.08	0.08

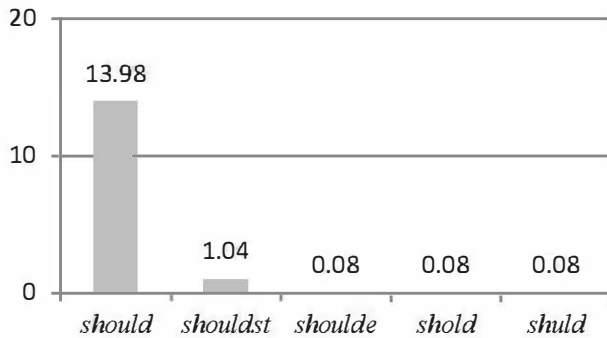


Fig. 29. Forms and spelling variants of *should* in the plays of Marlowe.

12 instances (1.04 RF) of the form *shouldst* have been detected in the tragedies and all of them co-occur with the personal pronoun *thou*, indicating the second person singular subject, as in (351), (352), and (353):

(351) Why *shouldst* thou kneele, knowest thou not who I am?
 (C. M., ES, 1.1.)

(352) Tis true, and but for reverence of these robes,
 Thou *shouldst* not plod one foote beyond this place.
 (C. M., ES, 1.1.)

(353) Thou *shouldst* not thinke of God, thinke of the deuil,
And of his dame too.

(C. M., DF, 5)

Epistemic modality

Epistemic *should* serves to express the assumption of the speaker based on the knowledge or circumstances, with a moderate degree of certainty allowing for admitting a mistake. This type of modality indicated by *should* is very scarce in the works of Christopher Marlowe. The relative frequency is 0.26 RF and accounts for only three instances.

Table 92. Distribution of *should* representing epistemic modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	1	0	0	0	0	0	3
RF	1.36	0.53	0.00	0.00	0.00	0.00	0.00	0.26

An example include:

(354) AENEAS

Where am I now? these *should* be Carthage walles.

ACHATES

Why stands my sweete Aeneas thus amazde?

AENEAS

● my Achates, Theban Niobe,

Who for her sonnes death wept out life and breath,

And drie with grieve was tumd into a stone,

Had not such passions in her head as I. [Sees Priams statue.]

Me thinkes that towne there *should* be Troy, yon Idas hill,

There Zanthus streame, because here's Priamus,

And when I know it is not, then I dye.

(C. M., DQ, 2.1.)

In the example (354), the modal denoting the supposition of the speaker is preceded by the impersonal construction *me thinkes*, commonly used in the ●E and ME periods. Infrequent though as it may be, the construction still exists in PDE. The co-occurrence of the modal *should* and *me thinkes* may serve as an intentional manoeuvre highlighting the process of sensual perception and a consecutive mental analysis leading to a deduction and the rise of certain expectations. Sabatini (1979) stresses

the role of perception as a trigger for mental operations. As he points out the OE construction *me thinketh that* signifies “far less the mental operation of ratiocination than the idea of sense perception (...)” Sabatini (1979: 151). As the author further explains “what speakers are really saying when they utter the expression *we think* is *it appears* or *seems thus to us*. With the perception of an object or a phenomenon comes the internalization of mental operation engaged in by the beholder upon reacting to the stimulus: what we perceive causes us to designate as ... (note factitive import)” Sabatini (1979: 151).

Table 93 shows the frequency of occurrence of the modal and the impersonal construction in the works of Christopher Marlowe. The total relative frequency is relatively low and equals 0.52 RF.

Table 93. Distribution of *should* collocating with *me thinkes* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	1	1	1	0	2	0	6
RF	0.68	0.53	0.52	0.48	0.00	1.09	0.00	0.52

Some instances include:

(355) By Mahomet he shal be tied in chaines,

Rowing with Christians in a Brigandine,

About the Grecian Isles to rob and spoile:

And tume him to his ancient trade againe.

Me thinks the slave *should* make a lusty theefe.

(C. M., T2, 3.5.)

(356) This is the ware wherein consists my wealth:

And thus *me thinkes should* men of judgement frame

Their meanes of traffique from the vulgar trade,

And as their wealth increaseth, so inclose

Infinite riches in a little roome.

(C. M., JM, 1.1.)

Deontic modality

Indicative should

Indicative *should* serves to affect the interlocutor so that they behave in a particular way and perform certain deeds. The speaker is typically someone of the same social status as the addressee, or of a higher status but unwilling to exercise power over the interlocutor, hence the use of

weak *should* instead of much more forceful *must*. This meaning of the modal is not very common (0.69 RF), attested mostly in *Doctor Faustus* (1.56 RF) and *Edward the Second* (1.64 RF).

Table 94. Distribution of indicative *should* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	1	1	2	3	1	8
RF	0.00	0.00	0.52	0.48	1.56	1.64	0.89	0.69

Some examples include:

- (357) we come to tell thee thou dost iniure vs,
 Thou talkst of Christ, contrary to thy promise
 Thou *shouldst* not thinke of God, thinke of the deuil,
 And of his dame too.
 (C. M., DF, 5)
- (358) Tis true, and but for reverence of these robes,
 Thou *shouldst* not plod one foote beyond this place.
 (C. M., ES, 1.1.)
- (359) Twas in your wars, you *should* ransom him.
 (C. M., ES, 2.2.)

Remarkably, in three cases the modal verb in this context is preceded and thus its meaning is strengthened by the lexical verb *requisite* or *necessary*, as in examples (360)-(362).

- (360) I know it: yet I say make love to him;
 Doe, it is *requisite* it *should* be so.
 (C. M., JM, 2.3.)
- (361) The other knows enough to have my life,
 Therefore 'tis not *requisite* he *should* live.
 (C. M., JM, 4.1.)
- (362) That follows not necessary by force of argument,
 that you being licentiate *should* stand vpon't, therefore ac-
 knowledge your error, and be attentiu.
 (C. M., DF, 2)

Forbidding

Quite the opposite use of *should* has been revealed in merely two instances displaying the total relative frequency of 0.17 RF. Here, the speaker forbids the addressee to act or strongly advises not to take an action.

Table 95. Distribution of *should* indicating forbidding in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	0	1	1	0	2
RF	0.00	0.00	0.00	0.00	0.78	0.54	0.00	0.17

(363) 'Tis true, and but for reverence of these robes,
 Thou *shouldst* not plod one foote beyond this place.
 (C. M., ES, 1.1.)

Dynamic necessity

Dynamic necessity concerns the utterances in which the speaker admits that the necessity to act exists without imposing an obligation on the interlocutor nor indicating ways of behaviour. The distribution of *should* denoting dynamic modality is quite stable across the plays with a very low range (2.14 RF).

Table 96. Distribution of *should* indicating dynamic necessity in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	15	19	22	21	15	20	12	124
RF	10.24	10.17	11.50	10.27	11.70	10.95	10.72	10.77

(364) ITHIMORE
 I, and our lives too, therefore pull amaine.
 [Dies.]
 'Tis neatly done, Sir, here's no print at all.
 BARABAS
 Then is it as it *should* be, take him up.

(C. M., JM, 4.1.)

Danger

In a small number of cases the modal verb *should* has been found to denote danger. This meaning is very rare and exhibits the relative frequency of 0.43 RF.

Table 97. Distribution of *should* indicating a danger in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	3	1	0	0	1	0	5
RF	0.00	1.60	0.52	0.00	0.00	0.54	0.00	0.43

(365) Yet would the Souldane by his conquering power,
So scatter and consume them in his rage,
That not a man *should* live to rue their fall.

(C. M., T1, 4.1.)

(366) And when they see me march in black aray
With mournfull streamers hanging down their heads,
Were in that citie all the world contain'd,
Not one *should* scape: but perish by our swords.

(C. M., T1, 4.2.)

Caution – Lest/For fear

Four instances (0.34 RF) of *should* have been revealed to serve to introduce caution or call for special attention in order to avoid unfavourable course of action.

Table 98. Distribution of *should* indicating caution in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	1	2	0	0	0	0	4
RF	0.68	0.53	1.04	0.00	0.00	0.00	0.00	0.34

The instances include:

(367) Goe, bid my Nurse take yong Ascanius,
And beare him in the countrey to her house,
Aeneas will not goe without his sonne:
Yet lest he *should*, for I am full of feare,
Bring me his oares, his tackling, and his sailes:

(C. M., DQ, 4.4.)

(368) They say I am a coward, (Perdicas) and I feare as litle
 their tara, tantaras, their swordes or their cannons, as I doe a
 naked Lady in a net of golde, and for feare I *should* be affraid,
 would put it off and come to bed with me.

(C. M., T2, 4.1.)

Collocations with other verbs

The modal *should* does not reveal a great tendency to collocate with verbs of communication or stative verbs. Among the former ones *say* (0.17 RF) and *ask* (0.08 RF) have been attested, whereas the stative verbs include *think* (0.17 RF), *be* (0.08 RF), and *mean* (0.08 RF). As can be seen in Table 99, all of them are characterised by a very low frequency distribution (0.69 RF in total).

Table 99. Distribution of verbs collocating with *should* in the plays of Marlowe.

Title	<i>think</i>	<i>say</i>	<i>ask</i>	<i>see</i>	<i>be</i>	<i>mean</i>	Total
DQ	0	1	0	0	0	1	2
T1	0	0	0	0	0	0	0
T2	1	0	0	0	0	0	1
JM	0	1	0	0	0	0	1
DF	1	0	1	1	1	0	4
ES	0	0	0	0	0	0	0
MP	0	0	0	0	0	0	0
Total F	2	2	1	1	1	1	8
Total RF	0.17	0.17	0.08	0.08	0.08	0.08	0.69

(369) Do ye see yonder tall fellow in the round slop, hee has kild the
 diuell, so I *should be* cald kill diuell all the parish ouer.

(C. M., DF, 4)

(370) No, live Iarbus, what hast thou deserv'd,
 That I *should* say thou art no love of mine?

(C. M., DQ, 3.1.)

(371) Not a wise word, only gave me a nod, as who *shold*
say, Is it even so;

(C. M., JM, 4.2.)

- (372) Yes sir, I will tell you, yet if you were not dunces
 you would neuer aske me such a question,
 for is not he corpus naturale, and is not that mobile,
 then wherefore *should* you *aske* me such a question.
 (C. M., DF, 2)
- (373) that there would come a famine through all the worlde, that all
 might die, and I liue alone, then thou *shouldst see* how fatt I
 would be.
 (C. M., DF, 5)
- (374) I know not what I *should* think of it.
 Me thinks tis a pitifull sight.
 (C. M., T2, 3.2.)
- (375) What *should* this meane? my Doves are back returnd,
 Who warne me of such daunger prest at hand,
 To harme my sweete Ascanius lovely life.
 (C. M., DQ, 3.2.)

Evaluative modality

In the tragedies of Christopher Marlowe the modal verb *should* have been found to serve an evaluative function. What is meant by evaluative modality in this study is the emotional attitude of the speaker towards situations, actions or events. The modal verb has been attested to collocate frequently with the expressions denoting the emotive state of the speaker, such as sorrow and regret, hope, fear, anger, pity, despair, or even the reference to God, especially in a moment of misery and helplessness. *Should* is also commonly found in emotional (rhetorical) questions, however, not all cases indicate clearly evaluative modality so they are dealt with in a separate subsection. The frequency distribution of the modal *should* denoting evaluative modality is considerable (1.99 RF). The most numerous instances have been encountered in *Dido, Queen of Carthage* (5.46 RF) and *Doctor Faustus* (3.90 RF).

Table 100. Distribution of *should* indicating evaluative modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	8	3	1	2	5	2	2	23
RF	5.46	1.60	0.52	0.97	3.90	1.09	1.78	1.99

Sorrow and regret

The emotional state of sorrow and regret designated by *should* is accompanied by other elements enhancing this meaning, e.g. *alas*, *pitty*, *relent*, etc.

Table 101. Distribution of *should* indicating sorrow and regret in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	1	0	1	0	2	5
RF	0.00	0.53	0.52	0.00	0.78	0.00	1.78	0.43

- (376) Tismore then pittie such a heavenly face
Should by hearts sorrow wax so wan and pale,
 (C. M., T1, 3.2.)
- (377) Alas my Lord, how *should* our bleeding harts
 Wounded and broken with your Highnesse grieffe,
 Retaine a thought of joy, or sparke of life?
 (C. M., T2, 5.3.)
- (378) Alas I am a scholler, how *should* I have golde?
 All that I have is but my stipend from the King,
 Which is no sooner receiv'd but it is spent.
 (C. M., MP, 7)
- (379) Besides my heart relentes that noble men,
 Onely corrupted in religion,
 Ladies of honor, Knightes and Gentlemen,
Should for their conscience taste such ruteles ends.
 (C. M., MP, 4)
- (380) This soule *should* flie from me, and I be changed
 Vnto some brutish beast: al beasts are happy, for when they die
 Their soules are soone dissolud in elements,
 But mine must liue still to be plagde in hel.
 (C. M., DF, 14)

Despair

Despair may be considered a state akin to sorrow and regret, however, the intensiveness of the emotions in case of despair is much higher, caused by the issues of major importance, having a life or death impact on the speaker. The expressiveness of the feelings may be additionally strengthened by the interjection *oh* and the exclamation mark terminating the sentence.

Table 102. Distribution of *should* indicating despair in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	0	1	1	0	0	3
RF	0.68	0.00	0.00	0.48	0.78	0.00	0.00	0.26

(381) The Gods, what Gods be those that seeke my death?

Wherein have I offended Jupiter,
That he *should* take Aeneas from mine armes?

(C. M., DQ, 5.1.)

(382) Ah Pythagoras metem su xossis were that true,

This soule *should* flie from me, and I be changed
Vnto some brutish beast: al beasts are happy, for when they die
Their soules are soone dissolud in elements,
But mine must liue still to be plagde in hel:

(C. M., DF, 14)

Disapproval

Dynamic *should* has also been found to express the reluctance of the speaker to act or the disapproval of the interlocutor's deeds or intentions. Consequently, the speaker is unwilling to grant the permission to perform an action provided that they are in the position to do so. In some cases this meaning of *should* moves even close to reprimanding. The relative frequency of instances of this meaning is rather scarce (0.52 RF) and constitutes no more than six cases.

Table 103. Distribution of *should* indicating disapproval in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	3	1	0	1	1	0	0	6
RF	2.04	0.53	0.00	0.48	0.78	0.00	0.00	0.52

(383) Fie Venus, that such causeles words of wrath,

Should ere defile so faire a mouth as thine:

(C. M., DQ, 3.2.)

(384) Blush blush for shame, why *shouldst*thou thinke of love?

A grave, and not a lover fits thy age:

(C. M., DQ, 4.5.)

- (385) It is a blemish to the Majestie
 And high estate of mightie Emperours,
 That such a base usurping vagabond
Should brave a king, or weare a princely crowne.
 (C. M., T1, 4.3.)
- (386) What might the staying of my bloud portend?
 Is it vnwilling I *should* write this bill?
 (C. M., DF, 5)
- (387) Who then of all so cruell may he be,
 That *should* detaineth thy eye in his defects?
 (C. M., DQ, 3.4.)

Anger

Only one instance (0.08 RF) of evaluative *should* indicating anger has been attested in the database (388). This connotation of the modal is strengthened by the use of the verb *angers* and an exclamation mark terminating the sentence.

- (388) 'Tis not five hundred Crownes that I esteeme,
 I am not mov'd at that: this angers me,
 That he who knowes I love him as my selfe
Should write in this imperious vaine!
 (C. M., JM, 4.3.)

Hope and expectation

Similarly rare is the modal verb *should* expressing hope and expectation of the speaker for the positive tum of the potential future events. Only one instance (0.08 RF) of *should* denoting this meaning has been encountered in the database (389).

- (389) Yet *should* our courages and steeled crestes,
 And numbers more than infinit of men,
 Be able to withstand and conquer him.
 (C. M., T2, 2.2.)

God forbid!

Only one (0.08 RF) direct reference to the Deity, or more specifically to heaven, has been detected. Example (390) shows that *should* in this case

functions as a promise or even a swear providing a guarantee as for the sincerity and good will of the speaker.

(390) BARABAS

Thou know'st, and heaven can witnesse it is true,
That I intend my daughter shall be thine.

MATHIAS

I, Barabas, or else thou wrong'st me much.

BARABAS

Oh heaven forbid I *should* have such a thought.
Pardon me though I weepe; the Governours sonne
Will, whether I will or no, have Abigall:
He sends her letters, bracelets, jewels, rings.

(C. M., JM, 2.3.)

Emotional questions

Quite a sizable number of *should* occur in emotional questions which, as Visser (1978: 1646) indicates, are also called rhetorical questions. As Table 104 shows, in the tragedies of Christopher Marlowe the number of *should* found in this context equals 30 (2.60 RF).

Table 104. Distribution of *should* in emotional questions in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	8	3	5	3	4	5	2	30
RF	5.46	1.60	2.61	1.46	3.12	2.73	1.78	2.60

Emotional questions are typically uttered by a speaker without an expectation of an answer, or the answer is so obvious that it does not need to be uttered. The most frequent environment for this type of questions are soliloquies, monologues, and longer utterances in which the speaker, overwhelmed by emotions, reflects on present, past or future events. Quotations (391) and 0 indicate the use of *should* in emotional questions in Marlowe's tragedies:

(391) Ah Troy is sackt, and Priamus is dead,
And why *should* poore Aeneas be alive?

(C. M., DQ, 2.1.)

(392) Alas I am a scholler, how *should* I have golde?
 All that I have is but my stipend from the King,
 Which is no sooner receiv'd but it is spent.

(C. M., MP, 7.)

Questions of this type usually open with a *wh*- interrogative pronoun. As Table 105 shows, the most frequent pronouns are *why* (0.95 RF) and *what* (0.69 RF). Both *who(m)* and *how* constitute only half of this frequency (0.34 RF) and the remaining two pronouns, namely *wherein* and *whither* are the least common (0.08 RF). Similarly, only one instance (0.08 RF) of the question opening with *should* has been encountered.

Table 105. Interrogative pronouns introducing emotional questions in the plays of Marlowe.

	Emotional questions	<i>Why</i>	<i>What</i>	<i>Who(m)</i>	<i>How</i>	<i>Wherein</i>	<i>Whither</i>	No pronoun
DQ	8	5	1	0	1	1	0	0
T1	3	1	1	1	0	0	0	0
T2	5	0	2	0	2	0	0	1
JM	3	1	1	1	0	0	0	0
DF	4	2	1	0	0	0	1	0
ES	5	2	1	2	0	0	0	0
MP	2	0	1	0	1	0	0	0
F	30	11	8	4	4	1	1	1
RF	2.60	0.95	0.69	0.34	0.34	0.08	0.08	0.08

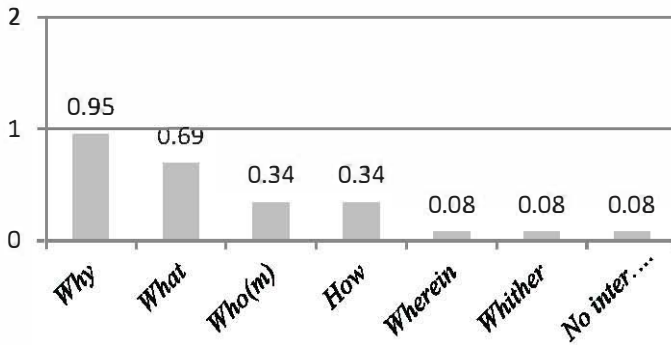


Fig. 30. Interrogative pronouns introducing emotional questions with *should* in the plays of Marlowe.

According to Visser (1978: 1646), a question which is introduced by the modal verb and is unaccompanied by an interrogative pronoun calls for the emphatic answer 'no!', as in (393).

- (393) And *should* we lose the opportunity
 That God hath given to venge our Christians death
 And scourge their foule blasphemous Paganisme?
 (C. M., T2, 2.1.)

It has been already mentioned that *should* in emotional questions introduced by an interrogative pronoun *why* is the most common type (0.95 RF). It needs to be pointed out that this meaning of the modal carries a subjective judgment of the speaker driven by wonder, surprise or doubt.

Table 106. Distribution of interrogative emotional *should* preceded by *why* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	5	1	0	1	2	2	0	11
RF	3.41	0.53	0.00	0.48	1.56	1.09	0.00	0.95

- (394) Ah Troy is sackt, and Priamus is dead,
 And why *should* poore Aeneas be alive?
 (C. M., DQ, 2.1.)

- (395) Why *should* we live, ● wretches, beggars, slaves,
 Why live we Bajazeth, and build up neasts,
 So high within the region of the aire,
 By living long in this oppression,
 That all the world will see and laugh to scorne,
 The former triumphes of our mightines,
 In this obscure infernall servitude?
 (C. M., T1, 5.1.)

Rational should

Should designating rational modality indicates a situation or a behaviour which is rational and thus is a reasonable expectation of the speaker.

Table 107. Distribution of *should* indicating rational modality in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	5	2	3	0	2	2	15
RF	0.68	2.67	1.04	1.46	0.00	1.09	1.78	1.30

- (396) A grave, and not a lover fits thy age:
 A grave? why, I may live a hundred yeares,
 Fourescore is but a girles age, love is sweete:
 My vaines are withered, and my sinewes drie,
 Why doe I thinke of love now I *should* dye?
 (C. M., DQ, 4.5.)
- (397) Though womans modesty *should* hale me backe,
 I can with-hold no longer; welcome sweet love.
 (C. M., JM, 4.2.)
- (398) But that greefe keepes me waking, I *shoulde* sleepe,
 For not these ten daies have these eyes lids closd.
 (C. M., ES, 5.5.)

Asking for advice

A small number (0.26 RF) of instances of *should* concern the utterances in which the speaker asks the interlocutor for advice.

Table 108. Distribution of *should* indicating asking for advice in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	1	0	0	0	1	3
RF	0.00	0.53	0.52	0.00	0.00	0.00	0.89	0.26

- (399) And tell me whether I *should* stoope so low,
 Or treat of peace with the Natolian king?
 (C. M., T2, 1.1.)
- (400) TALEUS
 Flye Ramus flye, if thou wilt save thy life.
 RAMUS
 Tell me Taleus, wherfore *should* I flye?
 (C. M., MP, 7)

Unreal situations

Quite a considerable number of cases (3.82 RF) indicate either unreal, hypothetical situations which are non-existent at the time when the utterance is being made, or the situations which are so unusual that it makes them unbelievable and almost unreal. In the database analysed four groups of such cases have been attested, namely a prophecy, hypothetical, unbelievable and preposterous situation, and reasonable expectation.

Prophecy

The modal *should* denoting a prophecy is very infrequent and has been attested in only two cases (0.17 RF).

Table 109. Distribution of *should* indicating a prophecy in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	1	0	1	0	0	0	0	2
RF	0.68	0.00	0.52	0.00	0.00	0.00	0.00	0.17

- (401) And as he spoke, to further his entent
 The windes did drive huge billowes to the shoare,
 And heaven was darkned with tempestuous clowdes:
 Then he alleag'd the Gods would have them stay,
 And prophecied Troy *should* be overcome:

(C. M., DQ, 2.1.)

- (402) Feare not my Lord, I see great Mahomet
 Clothed in purple clowdes, and on his head
 A Chaplet brighter than Apollos crowne,
 Marching about the ayer with armed men,
 To joine with you against this Tamburlaine.
 Renowmed Generall mighty Callapine,
 Though God himselfe and holy Mahomet,
Should come in person to resist your power,
 Yet might your mighty hoste incounter all,
 And pull proud Tamburlaine upon his knees,
 To sue for mercie at your highnesse feete.

(C. M., T2, 5.2.)

Hypothetical

The most frequent context in this group is a hypothetical, unreal situation or event which, concerning the knowledge of the speaker, may or may not occur in the future. The total number of actual occurrences equals 39 (3.38 RF), as shown in Table 110.

Table 110. Distribution of *should* indicating a hypothetical situation in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	9	17	4	2	2	3	39
RF	1.36	4.81	8.89	1.95	1.56	1.09	2.68	3.38

(403) That if I *should* desire the Persean Crowne,
I could attaine it with a woondrous ease,
And would not all our souldiers soone consent,
If we *should* aime at such a dignitie?

(C. M., T1, 2.5.)

(404) Take you the honor, I will take my ease,
My wisdome shall excuse my cowardise:
I goe into the field before I need?
Alarme, and Amyras and Celebinus run in.
The bullets fly at random where they list.
And *should* I goe and kill a thousand men,
I were as soone rewarded with a shot,
And sooner far than he that never fights.
And *should* I goe and do nor harme nor good,
I might have harme, which all the good I have
Join'd with my fathers crowne would never cure.

(C. M., T2, 4.1.)

Should denoting hypothetical situation usually appears in the protasis of a conditional sentence, as in (405) and (406).

(405) I like that well: but tel me my Lord, if I *should* let you
goe, would you bee as good as your word? Shall I be made a king
for my labour?

(C. M., T2, 1.2.)

(406) But do you hear? if I *should* serue you, would you
(407) teach me to raise vp Banios and Belcheos?

(C. M., DF, 4)

(408) What wudst thou doe if he *should* send thee none?

(C. M., JM, 4.4.13)

Unbelievable

Should is also found in the utterances which refer to a highly unusual, unbelievable, almost improbable situation. Only two such cases (0.17 RF) have been found in the works of Christopher Marlowe.

Table 111. Distribution of *should* indicating an unbelievable situation in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	0	1	0	1	2
RF	0.00	0.00	0.00	0.00	0.78	0.00	0.89	0.17

(409) Beleeue me master Doctor, this makes me wonder
about the rest, that being in the dead time of winter, and in
the month of Ianuary, how you *shuld* come by these grapes.

(C. M., DF, 12)

Preposterous

Should denoting preposterous, absurd situation has been encountered in only one (0.08 RF) example (410).

Table 112. Distribution of *should* indicating a preposterous situation in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	1	0	0	0	1
RF	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.08

(410) CURTEZANE

And what think'st thou, will he come?

PILIA-BORZA

I think so, and yet I cannot tell, for at the reading
of the letter, he look'd like a man of another world.

CURTEZANE

Why so?

PILIA-BORZA

That such a base slave as he *should* be saluted by
such a tall man as I am, from such a beautifull dame as you.

(C. M., JM, 4.2.)

Past reference

Only five instances (0.43 RF) of *should* with past reference have been encountered in the corpus. These include a reported speech and the indication of the future in the past.

Table 113. Distribution of *should* with past reference in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	1	0	0	2	1	5
RF	0.00	0.53	0.52	0.00	0.00	1.09	0.89	0.43

(411) Mine unckle heere, this Earle, and I my selfe,
Were swome to your father at his death,
That he *should* nere returne into the realme.

(C. M., ES, 1.1.)

Indeterminate cases of should in Marlowe

A few instances of *should* are difficult or impossible to classify. These constitute indeterminate cases with the total relative frequency of 0.60 RF.

Table 114. Distribution of indeterminate cases of *should* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	0	2	1	0	3	7
RF	0.00	0.53	0.00	0.97	0.78	0.00	2.68	0.60

Summary of the main findings

As can be seen in Fig. 31, the prevailing type of modality denoted by *should* in the works of Christopher Marlowe is dynamic necessity (10.77 RF) indicating the existence of external and independent of the speaker demand for a certain action to take place.

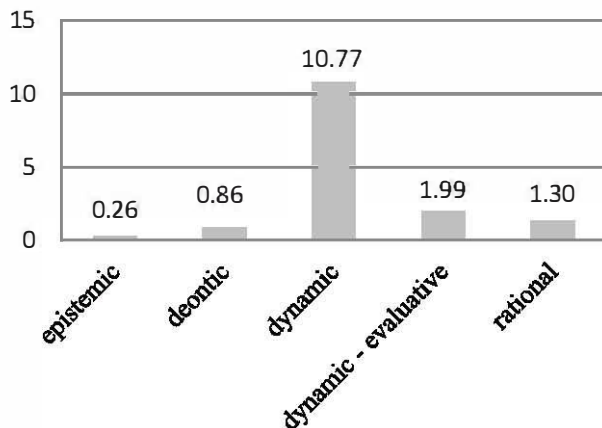


Fig. 31. Distribution of *should* representing different kinds of modality in the plays of Marlowe.

A great part of this modality is revealed by evaluative modality (1.99 RF) which may be treated as an expression of the speaker's emotional attitude towards people and events. The particularly frequent distribution of evaluative *should* in the plays *Dido*, *Queen of Carthage* (5.46 RF) and *Doctor Faustus* (3.90 RF) may be partially explained by the motives standing behind the behaviour of the main characters. Both, queen *Dido* and *Faustus*, are driven by two, possibly the most powerful emotional forces which govern human behaviour, heartache and rapacity. *Dido*'s deeds are the results of affectionate but unhappy love for *Aeneas*, whereas *Faustus*'s performance is driven by the desire of absolute power. Both characters struggle with a range of emotional states such as sorrow, regret, hope, fear, anger, pity, or despair, and both face tragic ends. This emotive variety, strengthened by the abundance of emotional questions (2.60 RF), finds its expression in the use of evaluative *should*.

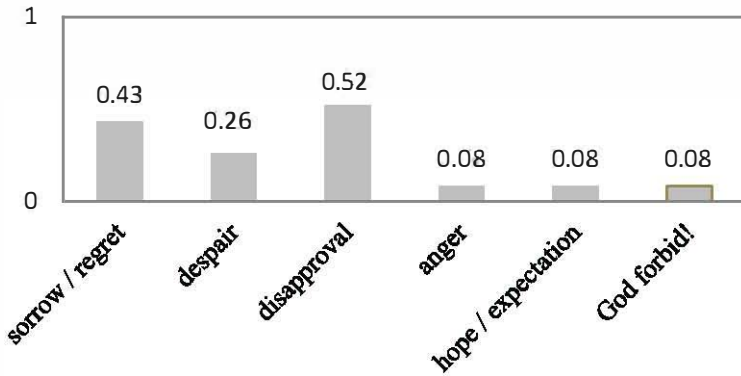


Fig. 32. Distribution of emotional states denoted by *should* in the plays of Marlowe.

The modal verb *should* is also frequently (3.82 RF) found to indicate unreal or dubious, improbable events. Particularly frequent (3.38 RF) in this group are hypothetical situations which include the use of the modal in conditional sentences.

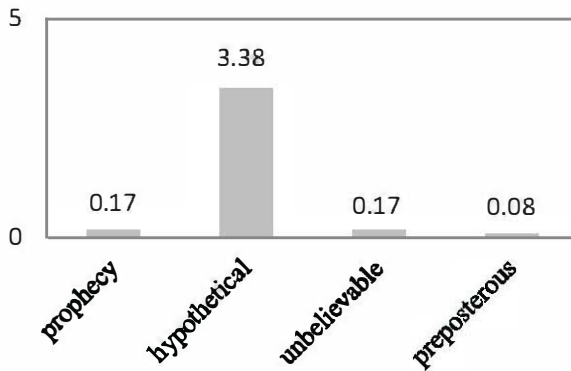


Fig. 33. Distribution of unreal or dubious events denoted by *should* in the plays of Marlowe.

Must

Frequency distribution of must

The distribution of the modal verb *must* in the works of Christopher Marlowe is presented in Table 115. The highest frequency of the verb is found in *Edward the Second* (23.56 RF) and *The Jew of Malta* (22.00 RF), whereas the lowest appears in the two parts of *Tamburlaine the Great* (10.70 RF and 10.98 RF).

Table 115. Distribution of *must* in the plays of Marlowe.

Title	Words in total	<i>Must</i> – F	<i>Must</i> – RF
DQ	14,642	21	14.34
T1	18,676	20	10.70
T2	19,116	21	10.98
JM	20,447	45	22.00
DF	12,815	24	18.72
ES	18,249	43	23.56
MP	11,186	18	16.09
Total	115,131	192	16.67

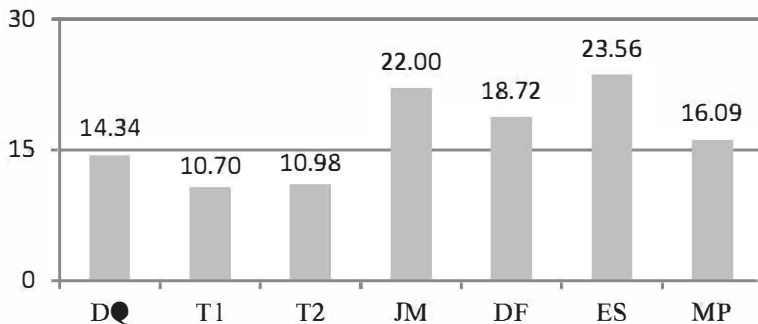


Fig. 34. Distribution of *must* in the plays of Marlowe.

The graphic representation of the distribution in Fig. 34 shows that the verb tends to increase in frequency in the later works of Christopher Marlowe, especially in those written in and after the year 1589.

Epistemic necessity

Epistemic modality seeks to make judgements about the actuality of the proposition in relation to reality. By the means of epistemic necessity the speaker expresses their strong confidence or belief in the truth of what is being said. Palmer (1990: 50) claims that the verb *must* representing this kind of modality can be paraphrased as ‘The only possible conclusion is that...’. Only two occurrences of this kind of modality have been detected in the corpus, (412) and (413).

Table 116. Distribution of *must* indicating epistemic necessity in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	0	2	0	0	0	2
RF	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.17

(412) And saw'st thou not
 Mine Argosie at Alexandria?
 Thou couldst not come from Egypt, or by Caire
 But at the entry there into the sea,
 Where Nitus payes his tribute to the maine,
 Thou needs *must* saile by Alexandria.
 (C. M., JM, 1.1.)

(413) KNIGHT
 Tut, Jew, we know thou art no souldier;
 Thou art a Merchant, and a monied man,
 And 'tis thy mony, Barabas, we seeke.
 BARABAS
 How, my Lord, my mony?
 GOVERNOR
 Thine and the rest.
 For to be short, amongst you 't*must* be had.
 (C. M., JM, 1.2.)

Deontic modality

Deontic necessity – imposing an obligation

According to Palmer (1990: 69), deontic necessity is performative in that the speaker, in the moment of utterance, performs an act of laying an obligation on the addressee. The modal verb *must* is thus a deontic modal

and as such is also found in the tragedies of Christopher Marlowe. The speaker thus is someone of a higher status in relation to the interlocutor and hence in a position to issue a command or lay an obligation. Table 117 shows the distribution of the verb indicating deontic necessity.

Table 117. Distribution of *must* imposing an obligation in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	3	0	6	8	3	2	1	23
RF	2.04	0.00	3.13	3.91	2.34	0.54	0.89	1.99

An example (414) illustrates the situation in which the addressee is forced to act.

(414) Content thee, Calymath, here thou *must* stay,
 And live in Malta prisoner; for come all the world
 To rescue thee, so will we guard us now,
 As sooner shall they drinke the Ocean dry,
 Then conquer Malta, or endanger us.
 So march away, and let due praise be given
 Neither to Fate nor Fortune, but to Heaven.

(C. M., JM, 5.5.)

Sometimes the speaker lays an obligation addressing directly the interlocutor in the third person singular. In example (415), the conversation is held between Barabas and his daughter Abigail.

(415) BARABAS
 Then Abigall, there *must* my girle
 Intreat the Abbasse to be entertain'd.
 ABIGALL
 How, as a Nunne?
 BARABAS
 I, Daughter, for Religion
 Hides many mischiefes from suspition.

(C. M., JM, 1.2.)

Deontic possibility – granting a permission

There are two modal verbs in modern English language which are involved in granting a permission, i.e. *may* and *can*. One case of *must*, however, has been detected in the corpus which apparently serves this function. It may be paraphrased thus as ‘It is necessary that only a woman may...’.

(416) GUISE

What, all alone my love, and writing too:

I prethee say to whome thou writes?

DUCHESS

To such a one my Lord, as when she reads my lines,

Will laugh I feare me at their good aray.

GUISE

I pray thee let me see.

DUCHESS

● no my Lord, a woman only *must*

Partake the secrets of my heart.

(C. M., MP, 13)

Dynamic necessity

Quite a significant number of cases refer to the situations in which the speaker merely states the necessity for an event to occur but without imposing an obligation on the interlocutor. Palmer (1990: 113) refers to this usage of *must* as ‘neutral’ or ‘circumstantial’ necessity and paraphrases the meaning as ‘it is necessary for...’. This kind of modality combines very often, but not exclusively, with a first person singular and plural subject. The speaker thus does not lay an obligation on themselves but claims that it is necessary for an event to happen.

Table 118. Distribution of *must* representing dynamic necessity in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	16	13	11	32	20	38	12	142
RF	10.92	6.96	5.75	15.65	15.60	20.82	10.72	12.33

(417) But now I *must* be gone to buy a slave.

(C. M., JM, 2.3.)

- (418) If we say that we haue no sinne,
 We deceiue our selues, and theres no truth in vs.
 Why then belike we *must* sinne,
 And so consequently die.
 I, we *must* die an euerlasting death.

(C. M., DF, 1)

It is also found in interrogative sentences. Sometimes, as the example (419) illustrates, the speaker expresses their discontent and disapproval of the circumstances which are enforced on them. Rhetorical question strengthens the indignant force of the utterance.

- (419) Yet *must* I heare that lothsome name againe?

(C. M., DQ, 3.1.)

Collocations with communicative verbs

The modal verb *must* expressing dynamic necessity is frequently combined with a verb of communication. In such a case, the modal is immediately followed by one of the verbs: *say*, *tell*, *speak*, *talk*, *confess*, as in examples (419)–(423).

- (420) I *must say* so, paine forceth me complaine.

(C. M., MP, 11)

- (421) Wel, come giue me your money, my boy wil deliuer
 him to you: but I *must tel* you one thing before you haue
 him, ride him not into the water at any hand.

(C. M., DF, 11)

- (422) WARWICKE
 Bridle thy anger gentle Mortimer.
 MORTIMER
 I cannot, nor I will not, I *must speake*.

(C. M., ES, 1.1.)

- (423) Sweete sonne come hither, I *must talke* with thee.

(C. M., ES, 5.2.)

- (424) My gracious Soueraign though I *must confesse*
 my selfe farre inferior to the report men haue published, and
 nothing answerable to the honor of your Imperial majesty,
 yet for that loue and duety bindes me therevnto, I am con-
 tent to do whatsoever your maiesty shall conmand me.

(C. M., DF, 10)

Table 119. Distribution of communicative verbs collocating with *must* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	F	RF
<i>say</i>	●	●	●	●	2	●	1	3	●.26
<i>confess</i>	●	●	●	●	1	●	1	2	●.17
<i>tell</i>	●	●	●	●	1	●	●	1	●.08
<i>speak</i>	●	●	●	●	●	1	●	1	●.08
<i>talk</i>	●	●	●	●	●	1	●	1	●.08

As can be seen in Table 119, the most common verbs of communication following *must* are *say* (●.26 RF) and *confess* (●.17 RF). Other attested verbs, *tell*, *speak*, and *talk*, are very scarce and only one representative (●.08 RF) of each has been found in the corpus. *Doctor Faustus* is the most prolific play in which most cases have been encountered.

Fatal Destiny

The modal verb *must* occurs also in the utterances which point out to the inevitability of future events. In most cases, the fate is tragic and the subject is doomed to death. Only one case (427) has been found in which the future situation is going to be beneficial and even prestigious to the subject.

(425) ●h brother, brother, all the Nuns are sicke,
 And Physicke will not helpe them; they *must dye*.

(C. M., JM, 3.6.)

(426) Now Faustus *must* thou needes *be damnd*,
 And canst thou not be saued?

(C. M., DF, 5)

(427) SURGEON
 Alas my Lord, your highnes cannot live.
 NAVARRE
 Surgeon, why saist thou so? the King may live.
 KING
 ●h no Navarre, thou *must be* King of France.

(C. M., MP, 22)

Table 120. Distribution of *must* indicating fatal destiny in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	F	RF
<i>must die</i>	0	0	2	1	1	4	2	10	0.86
<i>must sin</i>	0	0	0	0	1	0	0	1	0.08
<i>must be damnd</i>	0	0	0	0	1	0	0	1	0.08
<i>must be sackt</i>	1	0	0	0	0	0	0	1	0.08
<i>must be king</i>	0	0	0	0	0	0	1	1	0.08
other	0	0	0	1	0	0	0	1	0.08

'Now must I about this geare'

The modal verb *must* has also been found in the expression *I/we must about this geare*, which may be paraphrased as 'it is necessary for me/us to handle this matter.'

(428) Venus farewell, thy sonne shall be our care:

Come Ganimed, we *must about this geare*.

Exeunt Jupitercum Ganimed.

(C. M., DQ, 1.1.)

(429) So, Now *must I about this geare*, nere was there any

So finely handled as this king shalbe.

Foh, heeres a place in deed with all my hart.

(C. M., ES, 5.5.)

Indignant comment

The use of the modal verb *must* in order to express the indignation and disapproval of the speaker was pointed out by Visser (1978: 1807), who dates its first occurrence back to 1390. Marlowe seems to incorporate this usage to a very limited degree. Only 5 cases (0.43 RF) have been found in which the speaker clearly makes an indignant and satirical comment in reply to their interlocutor's ludicrous remark or offensive behaviour.

Table 121. Distribution of *must* indicating indignation in the plays of Marlowe.

		T2	JM	DF	ES	MP	Total
F	1	0	0	1	1	0	5
RF	0.68	0.00	0.00	0.48	0.78	1.09	0.43

- (430) ANNA
 Then sister youle abjure Iarbus love?
 DIDO
 Yet *must* I heare that lothsome name againe?
 (C. M., DQ, 3.1.)
- (431) I cannot brooke these hautie menaces:
 Am I a king and *must* be over rulde?
 (C. M., ES, 1.1.)
- (432) LEISTER
 Your majestie *must* go to Killingworth.
 EDWARD
Must! tis somewhat hard, when kings *must* go.
 (C. M., ES, 4.7.)
- (433) ● that there would come a famine through all the worlde, that all
 might die, and I liue alone, then thou shouldst see how fatt I
 would be: but *must* thou sit and I stand?
 (C. M., DF, 5)

The use of *must* in example (433) emphasises the irritation and enviousness of the speaker driven by the unfavourable circumstances. The meaning of the verb is strengthened by the fact that the speech is delivered by the ghost of Envy.

Emotional/wishful must

Merely one example (0.08 RF) of emotional *must* denoting a wish has been found.

- (434) ● *must* this day be period of my life,
 Center of all my blisse!
 (C. M., ES, 2.6.)

Must co-occurring with need

Visser (1978: 1810) draws attention to the illative *must*, which 'expresses an inferred or presumed probability that borders on certainty.' This epistemic force of *must* is sometimes manifested by the combination with *need* which, as *Oxford English Dictionary* indicates, in this context seems to function rather as an adverb meaning 'necessarily', 'of necessity', or 'unavoidably'.

In the works of Christopher Marlowe, 3 cases of *must needs* have been found, however, not all of them incorporating illative *must*. In (436) for instance, it is clearly neutral, dynamic necessity which may be paraphrased as 'I necessarily must confess' or 'it is necessary for me to confess.'

- (435) Save onely that in Beauties just applause,
 With whose instinct the soule of man is toucht,
 And every Warriour that is rapt with love
 ●f fame, of valour, and of victory,
Must needs have beauty beat on his conceites.
 (C. M., T1, 5.1.)
- (436) Now Faustus *must* thou *needes* be damnd,
 And canst thou not be sau'd?
 (C. M., DF, 5)
- (437) My Lords of Poland I *must needs* confesse,
 The offer of your Prince Electors, farre
 Beyond the reach of my desertes.
 (C. M., MP, 8)

What is more, 2 cases of the reversed phrase have been found, namely the combination of needs followed by *must*, (438) and (439). The phrase 'needs must' dates back to the saying 'He *must nedys* go that the deuell dryues' and points out to the act which is inevitable and, although reluctantly, must be performed by the subject.

- (438) And saw'st thou not
 Mine Argosie at Alexandria?
 Thou couldst not come from Egypt, or by Caire
 But at the entry there into the sea,
 Where Nitus payes his tribute to the maine,
 Thou *needs must* saile by Alexandria.
 (C. M., JM, 1.1.)
- (439) But dayes bright beames dooth vanish fast away,
 And *needes* I *mustresigne* my wished crowne.
 (C. M., ES, 5.1.)

Table 122. Distribution of *must* co-occurring with *need* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	1	0	1	1	1	1	5
RF	0.00	0.53	0.00	0.48	0.78	0.54	0.89	0.43

Rational must

Palmer (1990: 105) proposes a separate term for the modality indicating what the speaker believes is extremely reasonable or rational to do, namely rational modality.

Table 123. Distribution of rational *must* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	2	7	2	3	1	1	4	20
RF	1.36	3.74	1.04	1.46	0.78	0.54	3.57	1.73

(440) Soft sir, you *must* be dieted, too much eating will
make you surfeit.

(C. M., T1, 4.4.)

(441) Come Madame, let vs in, where you *must* wel reward
this learned man for the great kindnes he hath shewd to you.

(C. M., DF, 12)

(442) Go too sirha, take your crown, and make up the halfe dozen.
So sirha, now you are a king you *must* give armes.

(C. M., T2, 3.5.)

Strong advice

As much as half of all the rational occurrences of *must* indicate unambiguously strong advice. It is hardly surprising taken into consideration the fact that what is reasonable and rational is also very often advisable. This meaning of *must* is especially strongly manifested in the clauses with the second person subject (90% of cases), as in (443) and (444).

(443) Then Balduck, you *must* cast the scholler off
And leame to court it like a Gentleman, (...)
You *must* be proud, bold, pleasant, resolute,
And now and then, stab as occasion serves.

(C. M. ES, 2.1.)

(444) Now Madam *must* you insinuate with the King,
And tell him that tis for his Countries good,
And common profit of Religion.

(C. M., MP, 12)

●other subjects include the third person plural.

(445) Techelles, women *must* be flattered.

(C. M., T1, 1.2.)

Table 124. Distribution of *must* indicating strong advice in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	4	2	0	0	3	1	10
RF	0.00	2.14	1.04	0.00	0.00	1.64	0.89	0.86

Strong expectation

Another meaning denoted by rational modality is a strong expectation of the speaker. It is illustrated by examples (446)–(448).

(446) Content thy selfe, his person shall be safe,
 And all the friendes of faire Zenocrate,
 If with their lives they will be pleaste to yeeld,
 ●r may be forc'd, to make me Emperour.
 For Egypt and Arabia *must* be mine.

(C. M., T1, 4.4.)

(447) Arundell, we will gratifie the king
 In other matters, he *must* pardon us in this,
 Souldiers away with him.

(C. M., ES, 2.5.)

(448) This is the time that *must* eternize me,
 For conquering the Tyrant of the world.

(C. M., T2, 5.2.)

Table 125. Distribution of *must* indicating strong expectation in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	3	1	1	1	2	0	8
RF	0.00	1.60	0.52	0.48	0.78	1.09	0.00	0.69

Must in rhetorical questions

In the analysed database the verb *must* is not frequently incorporated in rhetorical questions. ●nly seven occurrences have been detected, all of them representing dynamic modality. In three cases, the verb denotes indignant remark. The frequency distribution is represented in Table 126.

Table 126. Distribution of *must* in rhetorical questions in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	4	1	0	1	1	2	0	7
RF	2.73	0.53	0.00	0.48	0.78	1.09	0.00	0.6

Some examples illustrating the use of *must* in rhetorical questions include:

(449) You'll make 'em friends?
 Are there not Jewes enow in Malta,
 But thou *must* dote upon a Christian?
 (C. M., JM, 2.3.)

(450) Friends, whither *must* unhappie *Edward* go,
 Will hatefull Mortimer appoint no rest?
Must I be vexed like the nightly birde,
 Whose sight is loathsome to all winged fowles?
 (C. M., ES, 5.3.)

Indeterminate cases of must in Marlowe

Due to a high tendency of modal verbs towards merging, it is sometimes very difficult, if not impossible, to assign a kind of modality to a verb in context. The modal verb *must* reveals high indeterminacy in terms of differentiating between deontic and dynamic modality. As Palmer (1990: 199) points out, there is no clear dividing line between the two kinds. In the ambiguous cases the problem has been resolved by the deeper analysis of pragmatic factors, such as, for instance, social relations between the participants, or type of discourse. Nevertheless, in four cases (0.34 RF) the indeterminacy remained inexplicable.

Table 127. Distribution of indeterminate cases of *must* in the plays of Marlowe.

	DQ	T1	T2	JM	DF	ES	MP	Total
F	0	0	2	0	0	1	1	4
RF	0.00	0.00	1.04	0.00	0.00	0.54	0.89	0.34

(451) He that will be a flat dectamest,
 And seen in nothing but Epitomes:
 Is in your judgment thought a learned man.
 And he forsooth *must* goe and preach in Germany.
 (C. M., MP, 7)

(452) Even from the midst of fiery Cancers Tropick,
 To Amazonia under Capricome,
 And thence as far as Archipelago:
 All Affrike is in Armes with Tamburlaine.
 Therefore Vicerioies the Christians *must* have peace.
 (C. M., T2, 1.1)

Summary of the main findings

The most frequent kind of modality manifested in the tragedies of Christopher Marlowe is dynamic necessity. As shown in Fig. 35, this 'neutral' modality is significantly higher (12.33 RF) than deontic necessity (1.99 RF) or rational modality (1.73 RF). On the other hand, the most scarce are epistemic modality (0.17 RF) and deontic possibility (0.08 RF).

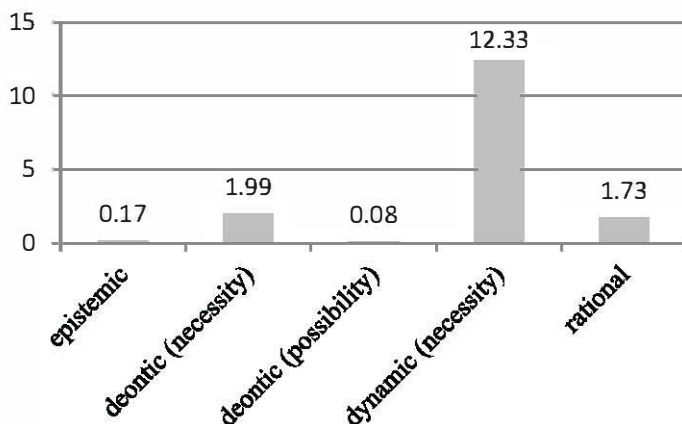


Fig. 35. Distribution of *must* representing different kinds of modality in the plays of Marlowe.

Fig. 36 shows different meanings and functions of the modal verb *must* in the corpus. As can be seen in the graph, the most numerous is *must* imposing an obligation (1.99 RF) and indicating fatal destiny (1.30 RF). The distribution of *must* occurring in indignant remarks and combined

with the verb *need* is constant and equals 0.43 RF. Similarly, granting a permission and emotional *must* are equally infrequent (0.08 RF). The verb *must* denoting strong advice, strong expectation, and occurring in rhetorical questions fluctuates between 0.86 RF and 0.60 RF.

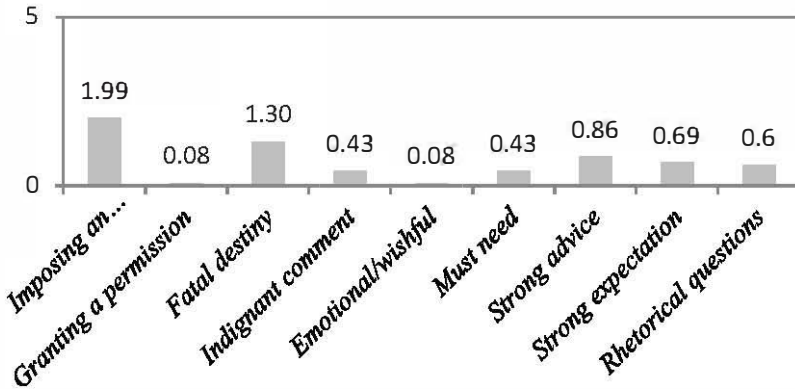


Fig. 36. Distribution of *must* occurring in different contexts in the plays of Marlowe.

To conclude, quantitative and qualitative analyses of nine EModE modal verbs in the tragedies of Christopher Marlowe have revealed a variety of meanings denoted by the modals. Dynamic modality has turned out to be the most common type of modality denoted by the verbs, and for as many as six of them, i.e., *can*, *could*, *may*, *might*, *should*, and *must*, dynamic meaning is the prevailing one. Deontic modality seems to be less popular, and is denoted typically by *can*, *may*, and *shall*. Epistemic modality is rather scarce, indicated by *would* and *might*, though only marginally in the case of the latter.

4. SHAKESPEARE⁴

This chapter presents the results of the quantitative and qualitative analysis of nine EModE modal verbs in the plays of William Shakespeare. The corpus is divided into two smaller corpora, history plays (98,996 words) and tragedies (68,178 words), and comprises in total 167,174 words. The history plays under analysis include three parts of *King Henry the Sixth* and *King Richard the Second*, whereas the tragedies include *Titus Andronicus*, *Romeo and Juliet*, and *Julius Caesar*. The division of the corpus into two smaller corpora creates the opportunity for the comparison of the usage of modals employed by one author in different genres. Each of the nine modal verbs (i.e., *can*, *could*, *may*, *might*, *will*, *would*, *shall*, *should*, and *must*) is analysed in terms of its frequency distribution,

⁴ Aspects of it were earlier discussed in:

Skorasińska, Monika. "Deontic modality indicated by *shall* in the works of Christopher Marlowe." In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka*, edited by Ewa Komorowska, Katarzyna Kondziola-Pich, and Ewa Panter, 227-234. Szczecin: Vohunina.pl, 2010.

Skorasińska, Monika. "Emotional implications of *should* in Shakespeare and Marlowe." In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka III*, edited by Ewa Komorowska, Katarzyna Kondziola-Pich, and Anna Ochrymowicz, 339-346. Szczecin: Zapol, 2012.

Skorasińska, Monika. "Emotional colouring by means of selected modal verbs in the plays of William Shakespeare and Christopher Marlowe." In *Świat Słowian w Języku i Kulturze XIV. Wybrane zagadnienia z języków słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 273-280. Szczecin: Vohunina.pl, 2013.

Skorasińska, Monika. "*Can* in Shakespeare and Marlowe." *Studia Anglica Posnaniensia* 49, no. 1 (2014): 31-55.

Skorasińska, Monika. "Epistemic modal verbs in Shakespeare and Marlowe." In *Subjectivity and Epistemicity. Corpus, Discourse, and Literary Approaches to Stance*, edited by Dylan Glynn and Mette Sjolín, 91-105. Lund: Lund University, 2014.

Skorasińska, Monika. "Speech acts performed by means of modal verbs in the plays of Shakespeare and Marlowe." In *Świat Słowian w Języku i Kulturze XV. Wybrane zagadnienia z języków, literatur i kultur słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 229-238. Szczecin: Vohunina.pl, 2016.

spelling variants, types of modality denoted, and other usage typical of a given verb, and the findings are illustrated by a number of quotations. Each of the modals are discussed separately in the subsequent subsections.

Can

Frequency distribution of can

As Table 128 shows, the frequency distribution of the modal verb *can* is slightly higher in the histories (23.73 RF) than in the tragedies (20.82 RF) of William Shakespeare. The range of the distribution is relatively high and equals 15.76 RF. The highest frequency has been attested in *Henry the Sixth, Part Two* (29.23 RF), and the lowest in *Julius Caesar* (13.47 RF).

Table 128. Distribution of *can* in the plays of Shakespeare.

	Words in total	<i>Can</i> – F	<i>Can</i> – RF
Histories			
KH I	22,679	42	18.51
KH II	26,677	78	29.23
KH III	25,833	66	25.54
KR II	23,807	49	20.58
Total	98,996	235	23.73
Tragedies			
TA	21,658	46	21.23
RJ	25,740	68	26.41
JC	20,780	28	13.47
Total	68,178	142	20.82
Total (histories and tragedies)			
	167,174	377	22.55

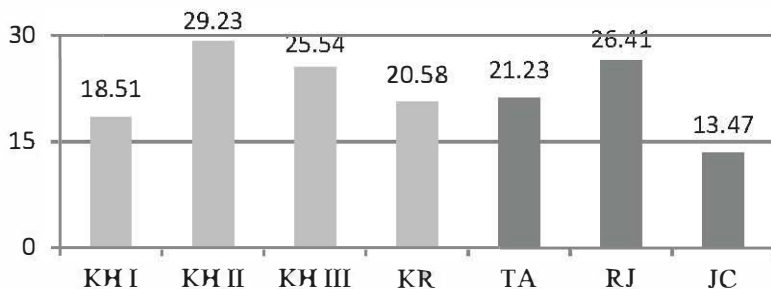


Fig. 37. Distribution of *can* in the plays of Shakespeare.

Forms and spelling variants

The modal verb *can* has been found to appear in Shakespeare in two different forms, namely *can* and *canst*. As Fig. 38 shows, the most numerous form of the verb is *can* with a relative frequency of 13.21 RF. *Canst* (2.99 RF) co-occurs with the relative pronoun *thou* exclusively.

Additionally, two different spelling variants of negative forms have been encountered, *cannot* and *can not*. The most common negative form is *cannot* constituting 6.28 RF, while *can not* appears only in two cases equal to 0.05 RF. No examples of the abbreviated form *can't* have been found in the database.

Table 129. Distribution of different forms of *can* in the plays of Shakespeare.

Title	<i>can</i>	<i>canst</i>	<i>cannot</i>	<i>can not</i>
Histories				
KH I	19	12	11	0
KH II	55	7	16	0
KH III	34	9	23	0
KR II	25	5	18	1
Tragedies				
TA	29	8	9	0
RJ	40	7	21	0
JC	19	2	7	0
Total	221	50	105	1
<hr/>				
Total RF (histories and tragedies)	13.21	2.99	6.28	0.05

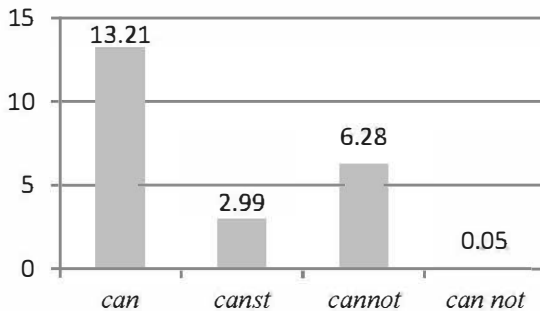


Fig. 38. Distribution of different forms and spelling variants of *can* in the plays of Shakespeare.

Dynamic possibility

Dynamic modality expressed in English by the modal verb *can* is necessarily and exclusively related to possibility. The main typology proposed by Palmer (1990: 83) introduces two subkinds of this type of modality, namely subject oriented and neutral, in some cases also called circumstantial.

Dynamic possibility is relatively frequent in both histories and tragedies of William Shakespeare. The overall frequency equals 21.47 RF and constitutes the most common type of modality indicated by *can* and attested in both corpora.

Table 130. Distribution of *can* indicating dynamic possibility in the plays of Shakespeare.

	F	RF
Histories		
KH I	42	18.51
KH II	75	28.11
KH III	64	24.38
KR II	49	20.58
Total	230	23.23
Tragedies		
TA	44	20.31
RJ	61	23.69
JC	24	11.54
Total	129	18.92
Total (histories and tragedies)		359 21.47

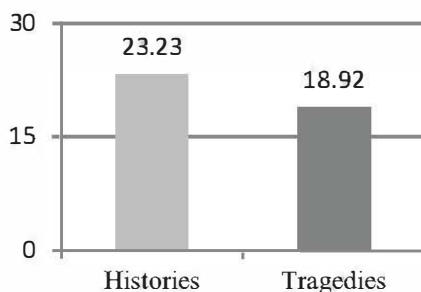


Fig. 39. Distribution of *can* indicating dynamic possibility in the plays of Shakespeare.

Ability

Ability is the feature of animate subjects which enables them to direct the course of action. It involves both mental and physical capacity for acting including the possession of theoretical and practical knowledge, skills, as well as favourable circumstances, the lack of impediments to act or the power to overcome them. Abilitive *can* appears scarcely in the works of William Shakespeare and its relative frequency is slightly higher in tragedies (1.76 RF) than in history plays (1.51 RF).

Table 131. Distribution of *can* indicating ability in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	8	2.99
KH III	3	1.16
KR II	2	0.84
Total	15	1.51
Tragedies		
TA	7	3.23
RJ	4	1.55
JC	1	0.48
Total	12	1.76
Total (histories and tragedies)		27 1.61

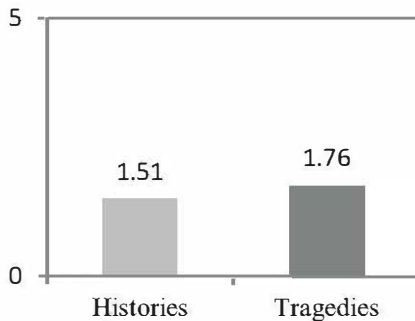


Fig. 40. Distribution of *can* indicating ability in the plays of Shakespeare.

Example (452) illustrates the abilitive function of the verb *can* indicating the possession of skills, practical knowledge and the capacity which enable the animate subject to read.

(452) SERVANT

God gi' god-den. I pray, sir, *can* you read?

R●ME●

Ay, mine own fortune in my misery.

SERVANT

Perhaps you have learned it without book: but, I pray, *can* you read any thing you see?

R●ME●

Ay, if I know the letters and the language.

SERVANT

Ye say honestly: rest you merry!

R●ME●

Stay, fellow; I *can* read.

(W. Sh., RJ, 1.2.)

Power

Inanimate objects are not in control of events, they do not possess consciousness nor will. It would be irrational thus to claim that lifeless substance, such as water and stone, has abilities to act. It seems justified therefore to adopt after Palmer (1990: 85) the term *power* in order to refer to the special qualities of the inanimate entities which allow them to affect the course of action.

Table 132. Distribution of *can* indicating power in the plays of Shakespeare.

	F	RF
Histories		
KH I	4	1.76
KH II	2	0.74
KH III	2	0.77
KRII	4	1.68
Total	12	1.21

Tragedies		
TA	2	0.92
RJ	3	1.16
JC	0	0.00
Total	5	0.73
<hr/>		
Total (histories and tragedies)	17	1.01

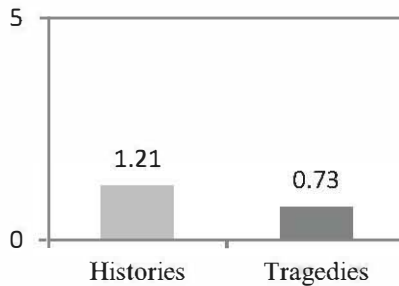


Fig. 41. Distribution of *can* indicating power of inanimate subject in the plays of Shakespeare.

All of the observed cases involve the negation of the verb so the possession of the power by an inanimate substance is denied.

(453) Therefore I tell my sorrows to the stones;
 Who, though they *cannot* answer my distress,
 Yet in some sort they are better than the tribunes,
 For that they will not intercept my tale;
 (W. Sh., TA, 4.1.)

(454) For all the water in the ocean
Can never tum the swan's black legs to white,
 Although she lave them hourly in the flood.
 (W. Sh., TA, 4.2.)

(455) Though some of you with Pilate wash your hands
 Showing an outward pity; yet you Pilates
 Have here deliver'd me to my sour cross,
 And water *cannot* wash away your sin.
 (W. Sh., KR II, 4.1.)

Rational can

Rational modality refers to the events which are unreasonable or which the speaker refuses to accept. This kind of modality is usually expressed by the modal verb *can* in a negative form. As Palmer (1990: 105) points out *can* indicating rational possibility typically has a subject either in the first person, the impersonal *you* or something with which the speaker identifies himself. Rational possibility is more frequently found in the histories (2.42 RF) than in the tragedies (1.61 RF) of William Shakespeare.

Table 133. Distribution of rational *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	10	3.74
KH III	10	3.87
KR II	3	1.26
Total	24	2.42
Tragedies		
TA	2	0.92
RJ	9	3.49
JC	0	0.00
Total	11	1.61
Total (histories and tragedies)		
	35	2.09

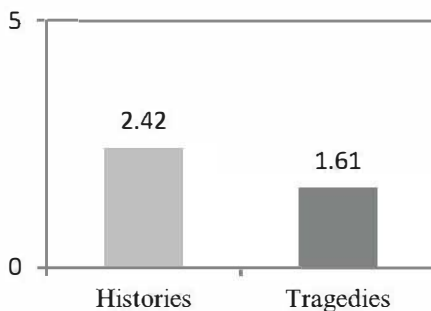


Fig. 42. Distribution of *can* indicating rational possibility in the plays of Shakespeare.

The instances of rational possibility include (456) and (457).

(456) GLOUCESTER

I go. Come, Nell, thou wilt ride with us?

DUCHESS

Yes, my good lord, I'll follow presently.

Follow I must; I *cannot* go before,

While Gloucester bears this base and humble mind.

(W. Sh., KH II, 1.2.)

(457) What, shall we suffer this? let's pluck him down:

My heart for anger burns; I *cannot* brook it.

(W. Sh., KH III, 3.3.)

Neutral can

According to Palmer (1990: 83-84), *can* denoting neutral possibility indicates that an event is possible to happen and the meaning of the modal verb may be paraphrased as 'It is possible for...'. This neutral sense is sometimes referred to as circumstantial, however, as Palmer (1990: 84) points out, this term is appropriate when clear circumstances conditioning the occurrence of an event are indicated. Neutral possibility is quite numerous in both corpora with a slightly higher relative frequency in the historical plays (18.08 RF) than in the tragedies (14.66 RF).

Table 134. Distribution of neutral *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	35	15.43
KH II	55	20.61
KH III	49	18.96
KR II	40	16.80
Total	179	18.08
Tragedies		
TA	33	15.23
RJ	44	17.09
JC	23	11.06
Total	100	14.66
Total (histories and tragedies)	279	16.68

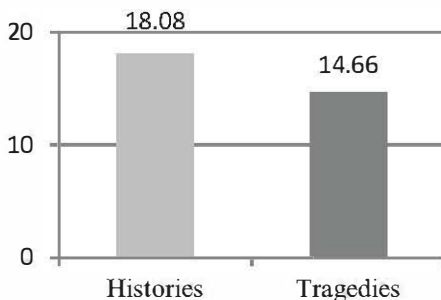


Fig. 43. Distribution of *can* indicating neutral possibility in the plays of Shakespeare.

Some instances of neutral *can* include (458) and (459).

(458) *I cannot* tell what you and other men
 Think of this life; but, for my single self,
 I had as lief not be as live to be
 In awe of such a thing as I myself.

(W. Sh., JC, 1.2.)

(459) His rash fierce blaze of riot *cannot* last,
 For violent fires soon bum out themselves;

(W. Sh., KR II, 2.1.)

Circumstantial can

The differentiation of a circumstantial from a neutral possibility relies mainly on the actuality of clearly defined circumstances which determine the occurrence of an event. This type of modality is very infrequent (0.23 RF) in the works of William Shakespeare as only four cases have been attested in both histories and tragedies.

Table 135. Distribution of circumstantial *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	0	0.00
KRII	0	0.00

Total	1	0.10
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	3	1.44
Total	3	0.44
Total (histories and tragedies)		
Total (histories and tragedies)	4	0.23

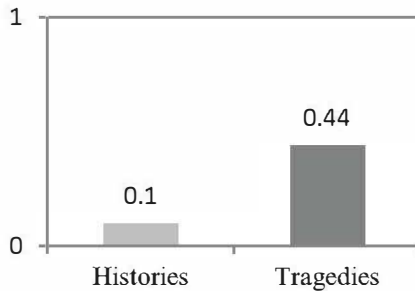


Fig. 44. Distribution of *can* indicating circumstantial possibility in the plays of Shakespeare.

The instances (460) and (462) represent a verb in a negative form indicating the circumstances under which it is impossible to act.

- (460) Pardon me, gracious lord;
 Some sudden qualm hath struck me at the heart
 And dimm'd mine eyes, that I *can* read *no* further.
 (W. Sh., KH II, 1.1.)
- (461) Nay, I beseech you, sir, be not out with me: yet,
 if you be out, sir, I *can* mend you.
 (W. Sh., JC, 1.1.)
- (462) For I *can* raise *no* money by vile means.
 (W. Sh., JC, 4.3.)
- (463) If I know this, know all the world besides,
 That part of tyranny that I do bear
 I *can* shake off at pleasure.
 (W. Sh., JC, 1.3.)

Existential modality

Existential modality, according to Palmer (1990: 107-108), deals with quantification, especially involving the quantifier *some* or the adverb of frequency *sometimes*. The plausible interpretation of the meaning of *can* is thus 'It is possible for some...' or 'It is sometimes possible that...'. In the negative form ambiguity may be observed between the existential modality and the subject oriented *can*. Only one instance of this type of modality has been detected in the corpora.

Table 136. Distribution of existential *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	0	0.00
KRII	0	0.00
Total	0	0.00
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	1	0.48
Total	1	0.14
Total (histories and tragedies)	1	0.05

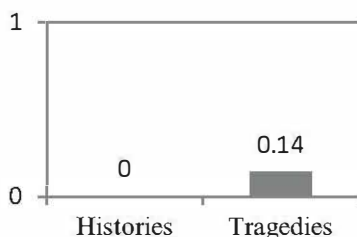


Fig. 45. Distribution of *can* indicating existential modality in the plays of Shakespeare.

The example (464) is ambiguous in that the meaning of *can* may be paraphrased either in terms of the existential modality as ‘no (...) strong links of iron are ever retentive to the strength of spirit’ or as subject oriented modality indicating the power of inanimate entities ‘no (...) strong links of iron have the power to retain the strength of spirit’.

(464) Nor stony tower, nor walls of beaten brass,
 Nor airless dungeon, nor strong links of iron,
Can be retentive to the strength of spirit;

(W. Sh., JC, 1.3.)

Deontic modality

According to Palmer (1990: 69) deontic modality is performative or discourse-oriented. By using a deontic *can* the speaker may give permission (permissive), forbid to act (forbidding) or ask for something (polite request). As Fig. 46 indicates, this type of modality is much more common in the tragedies (0.58 RF) than in the history plays (0.20 RF) of William Shakespeare.

Table 137. Distribution of *can* indicating deontic modality in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	1	0.38
KRII	0	0.00
Total	2	0.20
Tragedies		
TA	1	0.46
RJ	2	0.77
JC	1	0.48
Total	4	0.58
Total (histories and tragedies)	6	0.35

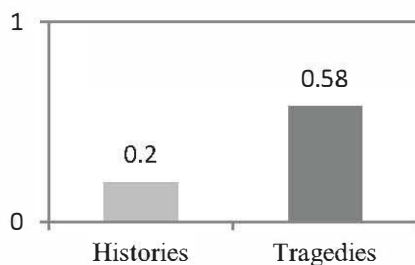


Fig. 46. Distribution of *can* indicating deontic modality in the plays of Shakespeare.

Permission

Permissive *can* is a very infrequent type of deontic modality. In (465) the verb is positive and appears with a first person subject. It is not though to be interpreted as if the speaker grants the permission to themselves, but that the speaker is rather granted the permission by someone else. The most credible interpretation in this case is “I am allowed to” or “I am permitted to”.

(465) My shame will not be shifted with my sheet:

No, it will hang upon my richest robes

And show itself, attire me how I *can*.

Go, lead the way; I long to see my prison.

(W. Sh., KH II, 2.4.)

Table 138. Distribution of permissive *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	0	0.00
KRII	0	0.00
Total	1	0.20

Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00

Total (histories and tragedies)	0	0.00
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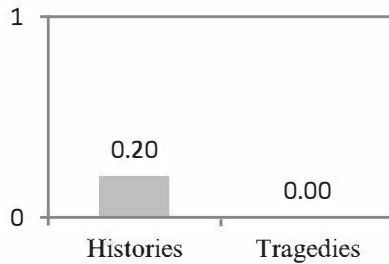


Fig. 47. Distribution of *can* indicating permissive modality in the plays of Shakespeare.

Forbidding

In some cases the permissive *can* is negated and the meaning denoted by the verb should be interpreted in terms of imposing a prohibition on the addressee. As Table 139 shows, only two instances constituting a very limited relative frequency (0.11 RF) of the forbidding *can* have been found in the database.

Table 139. Distribution of *can* indicating forbidding in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	1	0.38
KRII	0	0.00
Total	1	0.10

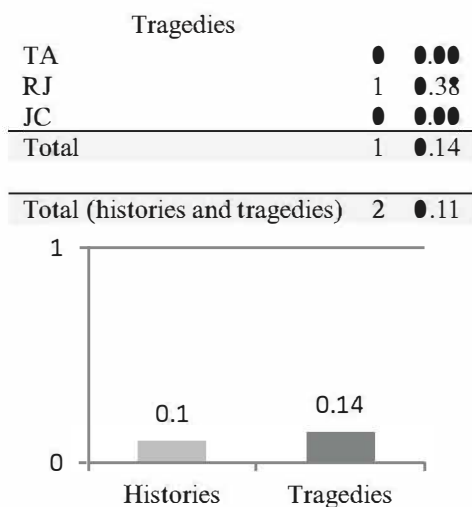


Fig. 48. Distribution of *can* indicating forbidding in the plays of Shakespeare.

The examples (466) and (467) below illustrate the modal verb *can* indicating a refusal or forbidding to undertake the action. In both cases the verb is negative and the meaning it conveys may be paraphrased as “I refuse to grant the permission to act”. The speakers respond to the requests of the interlocutors so the opposing function of the verb becomes an unambiguous and indisputable interpretation in the context.

(466) RICHARD

I'll prove the contrary, if you'll hear me speak.

YORK

Thou *canst not*, son; it is impossible.

(W. Sh., KH III, 1.2.)

(467) FRIAR LAURENCE

Let me dispute with thee of thy estate.

ROME

Thou *canst not* speak of that thou dost not feel;

(W. Sh., RJ, 3.3.)

Polite request

The verb *can* is infrequently found in the contexts when the speaker wants the addressee to perform certain action, but either is not in the position to

lay an obligation or does not want to manifest their power, and thus makes a polite request. In two out of three instances the verb co-occurs with the communication verb *tell*.

Table 140. Distribution of *can* indicating polite request in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	0	0.00
KRII	0	0.00
Total	0	0.00
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	1	0.48
Total	3	0.44
Total (histories and tragedies)		
	3	0.17

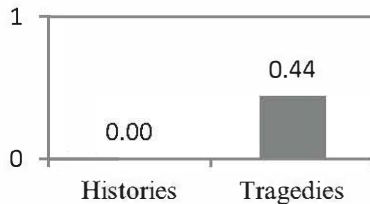


Fig. 49. Distribution of *can* indicating a polite request in the plays of Shakespeare.

Some examples of *can* indicating a polite request are given in (468), (469), and (470).

- (468) Gentlemen, *can* any of you tell me where I
 may find the young Romeo?
 (W. Sh., RJ, 2.4.)
- (469) Proud and ambitious tribune, *canst* thou tell?
 (W. Sh., TA, 1.1.)
- (470) *Canst* thou hold up thy heavy eyes awhile,
 And touch thy instrument a strain or two?
 (W. Sh., JC, 4.3.)

Collocations with communicative verbs

The modal verb *can* has been found to co-occur frequently with communicative verbs such as *tell*, *speak*, etc.. Table 141 shows the frequency distribution of the verbs in the database.

Table 141. Distribution of communicative verbs collocating with *can* in the plays of Shakespeare.

	<i>tell</i>	<i>speak</i>	<i>say</i>	<i>answer</i>	<i>deliver</i>	<i>call</i>	<i>utter</i>	<i>ask</i>	F
Histories									
KH I	3	1	0	0	0	0	0	1	5
KH II	2	2	0	2	0	0	0	0	6
KH III	1	5	0	0	0	1	0	0	7
KR II	2	0	1	0	1	1	0	0	5
Tragedies									
TA	2	2	1	1	2	0	1	0	9
RJ	4	1	2	0	0	0	0	0	7
JC	2	0	2	0	0	0	0	0	4
Total F	16	11	6	3	3	2	1	1	43
Total RF	0.95	0.65	0.35	0.17	0.17	0.11	0.05	0.05	2.57

The most numerous verb co-occurring with *can* is *tell* with a relative frequency of 0.95 RF. The next places are occupied by *speak* (0.65 RF) and *say* (0.35 RF). *Answer* and *deliver* constitute only 0.17 RF, and *call* 0.11 RF. The least common are *utter* and *ask*, both equal to 0.05 RF.

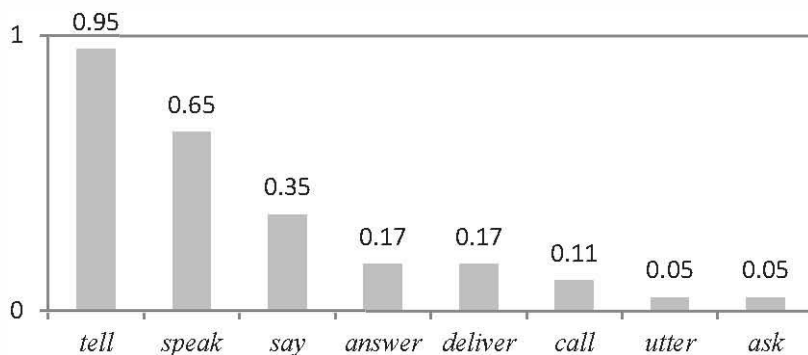


Fig. 50. Distribution of communicative verbs collocating with *can* in the plays of Shakespeare.

- (471) I *cannot* tell what you and other men
Think of this life;
(W. Sh., JC, 1.2.)
- (472) What chance is this that suddenly hath cross'd us?
Speak, Salisbury; at least, if thou *canst speak*.
(W. Sh., KH I, 1.4.)
- (473) Where's Romeo's man? what *can* he *say* in this?
(W. Sh., RJ, 5.3.)
- (474) What *canst* thou *answer* to my majesty for giving up of
ormandy unto
Mounsieur Basimecu, the dauphin of France?
(W. Sh., KH II, 4.7.)
- (475) Tell me, *can* you *deliver* an oration to the emperor with a grace?
(W. Sh., TA, 4.3.)
- (476) This battle fares like to the morning's war,
When dying clouds contend with growing light,
What time the shepherd, blowing of his nails,
Can neither *call* it perfect day nor night.
(W. Sh., KH III, 2.5.)
- (477) My heart is not compact of flint nor steel;
Nor *can* I *utter* all our bitter grief (...)
(W. Sh., TA, 5.3.)
- (478) Ask me what question thou *canst* possible,
And I will answer unpremeditated (...)
(W. Sh., KH I, 1.2.)

Collocations with verbs of sensation

In the database under analysis, only two verbs of sensation collocating with *can* have been found, namely *see* and *hear*. Only one representative of the latter has been found constituting the relative frequency of 0.05 RF and giving the priority in terms of the distribution to the verb *see* (0.41 RF).

Table 142. Distribution of verbs of sensation collocating with *can* in the plays of Shakespeare.

	<i>see</i>	<i>hear</i>	F
Histories			
KH I	0	0	0
KH II	1	0	1
KH III	0	0	0
KR II	2	0	2
Tragedies			
TA	1	1	2
RJ	1	0	1
JC	2	0	2
Total F	7	1	8
Total RF	0.41	0.05	0.47

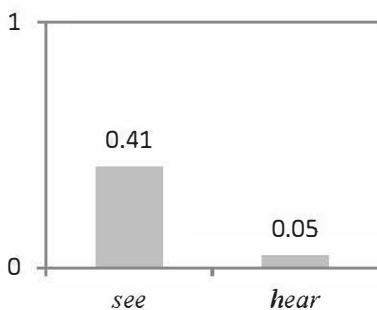


Fig. 51. Distribution of verbs of sensation collocating with *can* in the plays of Shakespeare.

Some examples include (479) and (480).

(479) Mine eyes are full of tears, I *cannot* see:
And yet salt water blinds them not so much
But they *can* see a sort of traitors here.

(W. Sh., KR II, 4.1.)

(480) O heavens, *can* you *hear* a good man groan,
And not relent, or not compassion him?

(W. Sh., TA, 4.1.)

Indeterminate cases

In some cases the function of the modal verb *can* remains indeterminate. These are the instances when the meaning, even in the light of contextual analysis, is ambiguous and cannot be assigned clearly to any single type of modality. As Table 143 indicates, the number of such cases is slightly higher in tragedies (0.29 RF) than in histories (0.20 RF).

Table 143. Distribution of undetermined cases of *can* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	1	0.38
KRII	0	0.00
Total	2	0.20
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	0	0.00
Total	2	0.29
Total (histories and tragedies)	4	0.23

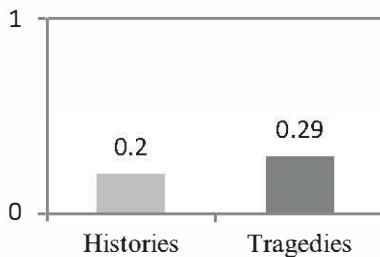


Fig. 52. Distribution of *can* indicating undetermined cases in the plays of Shakespeare.

(481) **QUEEN MARGARET**

They sale of offices and towns in France,
 If they were known, as the suspect is great,
 Would make thee quickly hop without thy head.

[Exit GLOUCESTER. QUEEN MARGARET drops her fan]
 Give me my fan: what, minion! *can* ye not?
 [She gives the DUCHESS a box on the ear]
 I cry you mercy, madam; was it you?

(W. Sh., KH II, 1.3.)

(482) CLIFFORD

And reason too:
 Who should succeed the father but the son?
 RICHARD
 Are you there, butcher? ●, I *cannot* speak!

(W. Sh., KH III, 2.2.)

(483) Why, is not this a lamentable thing,
 grandsire, that we should be thus afflicted with
 these strange flies, these fashion-mongers, these
 perdona-mi's, who stand so much on the new form,
 that they *cannot* at ease on the old bench? ●, their
 bones, their bones!

(W. Sh., RJ, 2.4.)

(484) For shame, be friends, and join for that you jar:

'Tis policy and stratagem must do
 That you affect; and so must you resolve,
 That what you *cannot* as you would achieve,
 You must perforce accomplish as you may.

(W. Sh., TA, 2.1.)

Summary of the main findings

The most common types of modality in both histories and tragedies of William Shakespeare are dynamic possibilities, including 'ability' and 'power', as well as rational, neutral, circumstantial and existential modality.

The capability assigned to both animate (ability) and inanimate (power) entities reveal a higher frequency in histories than tragedies, what may be explained by the common reference in the texts to the military skills and capacities of the beings in the historical plays. People, their capacity and inborn qualities, are the most frequent point of reference of can indicating dynamic ability.

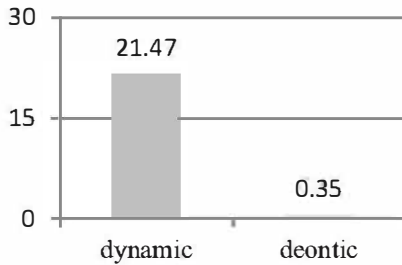


Fig. 53. Distribution of *can* indicating dynamic and deontic modality in the plays of Shakespeare.

Could

Frequency distribution of could

Table 144 represents the frequency distribution of the modal verb *could* in the two corpora, the history plays and the tragedies of William Shakespeare. The relative frequency is slightly higher in the tragedies (6.89 RF) than in the histories (5.45 RF). The distribution of the verb is inconsistent. The lowest number of instances of the verb are exhibited in *King Richard II* (2.52 RF), whereas most instances of *could* have been encountered in *Henry the Sixth, Part Two* (7.12 RF).

Table 144. Distribution of *could* in the plays of Shakespeare.

	Words in total	<i>Could</i> – F	<i>Could</i> – RF
Histories			
KH I	22,679	15	6.61
KH II	26,677	19	7.12
KH III	25,833	14	5.41
KR II	23,807	6	2.52
Total	98,996	54	5.45
Tragedies			
TA	21,658	10	4.61
RJ	25,740	19	2.78
JC	20,780	18	2.64
Total	68,178	47	6.89
Total (histories and tragedies)	167,174	101	6.04

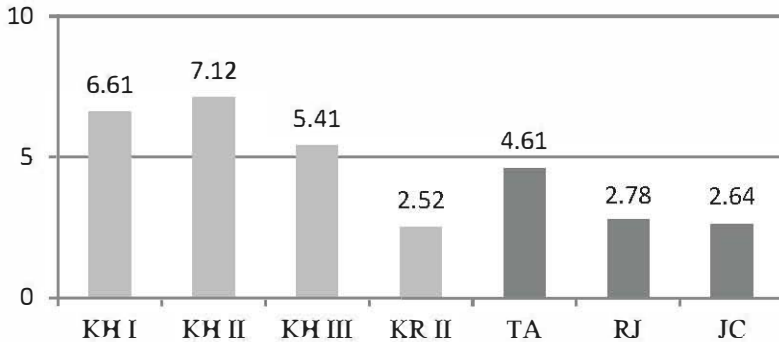


Fig. 54. Distribution of *could* in the plays of Shakespeare.

Forms and spelling variants

Two forms of the verb *could* have been revealed during the analysis. The most common form is *could* exhibiting 95 instances (5.68 RF). The less numerous forms constitute those assigned to the second person singular subject *thou*, namely *couldst* (0.29 RF) and *could'st* (0.05 RF).

Table 145. Distribution of different forms of *could* in the plays of Shakespeare.

Title	<i>could</i>	<i>couldst</i>	<i>could'st</i>
Histories			
KH I	15	0	0
KH II	18	1	0
KH III	12	1	1
KR II	6	0	0
Tragedies			
TA	10	0	0
RJ	17	2	0
JC	17	1	0
Total	95	5	1
<hr/>			
Total RF (histories and tragedies)	5.68	0.29	0.05

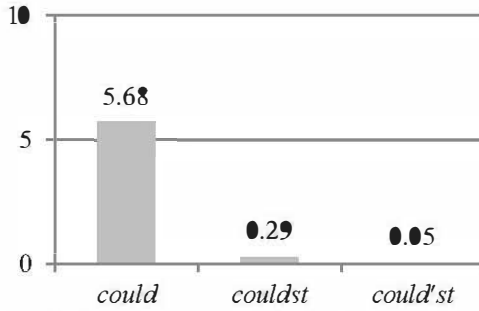


Fig. 55. Distribution of different forms of *could* in the plays of Shakespeare.

Dynamic possibility

Dynamic possibility indicated by *could* is almost equally distributed in the tragedies (6.01 RF) and in the historical plays (4.64 RF).

Table 146. Distribution of *could* indicating dynamic possibility in the plays of Shakespeare.

	F	RF
Histories		
KH I	14	6.17
KH II	15	5.62
KH III	11	4.25
KRII	6	2.52
Total	46	4.64
Tragedies		
TA	8	3.69
RJ	17	6.60
JC	16	7.69
Total	41	6.01
Total (histories and tragedies)		
	87	5.20

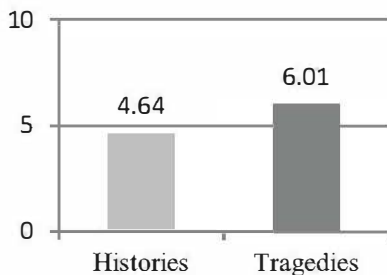


Fig. 56. Distribution of *could* indicating dynamic possibility in the plays of Shakespeare.

In the case of the modal verb *could*, subject oriented modality may denote two types of modal meaning, ability and power, the distinction of which is based on the kind of material functioning as a subject of a sentence.

Ability

The modal verb *could* has been found to indicate physical or mental abilities of an animate entity in reference to the past or a hypothetical situation. When referring to the present, this meaning of the verb is expressed by *can*. As Table 147 shows, *could* denoting abilities is equally residual in the histories (0.70 RF) and in the tragedies (0.58 RF) of William Shakespeare.

Table 147. Distribution of *could* indicating ability in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	4	1.49
KH III	2	0.77
KR II	0	0.00
Total	7	0.70

Tragedies		
TA	1	0.46
RJ	2	0.77
JC	1	0.48
Total	4	0.58
<hr/>		
Total (histories and tragedies)	11	0.65

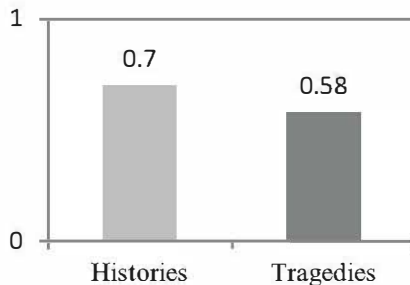


Fig. 57. Distribution of *could* indicating ability in the plays of Shakespeare.

The instances of *could* denoting ability include (485), (486), and (487).

(485) So great fear of my name 'mongst them was spread,
That they supposed I *could* rend bars of steel,
And spum in pieces posts of adamant:

(W. Sh., KH I, 1.4.)

(486) God's secret judgment: I did dream to-night
The duke was dumb and *could* not speak a word.

(W. Sh., KH II, 3.2.)

(487) Moreover, thou hast put them in prison; and because
they *could* not read, thou hast hanged them;

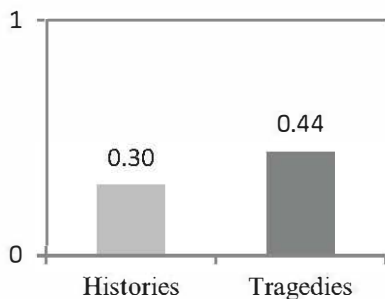
(W. Sh., KH II, 4.7.)

Power

When *could* is used in reference to the 'abilities' of inanimate entities, it indicates their power to act. This meaning of *could* is also infrequent, with merely a trace of occurrence in the tragedies (0.44 RF) and in the history plays (0.30 RF).

Table 148. Distribution of *could* indicating power in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	3	1.12
KH III	0	0.00
KRII	0	0.00
Total	3	0.30
Tragedies		
TA	2	0.92
RJ	1	0.38
JC	0	0.00
Total	3	0.44
Total (histories and tragedies)	6	0.35

**Fig. 58. Distribution of *could* indicating power of an inanimate subject in the plays of Shakespeare.**

The examples (488)–(489) represent the use of the modal *could* to indicate power of abstract entities, such as mourning (488), and, presumably, lifeless objects, such as gifts (489).

(488) Do not draw back, for we will mourn with thee

●, *could* our mourning ease thy misery!

(W. Sh., TA, 2.4.)

(489) Prayers and tears have moved me, gifts *could* never.

(W. Sh., KH II, 4.7.)

Wishing

The modal verb *could* is also used to indicate the wish or the desire of the speaker. The distribution of this meaning of *could* is extremely infrequent, below 0.5 RF, in both corpora.

Table 149. Distribution of *could* indicating wishing in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	1	0.37
KH III	1	0.38
KRII	1	0.42
Total	4	0.40
Tragedies		
TA	2	0.92
RJ	0	0.00
JC	1	0.48
Total	3	0.44
Total (histories and tragedies)	7	0.41

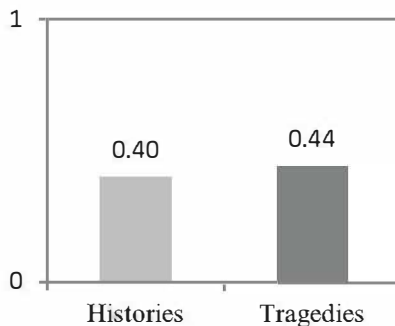


Fig. 59. Distribution of *could* indicating wishing in the plays of Shakespeare.

As may be observed in the examples (490), (491), and (492), the modal *could* denoting wishing is typically introduced by the interjection *O*, and sometimes also *Ah*:

- (490) ●, that I *could* but call these dead to life!
(W. Sh., KH I, 4.7.)
- (491) ● that I were as great
As is my grief, or lesser than my name!
●r that I *could* forget what I have been,
●r not remember what I must be now!
(W. Sh., KR II, 3.3.)
- (492) ●, *could* our mourning ease thy misery!
(W. Sh., TA, 2.4.)

Rational could

Rational possibility concerns the situations and events which the speaker regards as illogical, unacceptable or ridiculous. This type of modality is very often denoted by the modal in a negative form. *Could* indicating rational possibility is equally scarce in both the histories (0.60 RF) and in the tragedies (0.44 RF).

Table 150. Distribution of rational *could* in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	1	0.37
KH III	2	0.77
KR II	0	0.00
Total	6	0.60
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	1	0.48
Total	3	0.44
Total (histories and tragedies)	9	0.53

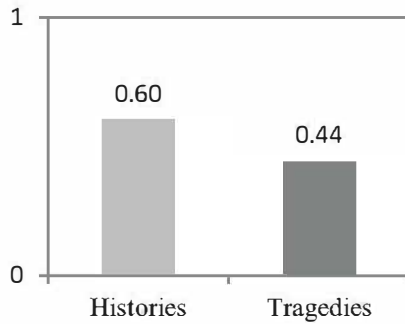


Fig. 60. Distribution of *could* indicating rational possibility in the plays of Shakespeare.

(493) While we pursued the horsemen of the north,
 He slyly stole away and left his men:
 Whereat the great Lord of Northumberland,
 Whose warlike ears *could* never brook retreat,
 Cheer'd up the drooping army;

(W. Sh., KH III, 1.1.)

Neutral could

Neutral possibility points out to the existence of certain circumstances which make it plausible for the event to take place. As can be seen in Table 151, *could* denoting this type of modality is only marginally higher in the tragedies (4.54 RF) than in the histories (3.13 RF).

Table 151. Distribution of neutral *could* in the plays of Shakespeare.

	F	RF
Histories		
KH I	10	4.40
KH II	8	2.99
KH III	7	2.70
KRII	6	2.52
Total	31	3.13

Tragedies		
TA	4	1.84
RJ	13	5.05
JC	14	6.73
Total	31	4.54
<hr/>		
Total (histories and tragedies)	62	3.70

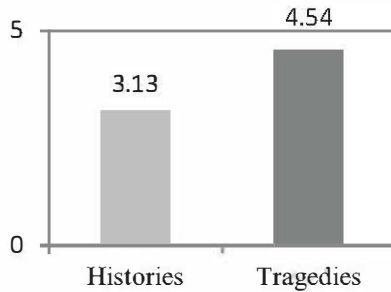


Fig. 61. Distribution of *could* indicating neutral possibility in the plays of Shakespeare.

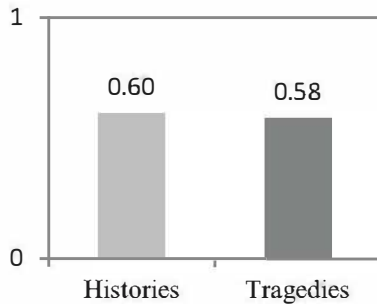
- (494) Alas, you know, 'tis far from hence to France;
 How *could* he stay till Warwick made return?
 (W. Sh., KH III, 4.1.)
- (495) Madam, if you *could* find out but a man
 To bear a poison, I would temper it;
 (W. Sh., RJ, 3.5.)
- (496) FRIAR LAURENCE
 Who bare my letter, then, to Romeo?
 FRIAR JOHN
 I *could* not send it, -- here it is again (...)
 (W. Sh., RJ, 5.2.)

Emotional could

A few cases of the modal verb *could* have been found to denote an especially intensive emotional attitude of the speaker towards an event. As Table 152 shows, emotional *could* is very scarce in both the histories (0.60 RF) and in the tragedies (0.58 RF).

Table 152. Distribution of emotional *could* in the plays of Shakespeare.

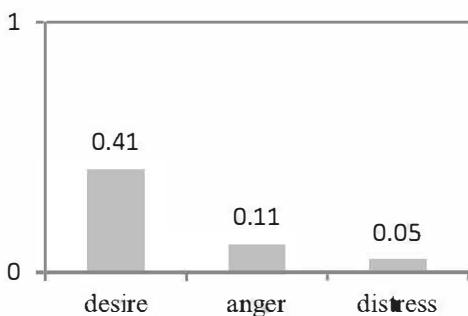
	F	RF
Histories		
KH I	1	0.44
KH II	3	1.12
KH III	1	0.38
KR II	1	0.42
Total	6	0.60
Tragedies		
TA	2	0.92
RJ	0	0.00
JC	2	0.96
Total	4	0.58
Total (histories and tragedies)		
	10	0.59

Fig. 62. Distribution of emotional *could* in the plays of Shakespeare.

The emotional states of the speaker indicated by *could* in the works of William Shakespeare include: *desire* (0.41 RF), *anger* (0.11 RF) and *distress* (0.05 RF). All of them reveal minor distribution below 0.5 RF.

Table 153. Distribution of emotional states denoted by *could* in the plays of Shakespeare.

	desire	anger	distress
Histories			
KH I	1	0	0
KH II	1	2	0
KH III	1	0	0
KR II	1	0	0
Tragedies			
TA	2	0	0
RJ	0	0	0
JC	1	0	1
Total	7	2	1
Total RF	0.41	0.11	0.05

**Fig. 63.** Distribution of emotional states denoted by *could* in the plays of Shakespeare.

Examples 0, (498), (499), and (500) represent some instances of emotional *could* in the histories and the tragedies of William Shakespeare. Desire is denoted by the modal in the quotation 0 and (498). The eagerness of the speaker is here strengthened by the interjections 0 and *Ah*. The two representations of the modal verb in the example (499) correspond to anger, which is apparent given the preceding clauses *my choler is so great* and *I am so angry*. The exclamatory sentence introduced by the interjection 0 in (500) reveals the distress of the speaker.

- (497) ●, were mine eyeballs into bullets tum'd,
 That I in rage might shoot them at your faces!
 ●, that I *could* but call these dead to life!
 (W. Sh., KH I, 4.7.)
- (498) Ah, Warwick, Warwick! wert thou as we are.
 We might recover all our loss again;
 The queen from France hath brought a puissant power:
 Even now we heard the news: ah, *could'st* thou fly!
 (W. Sh., KH III, 5.2.)
- (499) Scarce can I speak, my choler is so great:
 ●, I *could* hew up rocks and fight with flint,
 I am so angry at these abject terms;
 And now, like Ajax Telamonius,
 ●n sheep or oxen *could* I spend my fury.
 (W. Sh., KH II, 5.1.)
- (500) ●, I *could* weep My spirit from mine eyes!
 (W. Sh., JC, 4.3.)

Conditional could

The modal verb *could* has also been found in conditional sentences with similarly scarce distribution in both the history plays (1.31 RF) and the tragedies (1.76 RF).

Table 154. Distribution of *could* in conditional clauses in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	5	1.87
KH III	2	0.77
KR II	3	1.26
Total	13	1.31
Tragedies		
TA	3	1.38
RJ	4	1.55
JC	5	2.40
Total	12	1.76
Total (histories and tragedies)	25	1.49

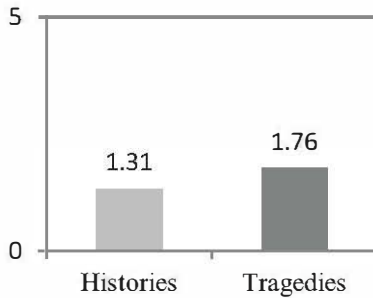


Fig. 64. Distribution of *could* in conditional clauses in the plays of Shakespeare.

The modal verb *could* occurs in both parts of a conditional sentence, the protasis ((501), (502), and (503)) and the apodosis ((504), (505), and (506)), with similarly infrequent distribution below 1.00 RF.

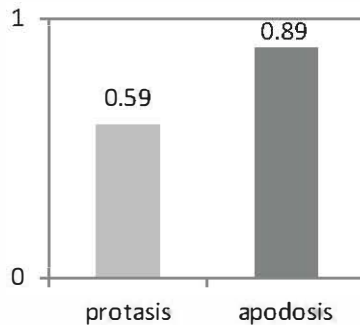


Fig. 65. Distribution of *could* in the protasis and the apodosis of conditional clauses in the plays of William Shakespeare.

- (501) Ay, marry, sweeting, if we *could* do that,
 France were no place for Henry's warriors;
 (W. Sh., KH I, 3.3.)
- (502) Madam, if you *could* find out but a man
 To bear a poison, I would temper it;
 (W. Sh., RJ, 3.5.)
- (503) If I *could* pray to move, prayers would move me.
 (W. Sh., JC, 3.1.)

- (504) No, if I digg'd up thy forefathers' graves
 And hung their rotten coffins up in chains,
 It *could* not slake mine ire, nor ease my heart.
 (W. Sh., KH III, 1.3.)
- (505) If there were reason for these miseries,
 Then into limits *could* I bind my woes:
 (W. Sh., TA, 3.1.)
- (506) ●, if thou wert the noblest of thy strain,
 Young man, thou *couldst* not die more honourable.
 (W. Sh., JC, 5.1.)

Hypothetical could

Hypothetical *could* is used in reference to unreal imaginary situations and events which do not exist at the time of the utterance in the real world. The modal verb found in this context exhibits the total relative frequency of 1.55 RF and is equally distributed in both corpora.

Table 155. Distribution of hypothetical *could* in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	4	1.49
KH III	3	1.16
KR II	3	1.26
Total	15	1.51
Tragedies		
TA	3	1.38
RJ	1	0.38
JC	7	3.36
Total	11	1.61
Total (histories and tragedies)	26	1.55

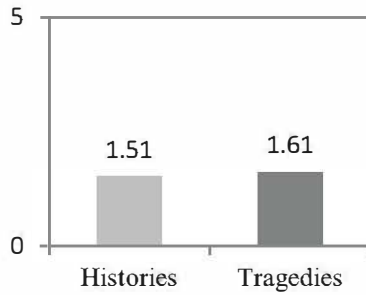


Fig. 66. Distribution of *could* in a hypothetical context in the plays of Shakespeare.

(507) Am sure I scared the Dauphin and his trull,
 When arm in arm they both came swiftly running,
 Like to a pair of loving turtle-doves
 That *could* not live asunder day or night.

(W. Sh., KH I, 2.2.)

(508) A friendly eye *could* never see such faults.

(W. Sh., JC, 4.3.)

Past reference

Could with past reference reveals almost equal distribution in both the histories (2.02 RF) and the tragedies (2.05 RF) of William Shakespeare.

Table 156. Distribution of *could* with past reference in the plays of Shakespeare.

	F	RF
Histories		
KH I	6	2.64
KH II	8	2.99
KH III	5	1.93
KR II	1	0.42
Total	20	2.02

Tragedies			
TA	1	0.46	
RJ	10	3.88	
JC	3	1.44	
Total	14	2.05	
<hr/>			
Total (histories and tragedies)	34	2.03	

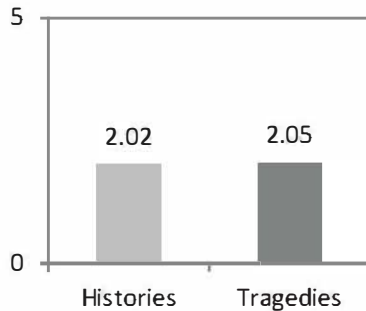


Fig. 67. Distribution of *could* with past reference in the plays of Shakespeare.

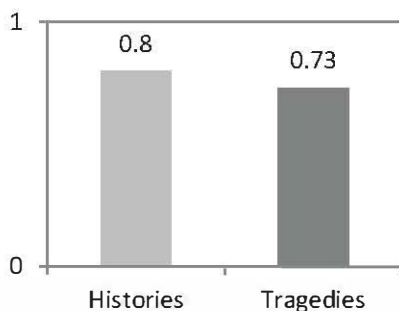
- (509) My lords of England, let me tell you this:
 I have had feeling of my cousin's wrongs
 And laboured all I *could* to do him right;
(W. Sh., KR II, 2.3.)
- (510) A craftier Tereus, cousin, hast thou met,
 And he hath cut those pretty fingers off,
 That *could* have better sew'd than Philomel.
(W. Sh., TA, 2.4.)

Indeterminate cases

Table 157 shows the distribution of ambiguous and thus indeterminate instances of the modal verb *could*, displaying the total relative frequency of 0.77 RF.

Table 157. Distribution of indeterminate cases of *could* in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	4	1.49
KH III	3	1.16
KR II	0	0.00
Total	8	0.80
Tragedies		
TA	2	0.92
RJ	2	0.77
JC	1	0.48
Total	5	0.73
Total (histories and tragedies)		
	13	0.77

**Fig. 68. Distribution of indeterminate cases of *could* in the plays of Shakespeare.**

Summary of the main findings

The analysis of the plays of William Shakespeare has revealed that the modal verb *could* most commonly denotes dynamic and dynamic neutral modalities. Within dynamic possibility the verb has been found to indicate ability, power and wishing, although with the extremely marginal distribution represented by merely few cases. Such minor frequency of occurrence, irrespective of the genre, is insufficient to draw any uncontested conclusions regarding specific dynamic meanings. Similarly, emotional, and rational modalities are not signaled by a considerable number of instances.

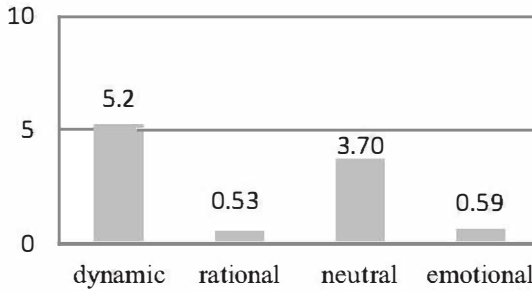


Fig. 69. Distribution of *could* representing different kinds of modality in the plays of Shakespeare.

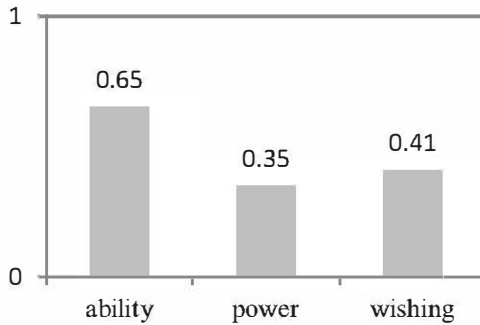


Fig. 70. Distribution of *could* representing different meanings of dynamic modality in the plays of Shakespeare.

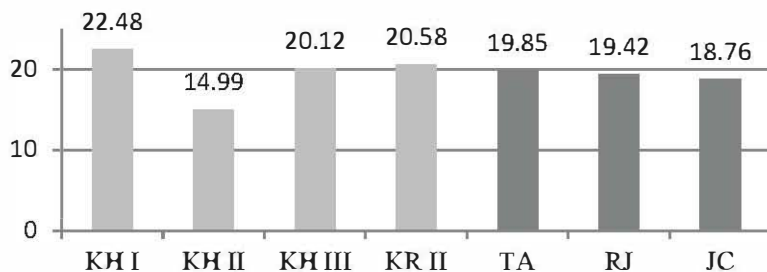
May

Frequency distribution of may

As Table 158 shows, the total relative frequency of the verb *may* in the works of William Shakespeare is 19.38 RF. The instances of the verb are almost equally distributed in the history plays (19.39 RF) and in the tragedies (19.36 RF). The value of the range is quite low (7.49 RF). The lowest frequency distribution is exhibited *Henry the Sixth, Part Two* (14.99 RF), and the highest in *Henry the Sixth, Part One* (22.48 RF).

Table 158. Distribution of *may* in the plays of Shakespeare.

	Words in total	<i>May</i> – F	<i>May</i> – RF
Histories			
KH I	22,679	51	22.48
KH II	26,677	40	14.99
KH III	25,833	52	20.12
KR II	23,807	49	20.58
Total	98,996	192	19.39
Tragedies			
TA	21,658	43	19.85
RJ	25,740	50	19.42
JC	20,780	39	18.76
Total	68,178	132	19.36
<hr/>			
Total (histories and tragedies)	167,174	324	19.38

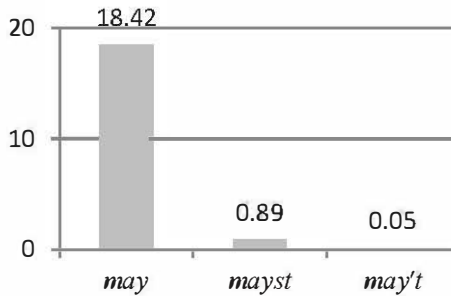
Fig. 71. Distribution of *may* in the plays of Shakespeare.

Forms and spelling variants

The most prevailing spelling variation of the verb *may* which have been encountered in the database is the PDE *may* (18.42 RF). The form *mayst*, assigned exclusively to the second person singular subject *thou*, is rather infrequent (0.89 RF). The database exhibits only a trace (0.05 RF) of the abbreviation *may't*, a combination of *may* and the third person singular pronoun *it*.

Table 159. Distribution of different forms of *may* in the plays of Shakespeare.

Title	<i>may</i>	<i>mayst</i>	<i>may't</i>
Histories			
KH I	48	3	0
KH II	38	1	1
KH III	50	2	0
KRII	47	2	0
Total	183	8	1
Tragedies			
TA	41	2	0
RJ	47	3	0
JC	37	2	0
Total	125	7	0
Total RF (histories and tragedies)	18.42	0.89	0.05

Fig. 72. Distribution of different forms of *may* in the plays of Shakespeare.

Epistemic may

According to Palmer (1990: 50) in PDE *may* is an epistemic modal and its function is “to make judgments about possibility, etc., that something is or is not the case.” In his earlier work, Palmer (1987: 107) offers a paraphrase of epistemic *may* as “possible that...”, but with the suggestion that the speaker makes a judgment about what ‘*may*’ be”, and further specifies that the verb can occur in propositions indicating actions, activities, as well as states. Three years later Palmer (1990: 51) draws the attention of the reader to the fact that “epistemic modals are normally

subjective, *ie* that the epistemic judgement rests with the speaker.” This important indication complies with Visser (1978: 1768) who terms this meaning a *subjective possibility*, and narrows its reference to “an eventuality, contingency or the admissibility of a supposition.” As Visser (1978: 1768) further explains, “there is an element of uncertainty, and occasionally a slight tinge of permission.”

The interpretation of modal meanings of *may* poses some difficulties owing to the fact that Early Modern English is the period of transition of the verb from dynamic into epistemic and deontic senses (Warner 2009: 181). Due to this, a significant number of cases in the database are discovered to be epistemic-dynamic hybrids as they reveal a great degree of overlapping of the two meanings. Only the most unambiguous instances have been classified as being members of one or the other area.

In the plays of William Shakespeare, epistemic *may* displays the relative frequency of 3.17 RF, and is slightly more numerous in the histories (3.33 RF) than the tragedies (2.93 RF).

Table 160. Distribution of *may* indicating epistemic modality in the plays of Shakespeare.

	F	RF
Histories		
KH I	9	3.96
KH II	5	1.87
KH III	10	3.87
KR II	9	3.78
Total	33	3.33
Tragedies		
TA	5	2.30
RJ	7	2.71
JC	8	3.84
Total	20	2.93
Total (histories and tragedies)	53	3.17

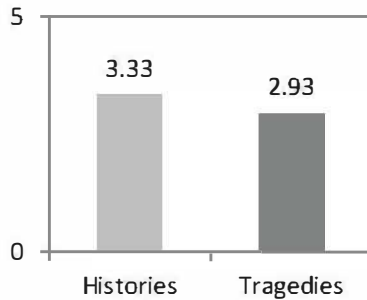


Fig. 73. Distribution of *may* indicating epistemic modality in the plays of Shakespeare.

Some examples of epistemic *may* include (511), (512), and (513):

(511) It *may* be so; but yet my inward soul
 Persuades me it is otherwise: howe'er it be,
 I cannot but be sad;
(W. Sh., KR II, 2.2.)

(512) Your grace *may* starve *perhaps* before that time.
(W. Sh., KH I, 3.2.)

(513) He *may* mean more than we poor men do know:
 These women are shrewd tempters with their tongues.
(W. Sh., KH I, 1.2.)

The use of *may* in the example (511) indicate the uncertainty of the supposition. In example (512) the subjective assumption of the speaker is additionally strengthened by the epistemic adverb *perhaps*, which excludes the dynamic interpretation of the meaning of *may*.

Dynamic possibility

In the course of the Modern English period, the modal verb *may* has been gradually losing its dynamic meanings and moving closer to the epistemic area (Warner 2009: 181). According to Palmer (1990), in PDE, *may* is no longer a dynamic modal. In the Early Modern English period, however, the epistemic and dynamic meanings of *may* exist parallel, and a number of instances of dynamic *may* have been revealed in the plays of William Shakespeare.

As Table 161 shows, the total relative frequency is 9.75 RF, and the distribution is almost equal in the tragedies (9.79 RF) and in the historical plays (9.68 RF).

Table 161. Distribution of *may* indicating dynamic possibility in the plays of Shakespeare.

	F	RF
Histories		
KH I	24	10.58
KH II	23	8.62
KH III	25	9.67
KR II	25	10.50
Total	97	9.79
Tragedies		
TA	18	8.31
RJ	25	9.71
JC	23	11.06
Total	66	9.68
Total (histories and tragedies)		
	163	9.75

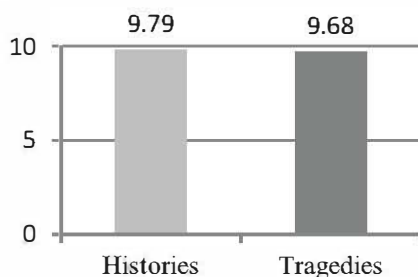


Fig. 74. Distribution of *may* indicating dynamic possibility in the plays of Shakespeare.

Although the epistemic and dynamic meanings of *may* are in majority difficult and sometimes even impossible to distinguish, a number of instances reveal features which allow for a clear-cut identification of the meaning. In examples (514), (515), and (516), the speakers do not express their subjective assumptions based on some rationale, but refer to the existence of a potential possibility for an event to happen under certain

circumstances. Importantly, the feasibility of the action depends largely on external physical conditions, such as place, time, speed, or manner.

- (514) Direct mine arms I *may* embrace his neck,
 And in his bosom spend my latter gasp:
 ●, tell me when my lips do touch his cheeks,
 That I *may* kindly give one fainting kiss.
 (W. Sh., KH I, 2.5.)
- (515) Now let us on, my lords, and join our powers,
 And seek how we *may* prejudice the foe.
 (W. Sh., KH I, 3.3.)
- (516) ●ff with his head, and set it on York gates;
 So York *may* overlook the town of York.
 (W. Sh., KH III, 1.4.)

Ability

In this study, the ability denoted by *may* is defined as the internal capacity or the skills of the subject to perform an action. Unlike dynamic possibility, the potential performance designated by abilitive *may* is conditioned by internal qualities of the subject, such as inborn and acquired skills or personality features.

In the corpus, ability is a rather infrequent meaning of the verb *may* (1.43 RF). As Fig. 75 indicates, the cases are more numerous in the tragedies (2.20 RF) than in the history plays (0.90 RF).

Table 162. Distribution of *may* indicating ability in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	3	1.12
KH III	1	0.38
KRII	5	2.10
Total	9	0.90

Tragedies			
TA	10	4.61	
RJ	3	1.16	
JC	2	0.96	
Total	15	2.20	
<hr/>			
Total (histories and tragedies)	24	1.43	

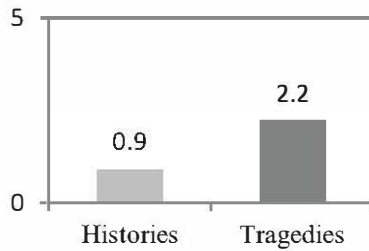


Fig. 75. Distribution of *may* indicating ability in the plays of Shakespeare.

- (517) A lover *may* bestride the gossamer
 That idles in the wanton summer air,
 And yet not fall; so light is vanity. (W. Sh., RJ, 2.6.)
- (518) My lord, what I have done, as best I *may*,
 Answer I must and shall do with my life. (W. Sh., TA, 1.1.)
- (519) Now let hot Aetna cool in Sicily,
 And be my heart an ever-burning hell!
 These miseries are more than *may* be borne. (W. Sh., TA, 3.1.)

Power

In a few cases, the dynamic *may* refers to the 'ability' or 'power' of an inanimate entity. Only six instances have been detected in the database, exhibiting the total relative frequency of 0.35 RF. The distribution is only slightly higher in the tragedies (0.44 RF) than in the history plays (0.30 RF). Given the low overall number of occurrences, this discrepancy may be considered as rather minor and coincidental.

Table 163. Distribution of *may* indicating power in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	0	0.00
KRII	2	0.84
Total	3	0.30
Tragedies		
TA	0	0.00
RJ	3	1.16
JC	0	0.00
Total	3	0.44
Total (histories and tragedies)	6	0.35

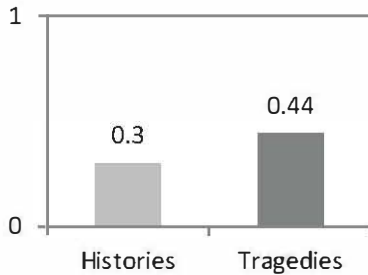


Fig. 76. Distribution of *may* indicating power of inanimate entities in the plays of Shakespeare.

In the examples (520) and (521), the modal *may* refers to the power of abstract matters such as *bondage* and *sins*.

(520) Bondage is hoarse, and *may* not speak aloud;
(W. Sh., RJ, 2.2.)

(521) ●, sit my husband's wrongs on Hereford's spear,
 That it *may* enter butcher Mowbray's breast!
 ●r, if misfortune miss the first career,
 Be Mowbray's sins so heavy in his bosom,
 They *may* break his foaming courser's back,
 And throw the rider headlong in the lists,

A caitiff recreant to my cousin Hereford!

(W. Sh., KR II, 1.2.)

Wishing

May denoting hope and desire of the speaker displays the total relative frequency of 1.49 RF. This meaning of *may* is more numerous in the histories (2.02 RF) than the tragedies (0.73 RF).

Table 164. Distribution of *may* indicating wishing in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	7	2.62
KH III	7	2.70
KR II	3	1.26
Total	20	2.02
Tragedies		
TA	2	0.92
RJ	0	0.00
JC	3	1.44
Total	5	0.73
Total (histories and tragedies)	25	1.49

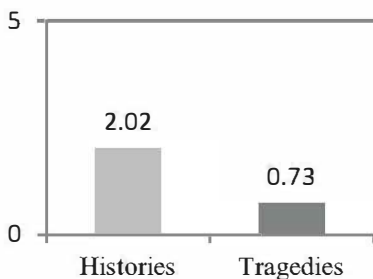


Fig. 77. Distribution of *may* indicating wishing in the plays of Shakespeare.

(522) ● brave young prince! thy famous grandfather
 Doth live again in thee: long *mayst* thou live
 To bear his image and renew his glories!

(W. Sh., KH III, 5.4.)

(523) Long *mayst* thou live in Richard's seat to sit,
And soon lie Richard in an earthly pit!

(W. Sh., KR II, 4.1.)

In the examples (524) and (525), the verb *may* denoting a wish of the speaker is preceded by a reference to God:

(524) Pray God he *may* acquit him of suspicion!

(W. Sh., KH II, 3.2.)

(525) Pray God we *may* make haste, and come too late!

(W. Sh., KR II, 1.4.)

May in this context is sometimes introduced by the verb *wish*, as in the examples (526) and (527):

(526) Come, come, be every one officious
To make this banquet; which I *wish may* prove
More stern and bloody than the Centaurs' feast.

(W. Sh., TA, 5.2.)

(527) *BRUTUS*

I know that we shall have him well to friend.

CASSIUS

I *wish we may*: but yet have I a mind
That fears him much; and my misgiving still
Falls shrewdly to the purpose.

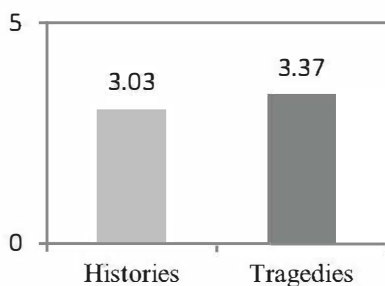
(W. Sh., JC, 3.1.)

Purpose

May has been also found to denote a desired result or reason for which certain steps are undertaken. The total frequency of this meaning of the modal *may* is 3.17 RF, with the distribution almost equal in the histories (3.03 RF) and the tragedies (3.37 RF).

Table 165. Distribution of *may* indicating purpose in the plays of Shakespeare.

	F	RF
Histories		
KH I	8	3.52
KH II	7	2.62
KH III	5	1.93
KR II	10	4.20
Total	30	3.03
Tragedies		
TA	11	5.07
RJ	4	1.55
JC	8	3.84
Total	23	3.37
Total (histories and tragedies)		
	53	3.17

**Fig. 78. Distribution of *may* indicating purpose in the plays of Shakespeare.**

May indicating a purpose is typically found in subordinate clauses describing a desired effect and introduced by *that*, *so* or *that so*, as in the examples (528), (529), (531), and (532):

(528) Place barrels of pitch upon the fatal stake,
That so her torture *may* be shortened.

(W. Sh., KH I, 5.4.)

(529) O, let me entreat thee cease. Give me thy hand,
That I may dew it with my mournful tears;

(W. Sh., KH II, 3.2.)

- (530) Off with his head, and set it on York gates;
 So York *may* overlook the town of York.
 (W. Sh., KH III, 1.4.)
- (531) What is the matter, uncle? speak;
 Recover breath; tell us how near is danger,
 That we *may* arm us to encounter it.
 (W. Sh., KR II, 5.3.)
- (532) Reach me thy hand, *that* I *may* help thee out;
 (W. Sh., TA, 2.3.)

Deontic modality

Deontic modality denoted by *may* includes both granting permission and forbidding, and constitutes merely 0.95 RF.

Permission

Permissive *may* serves to give a consent for an event to take place. It displays the total relative frequency of 0.77 RF, and is slightly more numerous in the tragedies (0.88 RF) than in the history plays (0.70 RF).

Table 166. Distribution of permissive *may* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	0	0.00
KH III	3	1.16
KR II	2	0.84
Total	7	0.70
Tragedies		
TA	1	0.46
RJ	2	0.77
JC	3	1.44
Total	6	0.88
Total (histories and tragedies)	13	0.77

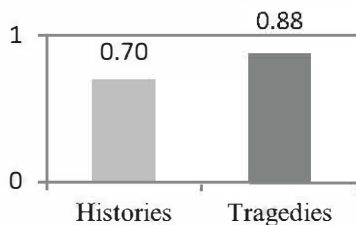


Fig. 79. Distribution of permissive *may* in the plays of Shakespeare.

(533) Therefore, my lord protector, give consent
That Margaret *may* be England's royal queen.

(W. Sh., KH I, 2.5.)

(534) And men *may* talk of kings, and why not I?

(W. Sh., KH III, 1.4.)

Forbidding

Deontic *may* has also been found to denote strong opposition of the speaker, who prohibits an action. Only three instances (0.17 RF) of the verb designating this meaning have been attested in the corpus, all of them in the history plays (0.30 RF) and none in the tragedies.

Table 167. Distribution of forbidding *may* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	0	0.00
KH III	1	0.38
KRII	0	0.00
Total	3	0.30
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	3	0.17

- (535) Whoe'er he be, you *may* not be let in.
 (W. Sh., KH I, 1.3.)
- (536) ●, wert thou for myself! But, Suffolk, stay;
 Thou *mayst* not wander in that labyrinth;
 There Minotaurs and ugly reasons lurk.
 (W. Sh., KH I, 5.3.)

Concession

As may be observed in Table 168, only a trace of concessive *may* has been found in the history plays (0.20 RF) and no instances in the tragedies.

Table 168. Distribution of concessive *may* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	1	0.38
KRII	1	0.42
Total	2	0.20
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	2	0.11

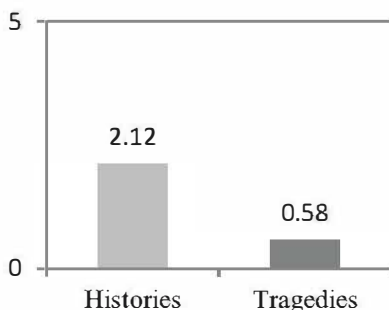
- (537) Cousin of Hereford, as thy cause is right,
 So be thy fortune in this royal fight!
 Farewell, my blood; which if to-day thou shed,
 Lament we *may*, but not revenge thee dead.
 (W. Sh., KR II, 1.3.)

Indeterminate cases

A number of cases (1.49 RF), being highly ambiguous, remain indeterminate.

Table 169. Distribution of indeterminate cases of *may* in the plays of Shakespeare.

	F	RF
Histories		
KH I	8	3.52
KH II	4	1.49
KH III	7	2.70
KR II	2	0.84
Total	21	2.12
Tragedies		
TA	4	1.84
RJ	0	0.00
JC	0	0.00
Total	4	0.58
Total (histories and tragedies)		
	25	1.49

**Fig. 80.** Distribution of indeterminate cases of *may* in the plays of Shakespeare.

Summary of the main findings

The analysis has shown that the most numerous type of modality indicated by *may* is dynamic modality (9.75 RF) with the distribution equal in the histories and the tragedies. The least common are deontic and concessive modalities with the frequency of occurrence below 1.0 RF. The modal *may* most frequently introduces purpose (3.17 RF). Other meanings of the verb are minor, with the distribution not higher than 1.5 RF. All the types of modality attested in the corpus reveal similar distribution of the modal *may* in both the history plays and the tragedies of William Shakespeare.

This leads to the conclusion that the literary sub-genres does not determine the distribution of the verb *may*.

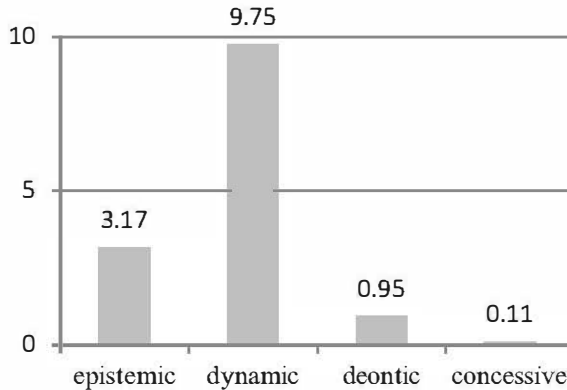


Fig. 81. Distribution of *may* representing different kinds of modality in the plays of Shakespeare.

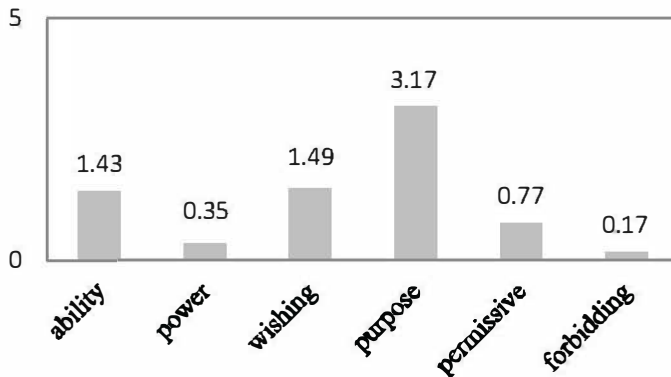


Fig. 82. Distribution of different meanings of *may* in the plays of Shakespeare.

Might

Frequency distribution of might

The modal *might* is rather infrequent in comparison to other modal verbs attested in the database. The total relative frequency is 4.00 RF with a low range equal to 2.58 RF. As Table 170 shows, the highest distribution has been detected in *Julius Caesar* (5.29 RF) and the three parts of *King*

Henry VI, with the distribution above 4.00 RF, whereas the lowest in *King Richard II* (2.94 RF) and *Romeo and Juliet* (2.71 RF).

Table 170. Distribution of *might* in the plays of Shakespeare.

	Words in total	<i>Might</i> – F	<i>Might</i> – RF
Histories			
KH I	22,679	11	4.85
KH II	26,677	13	4.87
KH III	25,833	11	4.25
KR II	23,807	7	2.94
Total	98,996	42	4.24
Tragedies			
TA	21,658	7	3.23
RJ	25,740	7	2.71
JC	20,780	11	5.29
Total	68,178	25	3.66
Total (histories and tragedies)	167,174	67	4.00

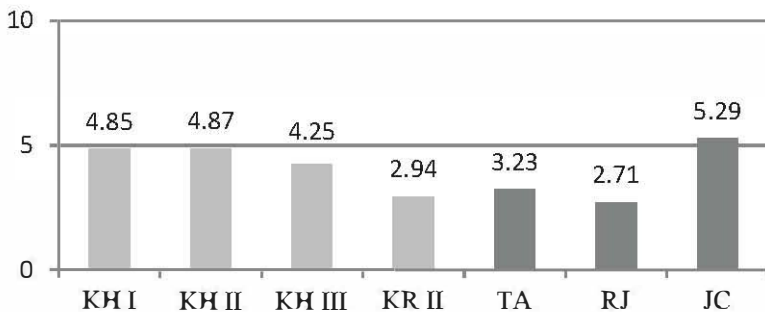


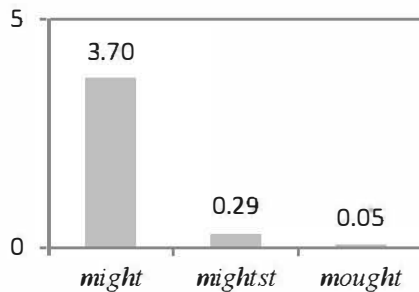
Fig. 83. Distribution of *might* in the plays of Shakespeare.

Forms and spelling variants

As can be seen in Table 171, the most common form of the verb is *might* with the total relative frequency of 3.70 RF. The form *mightst* with reference to the second person singular subject *thou* has been revealed in only 5 cases, constituting 0.29 RF. The third attested form is *mought* with only one instance (0.05 RF).

Table 171. Distribution of different forms of *might* in the plays of Shakespeare.

Title	<i>might</i>	<i>mightst</i>	<i>mought</i>
Histories			
KH I	11	0	0
KH II	12	1	0
KH III	10	1	1
KR II	7	0	0
Total	40	2	1
Tragedies			
TA	6	1	0
RJ	5	2	0
JC	11	0	0
Total	22	3	0
Total RF (histories and tragedies)	3.70	0.29	0.05

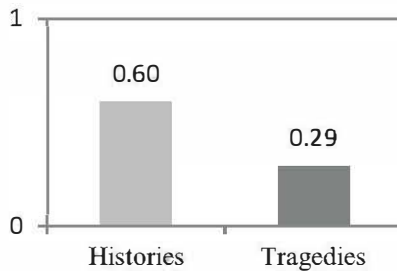
Fig. 84. Distribution of different forms of *might* in the plays of Shakespeare.

Epistemic might

Epistemic *might* denotes the subjective assumption of the speaker based on some facts or data, not without a hint of uncertainty regarding the correctness of their conclusions. Merely traces of this type of modality indicated by the modal *might* have been encountered in the database with very low distribution in both the history plays (0.60 RF) and the tragedies (0.29 RF).

Table 172. Distribution of epistemic *might* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	3	1.12
KH III	2	0.77
KRII	1	0.42
Total	6	0.60
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	2	0.96
Total	2	0.29
Total (histories and tragedies)		
	8	0.47

**Fig. 85. Distribution of *might* indicating epistemic modality in the plays of Shakespeare.**

(538) The splitting rocks cower'd in the sinking sands
 And would not dash me with their ragged sides,
 Because thy flinty heart, more hard than they,
Might in thy palace perish Margaret.

(W. Sh., KH II, 3.2.)

(539) It must be by his death: and for my part,
 I know no personal cause to spurn at him,
 But for the general. He would be crown'd:
 How that *might* change his nature, there's the question.

(W. Sh., JC, 2.1.)

Dynamic possibility

Dynamic *might* indicates the lack of obstacles which may hamper or prevent an action from being performed. Dynamic possibility denoted by *might* exhibits the total relative frequency of 2.81 RF, and is almost equal in the histories (2.92 RF) and in the tragedies (2.64 RF).

Table 173. Distribution of *might* indicating dynamic possibility in the plays of Shakespeare.

	F	RF
Histories		
KH I	11	4.85
KH II	5	1.87
KH III	7	2.70
KRII	6	2.52
Total	29	2.92
Tragedies		
TA	6	2.77
RJ	4	1.55
JC	8	3.84
Total	18	2.64
Total (histories and tragedies)	47	2.81

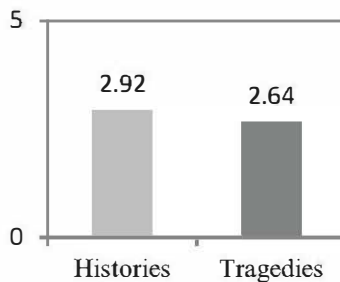


Fig. 86. Distribution of *might* indicating dynamic possibility in the plays of Shakespeare.

Ability

The modal *might* has been found to indicate the internal abilities or skills of the subject which enable them to perform. As Table 174 shows, this

meaning is very infrequent in the database with only three instances in the histories (0.30 RF) and two in the tragedies (0.29 RF).

Table 174. Distribution of *might* indicating ability in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	2	1.12
KH III	1	0.38
KRII	0	0.00
Total	3	0.30
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	0	0.00
Total	2	0.29
Total (histories and tragedies)	5	0.29

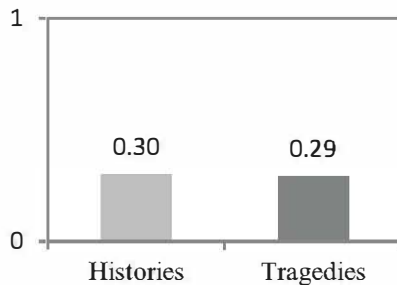


Fig. 87. Distribution of *might* indicating ability in the plays of Shakespeare.

(540) We do, and vow to heaven and to his highness,
That what we did was mildly as we *might*,
Tendering our sister's honour and our own.

(W. Sh., TA, 1.1.)

(541) I met the youthful lord at Laurence' cell;
And gave him what becomed love I *might*,
Not step o'er the bounds of modesty.

(W. Sh., RJ, 4.2.)

Power

Only six instances (0.35 RF) of *might* denoting the power of inanimate entities have been encountered in the corpus. Four of them have been found in the history plays, two in *Henry the Sixth, Part One* (0.88 RF) and two in *Henry the Sixth, Part Two* (1.12 RF), and one each in the tragedy *Julius Caesar* (0.48 RF) and *Romeo and Juliet* (0.38 RF).

Table 175. Distribution of *might* indicating power in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	2	1.12
KH III	0	0.00
KRII	0	0.00
Total	4	0.40
Tragedies		
TA	0	0.00
RJ	1	0.38
JC	1	0.48
Total	2	0.29
Total (histories and tragedies)	6	0.35

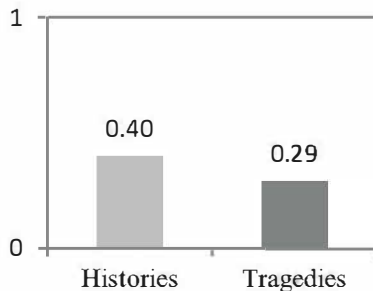


Fig. 88. Distribution of *might* indicating power of inanimate entities in the plays of Shakespeare.

Some instances include:

- (542) ●, uncle, would some part of my young years
Might but redeem the passage of your age!
 (W. Sh., KH I, 2.5.)
- (543) I would prevail, if prayers *might* prevail,
 To join your hearts in love and amity.
 (W. Sh., KH I, 3.1.)
- (544) I know their complot is to have my life,
 And if my death *might* make this island happy,
 And prove the period of their tyranny,
 I would expend it with all willingness:
 (W. Sh., KH II, 3.1.)

Wishing

The analysis of the database has revealed that the modal verb *might* serves to express the desire and longing of the speaker, or the wish which may be addressed to the speaker themselves, the interlocutor, or to the third person. This meaning of *might* displays the total relative frequency of 1.01 RF, and is slightly more numerous in the history plays (1.11 RF) than in the tragedies (0.88 RF).

Table 176. Distribution of *might* indicating wishing in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	4	1.49
KH III	2	0.77
KR II	2	0.84
Total	11	1.11
Tragedies		
TA	2	0.92
RJ	3	1.16
JC	1	0.48
Total	6	0.88
Total (histories and tragedies)		
	17	1.01

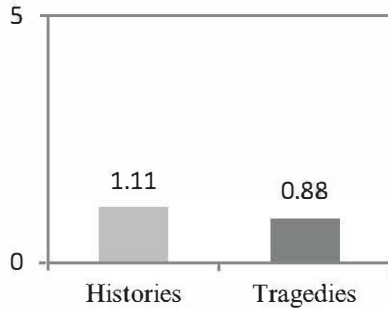


Fig. 89. Distribution of *might* indicating wishing in the plays of Shakespeare.

The characteristic feature of *might* denoting this meaning is its occurrence in the sentences initiated with the interjection ● and terminated with an exclamation mark, as in the example (545) and (546).

(545) ●, were mine eyeballs into bullets tum'd,
That I in rage *might* shoot them at your faces!
(W. Sh., KH I, 4.7.)

(546) ●, could this kiss be printed in thy hand,
That thou *mightst* think upon these by the seal,
Through whom a thousand sighs are breathed for thee!
(W. Sh., KH II, 3.2.)

In other instances, the meaning of *might* is additionally strengthened by the direct disclosure of the speaker's eagerness. In the example (547) and (548), the intentions of the speaker are revealed by *So wish I* and *I have my wish*.

(547) How much thou wrong'st me, heaven be my judge.
Die, danmed wretch, the curse of her that bare thee;
And as I thrust thy body in with my sword,
So wish I, I *might* thrust thy soul to hell.
(W. Sh., KH II, 4.10.)

(548) Thou wast the prettiest babe that e'er I nursed:
An I *might* live to see thee married once,
I have *my wish*.
(W. Sh., RJ, 1.3.)

Two instances have been encountered in the clause *if I might have my will*, (549) and (550):

(549) *WHITMORE*

I lost mine eye in laying the prize aboard,
And therefore to revenge it, shalt thou die;
[To *SUFFOLK*]
And so should these, *if I might have my will*.

(W. Sh., KH II, 4.1.)

(550) *●*, why should wrath be mute, and fury dumb?

I am no baby, I, that with base prayers
I should repent the evils I have done:
Ten thousand worse than ever yet I did
Would I perform, *if I might have my will*;
If one good deed in all my life I did,
I do repent it from my very soul.

(W. Sh., TA, 5.3.)

Purpose

As can be seen in Table 177, the modal verb *might* introducing a purpose of an action reveals an extremely low distribution in both the histories (1.11 RF) and the tragedies (0.58 RF).

Table 177. Distribution of *might* indicating purpose in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	1	0.37
KH III	4	1.54
KR II	1	0.42
Total	11	1.11
Tragedies		
TA	2	0.92
RJ	0	0.00
JC	2	0.96
Total	4	0.58
Total (histories and tragedies)	15	0.89

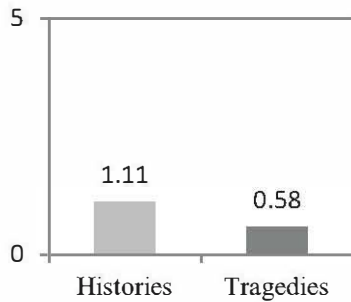


Fig. 90. Distribution of *might* indicating purpose in the plays of Shakespeare.

The modal *might* is typically found in subordinate clauses which describe an intended effect and are introduced by *that* or *that so*, as in the following examples:

(551) I would his troubles likewise were expired,
That so he *might* recover what was lost.
(W. Sh., KH I, 2.5.)

(552) York set him on to fight and die in shame,
That, Talbot dead, great York *might* bear the name.
(W. Sh., KH I, 4.4.)

Three instances (0.17 RF) of *might* indicating purpose occur in the clauses which are introduced by *lest* or *for fear*, as in (553) and (554):

(553) I speak not this as doubting any here
For did I but suspect a fearful man
He should have leave to go away betimes,
Lest in our need he *might* infect another
And make him of like spirit to himself.
(W. Sh., KH III, 5.4.)

(554) Even by the rule of that philosophy
By which I did blame Cato for the death
Which he did give himself, I know not how,
But I do find it cowardly and vile,
For fear of what *might* fall, so to prevent
The time of life: arming myself with patience
To stay the providence of some high powers
That govern us below.
(W. Sh., JC, 5.1.)

Conditional might

The modal *might* has been found in conditional sentences in a very limited number (0.65 RF), with similarly low distribution in both the histories (0.80 RF) and the tragedies (0.44 RF).

Table 178. Distribution of *might* in conditional clauses in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	4	1.49
KH III	2	0.77
KR II	1	0.42
Total	8	0.80
Tragedies		
TA	1	0.46
RJ	0	0.00
JC	2	0.96
Total	3	0.44
Total (histories and tragedies)	11	0.65

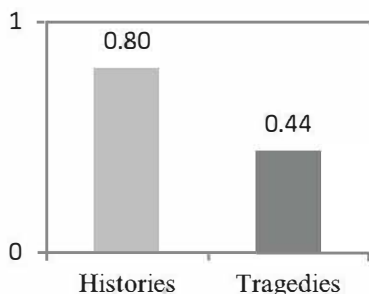


Fig. 91. Distribution of *might* in conditional clauses in the plays of Shakespeare.

(555) These five days have I
hid me in these woods and durst not peep out, for
all the country is laid for me; but now am I so
hungry that if I *might* have a lease of my life for a
thousand years I could stay no longer.

(W. Sh., KH II, 4.9.)

(556) Ah, Warwick, Warwick! wert thou as we are.

We *might* recover all our loss again;

(W. Sh., KH III, 5.2.)

The modal *might* has been found in both, the protasis (557), constituting the total relative frequency of 0.35 RF, and the apodosis, (558) and (559), with the distribution of 0.23 RF.

(557) Flatterers! Now, Brutus, thank yourself:

This tongue had not offended so to-day,

If Cassius *might* have ruled.

(W. Sh., JC, 5.1.)

(558) Thy fortune, York, hadst thou been regent there,

Might happily have proved far worse than his.

(W. Sh., KH II, 3.1.)

(559) And had he match'd according to his state,

He *might* have kept that glory to this day;

(W. Sh., KH III, 2.2.)

Hypothetical might

In some cases the modal *might* has been found to refer to hypothetical or highly improbable future events revealing the sceptical attitude of the speaker. The scope of distribution of hypothetical *might* includes unreal conditionals. The modal is almost equally infrequent in the histories and the tragedies, with the total relative frequency slightly over 1.00 RF.

Table 179. Distribution of hypothetical *might* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	3	1.12
KH III	4	1.54
KRII	3	1.26
Total	12	1.21

Tragedies			
TA	3	1.38	
RJ	2	0.77	
JC	4	1.92	
Total	9	1.32	
<hr/>			
Total (histories and tragedies)	21	1.25	

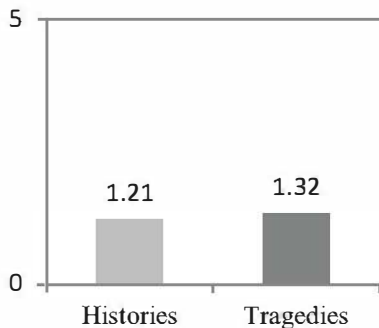


Fig. 92. Distribution of *might* in hypothetical context in the plays of Shakespeare.

- (560) If there be devils, would I were a devil,
 To live and bum in everlasting fire,
 So I *might* have your company in hell,
 But to torment you with my bitter tongue!
 (W. Sh., TA, 5.1.)
- (561) Wert thou as young as I, Juliet thy love,
 An hour but married, Tybalt murdered,
 Doting like me and like me banished,
 Then *mightst* thou speak, then *mightst* thou tear thy hair,
 And fall upon the ground, as I do now,
 Taking the measure of an unmade grave.
 (W. Sh., RJ, 3.3.)
- (562) His life was gentle, and the elements
 So mix'd in him that Nature *might* stand up
 And say to all the world 'This was a man!'
 (W. Sh., JC, 5.5.)

Past reference

In a number of cases (1.19 RF), the modal *might* has been found to refer to the past. As Table 180 indicates, the distribution of *might* in this context is almost equal in the history plays (1.21 RF) and the tragedies (1.17 RF).

Table 180. Distribution of *might* with reference to the past in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	3	1.12
KH III	5	1.93
KR II	2	0.84
Total	12	1.21
Tragedies		
TA	4	1.84
RJ	2	0.77
JC	2	0.96
Total	8	1.17
Total (histories and tragedies)		
	20	1.19

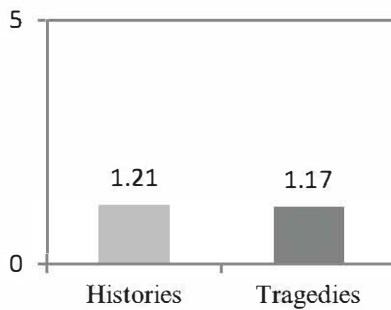


Fig. 93. Distribution of *might* with reference to the past in the plays of Shakespeare.

Might referring to the past is typically a representative of dynamic possibility, and it may be regarded as a past counterpart of dynamic *may* with the meaning paraphrased as ‘it was possible for’, as in the examples (563) and (564):

(563) ●, let me teach thee! for my father's sake,
 That gave thee life, when well he *might* have slain thee,
 Be not obdurate, open thy deaf ears.
 (W. Sh., TA, 1.3.)

(564) I met the youthful lord at Laurence' cell;
 And gave him what becomed love I *might*,
 Not step o'er the bounds of modesty.
 (W. Sh., RJ, 4.2.)

Nearly half (0.53 RF) of all the instances of *might* referring to the past are followed by 'have + past participle', with almost equal distribution in both the histories (0.50 RF) and the tragedies (0.58 RF).

(565) But yesterday the word of Caesar *might*
 Have stood against the world; now lies he there.
 (W. Sh., RJ, 3.2.)

Indeterminate cases

As can be seen in Table 181, the ambiguous cases of *might* which cannot be clearly classified exhibit the total relative frequency of 0.35 RF.

Table 181. Distribution of indeterminate cases of *might* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	2	1.12
KH III	2	0.77
KRII	0	0.00
Total	4	0.40
Tragedies		
TA	0	0.00
RJ	1	0.38
JC	1	0.48
Total	2	0.29
Total (histories and tragedies)	6	0.35

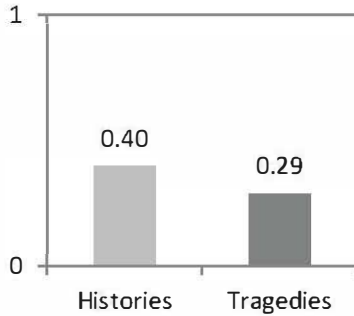


Fig. 94. Distribution of indeterminate cases of *might* in the plays of Shakespeare.

Summary of the main findings

As can be seen in Fig. 95, the modal verb *might* has been found in only two kinds of modality, namely dynamic and epistemic. The former one is the prevailing type (2.81 RF) whereas epistemic *might* (0.47 RF) exhibits extremely low frequency of occurrence. No transparent instances of deontic modality have been encountered in the corpus. The residual distribution of epistemic *might* may be due to the fact that during the Early Modern English period epistemic meanings are still in their infancy.

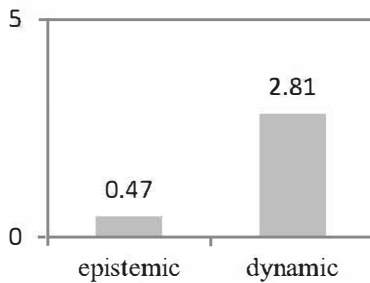


Fig. 95. Distribution of *might* representing different kinds of modality in the plays of Shakespeare.

As for dynamic possibility, only *might* indicating wishing exhibits distribution above 1.00 RF. Other meanings, ability (0.29 RF), power (0.35 RF) and also purpose (0.89 RF) occur in a very limited number.

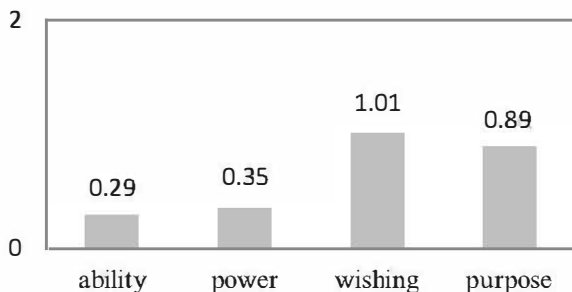


Fig. 96. Distribution of different meanings of dynamic *might* in the plays of Shakespeare.

The genre of the plays under study does not seem to affect the distribution of dynamic *might*. The frequency of occurrence of its meanings is similar in both the histories and the tragedies, with range no greater than 0.53 RF.

Similarly, hypothetical *might* (1.25 RF) and *might* with past reference (1.19 RF) remain independent of the type of the plays. Both constitute the most numerous contexts in which the modal *might* has been encountered. It may be concluded thus, that the most numerous is non-factual *might*, with the point of reference set beyond the boundaries of presence or actuality. This promotes the evolution of epistemic meanings, which, though still limited in Shakespearian language, are on their best way to gain on frequency.

Will

Frequency distribution of will

Will is the most numerous modal verb in the database, with the total relative frequency of 84.16 RF. As Table 182 indicates, the distribution of the verb is higher in the tragedies (89.17 RF) than in the history plays (80.71 RF). The distribution of the modal fluctuates from 55.86 RF in *King Richard II* to 104.06 RF in *King Henry VI Part One*. The range thus is unusually high and equals 48.20 RF.

Table 182. Distribution of *will* in the plays of Shakespeare.

	Words in total	<i>Will</i> – F	<i>Will</i> – RF
Histories			
KH I	22,679	236	104.06
KH II	26,677	203	76.09
KH III	25,833	227	87.87
KR II	23,807	133	55.86
Total	98,996	799	80.71
Tragedies			
TA	21,658	183	84.49
RJ	25,740	253	98.29
JC	20,780	172	82.77
Total	68,178	608	89.17
Total (histories and tragedies)	167,174	1407	84.16

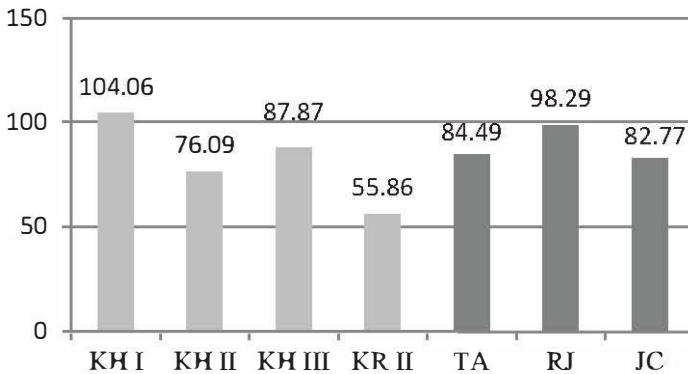


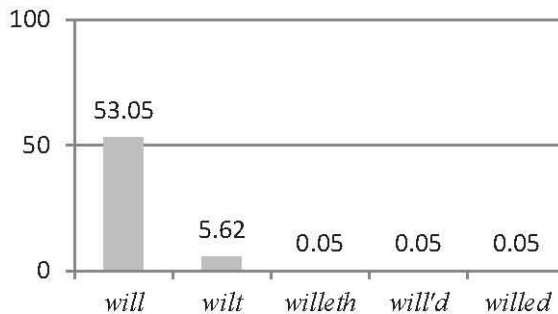
Fig. 97. Distribution of *will* in the plays of Shakespeare.

Forms and spelling variants

The analysis of the corpus has revealed a variety of the forms and abbreviations concerning the modal *will*. As can be seen in Table 183, the most frequent spelling form of the verb is *will* (53.05 RF). *Wilt* is much less numerous (5.62 RF) and assigned exclusively to the second person singular subject. Only one case of *willeth* (0.05 RF) has been encountered (with a reference to a third person singular subject). Similarly, single instances of the past forms, *will'd* (0.05 RF) and *willed* (0.05 RF) have been attested in the database.

Table 183. Distribution of different forms of *will* in the plays of Shakespeare.

Title	<i>will</i>	<i>wilt</i>	<i>willeth</i>	<i>will'd</i>	<i>willed</i>
Histories					
KH I	143	15	1	1	1
KH II	129	10	0	0	0
KH III	125	16	0	0	0
KR II	91	7	0	0	0
Total	488	48	1	1	1
Tragedies					
TA	129	10	0	0	0
RJ	133	30	0	0	0
JC	137	6	0	0	0
Total	399	46	0	0	0
Total RF (histories and tragedies)	53.05	5.62	0.05	0.05	0.05

**Fig. 98. Distribution of different forms of *will* in the plays of Shakespeare.**

As far as the abbreviated forms are concerned, the most common are the ones concerning the first person subject, both singular and plural. The prevailing abbreviations are *I'll*, with the total relative frequency of 18.24 RF, and *we'll* (4.78 RF). Other forms attested in the database include *you'll* and *he'll*, both forms with the equal distribution (0.89 RF). The least numerous are *she'll* (0.23 RF) and *will't* (0.17 RF).

Table 184. Distribution of abbreviated forms of *will* in the plays of Shakespeare.

Title	<i>I'll</i>	<i>you'll</i>	<i>he'll</i>	<i>she'll</i>	<i>will't</i>	<i>we'll</i>
Histories						
KH I	58	0	2	0	0	14
KH II	41	3	3	2	0	15
KH III	60	6	6	0	0	14
KR II	27	0	0	0	1	7
	186	9	11	2	1	43
Tragedies						
TA	35	1	1	0	2	5
RJ	72	4	2	2	0	10
JC	12	1	1	0	0	15
Total	119	6	4	2	2	30
Total RF (histories and tragedies)	18.24	0.89	0.89	0.23	0.17	4.36

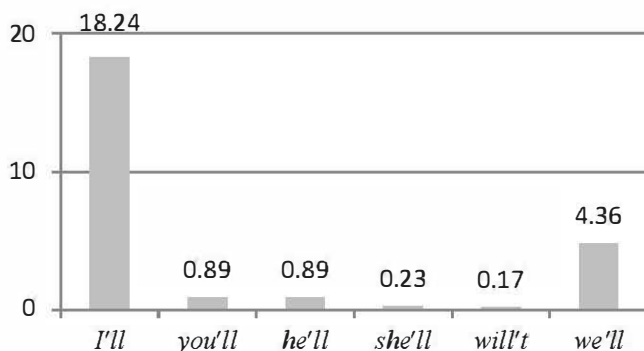


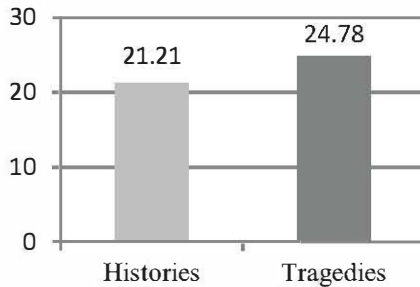
Fig. 99. Distribution of abbreviated forms of *will* in the plays of Shakespeare.

Predictive will

Predictive *will* refers to the futurity and most commonly indicates the speaker's predictions and expectations based on the available information. *Will* indicating futurity exhibits the total relative frequency of 22.67 RF, and its distribution is similar in the histories (21.21 RF) and in the tragedies (24.78 RF).

Table 185. Distribution of predictive *will* in the plays of Shakespeare.

	F	RF
Histories		
KH I	58	25.57
KH II	54	20.24
KH III	65	25.16
KR II	33	13.86
Total	210	21.21
Tragedies		
TA	57	26.31
RJ	61	23.69
JC	51	24.54
Total	169	24.78
Total (histories and tragedies)	379	22.67

**Fig. 100. Distribution of predictive *will* in the plays of Shakespeare.**

- (566) What say'st thou, man, before dead Henry's corse?
 Speak softly, or the loss of those great towns
Will make him burst his lead and rise from death.
 (W. Sh., KH II, 1.1.)
- (567) My masters, let's stand close: my lord protector
will come this way by and by, and then we may deliver
 our supplications in the quill.
 (W. Sh., KH II, 1.3.)
- (568) Peace, tender sapling; thou art made of tears,
 And tears *will* quickly melt thy life away.
 (W. Sh., TA, 3.2.)

- (569) If they do see thee, they *will* murder thee. (W. Sh., RJ, 2.2.)
- (570) Take thou some new infection to thy eye,
And the rank poison of the old *will* die. (W. Sh., RJ, 1.2.)

Declarative will

Declarative *will* seeks to announce the intentions of the speaker and their decisions regarding future actions. As can be seen in Table 186, the modal verb is more common in the tragedies (44.29 RF) than in the history plays (37.17 RF), constituting the total distribution equal to 40.07 RF.

Table 186. Distribution of declarative *will* in the plays of Shakespeare.

	F	RF
Histories		
KH I	119	52.47
KH II	85	31.86
KH III	115	44.51
KR II	49	20.58
Total	368	37.17
Tragedies		
TA	76	35.09
RJ	141	54.77
JC	85	40.90
Total	302	44.29
Total (histories and tragedies)	670	40.07

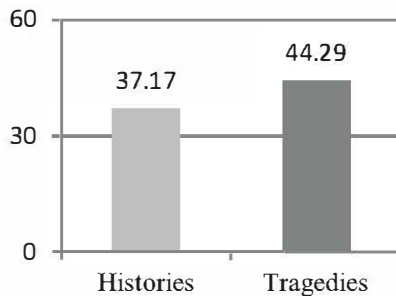


Fig. 101. Distribution of declarative *will* in the plays of Shakespeare.

- (571) Mine honour is my life; both grow in one:
 Take honour from me, and my life is done:
 Then, dear my liege, mine honour let me try;
 In that I live and for that *will* I die.
 (W. Sh., KR II, 1.1.)
- (572) But come, young waverer, come, go with me,
 In one respect *I'll* thy assistant be;
 For this alliance may so happy prove,
 To tum your households' rancour to pure love.
 (W. Sh., RJ, 2.3.)
- (573) Do not go forth to-day: call it my fear
 That keeps you in the house, and not your own.
We'll send Mark Antony to the senate-house:
 And he shall say you are not well to-day:
 Let me, upon my knee, prevail in this.
 (W. Sh., JC, 2.2.)

Volitive will

As can be seen in Table 187, volitive *will* exhibits the distribution equal to 8.91 RF, including a residual 'agreement' (1.13 RF) and a much more common 'willingness' (7.77 RF).

Table 187. Distribution of volitive *will* in the plays of Shakespeare.

	willingness	agreement	Total
Histories			
KH I	25	3	28
KH II	23	6	29
KH III	23	0	23
KR II	12	0	12
Total	83	9	92
Tragedies			
TA	10	3	13
RJ	25	0	25
JC	12	7	19
Total	47	10	57
Total F (histories and tragedies)	130	19	149
Total RF (histories and tragedies)	7.77	1.13	8.91

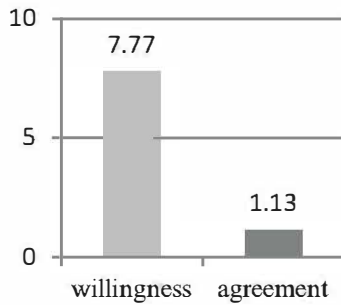


Fig. 102. Distribution of volitive *will* in the plays of Shakespeare.

Willingness

The modal *will* denoting willingness indicates the intentions and the readiness of the speaker to act. As can be seen in Table 188, its total relative distribution is equal to 7.77 RF and is only slightly more numerous in the histories (8.38 RF) than in the tragedies (6.89 RF).

Table 188. Distribution of *will* indicating willingness in the plays of Shakespeare.

	F	RF
Histories		
KH I	25	11.02
KH II	23	8.62
KH III	23	8.90
KRII	12	5.04
Total	83	8.38
Tragedies		
TA	10	4.61
RJ	25	9.71
JC	12	5.77
Total	47	6.89
Total (histories and tragedies)	130	7.77

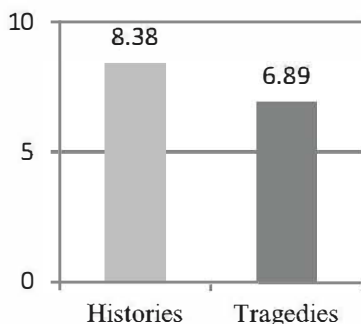


Fig. 103. Distribution of *will* indicating willingness in the plays of Shakespeare.

(574) KING HENRY VI

And those occasions, uncle, were of force:
Therefore, my loving lords, our pleasure is
That Richard be restored to his blood.

WARWICK

Let Richard be restored to his blood;
So shall his father's wrongs be recompensed.

OF WINCHESTER

As *will* the rest, so *willeth* Winchester.

(W. Sh., KH I, 3.1.)

The analysis has revealed that in many cases the verb *will* indicating willingness occupies the position of a lexical verb following directly the subject of a sentence and not preceding any other lexical verb. The most common phrases in which this meaning has been encountered are the structure 'wh word + personal pronoun + *will*'. The position of 'wh' word is mostly occupied by what (0.47 RF) and *whither* (also EModE spelling alternative *whether*) meaning 'to what/whatever place' (0.17 RF). In all these cases the lexical meaning of the verb *will* is 'to have a desire' or 'wish'.

(575) Even as thou *wilt*, sweet Warwick, let it be;

(W. Sh., KH III, 2.6.)

(576) Then be it as you *will*; for 'tis my right,
And Henry but usurps the diadem.

(W. Sh., KH III, 4.7.)

(577) Talk not to me, for I'll not speak a word:
Do as thou *wilt*, for I have done with thee.

(W. Sh., RJ, 3.5.)

- (578) Put this in any liquid thing you *will*,
 And drink it off; and, if you had the strength
 ● of twenty men, it would dispatch you straight.

(W. Sh., RJ, 5.1.)

Table 189. The most common phrase structures indicating willingness in the plays of Shakespeare.

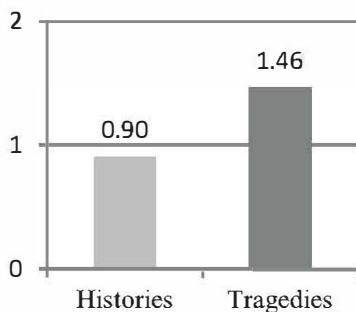
	F	RF
‘Wh’ word followed by a personal pronoun and <i>will</i> :		
8. <i>what</i> + personal pronoun + <i>will</i>	8	0.47
9. <i>whither</i> (<i>whether</i>) + personal pronoun + <i>will</i>	3	0.17
10. <i>where</i> + personal pronoun + <i>will</i>	3	0.17
11. <i>when</i> + personal pronoun + <i>will</i>	1	0.05
Total	15	0.89
●ther structures:		
12. <i>as</i> + personal pronoun + <i>will</i> (or: <i>as</i> + <i>will</i> + personal pronoun)	4	0.23
13. <i>so</i> + <i>will</i> + noun / noun phrase	1	0.05
14. personal pronoun + <i>will</i> + <i>that</i>	1	0.05
15. personal pronoun + <i>will</i> + <i>none</i>	2	0.11
16. <i>any</i> + noun phrase + personal pronoun + <i>will</i>	1	0.05
Total (<i>will</i> indicating willingness)	24	1.43

Agreement

Agreement has mainly been found in the phrases which are responses to a suggestion, request or a command. The speaker is often of inferior status in relation to the interlocutor. Agreements denoted by *will* are marginal in both the histories (0.90 RF) and the tragedies (1.46 RF), with the total distribution no higher than 1.13 RF.

Table 190. Distribution of *will* indicating agreement in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	6	2.24
KH III	0	0.00
KR II	0	0.00
Total	9	0.90
Tragedies		
TA	3	1.38
RJ	0	0.00
JC	7	3.36
Total	10	1.46
Total (histories and tragedies)		
	19	1.13

**Fig. 104. Distribution of *will* indicating agreement in the plays of Shakespeare.**

As can be seen in Table 191, the forms of oral address in the agreements include: *my (good) Lord* (0.29 RF), *Sir* (0.11 RF), *Madam* (0.05 RF), and directly the name of the interlocutor (0.05 RF). The structure of such phrases usually consists of three components: first person singular + *will* + form of address.

Table 191. Different forms of oral address in the plays of Shakespeare.

	F	RF
Forms of oral address:		
17. <i>my (good/noble) Lord</i>	5	0.29
18. <i>Sir</i>	2	0.11
19. <i>Madam</i>	1	0.05
20. name	1	0.05
21. no addressee uttered	10	0.59
Total	19	1.13

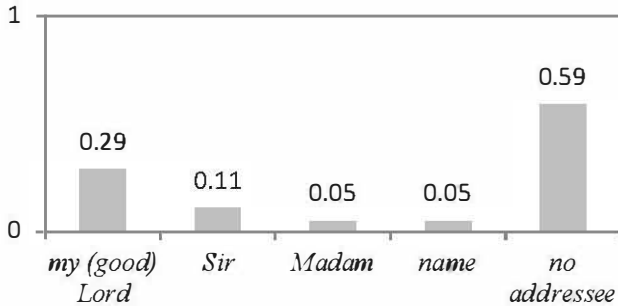


Fig. 105. Different forms of oral address in the plays of Shakespeare.

(579) ●F AUVERGNE

Porter, remember what I gave in charge;
And when you have done so, bring the keys to me.

PORTER

Madam, I *will*.

(W. Sh., KH I, 2.3.)

(580) KING HENRY VI

Go, call our uncle to our presence straight;
Say we intend to try his grace to-day.
If he be guilty, as 'tis published.

SUFFOLK

I'll call him presently, my noble lord.

(W. Sh., KH II, 3.2.)

(581) TALB●T

Not all together: better far, I guess,
 That we do make our entrance several ways;
 That, if it chance the one of us do fail,
 The other yet may rise against their force.

BEDF●RD

Agreed: *I'll* to yond comer.

(W. Sh., KH I, 2.1.)

*Deontic modality**Promise*

Promises constitute the most numerous deontic *will* in the corpus (5.14 RF). They indicate good will and the readiness of the speaker to act, as well as the guarantee given by the speaker that the event will take place. The speaker reassures that the action will be taken and carried out by them or by some other individuals. As Table 192 shows, the distribution of *will* denoting a promise is similar in both the histories (4.24 RF) and the tragedies (6.45 RF).

Table 192. Distribution of *will* indicating a promise in the plays of Shakespeare.

	F	RF
Histories		
KH I	14	6.17
KH II	13	4.87
KH III	12	4.64
KR II	3	1.26
Total	42	4.24
Tragedies		
TA	26	12.00
RJ	7	2.71
JC	11	5.29
Total	44	6.45
Total (histories and tragedies)	86	5.14

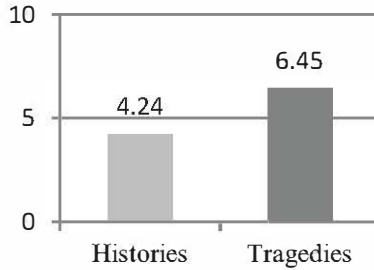


Fig. 106. Distribution of *will* indicating a promise in the plays of Shakespeare.

- (582) Gloucester, we *will* meet; to thy cost, be sure
 (W. Sh., KH I, 1.3.)
- (583) Search out thy wit for secret policies,
 And we *will* make thee famous through the world.
 (W. Sh., KH I, 3.3.)
- (584) Even by my god I swear to thee I *will*.
 (W. Sh., TA, 5.1.)

Threat

The analysis of the database has shown that *will* indicating a threat is more frequent in the histories (3.63 RF) than in the tragedies (2.93 RF) of William Shakespeare. No instances have been encountered in *Julius Caesar*. The total frequency distribution of *will* designating a threat is 3.34 RF.

Table 193. Distribution of *will* indicating a threat in the plays of Shakespeare.

	F	RF
Histories		
KH I	12	5.29
KH II	14	5.24
KH III	9	3.48
KRII	1	0.42
Total	36	3.63

Tragedies	
TA	9 4.15
RJ	11 4.27
JC	0 0.00
Total	20 2.93
Total (histories and tragedies)	56 3.34

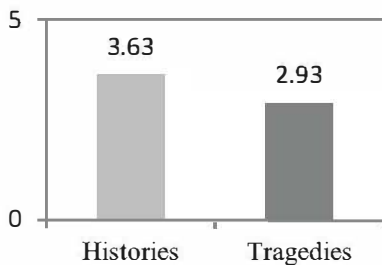


Fig. 107. Distribution of *will* indicating a threat in the plays of Shakespeare.

The modal verb *will* denoting a threat has been found almost exclusively with the first-person singular subject, as in (585), (586), and (587).

(585) Hence *will* I drag thee headlong by the heels
 Unto a dunghill which shall be thy grave,
 And there cut off thy most ungracious head;
 Which I *will* bear in triumph to the king,
 Leaving thy trunk for crows to feed upon.

(W. Sh., KH II, 3.3.)

(586) Open the door, secure, foolhardy king:
 Shall I for love speak treason to thy face?
 Open the door, or I *will* break it open.

(W. Sh., KR II, 5.3.)

(587) But if thou, jealous, dost return to pry
 In what I further shall intend to do,
 By heaven, I *will* tear thee joint by joint
 And strew this hungry churchyard with thy limbs:

(W. Sh., RJ, 5.3.)

Polite request

A marginal number of instances of *will* (0.95 RF) have been found in the utterances in which the speaker makes a polite request or puts forward an invitation. As can be seen in Table 194, the modal is more numerous in the tragedies (2.05 RF) than in the histories (0.20 RF).

Table 194. Distribution of *will* in polite requests in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	0	0.00
KR II	1	0.42
Total	2	0.20
Tragedies		
TA	5	2.30
RJ	2	0.77
JC	7	3.36
Total	14	2.05
Total (histories and tragedies)	16	0.95

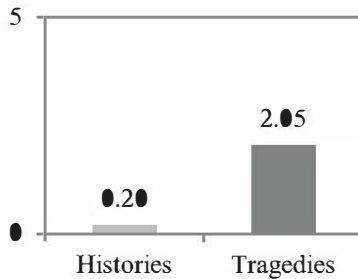


Fig. 108. Distribution of *will* in polite requests in the plays of Shakespeare.

(588) Nurse, *will* you go with me into my closet,
 To help me sort such needful ornaments
 As you think fit to furnish me to-morrow?

(W. Sh., RJ, 4.2.)

- (589) *Will* you sup with me to-night, Casca?
(W. Sh., JC, 1.2.)
- (590) *Will* you dine with me to-morrow?
(W. Sh., JC, 1.2.)

Omission of the following verb

Some instances of the verb *will* are not followed by a lexical verb. As can be seen in Table 195, the omission frequently concerns the verb *go* constituting the total distribution equal to 7.29 RF.

Table 195. Distribution of *will* with the omission of the verb *go* in the plays of Shakespeare.

	F	RF
Histories		
KH I	8	3.52
KH II	12	4.49
KH III	28	10.83
KR II	24	10.08
Total	72	7.27
Tragedies		
TA	8	3.69
RJ	36	13.98
JC	6	2.88
Total	50	7.33
Total (histories and tragedies)	122	7.29

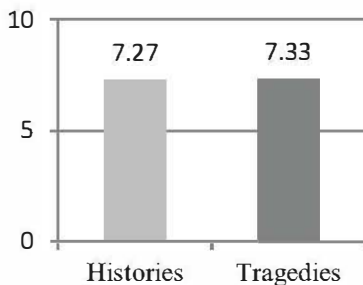


Fig. 109. Distribution of *will* followed by the omission of the verb *go* in the plays of Shakespeare.

- (591) *I'll to the Tower with all the haste I can,
To view the artillery and munition;*
(W. Sh., KH I, 1.1.)
- (592) Farewell, my gracious lord; *I'll to my castle.*
(W. Sh., KH III, 1.1.)
- (593) Come, take away. Lavinia, go with me:
*I'll to thy closet; and go read with thee
Sad stories chanced in the times of old.*
(W. Sh., TA, 3.2.)
- (594) Romeo, good night: *I'll to my truckle-bed;
This field-bed is too cold for me to sleep:
Come, shall we go?*
(W. Sh., RJ, 2.1.)

Will as a lexical verb

The analysis of *will* in terms of its lexical meaning 'have a desire or wish' constitute the total relative frequency of 3.40 RF (57 items).

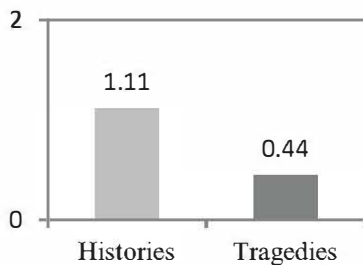
- (595) GREGORY
The heads of the maids?
SAMPSON
Ay, the heads of the maids, or their maidenheads;
take it in what sense thou *wilt*.
(W. Sh., RJ, 1.1.)

Indeterminate cases of will in Shakespeare

Due to great ambiguity, some instances of the modal verb *will* remain indeterminate (0.83 RF) with the distribution in both the history plays (1.11 RF) and the tragedies (0.44 RF).

Table 196. Distribution of indeterminate cases of *will* in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	2	0.74
KH III	3	1.16
KR II	3	1.26
Total	11	1.11
Tragedies		
TA	0	0.00
RJ	1	0.38
JC	2	0.96
Total	3	0.44
Total (histories and tragedies)		
	14	0.83

Fig. 110. Distribution of indeterminate cases of *will* in the plays of Shakespeare.

Summary of the main findings

The analysis of the corpus has revealed that *will* indicating futurity is the most numerous meaning of the modal verb with the distribution equal to 40.07 RF (declarative) and 22.67 RF (predictive). The least common is *will* found in polite requests constituting merely residual frequency of occurrence of 0.95 RF, although its distribution in the tragedies is notably higher (2.05 RF) than in the history plays (0.20 RF).

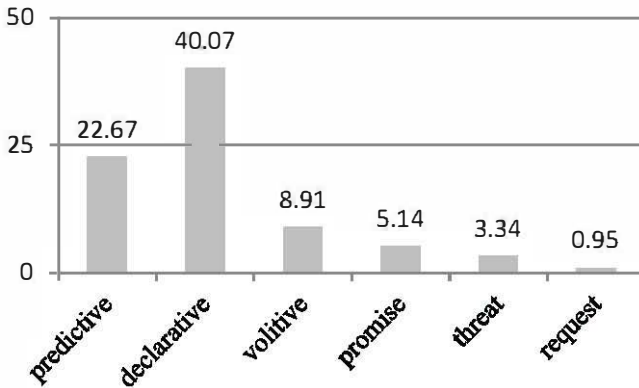


Fig. 111. Distribution of different meanings of *will* in the plays of Shakespeare.

Would

Frequency distribution of would

As can be seen in Table 197, the total relative distribution of the modal verb *would* is 20.87 RF. The highest frequency has been observed in *Titus Andronicus* (25.39 RF), whereas the lowest in *King Henry VI Part II* (17.99 RF), what gives the range equal to 7.40 RF.

Table 197. Distribution of *would* in the plays of Shakespeare.

	Words in total	<i>Would</i> – F	<i>Would</i> – RF
Histories			
KH I	22,679	41	18.07
KH II	26,677	48	17.99
KH III	25,833	51	19.74
KR II	23,807	49	20.58
Total	98,996	189	19.09
Tragedies			
TA	21,658	55	25.39
RJ	25,740	61	23.69
JC	20,780	44	21.17
Total	68,178	160	23.46
Total (histories and tragedies)	167,174	349	20.87

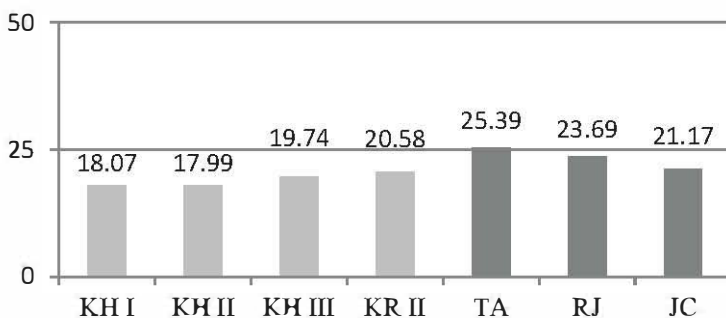


Fig. 112. Distribution of *would* in the plays of Shakespeare.

Forms and spelling variants

As Table 198 indicates, the most common form of the verb attested in the corpus is *would* (19.44 RF). The other two spelling variants, assigned exclusively to the second person singular subject *thou*, are *wouldst* (1.37 RF) and *wouldest* (0.05 RF).

Table 198. Distribution of different forms of *would* in the plays of Shakespeare.

Title	<i>would</i>	<i>wouldst</i>	<i>wouldest</i>
Histories			
KH I	40	1	0
KH II	42	6	0
KH III	47	4	0
KR II	45	4	0
Total	174	15	0
Tragedies			
TA	50	4	1
RJ	57	4	0
JC	44	0	0
Total	151	8	1
Total RF (histories and tragedies)	19.44	1.37	0.05

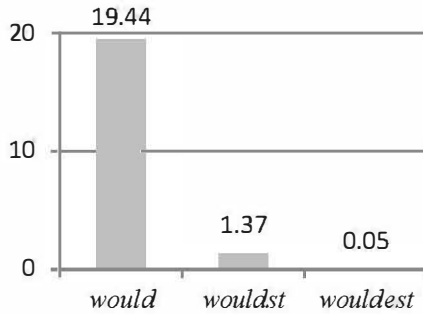


Fig. 113. Distribution of different forms of *would* in the plays of Shakespeare.

Epistemic modality

Epistemic modality is the expression of judgement and conclusion made by a speaker and based on some available data, such as events and experience. The analysis has shown that epistemic *would* is only slightly more common in the histories (3.53 RF) than in the tragedies (2.93 RF), displaying the total relative frequency of 3.28 RF.

Table 199. Distribution of epistemic *would* in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	9	3.37
KH III	11	4.25
KR II	10	4.20
Total	35	3.53
Tragedies		
TA	8	3.69
RJ	6	2.33
JC	6	2.88
Total	20	2.93
Total (histories and tragedies)	55	3.28

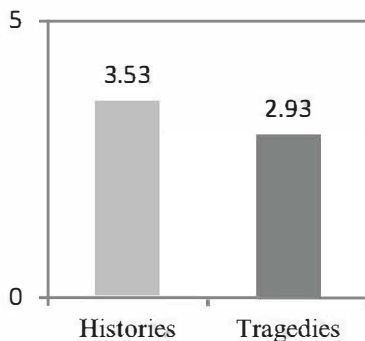


Fig. 114. Distribution of *would* representing epistemic modality in the plays of Shakespeare.

Some instances of epistemic *would* include:

(596) Nor thou, nor he, are any sons of mine;
 My sons *would* never so dishonour me:
 Traitor, restore Lavinia to the emperor.

(W. Sh., TA, 1.1.)

(597) If they did kill thy husband, then be joyful
 Because the law hath ta'en revenge on them.
 No, no, they *would* not do so foul a deed;
 Witness the sorrow that their sister makes.

(W. Sh., TA, 3.1.)

Volitive would

Willingness

Volitive *would* indicating the willingness of the speaker or the interlocutors varies from 6.72 RF in *The Tragedy of King Richard II* to 12.03 RF in *Julius Caesar*. As can be seen in Fig. 115, the distribution is slightly lower in the histories (8.68 RF) than in the tragedies (11.14 RF) exhibiting the total relative frequency equal to 9.69 RF.

Table 200. Distribution of *would* indicating willingness in the plays of Shakespeare.

	F	RF
Histories		
KH I	21	9.25
KH II	24	8.99
KH III	25	9.67
KRII	16	6.72
Total	86	8.68
Tragedies		
TA	23	10.61
RJ	28	10.87
JC	25	12.03
Total	76	11.14
Total (histories and tragedies)		
	162	9.69

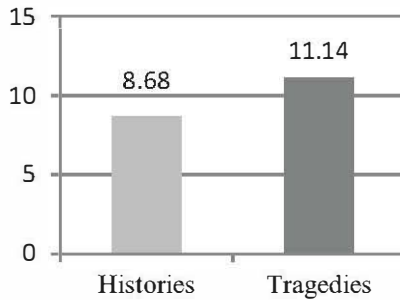


Fig. 115. Distribution of *would* indicating willingness in the plays of Shakespeare.

Will denoting willingness has been observed in example (598), (599), and 0.

(598) Lieutenant, is it you whose voice I hear?

● open the gates; here's Gloucester that *would* enter.

(W. Sh., KH I, 1.3.)

(599) I *would* your highness *would* depart the field:

The queen hath best success when you are absent.

(W. Sh., KH III, 2.2.)

(600) ROME

I *would* I were thy bird.

JULIET

Sweet, so *would* I:

(W. Sh., RJ, 2.2.)

Emotional would

Emotional *would* seeks to denote the internal forces which drive the speaker's behaviour such as feelings and emotions. It reveals merely a marginal distribution, not higher than 0.41 RF, and indicates a strong wish, desire and longing for something which is typically beyond the speaker's reach and control. Emotional *would* is normally introduced by an interjection *Oh* or *Ah*, as in examples (601), (602), (603), and (604).

Table 201. Distribution of emotional *would* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	1	0.37
KH III	0	0.00
KRII	2	0.84
Total	5	0.50
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	0	0.00
Total	2	0.29
Total (histories and tragedies)	7	0.41

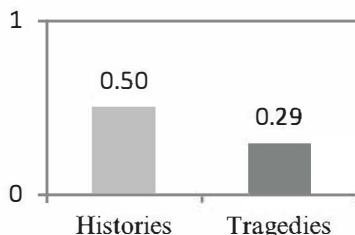


Fig. 116. Distribution of emotional *would* in the plays of Shakespeare.

- (601) ●, uncle, *would* some part of my young years
 Might but redeem the passage of your age!
 (W. Sh., KH I, 2.5.)
- (602) *Ah*, *would* the scandal vanish with my life,
 How happy then were my ensuing death!
 (W. Sh., KR II, 2.1.)
- (603) ●, *would* thou wert as thou tofore hast been!
 (W. Sh., TA, 3.1.)
- (604) Some say the lark and loathed toad change eyes,
 ●, now I *would* they had changed voices too!
 (W. Sh., RJ, 3.5.)

Rhetorical questions

As Table 202 indicates, the modal verb *would* is very scarce in rhetorical questions (0.29 RF). Only four instances in the histories (0.40 RF) and one in the tragedies (0.14 RF) have been attested in the corpus.

Table 202. Distribution of *would* in rhetorical questions in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	2	0.74
KH III	2	0.77
KRII	0	0.00
Total	4	0.40
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	1	0.48
Total	1	0.14
Total (histories and tragedies)	5	0.29

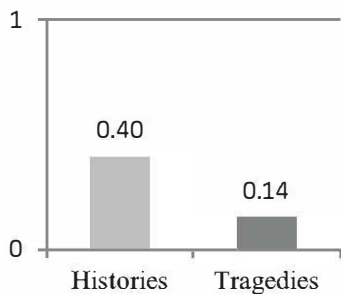


Fig. 117. Distribution of *would* in rhetorical questions in the plays of Shakespeare.

Rhetorical questions including the modal verb *would* are commonly introduced by the relative pronoun *who*, as in (605), (606), and (607).

(605) Lord, *who would* live turmoiled in the court,
 And may enjoy such quiet walks as these?
 (W. Sh., KH II, 4.10.)

(606) From Ireland thus comes York to claim his right,
 And pluck the crown from feeble Henry's head:
 Ring, bells, aloud; bum, bonfires, clear and bright,
 To entertain great England's lawful king.
 Ah! sancta majestas, *who would* not buy thee dear?
 (W. Sh., KH II, 5.1.)

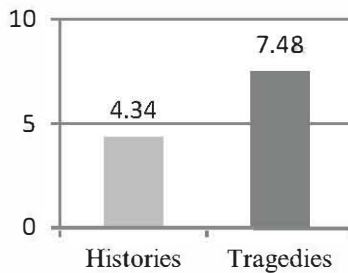
(607) These growing feathers pluck'd from Caesar's wing
 Will make him fly an ordinary pitch,
Who else *would* soar above the view of men
 And keep us all in servile fearfulness.
 (W. Sh., JC, 1.1.)

Conditional would

As can be seen in Table 203, the modal *would* is very numerous in conditional clauses (5.62 RF). The verb seems to be only slightly more common in the tragedies (7.48 RF) than in the history plays (4.34 RF).

Table 203. Distribution of *would* in conditional sentences in the plays of Shakespeare.

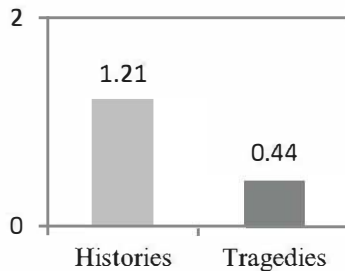
	F	RF
Histories		
KH I	8	3.52
KH II	10	3.74
KH III	10	3.87
KR II	15	6.30
Total	43	4.34
Tragedies		
TA	20	9.23
RJ	21	8.15
JC	10	4.81
Total	51	7.48
Total (histories and tragedies)		
	94	5.62

**Fig. 118. Distribution of *would* in conditional sentences in the plays of Shakespeare.**

Would occurring in the protasis of a conditional sentence displays the total relative frequency of 0.89 RF and is slightly more common in the histories (1.21 RF) than in the tragedies (0.44 RF).

Table 204. Distribution of *would* in the protasis in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	1	0.37
KH III	2	0.77
KR II	8	3.36
Total	12	1.21
Tragedies		
TA	0	0.00
RJ	1	0.38
JC	2	0.96
Total	3	0.44
Total (histories and tragedies)		
	15	0.89

Fig. 119. Distribution of *would* occurring in the protasis in the plays of Shakespeare.

(608) LADY

Madam, I'll sing.

QUEEN

'Tis well that thou hast cause

But thou shouldst please me better, *wouldst* thou weep.

LADY

I could weep, madam, *would* it do you good.

QUEEN

And I could sing, *would* weeping do me good,

And never borrow any tear of thee.

(W. Sh., KR II, 3.4.)

(609) I know by that he's dead; and, by my soul,
 If this right hand *would* buy two hour's life,
 That I in all despite might rail at him,
 This hand should chop it off, and with the issuing blood
 Stifle the villain whose unstanched thirst
 York and young Rutland could not satisfy.

(W. Sh., KH III, 2.6.)

As for the apodosis of a conditional clause, the modal tends to occupy this position more often (4.72 RF) than the protasis. As Fig. 120 shows, its distribution is slightly higher in the tragedies (7.04 RF) than in the history plays (3.13 RF).

Table 205. Distribution of *would* in the apodosis in the plays of Shakespeare.

	F	RF
Histories		
KH I	7	3.08
KH II	9	3.37
KH III	8	3.09
KR II	7	2.94
Total	31	3.13
Tragedies		
TA	20	9.23
RJ	20	7.77
JC	8	3.84
Total	48	7.04
Total (histories and tragedies)	79	4.72

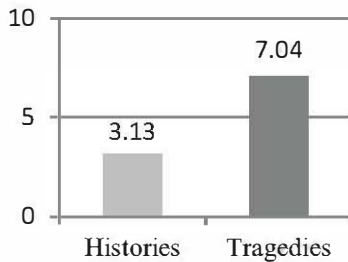


Fig. 120. Distribution of *would* occurring in the apodosis in the plays of Shakespeare.

- (610) But, ●! the treacherous Fastolfe wounds my heart,
 Whom with my bare fists I *would* execute,
 If I now had him brought into my power.
 (W. Sh., KH I, 1.4.)
- (611) I know their complot is to have my life,
 And if my death might make this island happy,
 And prove the period of their tyranny,
 I *would* expend it with all willingness:
 (W. Sh., KH II, 3.1.)
- (612) Ah, were the Duke of Suffolk now alive,
 These Kentish rebels *would* be soon appeased!
 (W. Sh., KH II, 4.4.)

A handful of cases have been attested in which the modal *would* occurs in both the protasis and the apodosis of a conditional sentence, as in (613) and (614):

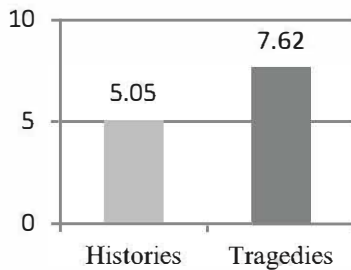
- (613) The time hath been,
Would you have been so brief with him, he *would*
 Have been so brief with you, to shorten you,
 For taking so the head, your whole head's length.
 (W. Sh., KR II, 3.3.)
- (614) An I had been a man of any
 occupation, if I *would* not have taken him at a word,
 I *would* I might go to hell among the rogues.
 (W. Sh., JC, 1.2.)

Hypothetical would

Hypothetical *would* indicates unreal imaginary situations and events. The total relative distribution of this meaning of the verb is 6.10 RF. As can be seen in Fig. 121, the modal is only slightly more common in the tragedies (7.62 RF) than in the history plays (5.05 RF).

Table 206. Distribution of hypothetical *would* in the plays of Shakespeare.

	F	RF
Histories		
KH I	10	4.40
KH II	10	3.74
KH III	12	4.64
KR II	18	7.56
Total	50	5.05
Tragedies		
TA	20	9.23
RJ	21	8.15
JC	11	5.29
Total	52	7.62
Total (histories and tragedies)	102	6.10

Fig. 121. Distribution of hypothetical *would* in the plays of Shakespeare.

Some instances of hypothetical *would* include (615), (616), (617), and (618).

(615) Thou lovest me not; for, brother, if thou didst,
 Thy tears *would* wash this cold congealed blood
 That glues my lips and will not let me speak.
 (W. Sh., KH III, 5.1.)

(616) Come, come, my son, I'll bring thee on thy way:
 Had I thy youth and cause, I *would* not stay.
 (W. Sh., KR II, 1.3.)

(617) An honour! were not I thine only nurse,
 I *would* say thou hadst suck'd wisdom from thy teat.
 (W. Sh., RJ, 1.3.)

(618) If I could pray to move, prayers *would* move me:
 But I am constant as the northern star,
 Of whose true-fix'd and resting quality
 There is no fellow in the firmament.

(W. Sh., JC, 3.1.)

Indeterminate cases of would in Shakespeare

As Table 207 shows, the ambiguous indeterminate cases of the modal *would* are residual and constitute no more than 0.65 RF.

Table 207. Distribution of indeterminate cases of *would* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	0	0.00
KH III	1	0.38
KR II	2	0.84
Total	5	0.50
Tragedies		
TA	3	1.38
RJ	3	1.16
JC	0	0.00
Total	6	0.88
Total (histories and tragedies)	11	0.65

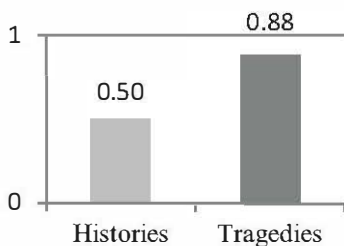


Fig. 122. Distribution of indeterminate cases of *would* in the plays of Shakespeare.

Summary of the main findings

The analysis of the plays of William Shakespeare has shown that the modal verb *would* most commonly denotes volitive modality (9.69 RF) with all the instances referring to the will and the intentions of the speaker or the interlocutors. Epistemic *would*, indicating a judgement of the speaker based on available data, constitutes only one third of volitive meanings (3.28 RF). The least numerous type of modality attested in the corpus is emotional modality (0.41 RF) with all the cases expressing desire and longing for something distant and elusive.

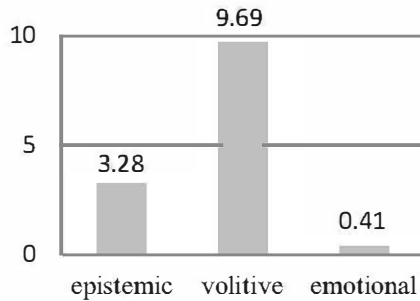


Fig. 123. Distribution of *would* representing different kinds of modality in the plays of Shakespeare.

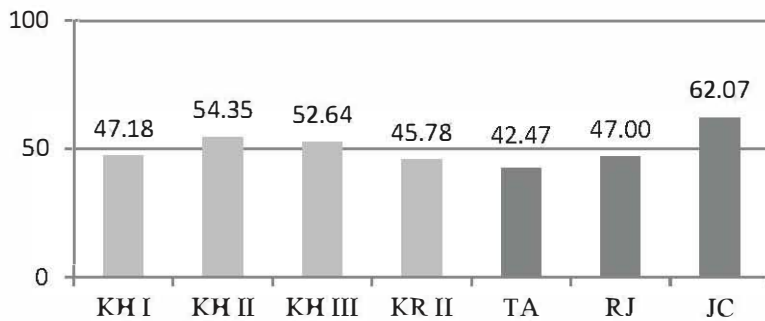
Shall

Frequency distribution of shall

As can be seen in Table 208, the modal verb *shall* is very common in the works of William Shakespeare. It displays the total relative frequency of 50.18, and the distribution of the verb is almost equally frequent in the history plays (50.20 RF) as in the tragedies (50.16 RF). The range is high, equal to 19.60 RF, what is caused by an outstandingly high distribution of the verb in *Julius Caesar* (62.07 RF) and low in *Titus Andronicus* (42.47 RF).

Table 208. Distribution of *shall* in the plays of Shakespeare.

	Words in total	<i>Shall</i> – F	<i>Shall</i> – RF
Histories			
KH I	22,679	107	47.18
KH II	26,677	145	54.35
KH III	25,833	136	52.64
KR II	23,807	109	45.78
Total	98,996	497	50.20
Tragedies			
TA	21,658	92	42.47
RJ	25,740	121	47.00
JC	20,780	129	62.07
Total	68,178	342	50.16
Total (histories and tragedies)	167,174	839	50.18

Fig. 124. Distribution of *shall* in the plays of Shakespeare.

Forms and spelling variants

As Table 209 shows, only two forms of the verb have been encountered in the database. The prevailing form is *shall* with the frequency of 45.40 RF, whereas *shalt* is a much less common obsolete form (4.78 RF) assigned exclusively to the second person singular subject *thou*.

Table 209. Distribution of different forms of *shall* in the plays of Shakespeare.

Title	<i>shall</i>	<i>shalt</i>
Histories		
KH I	95	12
KH II	133	12
KH III	116	20
KR II	102	7
Total	446	51
Tragedies		
TA	78	14
RJ	110	11
JC	125	4
Total	313	29
Total RF (histories and tragedies)		
	45.40	4.78

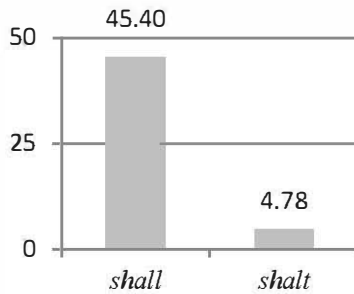


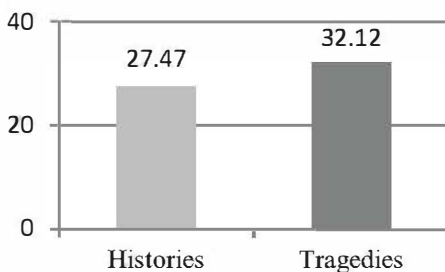
Fig. 125. Distribution of different forms of *shall* in the plays of Shakespeare.

Predictive shall

The analysis of the corpus has revealed that in both the histories and the tragedies of William Shakespeare the modal is widely used to denote future events. The total relative frequency of *shall* indicating futurity is very high, equal to 29.37 RF, and its distribution is only slightly higher in the tragedies (32.12 RF) than in the histories (27.47 RF).

Table 210. Distribution of predictive *shall* in the plays of Shakespeare.

	F	RF
Histories		
KH I	67	29.54
KH II	83	31.11
KH III	59	22.83
KR II	63	26.46
Total	272	27.47
Tragedies		
TA	45	20.77
RJ	91	35.35
JC	83	39.94
Total	219	32.12
Total (histories and tragedies)	491	29.37

Fig. 126. Distribution of predictive *shall* in the plays of Shakespeare.

Some of the examples of predictive *shall* include (619), (620), and 0.

(619) Yet call the ambassador; and, as you please,

So let them have their answers every one:

I *shall* be well content with any choice

Tends to God's glory and my country's weal.

(W. Sh., *Henry the Sixth, Part One*, 5.1.)

(620) This wind, you talk of, blows us from ourselves;

Supper is done, and we *shall* come too late.

(W. Sh., *Romeo and Juliet*, 1.5.)

(621) To tell thee thou *shalt* see me at Philippi.

(W. Sh., *Julius Caesar*, 4.3.)

Prophecy

The analysis of the corpus has revealed also a distinct, typical for soliloquies, kind of predictive *shall*. The modal *shall* denoting prophecy frequently involves the visualisation of the speaker’s mental images with reference to future events.

Table 211. Distribution of *shall* indicating prophecy in the plays of Shakespeare.

	F	RF
Histories		
KH I	9	3.96
KH II	15	5.62
KH III	14	5.41
KR II	14	5.88
Total	52	5.25
Tragedies		
TA	15	6.92
RJ	3	1.16
JC	8	3.84
Total	26	3.81
Total (histories and tragedies)	78	4.66

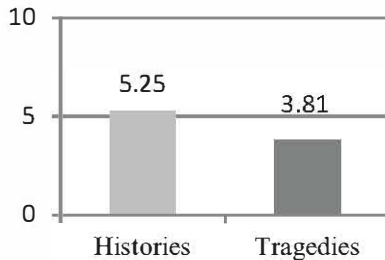


Fig. 127. Distribution of *shall* indicating prophecy in the plays of Shakespeare.

(622) And here I prophesy: this brawl to-day,
Grown to this faction in the Temple-garden,
Shall send between the red rose and the white
A thousand souls to death and deadly night.

(W. Sh., KH I, 2.5.)

(623) My Lord of Hereford here, whom you call king,
Is a foul traitor to proud Hereford's king:
And if you crown him, let me prophesy:
The blood of English *shall* manure the ground,
And future ages groan for this foul act;
Peace *shall* go sleep with Turks and infidels,
And in this seat of peace tumultuous wars
Shall kin with kin and kind with kind confound;
Disorder, horror, fear and mutiny
Shall here inhabit, and this land be call'd
The field of Golgotha and dead men's skulls.

(W. Sh., KR II, 4.1.)

Deontic modality

In general, deontic *shall* can be divided into three main categories: commands, promises and threats. The analysis has revealed that the most common deontic meaning of the verb is a promise with the total relative frequency of 3.46 RF. As Fig. 128 shows, commands (2.45 RF) and threats (1.97 RF) are much less numerous in the corpus.

Table 212. Deontic meanings of *shall* in the plays of Shakespeare.

	Commands	Promises	Threats	Total
F	41	58	33	129
RF	2.45	3.46	1.97	7.71

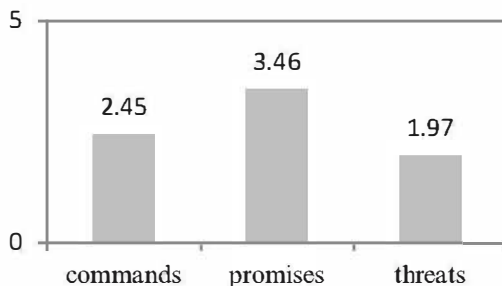


Fig. 128. Deontic meanings of *shall* in the plays of Shakespeare.

Promise

By the use of the modal verb *shall* the speaker reassures that the action will be taken and carried out by themselves or by some other individuals. The typical feature of this value is the fact that the intended action is desired by the interlocutor. The modal *shall* denoting a promise is almost equally numerous in the histories (3.63 RF) and in the tragedies (3.22 RF), displaying the total relative frequency of 3.46 RF.

Table 213. Distribution of *shall* indicating a promise in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	14	5.24
KH III	13	5.03
KR II	4	1.68
Total	36	3.63
Tragedies		
TA	11	5.07
RJ	5	1.94
JC	6	2.88
Total	22	3.22
Total (histories and tragedies)	58	3.46

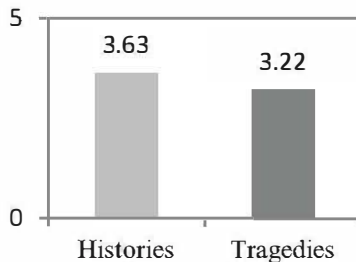


Fig. 129. Distribution of *shall* indicating a promise in the plays of Shakespeare.

Shall denoting a promise has been observed in (624), (625), (626), and (627). In (625) the value of the verb is additionally reinforced by the lexical verb *warrant*.

- (624) What, is he fled? Go some, and follow him;
 And he that brings his head unto the king
Shall have a thousand crowns for his reward.
 (W. Sh., KH II, 4.8.)
- (625) Tush, I will stir about,
 And all things *shall* be well, I *warrant* thee, wife.
 (W. Sh., RJ, 4.2.)
- (626) It *shall* be done, my lord.
 (W. Sh., JC, 3.4.)
- (627) Tell on thy mind; I say thy child *shall* live.
 (W. Sh., TA, 5.1.)

Threat

The analysis has revealed that the modal *shall* is also used to denote a threat. This meaning of the verb is associated with an action which is not only undesired by the addressee, but even poses a real danger to their life. As can be seen in Table 214, the distribution of *shall* indicating a threat is higher in the history plays (2.62 RF) than in the tragedies (1.02 RF).

Table 214. Distribution of *shall* indicating a threat in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	12	4.49
KH III	10	3.87
KR II	2	0.84
Total	26	2.62
Tragedies		
TA	2	0.92
RJ	3	1.16
JC	2	0.96
Total	7	1.02
Total (histories and tragedies)	33	1.97

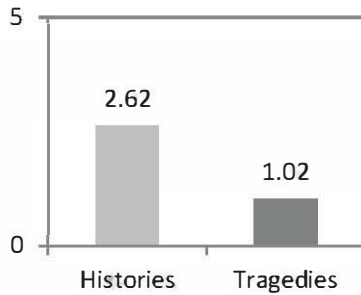


Fig. 130. Distribution of *shall* indicating a threat in the plays of Shakespeare.

Shall indicating a threat typically occurs in sentences with a second-person subject *you* or *thou*, as in (628) and (629):

(628) Cut both the villains' throats; for die you *shall*:
(W. Sh., KH II, 4.1.)

(629) I lost mine eye in laying the prize aboard,
And therefore to revenge it, *shalt* thou die;
(W. Sh., KH II, 4.1.)

Shall functioning as a threat may also occur with other subjects such as a third person singular or plural, as in (630) and (631).

(630) And be you silent and attentive too,
For he that interrupts him *shall* not live.
(W. Sh., KH III, 1.1.)

(631) Good uncle, help to order several powers
To Oxford, or where'er these traitors are:
They *shall* not live within this world, I swear,
But I will have them, if I once know where.
(W. Sh., KR II, 4.3.)

Command

The analysis of the corpus has shown that some instances of the modal verb *shall* indicate a command. In this context the speakers involved in the dialogue are of unequal status. The relation thus may be between a king and his subject or a commander and his knight. *Shall* indicating a command is slightly more numerous in the histories (2.82 RF) than in the

tragedies (0.44 RF) of William Shakespeare, with the total distribution 2.45 RF.

Table 215. Distribution of *shall* indicating a command in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	8	2.99
KH III	16	6.19
KR II	2	0.84
Total	28	2.82
Tragedies		
TA	5	2.30
RJ	4	1.55
JC	4	1.92
Total	13	0.44
Total (histories and tragedies)		
	41	2.45

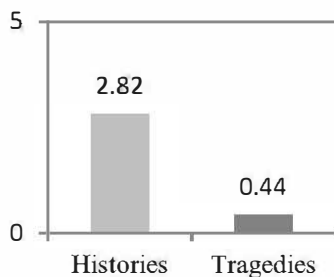


Fig. 131. Distribution of *shall* indicating a command in the plays of Shakespeare.

Some examples of *shall* functioning as a command include (632), 0, (634), and (635).

(632) But, Warwick,

Thou and Oxford, with five thousand men,
Shall cross the seas, and bid false Edward battle;

(W. Sh., KH III, 3.3.)

(633) TYBALT

It fits, when such a villain is a guest:
I'll not endure him.

CAPULET

He *shall* be endured:
What, goodman boy! I say, he *shall*: go to;
Am I the master here, or you? go to.

(W. Sh., RJ, 1.5.)

(634) Read the will; we'll hear it, Antony;
You *shall* read us the will, Caesar's will.

(W. Sh., JC, 3.2.)

(635) there *shall* not a maid be married, but she *shall* pay to me
her maidenhead ere they have it: men *shall* hold of
me in capite; and we charge and command that their
wives be as free as heart can wish or tongue can tell.

(W. Sh., KH II, 4.7.)

Forbidding

The modal verb *shall* has also been found to denote prohibition or refusal on the part of the speaker who holds a higher social position and thus can execute power over their interlocutors.

As Table 216 shows, forbidding *shall* exhibits the total relative frequency of 0.65 RF, with the distribution equally scarce in both, the history plays (0.30 RF) and the tragedies (1.17 RF).

Table 216. Distribution of forbidding *shall* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	0	0.00
KH III	0	0.00
KR II	1	0.42
Total	3	0.30
Tragedies		
TA	3	1.38
RJ	2	0.77
JC	3	1.44
Total	8	1.17
Total (histories and tragedies)	11	0.65

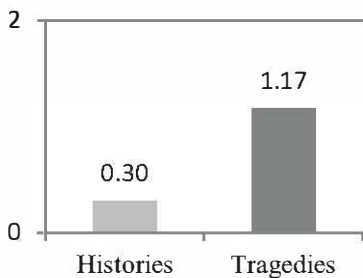


Fig. 132. Distribution of forbidding *shall* in the plays of Shakespeare.

The instances of forbidding *shall* include (636) and (637):

(636) Have patience, noble duke; I may not open;
 The Cardinal of Winchester forbids:
 From him I have express commandment
 That thou nor none of thine *shall* be let in.

(W. Sh., KH I, 1.3.)

(637) Mark Antony, here, take you Caesar's body.
 You *shall* not in your funeral speech blame us,
 But speak all good you can devise of Caesar,
 And say you do't by our permission;

(W. Sh., JC, 3.1.)

Conditions of agreement

No more than five instances of *shall* (0.29 RF) have been encountered in the speeches and written texts which constitute parts of formal agreements or pacts between countries and rulers.

(638) 'Imprimis, it is agreed between the French king Charles, and William de la Pole, Marquess of Suffolk, ambassador for Henry King of England, that the said Henry *shall* espouse the Lady Margaret, daughter unto Reignier King of Naples, Sicilia and Jerusalem, and crown her Queen of England ere the thirtieth of May next ensuing. Item, that the duchy of Anjou and the county of Maine *shall* be released and delivered to the king her father'

(W. Sh., KH II, 1.1.)

(639) 'Item, It is further agreed between them,
 that the duchies of Anjou and Maine *shall* be
 released and delivered over to the king her father,
 and she sent over of the King of England's own
 proper cost and charges, without having any dowry.'
 (W. Sh., KH II, 1.1.)

Interrogatives

In the plays of William Shakespeare, the modal verb *shall* is also found in interrogative sentences. The verb serves to denote a variety of meanings such as: a request for advice, a request for permission, asking about suggestions, asking for orders, asking for approval, and introducing proposals.

Interestingly, the different meanings of *shall* fall into two subcategories. One subcategory, 'interrogatives of equality', includes the meanings which are revealed in the dialogues between the speakers of equal social status, or between the speakers of unequal status but without manifesting the priority of one over the other (a request for advice, asking about suggestions, a request for information, and proposals).

The other subcategory, 'interrogatives of priority', consists of the meanings which reflect the priority or social dominance of a speaker over the interlocutor, such as: a request for permission, asking for orders, and asking for approval.

Table 217. Distribution of *shall* in interrogative sentences in the plays of Shakespeare.

	interrogatives of equality			interrogatives of priority		
F	32			10		
RF	1.91			0.59		
	request for advice	asking for suggestions	introducing proposals	request for permission	asking for orders	asking for approval
Total F	26	1	6	5	4	1
Total RF	1.55	0.05	0.35	0.29	0.23	0.05

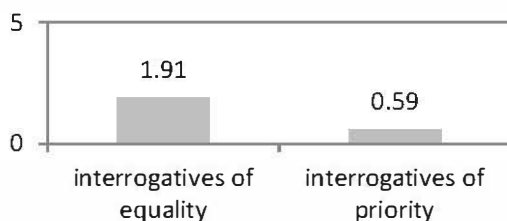


Fig. 133. Distribution of *shall* in interrogative sentences in the plays of Shakespeare.

Interrogatives of equality

Interrogatives of equality constitute the prevailing category of interrogative meanings of *shall* (1.91 RF), and include interpretations of the verb as a request for advice, asking for suggestions and introducing proposals.

Shall used to ask for some advice or opinion of the interlocutor on the action to be taken is the most frequent interrogative of equality (1.55 RF). This meaning differs from the others in that the speaker, presumably, is in an undesirable position or in a state of confusion, and thus seeks some help from the interlocutors.

- (640) Uncle, what *shall* we say to this in law?
(W. Sh., KH II, 1.3.)
- (641) What says Lord Warwick? *shall* we after them?
(W. Sh., KH II, 5.3.)
- (642) Our hap is loss, our hope but sad despair;
Our ranks are broke, and ruin follows us:
What counsel give you? whither *shall* we fly?
(W. Sh., KH III, 2.3.)

Asking for suggestions indicated by *shall* has only one representative (0.05 RF) in the plays of William Shakespeare. This meaning involves giving to the interlocutor the priority to share their ideas, express their opinions, speak their minds. The speaker is not necessarily in the state of confusion or a difficult undesirable position. When asking for suggestions the speaker admits that an individual is prone to subjectivism and limitations, and thus the only true and objective point of view can be obtained from other individuals.

(643) Divinest creature, Astraea's daughter,
 How *shall* I honour thee for this success?
 Thy promises are like Adonis' gardens
 That one day bloom'd and fruitful were the next.
 France, triumph in thy glorious prophets!
 Recover'd is the town of Orleans:
 More blessed hap did ne'er befall our state.

(W. Sh., KH I, 1.6)

Additionally, the modal verb *shall* is used to make a proposal or suggestion about some action (0.35 RF). *Shall* indicates in this context introducing an offer and seeking the approval of the interlocutor at the same time. In proposals the speaker does not merely expect some suggestions about the potential course of action, but, importantly, introduces his own ideas and expects their approval on the part of his interlocutor. It is important to notice that the proposal of an action is directed not only at the interlocutor but also at the speaker themselves. In both cases the subject of a sentence is the first person plural. The speaker thus not merely suggests undertaking an action but actually offers to carry it out together with the interlocutors provided that they express their approval. As Palmer claims, "there is not a request for information, but an invitation for action" (1990: 79).

(644) Ay, ay, farewell; thy office is discharged.
 Come, Stanley, *shall* we go?

(W. Sh., KH II, 2.4.)

(645) Romeo, good night: I'll to my truckle-bed;
 This field-bed is too cold for me to sleep:
 Come, *shall* we go?

(W. Sh., RJ, 2.1.)

(646) But what of Cicero? *shall* we sound him?
 I think he will stand very strong with us.

(W. Sh., JC, 2.1.)

Interrogatives of priority

Interrogatives of priority are very infrequent with the total relative frequency much below 1.00 (0.59 RF) and the modal *shall* interpreted as a request for permission, asking for orders and asking for approval.

A small number of interrogative sentences (0.29 RF) indicate the interpretation of *shall* in terms of a request for permission. In this case the

speaker suggests undertaking an action and seeks the approval of the interlocutor. Asking for permission, however, is different from the proposal in that it implies the priority of the interlocutor over the speaker.

(647) You will compel me, then, to read the will?
 Then make a ring about the corpse of Caesar,
 And let me show you him that made the will.
Shall I descend? and will you give me leave?

(W. Sh., JC, 3.2.)

Asking for orders requires the speaker to be of a lower status than the addressee. It is usually a conversation between a subject and a king or a knight and a commander. The speaker implies that they are ready to accept the orders and take full responsibility for carrying out the tasks. The instances of *shall* found in this context constitute no more than 0.23 RF.

(648) ALENCÓN

Doubtless he shrives this woman to her smock;
 Else ne'er could he so long protract his speech.

REIGNIER

Shall we disturb him, since he keeps no mean

ALENCÓN

He may mean more than we poor men do know:

These women are shrewd tempters with their tongues.

REIGNIER

My lord, where are you? what devise you on?

Shall we give over Orleans, or no?

JOAN LA PUCELLE

Why, no, I say, distrustful recreants!

Fight till the last gasp; I will be your guard.

CHARLES

What she says I'll confirm: we'll fight it out.

(W. Sh., KH I, 1.2.)

Asking for approval is another meaning of *shall* which involves two speakers of unequal status. The speaker undertakes to carry out an action provided that the approval of the interlocutor is granted. Only one instance (0.05 RF) of the modal has been encountered in the corpus.

(649) ALENCON

To say the truth, it is your policy
 To save your subjects from such massacre
 And ruthless slaughters as are daily seen
 By our proceeding in hostility;
 And therefore take this compact of a truce,
 Although you break it when your pleasure serves.
 WARWICK

How say'st thou, Charles? *shall* our condition stand?

(W. Sh., KH I, 5.5.)

Omission of the following verb

The analysis of *shall* has revealed that in a handful of occurrences (0.59 RF) the modal is not followed by a lexical verb.

Table 218. Distribution of *shall* with the omission of the following verb in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KHII	3	1.12
KH III	5	1.93
KR II	0	0.00
Total	8	0.80
Tragedies		
TA	0	0.00
RJ	2	0.77
JC	0	0.00
Total	2	0.29
Total (histories and tragedies)	10	0.59

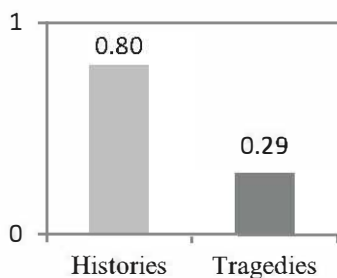


Fig. 134. Distribution of *shall* with the omission of the following verb in the plays of Shakespeare.

In the majority of these cases (7 out of 10 instances) the omission concerns the verb *go*, as in (650), (651), (652), and (653). In all of these occurrences, the modal *shall* indicates an order issued by a king or a commander to his subjects or knights.

- (650) True, madam, none at all: what call you this?
 Away with them! let them be clapp'd up close.
 And kept asunder. You, madam, *shall* with us.
 Stafford, take her to thee.

(W. Sh., KH II, 1.4.)

- (651) Richard, enough; I will be king, or die.
 Brother, thou *shalt* to London presently,
 And whet on Warwick to this enterprise.
 Thou, Richard, *shalt* to the Duke of Norfolk,
 And tell him privily of our intent.
 You Edward, *shall* unto my Lord Cobham,
 With whom the Kentishmen will willingly rise:
 In them I trust; for they are soldiers,
 Witty, courteous, liberal, full of spirit.

(W. Sh., KH III, 1.2.)

- (652) It shall be so; he *shall* to Brittany.
 Come, therefore, let's about it speedily.

(W. Sh., KH III, 4.6.)

- (653) ROMEO
 Bid her devise
 Some means to come to shrift this afternoon;
 And there she shall at Friar Laurence' cell
 Be shrived and married. Here is for thy pains.

NURSE

No truly sir; not a penny.

ROMEO

Go to; I say you *shall*.

(W. Sh., RJ, 1.5.)

The omission of the verb *go* has also been attested in interrogative sentences (654) denoting asking for advice or orders, depending on the social status of the interlocutors and their mutual relations.

(654) I know our safety is to follow them;
 For, as I hear, the king is fled to London,
 To call a present court of parliament.
 Let us pursue him ere the writs go forth.
 What says Lord Warwick? *shall* we after them?

(W. Sh., KH II, 5.3.)

Among all the samples of the modal occurring with the omission of the following lexical verb, two cases have been found to be part of *Marry, and shall* phrase, as in (655) and (656).

(655) Hume must make merry with the duchess' gold;
Marry, and shall. But how now, Sir John Hume!
 Seal up your lips, and give no words but mum:
 The business asketh silent secrecy.

(W. Sh., KH II, 1.4.)

(656) QUEEN MARGARET

●, kill me too!

GLUCESTER

Marry, and shall.

[●ffers to kill her]

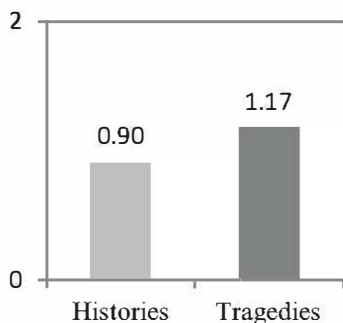
(W. Sh., KH III, 1.2.)

Indeterminate cases of shall in Shakespeare

As can be seen in Table 219, a handful of instances of the modal *shall* remain indeterminate displaying the total relative frequency of 1.01 RF.

Table 219. Distribution of indeterminate cases of *shall* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	1	0.37
KH III	1	0.38
KR II	5	2.10
Total	9	0.90
Tragedies		
TA	2	0.92
RJ	1	0.38
JC	5	2.40
Total	8	1.17
Total (histories and tragedies)	17	1.01

Fig. 135. Distribution of indeterminate cases of *shall* in the plays of Shakespeare.

Summary of the main findings

In the works of William Shakespeare, the modal verb *shall* has been attested in both deontic and predictive modality, with the prevailing distribution in the latter one (29.37 RF).

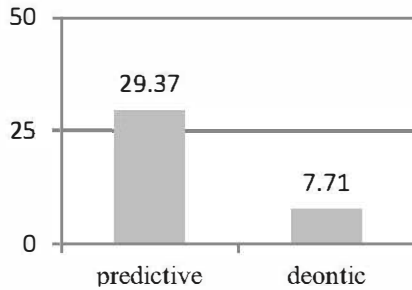


Fig. 136. Distribution of *shall* representing different kinds of modality in the plays of Shakespeare.

Such frequent occurrence of predictive *shall* in Shakespearean plays may indicate that at this stage of the development the verb is still widely used as a marker of futurity. A number of sentences in the text occur with a first-, second- and third-person subject and it is most plausible to analyse them in terms of futurity as there are no implications of undertaking commands, promises or threats. These findings seem to support Traugott's (1972) position about the status of the verb in Early Modern English period. As Traugott's (1972: 114–115) points out, during this period *shall*, although recessive, was still quite commonly used with all three persons for predictions about the future.

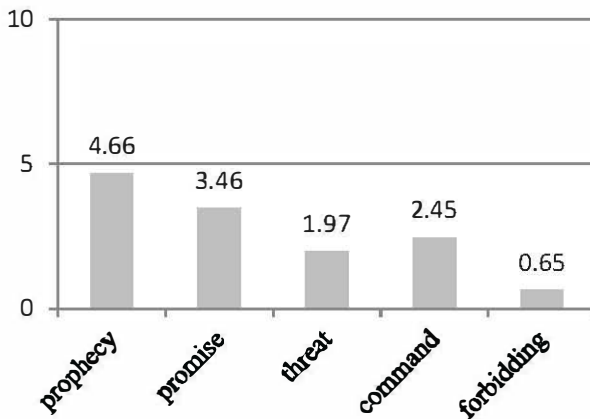


Fig. 137. Distribution of different meanings of *shall* in the plays of Shakespeare.

As Fig. 137 indicates, *shall* is most commonly used to make prophecies about future (4.66 RF). What is more, being a commissive verb (Palmer 2001: 72), the modal verb *shall* is also frequently used by the speaker to guarantee that the action will be performed (3.46 RF). It needs to be pointed out, however, that just as nowadays “*shall* rarely refers to a ‘pure’ future” (Palmer 1990: 160–161) and in many cases it is difficult see the difference between futurity or a promise, especially with first-person subjects, in the similar way the clear-cut differentiation between the two meanings is not always possible in the texts under study. As far as interrogative sentences are concerned, the most numerous are the instances of *shall* indicating ‘asking for advice’ (1.55 RF). As can be seen in Fig. 138, other meanings are residual with the distribution equal to or lower than 0.35 RF.

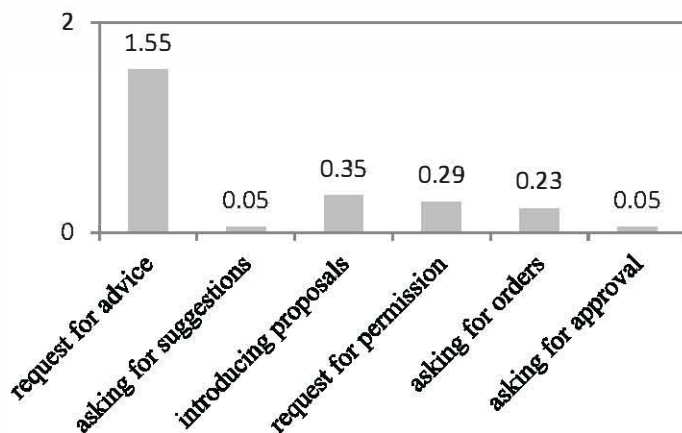


Fig. 138. Distribution of different meanings of *shall* in interrogative sentences in the plays of Shakespeare.

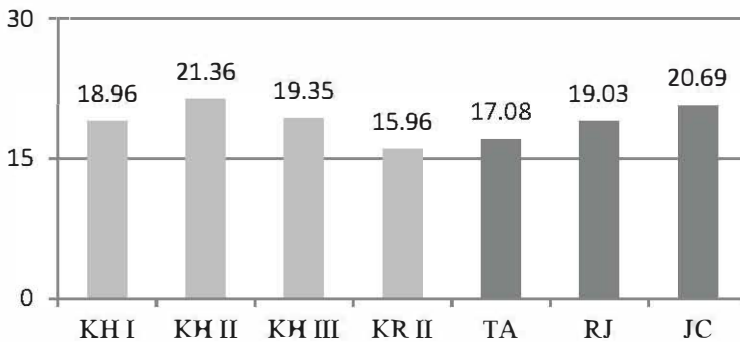
Should

Frequency distribution of should

As Table 220 shows, the frequency distribution of the modal verb *should* is similar in both the histories (18.99 RF) and the tragedies (18.92 RF) of William Shakespeare, with a low range equal to 5.40 RF.

Table 220. Distribution of *should* in the plays of Shakespeare.

	Words in total	<i>Should</i> – F	<i>Should</i> – RF
Histories			
KH I	22,679	43	18.96
KH II	26,677	57	21.36
KH III	25,833	50	19.35
KR II	23,807	38	15.96
Total	98,996	188	18.99
Tragedies			
TA	21,658	37	17.08
RJ	25,740	49	19.03
JC	20,780	43	20.69
Total	68,178	129	18.92
Total (histories and tragedies)	167,174	317	18.96

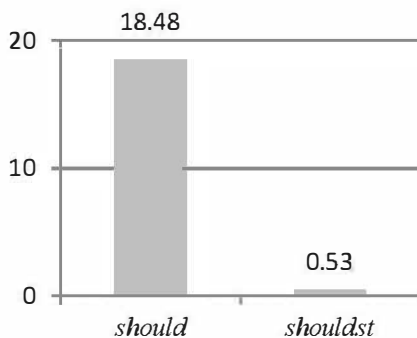
Fig. 139. Distribution of *should* in the plays of Shakespeare.

Forms and spelling variants

Only two forms have been found in the corpora, namely *should* (18.48 RF), and the inflected form assigned to the second person singular subject *shouldst* (0.53 RF). The analysis has not revealed a variety of spelling forms.

Table 221. Different forms of *should* in the plays of Shakespeare.

Title	<i>should</i>	<i>shouldst</i>
Histories		
KH I	42	1
KH II	56	1
KH III	49	2
KRII	36	2
Total	183	6
Tragedies		
TA	36	1
RJ	49	0
JC	41	2
Total	126	3
Total RF (histories and tragedies)	18.48	0.53

Fig. 140. Different forms of *should* in the plays of Shakespeare.

Epistemic modality

Should indicating epistemic modality is much more common in the history plays (21.21 RF) than in the tragedies (3.52 RF). It expresses an assumption of the speaker concerning the state of the events. Palmer (1987: 134) gives a rough paraphrase of its meaning as ‘it is likely or probable that...’. Epistemic *should* is similar to epistemic *must* in that the supposition of the speaker is based on some evidence or circumstances which allow them to make conclusions and expect a particular course of action. However, the difference between the two lays in the fact that *should* is much ‘weaker’ than *must*, which means that it does not posit an

absolute certainty and a correctness of the speaker, but leaves some space for a shadow of doubt and a mistaken judgement.

Table 222. Distribution of epistemic *should* in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	7	2.62
KH III	7	2.70
KR II	4	1.68
Total	21	21.21
Tragedies		
TA	8	3.69
RJ	13	5.05
JC	3	1.44
Total	24	3.52
Total (histories and tragedies)		
	45	2.69

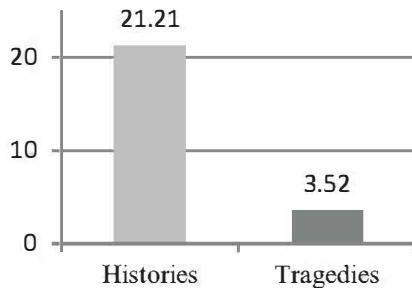


Fig. 141. Distribution of *should* representing epistemic modality in the plays of Shakespeare.

(657) SOMERSET

It is not his, my lord; here Southam lies:
The drum your honour hears marcheth from Warwick.

WARWICK

Who *should* that be? belike, unlook'd-for friends.

(W. Sh., KH III, 5.1.)

(658) This, by his voice, *should* be a Montague.

(W. Sh., RJ, 1.5.)

(659) As I remember, this *should* be the house.
Being holiday, the beggar's shop is shut.

(W. Sh., RJ, 5.1.)

It needs to be mentioned that epistemic *should* occasionally appears in the sentences which are introduced by the verb *methinks*. This combination seeks to underline the role of sensual perception and a mental analysis as the preliminary processes leading to a deduction. The instances of this type exhibit the total relative frequency of 0.71 RF, and are much more numerous in the histories (1.11 RF) than in the tragedies (0.14 RF). No cases have been encountered in *Titus Andronicus* and *Julius Caesar*, and only one in *Romeo and Juliet* (0.38 RF).

Table 223. Distribution of *should* co-occurring with *me thinks* in the plays of Shakespeare.

	F	RF
Histories		
KH I	4	1.76
KH II	2	0.74
KH III	4	1.54
KR II	1	0.42
Total	11	1.11
Tragedies		
TA	0	0.00
RJ	1	0.38
JC	0	0.00
Total	1	0.14
Total (histories and tragedies)		
	12	0.71

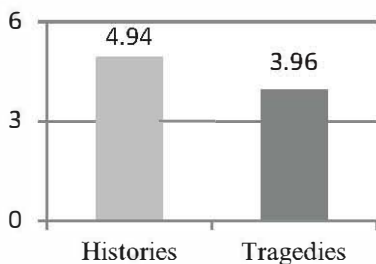


Fig. 142. Distribution of *should* co-occurring with *me thinks* in the plays of Shakespeare.

Some examples of the modal co-occurring with the impersonal construction include (660) and (661).

- (660) Methinks a woman of this valiant spirit
Should, if a coward heard her speak these words,
 Infuse his breast with magnanimity
 And make him, naked, foil a man at arms.
 (W. Sh., KH III, 5.4.)
- (661) But methinks he *should* stand in fear of
 fire, being burnt i' the hand for stealing of sheep.
 (W. Sh., KH II, 4.2.)

Deontic modality

Indicative should

By using an indicative modality the speaker seeks to give instructions to others, typically to someone of a lower status, and to prompt a preferable behaviour. *Should* denoting this type of modality is very scarce in the plays of William Shakespeare. Only four cases have been encountered in the database displaying the total relative frequency of 0.23 RF. As Table 224 shows, only one instance (0.10 RF) has been attested in the histories, and three (0.44 RF) in the tragedies.

Table 224. Distribution of indicative *should* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	1	0.38
KRII	0	0.00
Total	1	0.10
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	3	1.44
Total	3	0.44
Total (histories and tragedies)	4	0.23

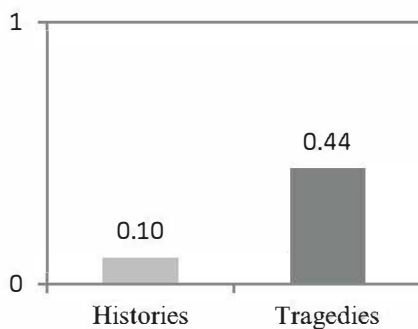


Fig. 143. Distribution of indicative *should* in the plays of Shakespeare.

Some instances of indicative *should* include (662), (663), and (664).

(662) I am his king, and he *should* bow his knee;
(W. Sh., KH III, 2.2.)

(663) I would have had thee there, and here again,
Ere I can tell thee what thou *shouldst* do there.
(W. Sh., JC, 2.3.)

(664) You have done that you *should* be sorry for.
(W. Sh., JC, 4.3.)

Forbidding

Merely a trace (0.05 RF) of *should* indicating a requirement not to act has been encountered in the database.

Table 225. Distribution of *should* indicating forbidding in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	0	0.00
KRII	1	0.42
Total	1	0.10

Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	1	0.05

Example (665) is the only case of *should* used in the forbidding sense:

(665) The king of heaven forbid our lord the king
Should so with civil and uncivil arms
 Be rush'd upon!

(W. Sh., KR II, 3.3.)

Dynamic necessity

Dynamic necessity is neutral in that the speaker only acknowledges the existence of necessity without actually imposing it onto the addressee. By the use of dynamic *should*, the speaker thus implies what is highly suitable, appropriate or expected, restraining themselves from imposing a duty or issuing a command. This may be due to the fact that the speaker either is not in the position to charge the interlocutor with an obligation or simply abstains from taking the responsibility.

Dynamic necessity is a numerous type (15.73 RF) of modality denoted by *should* in the plays of William Shakespeare, however, it is more frequent in the histories (16.26 RF) than in the tragedies (14.96 RF).

Table 226. Distribution of *should* indicating dynamic necessity in the plays of Shakespeare.

	F	RF
Histories		
KH I	39	17.19
KH II	49	18.36
KH III	39	15.09
KR II	34	14.28
Total	161	16.26

Tragedies		
TA	29	13.38
RJ	36	13.98
JC	37	17.80
Total	102	14.96

Total (histories and tragedies)	263	15.73
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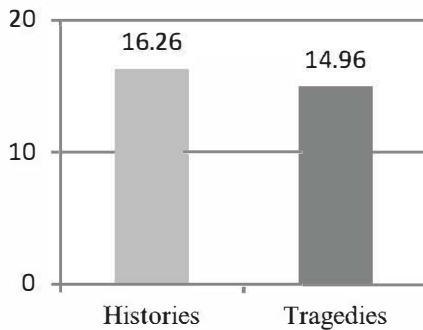


Fig. 144. Distribution of *should* indicating dynamic necessity in the plays of Shakespeare.

Some examples of dynamic *should* include (666), (667), (668), and (669).

(666) Even so great men great losses *should* endure.
(W. Sh., JC, 4.3.)

(667) Friends *should* associate friends in grief and woe:
(W. Sh., TA, 5.3.)

(668) Amongst the soldiers this is muttered,
That here you maintain several factions,
And whilst a field *should* be dispatch'd and fought,
You are disputing of your generals:
(W. Sh., KH I, 1.1.)

(669) O comfortable friar! where is my lord?
I do remember well where I *should* be,
And there I am. Where is my Romeo?
(W. Sh., RJ, 5.3.)

Danger

Should indicating a danger is extremely infrequent in the database (0.29 RF), with only a residual distribution in histories (0.50 RF), and not a single occurrence in the tragedies (0.00 RF).

Table 227. Distribution of *should* indicating a threat in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	0	0.00
KH III	0	0.00
KR II	2	0.84
Total	5	0.50
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	5	0.29

Some instances of *should* interpreted as a danger include (670), (671), and (672).

- (670) Presumptuous priest! this place commands my patience,
 Or thou *shouldst* find thou hast dishonour'd me.
 (W. Sh., KH I, 3.1.)
- (671) For ever *should* they be expelled from France
 And not have title of an earldom here.
 (W. Sh., KH I, 3.3.)
- (672) If not, I'll use the advantage of my power
 And lay the summer's dust with showers of blood
 Rain'd from the wounds of slaughter'd Englishmen:
 The which, how far off from the mind of Bolingbroke
 It is, such crimson tempest *should* bedrench
 The fresh green lap of fair King Richard's land,
 My stooping duty tenderly shall show.
 (W. Sh., KR II, 3.3.)

Caution – Lest/For fear

The modal *should* has been encountered in subordinate clauses introduced by the conjunction *lest*. The verb seeks to catch the attention of the interlocutor in order to warn them about some undesirable turn of events which may take place if no preventing steps are undertaken. *Should* co-occurring with *lest* is infrequent (0.29 RF) in the corpus, constituting only 0.10 RF in the histories and 0.58 RF in the tragedies.

Table 228. Distribution of *should* indicating caution in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	0	0.00
KH III	0	0.00
KRII	0	0.00
Total	1	0.10
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	2	0.96
Total	4	0.58
Total (histories and tragedies)	5	0.29

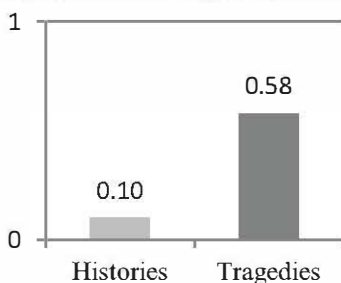


Fig. 145. Distribution of *should* indicating caution in the plays of Shakespeare.

(673) But, sure, some Tereus hath deflowered thee,
And, lest thou *shouldst* detect him, cut thy tongue.

(W. Sh., TA, 2.4.)

(674) Stand fast together, lest some friend of Caesar's
Should chance.

(W. Sh., JC, 3.1.)

(675) And leave us, Publius; lest that the people,
 Rushing on us, *should* do your age some mischief.

(W. Sh., JC, 3.1.)

Collocations with other verbs

The modal verb *should* has been found to collocate most frequently with the lexical verb *be* (1.79 RF), excluding an auxiliary *be* in passive constructions. Other collocations include a scarce occurrence of two communicative verbs, namely *say* (0.47 RF), and *speak* (0.05 RF), and a trace of the sensual verb *see* (0.05 RF).

Table 229. Distribution of verbs collocating with *should* in the plays of Shakespeare.

Title	<i>be</i>	<i>say</i>	<i>speak</i>	<i>see</i>
Histories				
KH I	4	2	1	0
KH II	2	1	0	0
KH III	1	2	0	0
KR II	3	2	0	0
Total	10	7	1	0
Tragedies				
TA	3	1	0	0
RJ	9	0	0	1
JC	8	0	0	0
Total	20	1	0	1
<hr/>				
Total RF (histories and tragedies)	1.79	0.47	0.05	0.05

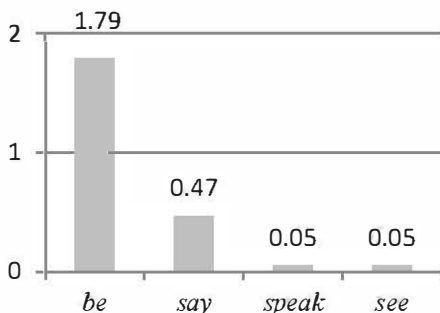


Fig. 146. Distribution of verbs collocating with *should* in the plays of Shakespeare.

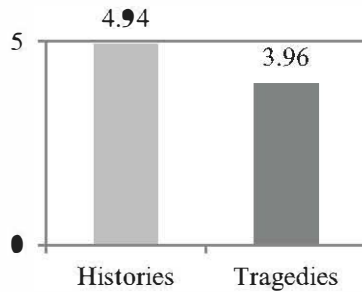
- (676) Where is my mother! why, she is within;
Where *should* she *be*? How oddly thou repliest!
(W. Sh., RJ, 2.5.)
- (677) Where the devil *should* this Romeo *be*?
Came he not home to-night?
(W. Sh., RJ, 2.4.)
- (678) Lords, knights, and gentlemen, what I *should* *say*
My tears gainsay; for every word I speak,
Ye see, I drink the water of mine eyes.
(W. Sh., KH III, 5.4.)
- (679) Alas, that love, whose view is muffled still,
Should, without eyes, *see* pathways to his will!
(W. Sh., RJ, 1.1.)

Evaluative modality

A distinct subkind of dynamic necessity, evaluative, is proposed by Palmer, who points out to the fact that *should* is frequently used “after expressions of surprise and similar feelings” (1987: 134). Jespersen suggests the term ‘emotional *should*’ for the use of the modal “in passing a judgement of an emotional character (agreeable or disagreeable surprise, indignation, joy) on some occurrence which may, or may not, be a fact” (1933: 231). This function of the modal verb is quite numerous in both corpora, with a relative frequency of 4.94 RF in the histories and 3.96 RF in the tragedies. Dynamic evaluative necessity denotes the very personal judgement driven by the feelings of a speaker, hence this type of modality reflects a wide range of emotional states, from disbelief and surprise to disappointment and anger.

Table 230. Distribution of evaluative *should* in the plays of Shakespeare.

	F	RF
Histories		
KH I	7	3.08
KH II	16	5.99
KH III	19	7.35
KR II	7	2.94
Total	49	4.94
Tragedies		
TA	9	4.15
RJ	10	3.88
JC	8	3.84
Total	27	3.96
Total (histories and tragedies)		
	76	4.54

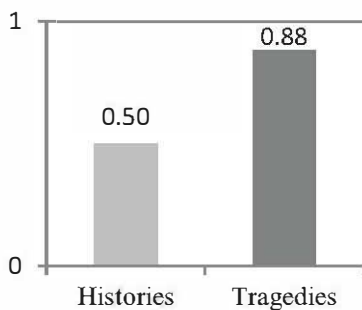
Fig. 147. Distribution of *should* indicating evaluative modality in the plays of Shakespeare.

Sorrow and regret

Should has been found in the utterances expressing sorrow or regret (0.65 RF), especially with interjections *alas* and *alack*, and an exclamation mark terminating a sentence.

Table 231. Distribution of *should* indicating sorrow and regret in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	3	1.16
KR II	2	1.26
Total	5	0.50
Tragedies		
TA	3	1.38
RJ	3	1.16
JC	0	0.00
Total	6	0.88
Total (histories and tragedies)		
	11	0.65

**Fig. 148. Distribution of *should* indicating sorrow and regret in the plays of Shakespeare.**

- (680) Alas, that love, so gentle in his view,
Should be so tyrannous and rough in proof!
 (W. Sh., RJ, 1.1.)
- (681) Alas, that love, whose view is muffled still,
Should, without eyes, see pathways to his will!
 (W. Sh., RJ, 1.1.)
- (682) Alack, alack, that heaven *should* practise stratagems
 Upon so soft a subject as myself!
 (W. Sh., RJ, 3.5.)

- (683) 'Tis pity they *should* take him for a stag.
 (W. Sh., TA, 2.3.)
- (684) Were it not pity that this goodly boy
Should lose his birthright by his father's fault,
 (W. Sh., KH III, 2.2.)
- (685) 'Twere pity they *should* lose their father's lands.
 (W. Sh., KH III, 3.2.)

Despair

A number of instances of *should* serve to indicate a strong lamentation over the unfavourable course of action. Such utterances frequently begin with the interjection ●, as in (686), (687), and (688).

- (686) ● that deceit *should* dwell
 In such a gorgeous palace!
 (W. Sh., RJ, 3.2.)
- (687) ●, why *should* nature build so foul a den,
 Unless the gods delight in tragedies?
 (W. Sh., TA, 4.1.)
- (688) ●, what a scandal is it to our crown,
 That two such noble peers as ye *should* jar!
 (W. Sh., KH I, 3.1.)

Table 232. Distribution of *should* indicating despair in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	0	0.00
KH III	0	0.00
KRII	1	0.42
Total	3	0.30
Tragedies		
TA	1	0.46
RJ	3	1.16
JC	0	0.00
Total	4	0.58
Total (histories and tragedies)	7	0.41

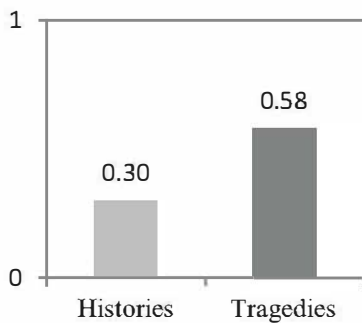


Fig. 149. Distribution of *should* indicating despair in the plays of Shakespeare.

Disapproval

Disapproval or distaste is another meaning denoted by the modal *should* (0.65 RF). Its particular and distinctive feature is the introduction of the sentence with the interjection *fie*.

Table 233. Distribution of *should* indicating disapproval in the plays of Shakespeare.

	F	RF
Histories		
KH I	3	1.32
KH II	3	1.12
KH III	1	0.38
KR II	2	0.84
Total	9	0.90
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	0	0.00
Total	2	0.29
Total (histories and tragedies)	11	0.65

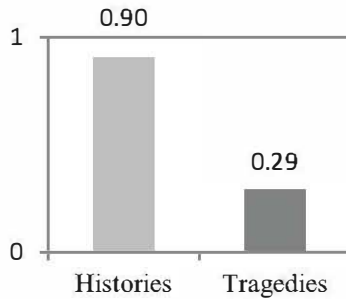


Fig. 150. Distribution of *should* indicating disapproval in the plays of Shakespeare.

(689) *Fie*, lords! that you, being supreme magistrates,
 Thus contumeliously *should* break the peace!
 (W. Sh., KH I, 1.3.)

(690) *Fie, fie*, how frantically I square my talk,
 As if we *should* forget we had no hands,
 If Marcus did not name the word of hands!
 (W. Sh., TA, 2.3.)

Hope and expectation

Only two cases (0.11 RF) of the modal *should* denoting hope or expectation of the speaker have been encountered in the tragedies, whereas no instances have been attested in the history plays.

Table 234. Distribution of *should* indicating hope or expectation in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	0	0.00
KH III	0	0.00
KRII	0	0.00
Total	0	0.00

Tragedies		
TA	2	0.92
RJ	0	0.00
JC	0	0.00
Total	2	0.29
<hr/>		
Total (histories and tragedies)	2	0.11

(691) Sly frantic wretch, that holp'st to make me great,
In hope thyself *should* govern Rome and me.

(W. Sh., TA, 4.4.)

God forbid!

God forbid or *God shield* is used with *should* to indicate a strong disagreement of the speaker regarding a factual or hypothetical situation, or to deny their mischievous intentions.

Table 235. Distribution of *should* indicating a cry to God in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	2	0.74
KH III	2	0.77
KRII	0	0.00
Total	4	0.40
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	0	0.00
Total	2	0.29
<hr/>		
Total (histories and tragedies)	6	0.35

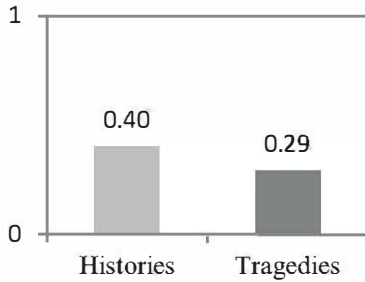


Fig. 151. Distribution of *should* indicating a cry to God in the plays of Shakespeare.

- (692) God forbid any malice *should* prevail,
 That faultless may condemn a nobleman!
 Pray God he may acquit him of suspicion!
 (W. Sh., KH II, 3.2.)
- (693) No; God forbid your grace *should* be forsworn.
 (W. Sh., KH III, 1.2.)
- (694) God shield I *should* disturb devotion!
 (W. Sh., RJ, 4.1.)

Emotional questions

As can be seen in Fig. 152, the modal verb *should* occurring in emotional questions is slightly more numerous in the histories (2.22 RF) than in the tragedies (1.76 RF).

Table 236. Distribution of *should* in emotional questions in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	6	2.24
KH III	8	3.09
KR II	3	1.26
Total	22	2.22

Tragedies			
TA	7	3.23	
RJ	2	0.77	
JC	3	1.44	
<hr/>			
Total	12	1.76	
<hr/>			
Total (histories and tragedies)	34	2.03	

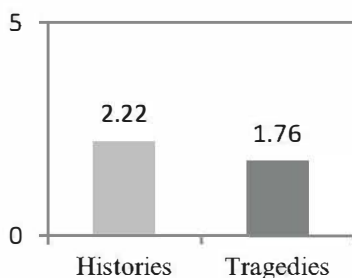


Fig. 152. Distribution of *should* in emotional questions in the plays of Shakespeare.

- (695) ●, why *should* nature build so foul a den,
 Unless the gods delight in tragedies?
 (W. Sh., TA, 4.1.)
- (696) Who *should* succeed the father but the son?
 (W. Sh., KH III, 2.2.)
- (697) Whom *should* we match with Henry, being a king,
 But Margaret, that is daughter to a king?
 Her peerless feature, joined with her birth,
 Approves her fit for none but for a king.
 (W. Sh., KH I, 5.5.)

The sentences introduced by *Why should...* carry an additional implication. Jespersen points out that the two sentences in examples a) and b) below, differ in that a) is simply a factual question, whereas b) transfers the emotional judgement of a speaker and “implies wonder and, possibly, some suspicion of the purity of the motives” (1933: 231).

- a) *Why was the date omitted?*
- b) *Why should the date of this document be omitted?*
 (Jespersen 1933: 231)

The analysis of the corpus reveals only three examples (0.17 RF) of *should* preceded by an interrogative adverb *why*. All of the cases are emotionally biased and denote amazement, disbelief, and even indignation.

- (698) Why *should* he, then, protect our sovereign,
He being of age to govern of himself?
(W. Sh., KH II, 1.1.)
- (699) Image of pride, why *should* I hold my peace?
(W. Sh., KH II, 1.3.)
- (700) And why *should* Caesar be a tyrant then?
(W. Sh., JC, 1.3.)

Rational modality

Rational modality denoted by the modal *should* concerns the deeds which the speaker considers reasonable.

Asking for advice

Only one instance (0.05 RF) of *should* denoting a request for advice has been attested in the corpus (701).

- (701) Madam, what *should* I do?
Run to the Capitol, and nothing else?
And so return to you, and nothing else?
(W. Sh., JC, 2.3.)

Unreal situations

In 49 cases (2.93 RF), the modal verb *should* have been found to denote unreal situations including a prophecy, hypothetical, unbelievable and a preposterous situation. As can be seen in Fig. 153, the distribution is higher in the histories (3.03 RF) than in the tragedies (2.78 RF).

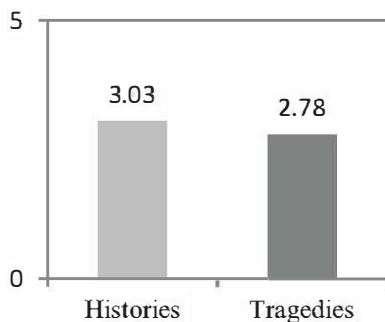


Fig. 153. Distribution of *should* indicating unreal situations in the plays of Shakespeare.

Prophecy

A small number (0.29 RF) of cases of the modal verb *should* denote a prophecy.

Table 237. Distribution of *should* indicating a prophecy in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	1	0.37
KH III	0	0.00
KRII	1	0.42
Total	4	0.40
Tragedies		
TA	1	0.46
RJ	0	0.00
JC	0	0.00
Total	1	0.14
Total (histories and tragedies)	5	0.29

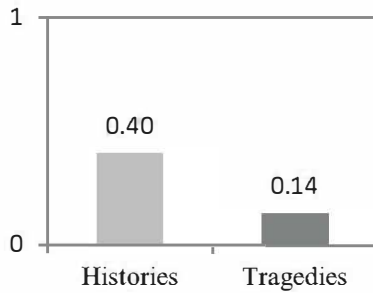


Fig. 154. Distribution of *should* indicating a prophecy in the plays of Shakespeare.

(702) A cunning man did calculate my birth
 And told me that by water I *should* die.

(W. Sh., KH II, 4.1.)

Hypothetical

Hypothetical situations constitute the most common subtype (2.27 RF) within the unreal situations denoted by *should*, as in (703) and (704).

(703) First note that he is near you in descent,
 And *should* you fall, he as the next will mount.

(W. Sh., KH II, 3.1.)

(704) Had I the power that some say Dian had,
 Thy temples *should* be planted presently
 With horns, as was Actaeon's; and the hounds
Should drive upon thy new-transformed limbs,
 Unmannerly intruder as thou art!

(W. Sh., TA, 2.3.)

Table 238. Distribution of hypothetical *should* in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	10	3.74
KH III	4	1.54
KR II	5	2.10
Total	20	2.02

Tragedies			
TA	6	2.77	
RJ	4	1.55	
JC	8	3.84	
Total	18	2.64	
<hr/>			
Total (histories and tragedies)	38	2.27	

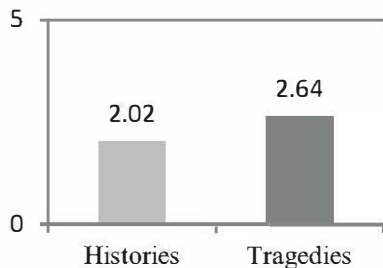


Fig. 155. Distribution of *should* indicating a hypothetical situation in the plays of Shakespeare.

Unbelievable

Should indicating an unbelievable situation has been encountered only in the histories (0.40), with a total distribution 0.23 RF.

Table 239. Distribution of *should* indicating an unbelievable situation in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	2	0.74
KH III	0	0.00
KRII	0	0.00
Total	4	0.40
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
<hr/>		
Total (histories and tragedies)	4	0.23

(705) Alas, this is a child, a silly dwarf!
 It cannot be this weak and writhled shrimp
Should strike such terror to his enemies.

(W. Sh., KH I, 2.3.)

Preposterous

Only two instances (0.11 RF) of *should* denoting an absurd ridiculous situation have been attested in the database.

Table 240. Distribution of *should* indicating a preposterous situation in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	0	0.00
KH III	1	0.38
KRII	0	0.00
Total	2	0.20
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	2	0.11

(706) Ay, marry, uncle; for I always thought
 It was both impious and unnatural
 That such immanity and bloody strife
Should reign among professors of one faith.

(W. Sh., KH I, 5.1.)

(707) Fair Queen of England, worthy Margaret,
 Sit down with us: it ill befits thy state
 And birth, that thou *shouldst* stand while Lewis doth sit.

(W. Sh., KH III, 3.3.)

Past reference

Should with past reference, including reported speech and future in the past, have been encountered in both, the histories (2.02 RF) and the tragedies (0.73 RF) of William Shakespeare.

Table 241. Distribution of *should* with past reference in the plays of Shakespeare.

	F	RF
Histories		
KH I	5	2.20
KH II	6	2.24
KH III	7	2.70
KR II	2	0.84
Total	20	2.02
Tragedies		
TA	2	0.92
RJ	3	1.16
JC	0	0.00
Total	5	0.73
Total (histories and tragedies)	25	1.49

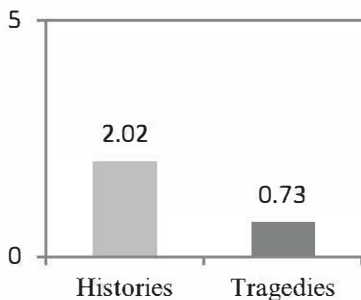


Fig. 156. Distribution of *should* with past reference in the plays of Shakespeare.

Some instances include (708), (709), (710), and (711).

(708) I thought I *should* have seen some Hercules,
A second Hector, for his grim aspect,
And large proportion of his strong-limbed limbs.

(W. Sh., KH I, 2.3.)

- (709) She *should* have stayed in France and starved
in France, Before
(W. Sh., KH II, 1.1.)
- (710) I took an oath that he *should* quietly reign.
(W. Sh., KH III, 1.2.)
- (711) Indeed, I *should* have ask'd you that before.
(W. Sh., RJ, 1.2.)

Indeterminate cases of should in Shakespeare

The meaning of the modal becomes more enigmatic when it comes to its relation with the word *reason*. According to Palmer (1990: 60), *reason* co-occurring with *should* is ambiguous and may be interpreted either epistemically (indicating a reason for conclusion) or dynamically (indicating a reason for being). In the works of William Shakespeare, only two cases of this kind have been found, constituting 0.11 RF.

Table 242. Distribution of indeterminate cases of *should* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	2	0.74
KH III	0	0.00
KRII	0	0.00
Total	2	0.20
Tragedies		
TA	0	0.00
RJ	0	0.00
JC	0	0.00
Total	0	0.00
Total (histories and tragedies)	2	0.11

- (712) Peace, son! and show some reason, Buckingham,
Why Somerset *should* be preferred in this.
(W. Sh., KH II, 1.3.)
- (713) I see no reason why a king of years
Should be to be protected like a child.
(W. Sh., KH II, 2.3.)

Summary of the main findings

The analysis of the modal verb *should* in the plays of William Shakespeare is revealing in a number of ways.

To start with, it can be seen in Fig. 157 that the prevailing type of modality designated by the verb is the neutral (dynamic) necessity (15.73 RF), in which the obligation is not imposed, but only admitted and uttered by the speaker. What is more, a great part of this use of *should* (4.54 RF) reflects and is generated by the emotional condition of the speaker, constituting a particular subtype of dynamic modality, namely evaluative. Dynamic *should* reduces, thus, the role of the speaker to an observer and a narrator of events, whose judgemental abilities are powered by strong emotional forces such as sorrow and regret (0.65 RF), disapproval (0.65 RF), despair (0.41 RF) or hope and expectation (0.11 RF). This leads us to the conclusion that the most effective and dominating coercion are the speaker's inner negative emotions, whereas the positive ones, such as hope and expectation, are rather infrequent and secondary.

Finally, a relatively low distribution of epistemic *should* (2.69 RF) in both corpora may be explained by the fact that at this stage of the development of modal meanings epistemicity is still at the beginning of its evolutionary path.

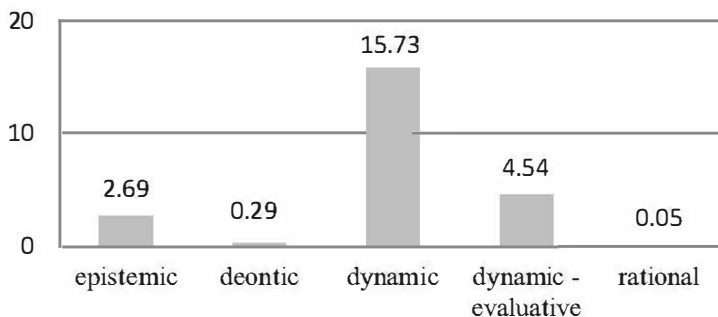


Fig. 157. Distribution of *should* representing different kinds of modality in the plays of Shakespeare.

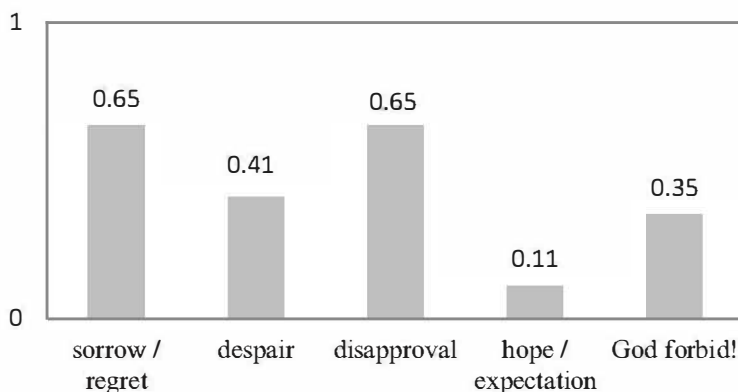


Fig. 158. Distribution of emotional states denoted by *should* in the plays of Shakespeare.

Must

Frequency distribution of must

The frequency of occurrence of the verb *must* in the works of William Shakespeare is quite inconsistent. As Table 243 illustrates, the normalised distribution of the verb fluctuates from 8.99 RF (in *Henry the Sixth, Part Two*) to as much as 21.00 RF (in *King Richard II*). The graphic representation of the data in Fig. 159 shows that the biggest variability is observable within histories, i.e. in *Henry the Sixth - Part One*, *Henry the Sixth - Part Two*, *Henry the Sixth - Part Three*, and *King Richard II*. The value of the range in this corpus equals 12.01 RF. On the other hand, Shakespearean tragedies, *Titus Andronicus*, *Romeo and Juliet*, and *Julius Caesar*, are more consistent in terms of frequency distribution and reveal a relatively lower variability with a range equal to 1.78 RF.

Table 243. Distribution of *must* in the plays of Shakespeare.

	Words in total	<i>Must</i> – F	<i>Must</i> – RF
Histories			
KH I	22,679	25	11.02
KH II	26,677	24	8.99
KH III	25,833	39	15.09
KR II	23,807	50	21.00
Total	98,996	138	13.93

Tragedies				
TA	21,658	34	15.69	
RJ	25,740	40	15.54	
JC	20,780	36	17.32	
Total	68,178	110	16.13	
<hr/>				
Total (histories and tragedies)	167,174	248	14.83	

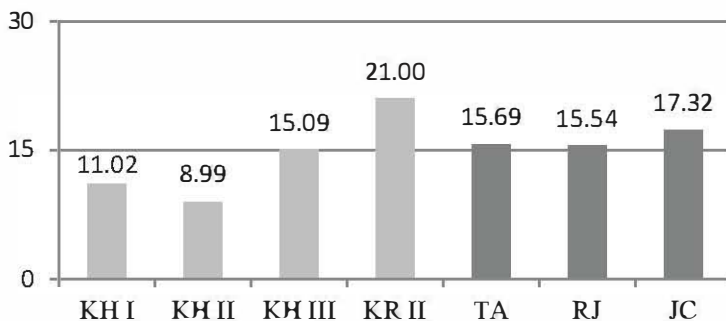


Fig. 159. Distribution of *must* in the plays of Shakespeare.

Epistemic necessity

Epistemic modality generally reflects the judgement of a speaker on the proposition that is being uttered. Epistemic *must* is scarce in both histories and tragedies of William Shakespeare, with a relative frequency below one.

Table 244. Distribution of epistemic *must* in the plays of Shakespeare.

	F	RF
Histories		
KHI	0	0.00
KH II	0	0.00
KH III	1	0.38
KRII	1	0.42
Total	2	0.10

Tragedies		
TA	1	0.46
RJ	1	0.38
JC	3	1.44
<hr/>		
Total	5	0.73
<hr/>		
Total (histories and tragedies)	7	0.41

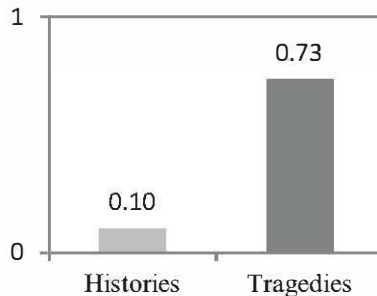


Fig. 160. Distribution of *must* indicating epistemic necessity in the plays of Shakespeare.

(714) My credit now stands on such slippery ground,
 That one of two bad ways you *must* conceit me,
 Either a coward or a flatterer.

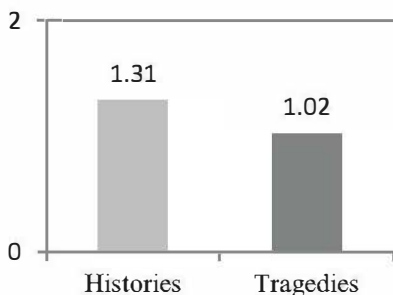
(W. Sh., JC, 3.1.)

Deontic necessity – imposing an obligation

In the plays of William Shakespeare, likewise in the tragedies of Christopher Marlowe, the modal verb *must* is incorporated in order to lay an obligation on the addressee of a lower status. The frequency of deontic *must* is similar in both corpora, with a slightly higher value in historical plays. This may be explained by the fact that the histories are based on the real events in the lives of English kings, in these cases of King Henry VI and King Richard II. The plays thus incorporate a great deal of interaction between the characters living at the royal court, and their social status determines the language they use. It seems reasonable thus to expect that the language in historical plays, more frequently than in tragedies, will serve to perform such acts as laying an obligation or giving an order.

Table 245. Distribution of *must* indicating an obligation in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	2	0.74
KH III	3	1.16
KR II	6	2.52
Total	13	1.31
Tragedies		
TA	5	2.30
RJ	1	0.38
JC	1	0.48
Total	7	1.02
Total (histories and tragedies)		
	20	1.19

Fig. 161. Distribution of *must* indicating an obligation in the plays of Shakespeare.

Some examples of deontic *must* imposing an obligation on the addressee include (715) and (716).

(715) Sirrah, or you *must* fight, or else be hang'd.
(W. Sh., KH II, 1.3.)

(716) Publius and Sempronius, you *must* do it;
'Tis you *must* dig with mattock and with spade,
And pierce the inmost centre of the earth.
(W. Sh., TA, 4.3.)

Dynamic necessity

The function of dynamic necessity is not to issue a command or charge the addressee with a duty, but to state that there is a necessity for an event to occur. This type of modality indicated by the verb *must* is the most frequent one. The value of relative frequency is slightly higher in tragedies and equals 12.61 RF whereas in histories 9.89 RF.

Table 246. Distribution of *must* indicating dynamic necessity in the plays of Shakespeare.

	F	RF
Histories		
KH I	20	8.81
KH II	17	6.37
KH III	26	10.06
KR II	35	14.70
Total	98	9.89
Tragedies		
TA	23	10.61
RJ	37	14.37
JC	26	12.51
Total	86	12.61
Total (histories and tragedies)	184	11.00

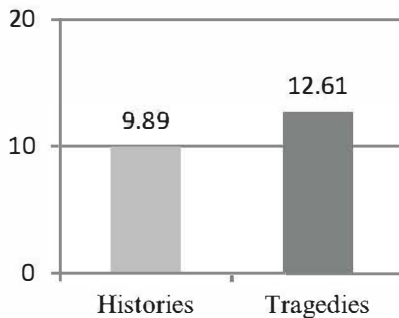


Fig. 162. Distribution of *must* indicating dynamic necessity in the plays of Shakespeare.

(717) What *must* be shall be.

(W. Sh., RJ, 4.1.)

- (718) Nay, nay, sweet emperor, we *must* all be friends.
(W. Sh., TA, 1.1.)
- (719) Come on, our queen: to-morrow *must* we part;
Be merry, for our time of stay is short.
(W. Sh., KR II, 2.1.)

Collocations with communicative verbs

The modal verb *must* is sometimes found to co-occur with a verb of communication. In these cases *must* occupies the position in front of the verb of communication and very often has a first-person singular or plural subject. The modal in such a context is categorised as a dynamic necessity owing to the fact that the speaker does not impose an obligation on themselves, but merely admits that the necessity to verbalise a speech exists and, thus, forces them to act. The frequency distribution is slightly higher in histories than in tragedies, nevertheless in both corpora it is very scarce and its value oscillates below one.

Table 247. Distribution of *must* collocating with communicative verbs in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	1	0.37
KH III	2	0.77
KR II	3	1.26
Total	7	0.70
Tragedies		
TA	1	0.46
RJ	2	0.77
JC	1	0.48
Total	4	0.58
Total (histories and tragedies)	11	0.65

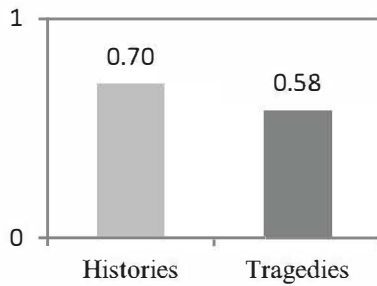


Fig. 163. Distribution of *must* with communicative verbs in the plays of Shakespeare.

The most frequent verbs of communication are *confess* in histories and *talk* in tragedies. All other verbs represent single occurrences in the corpora.

Table 248. Distribution of communicative verbs collocating with *must* in the plays of Shakespeare.

	<i>confess</i>	<i>talk</i>	<i>say</i>	<i>tell</i>	<i>inform</i>	<i>answer</i>	Total
Histories							
KH I	0	0	0	0	1	0	1
KH II	0	1	0	0	0	0	1
KH III	2	0	0	0	0	0	2
KR II	1	0	1	0	0	1	3
Total	3	1	1	0	1	1	7
Tragedies							
TA	0	1	0	0	0	0	1
RJ	1	1	0	0	0	0	2
JC	0	0	0	1	0	0	1
Total	1	2	0	1	0	0	4
Total RF (histories and tragedies)	0.23	0.17	0.05	0.05	0.05	0.05	0.65

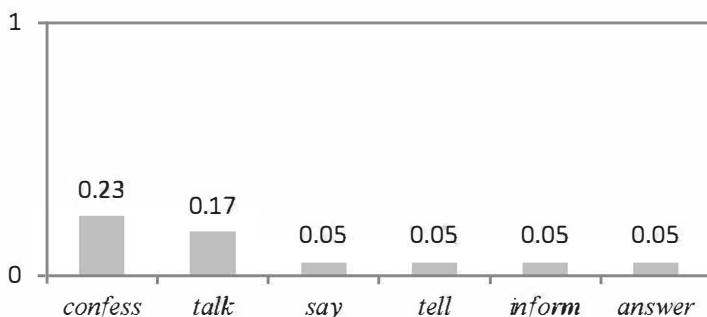


Fig. 164. Distribution of communicative verbs collocating with *must* in the plays of Shakespeare.

- (720) He that no more *must say* is listen'd more
 Than they whom youth and ease have taught to glose.
 (W. Sh., KR II, 2.1.)
- (721) Alas, you know not: I *must tell* you then:
 You have forgot the will I told you of.
 (W. Sh., JC, 3.2.)
- (722) This is the matter: -- Nurse, give leave awhile,
 We *must talk* in secret: -- nurse, come back again;
 I have remember'd me, thou's hear our counsel.
 (W. Sh., RJ, 1.3.)
- (723) I was, I *must confess*,
 Great Albion's queen in former golden days.
 (W. Sh., KH III, 3.3.)
- (724) My gracious lords, to add to your laments,
 Wherewith you now bedew King Henry's hearse,
 I *must inform* you of a dismal fight
 Betwixt the stout Lord Talbot and the French.
 (W. Sh., KH I, 1.1.)
- (725) Good mother, be content; it is no more
 Than my poor life *must answer*.
 (W. Sh., KR II, 5.2.)

Fatal destiny

The distribution of the modal verb *must* indicating tragic fate of the subject differs in the two corpora. As Table 249 shows, the occurrence of the verb in tragedies is more than three times higher than in historical plays. It seems reasonable to assume that the higher distribution of the

verb in the tragedies follows from the special characteristics of this genre. Tragedy necessarily involves action leading to the character's inevitable downfall. Thus, the discrepancy in the distribution of the verb in this context seems to be predictable and justified.

Table 249. Distribution of *must* indicating fatal destiny in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	0	0.00
KH III	5	1.93
KR II	1	0.42
Total	7	0.70
Tragedies		
TA	6	2.77
RJ	5	1.94
JC	5	2.40
Total	16	2.34
Total (histories and tragedies)	23	1.37

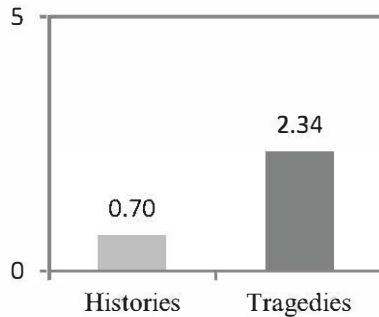


Fig. 165. Distribution of *must* indicating fatal destiny in the plays of Shakespeare.

(726) The sands are number'd that make up my life;
 Here *must* I stay, and here my life *must* end.

(W. Sh., KH III, 1.4.)

(727) These are their brethren, whom you Goths beheld

Alive and dead, and for their brethren slain

Religiously they ask a sacrifice:

To this your son is mark'd, and die he *must*,

To appease their groaning shadows that are gone.

(W. Sh., TA, 1.1.)

(728) What *must* be shall be.

(W. Sh., RJ, 4.1.)

The most numerous verb following *must* in this context is *die*. The relative distribution of this verb is 1.17 RF in tragedies and only 0.20 RF in histories. Almost all other verbs occur once only, however, many of them may be regarded as having the same or similar meaning, for instance *end (life)*, *(lives) wither*, *yield (body to the earth)*, *be slaughter'd*, *be hanged*, *not live*.

Table 250. Distribution of verb phrases indicating fatal destiny the plays of Shakespeare.

	Histories				Tragedies			Total F	Total RF
	KH I	KH II	KH III	KR II	TA	RJ	JC		
<i>die</i>	1	0	1	0	3	2	3	10	0.59
<i>end (life)</i>	0	0	1	1	0	0	0	2	0.11
<i>be, shall be</i>	0	0	0	0	0	1	0	1	0.05
<i>be let blood</i>	0	0	0	0	0	0	1	1	0.05
<i>fall</i>	0	0	1	0	0	0	0	1	0.05
<i>(lives) wither</i>	0	0	1	0	0	0	0	1	0.05
<i>yield (body to the earth)</i>	0	0	1	0	0	0	0	1	0.05
<i>be slaughter'd</i>	0	0	0	0	1	0	0	1	0.05
<i>lose (tongue)</i>	0	0	0	0	1	0	0	1	0.05
<i>be hanged</i>	0	0	0	0	1	0	0	1	0.05
<i>not live</i>	0	0	0	0	0	1	0	1	0.05
<i>bleed</i>	0	0	0	0	0	0	1	1	0.05
<i>love a loathed enemy</i>	0	0	0	0	0	1	0	1	0.05

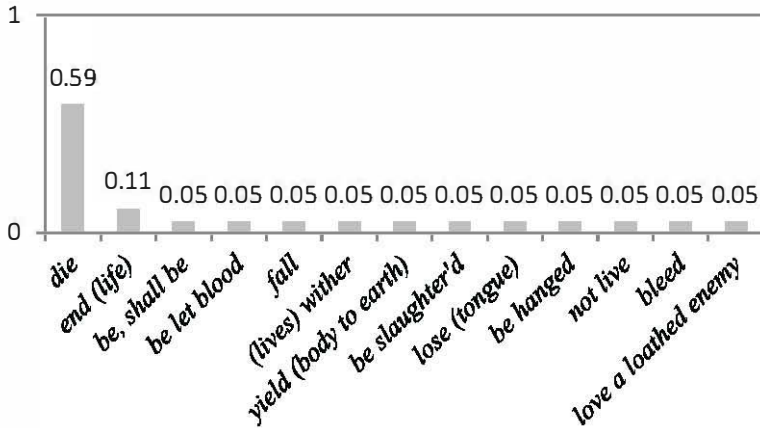


Fig. 166. Distribution of verb phrases indicating fatal destiny the plays of Shakespeare.

Indignant comment

Only two cases of *must* denoting sarcasm, indignation, or even outrage, have been found. Both of them appear in the histories, displaying the relative frequency of 0.11 RF. No instances of indignant comments involving *must* have been detected in tragedies (0.00 RF).

(729) Am I a queen in title and in style,
 And *must* be made a subject to a duke?
(W. Sh., KH II, 1.3.)

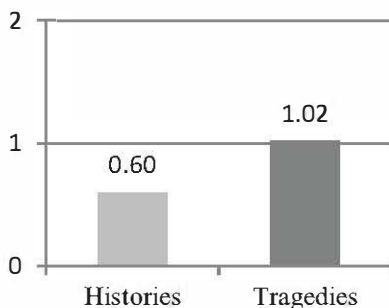
(730) How I am braved and *must* performe endure it!
(W. Sh., KH I, 2.4.)

Must co-occurring with need

As can be seen in Table 251, the combination of *must* and *need* is more frequent in the tragedies (1.02 RF) than in the historical plays (0.60 RF).

Table 251. Distribution of *must* co-occurring with *need* in the plays of Shakespeare.

	F	RF
Histories		
KH I	0	0.00
KH II	1	0.37
KH III	3	1.16
KR II	2	0.84
Total	6	0.60
Tragedies		
TA	2	0.92
RJ	4	1.55
JC	1	0.48
Total	7	1.02
Total (histories and tragedies)		
	13	0.77

Fig. 167. Distribution of *must* co-occurring with *need* in the plays of Shakespeare.

In both corpora, the constructions of *must* and *need* co-occurring next to each other are found in two combinations, with *must* either preceding or following *need*. The instances of both are distributed unequally with higher frequency in tragedies (1.02 RF) than in histories (0.60 RF).

(731) God forgive me,
 Marry, and amen, how sound is she asleep!
 I *must needs* wake her. Madam, madam, madam!

(W. Sh., RJ, 4.5.)

- (732) What fates impose, that men *must needs* abide;
 It boots not to resist both wind and tide.
 (W. Sh., KH III, 4.4.)
- (733) Well, well, I see the issue of these arms:
 I cannot mend it, I *must needs* confess,
 Because my power is weak and all ill left.
 (W. Sh., KR II, 2.3.)
- (734) For strokes received, and many blows repaid,
 Have robb'd my strong-knit sinews of their strength,
 And spite of spite *needs must* I rest awhile.
 (W. Sh., KH III, 2.3.)
- (735) Yea, brother of Clarence, are thou here too?
 Nay, then I see that Edward needs *must* down.
 (W. Sh., KH III, 4.3.)

Rational *must*

Rational modality indicated by *must* is more numerous in historical plays (1.71 RF) than in tragedies (0.88 RF). It may be due to the fact that histories more often than tragedies involve situations in which the speaker refers to rational or reasonable behaviour of the interlocutor consequential to the social status, and especially the position held by them on the royal court.

Table 252. Distribution of rational *must* in the plays of Shakespeare.

	F	RF
Histories		
KH I	2	0.88
KH II	4	1.49
KH III	6	2.32
KR II	5	2.10
Total	17	1.71
Tragedies		
TA	3	1.38
RJ	1	0.38
JC	2	0.96
Total	6	0.88
Total (histories and tragedies)	23	1.37

Must in rhetorical questions

A number of occurrences of the modal verb *must* have been found in rhetorical questions. The frequency distribution is higher in histories (1.51 RF) than in tragedies (1.02 RF).

Table 253. Distribution of *must* in rhetorical questions in the plays of Shakespeare.

	F	RF
Histories		
KH I	4	1.76
KH II	1	0.37
KH III	1	0.38
KR II	9	3.78
Total	15	1.51
Tragedies		
TA	1	0.46
RJ	1	0.38
JC	5	2.40
Total	7	1.02
Total (histories and tragedies)		
	22	1.31

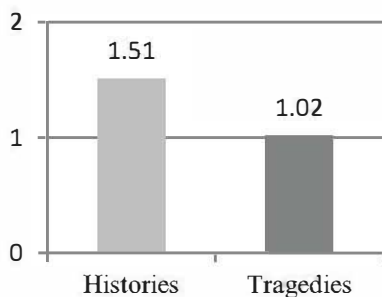


Fig. 169. Distribution of *must* in rhetorical questions in the plays of Shakespeare.

The most numerous subjects of *must* in rhetorical questions are the first person singular *I* (11 cases, constituting 50% of all instances) and the third person singular (*he* - 6 cases, *it* - 1 case). The other include the first person plural *we* (2 cases), the third person plural *they* (also 2 cases), and the second person singular *thou* (1 case).

(741) Have I sought every country far and near,
 And, now it is my chance to find thee out,
Must I behold thy timeless cruel death?
 Ah, Joan, sweet daughter Joan, I'll die with thee!

(W. Sh., KH I, 5.4.)

(742) *CASSIUS*

● ye gods, ye gods! *must* I endure all this?

BRUTUS

All this! ay, more: fret till your proud heart break;
 Go show your slaves how choleric you are,
 And make your bondmen tremble. *Must* I budge?
Must I observe you? *must* I stand and crouch
 Under your testy humour?

(W. Sh., JC, 4.3.)

Indeterminate cases of must in Shakespeare

The indeterminate cases, which due to the high degree of ambiguity and blending of different kinds of modality cannot be indisputably assigned to one category, constitute **0.80** RF in the histories and **0.44** RF in the tragedies.

Table 254. Distribution of indeterminate cases of *must* in the plays of Shakespeare.

	F	RF
Histories		
KH I	1	0.44
KH II	1	0.37
KH III	3	1.16
KR II	3	1.26
Total	8	0.80
Tragedies		
TA	2	0.92
RJ	0	0.00
JC	1	0.48
Total	3	0.44
Total (histories and tragedies)	11	0.65

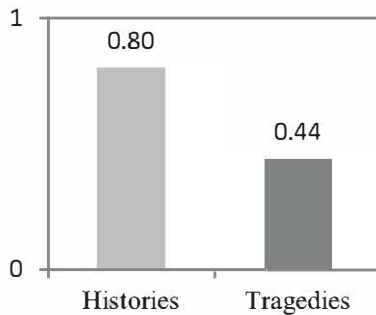


Fig. 170. Distribution of *must* in indeterminate cases in the plays of Shakespeare.

Summary of the main findings

In both corpora the most frequent modality indicated by the modal verb *must* is dynamic necessity. As can be seen in Fig. 171, in the histories the frequency distribution of this type of modality is 9.89 RF and even higher in tragedies, that is 12.61 RF. On the other hand, the least numerous is epistemic modality, and this tendency is also reflected in histories as well as in tragedies.

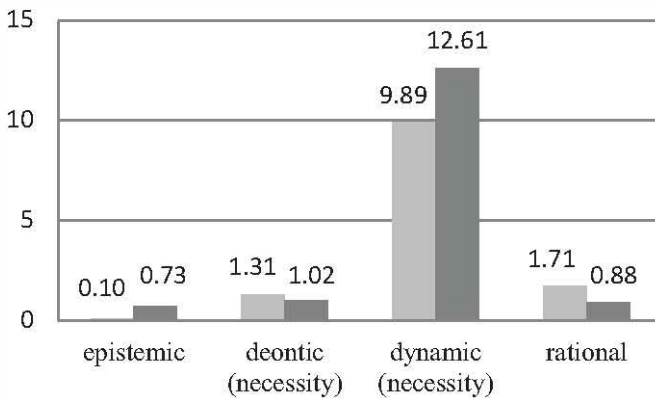


Fig. 171. Distribution of *must* representing different kinds of modality in the plays of Shakespeare.

As far as different meanings and functions of *must* are concerned, the analysis has revealed a great deal of inconsistencies and discrepancies in both corpora. Fatal destiny is the most frequent context in which *must*

occurs, however, it is numerous only in tragedies (2.34 RF). In histories its frequency distribution equals merely 0.70 RF. Interestingly, in tragedies *must* is found with equal relative number (1.02 RF) in three contexts: imposing an obligation, in structures *must + need*, and in rhetorical questions. It seems thus as if tragedies reveal less irregularities than histories. On the other hand, the value of the range in this corpus is higher and equals 2.34 RF, whilst in histories it constitutes 1.41 RF. What is more, *must* in indignant remarks is absent in tragedies, whereas in histories it has been found with a handful frequency (0.20 RF). The variety of contexts thus is greater in historical plays than in tragedies.

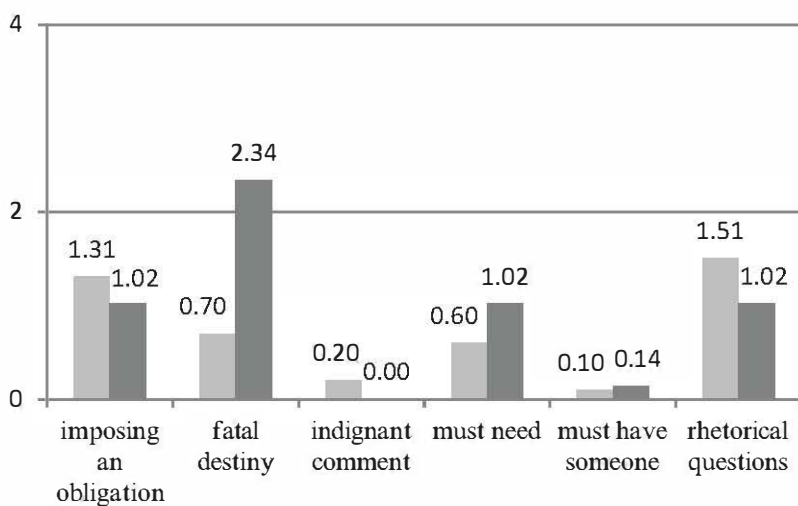


Fig. 172. Distribution of different meanings of *must* in the plays of Shakespeare.

To conclude, the quantitative and qualitative analyses of nine EMode modal verbs in the plays of William Shakespeare have revealed a great diversity of modal meanings. The most common type of modality denoted by the verbs is dynamic modality, indicated by *can*, *could*, *may*, *might*, *should*, and *must*. Deontic and epistemic modalities are less popular although they are denoted by as many as five modals. Deontic modality is indicated by *can*, *may*, *shall*, *should*, and *must*, whereas epistemic by *may*, *might*, *would*, *should*, and *must*. Apart from the three main types of modality, other meanings of verbs have been also attested, including rational, neutral, emotional, evaluative, preposterous, indicative, etc. What is striking is that each one verb is employed to denote a great variety of

meanings. Also, some differences have been shown in the use of the verbs in both genres.

5. COMPARATIVE STATISTICAL ANALYSES

Chapters 4 and 5 sought to present preliminary data, based on the calculation of all the actual occurrences of the modal verbs under study, and their normalised frequencies in the plays of Christopher Marlowe and William Shakespeare. Statistical testing of the modal verbs in both corpora has been conducted in order to reveal any statistically significant discrepancies between the use of the modal verbs in the plays of both authors. Detailed statistical calculations performed for each modal verb are given in Tables 257–300 in Appendix.

Shakespeare – Marlowe analysis

Can

Preliminary analyses of Marlowe's plays resulted in the interpretation of the modal verb *can* in terms of:

1. dynamic possibility including ability, power, rational, and neutral meaning; and
2. deontic modality including forbidding and polite requests;

Within dynamic possibility, all types of the meanings were numerous enough (minimum 5 actual instances) to be tested statistically, whereas a marginal frequency of occurrence in the sense of forbidding and polite requests resulted in their rejection, thus only the broader category of deontic modality was liable to further statistical testing.

● On the other hand, the investigation of Shakespeare's plays reveal that the dramatist uses the modal verb *can* in a wider variety of meanings than Marlowe. In comparison to the latter, the range of Shakespeare's different interpretations of the verb is extended by marginal instances of existential and circumstantial modality, as well as of the verb indicating permission. Their occurrences, however, proved too scarce to undergo further statistical analyses. Similarly, forbidding and polite requests do not exceed the required minimum of five instances in order to be statistically tested, although the broader category of deontic modality shows no differences in both corpora. The full set of the attested modal interpretations of *can* in

Shakespeare includes the following:

1. dynamic possibility including ability, power, rational, neutral, and circumstantial meaning;
2. existential modality; and
3. deontic modality including permission, forbidding, and polite requests;

Consequently, after the exclusion of the insufficient instances, only six types of the meanings of *can* were subjected to further analyses. The statistics of the chi-square test applied for the modal interpretations of the verb in both Marlowe and Shakespeare reveal significant differences in the distribution of the modal verb *can* in Marlowe and Shakespeare. In order to locate the most distinct areas of the corpora, the z-test has been applied. The application of the test has shown that significant discrepancies have been revealed within dynamic, rational, and neutral possibility, and in the meaning of ability. On the other hand, both corpora fail to point to such differences in the distribution of *can* indicating power and deontic modality.

Dynamic and rational *can*, as well as *can* denoting ability are more numerous in Marlowe, whereas *can* indicating neutral possibility is more frequently found in Shakespeare.

In addition, the investigation has shown that in both Marlowe and Shakespeare, the modal verb *can* collocates with communicative verbs, especially with *tell* and *speak*. The modal thus tends to co-occur with the verbs which assume that the interlocutors taking part in the conversation are of equal status or are equally engaged in the conversation, unlike other, less common, verbs such as *ask*, *answer*, and *call*, which imply the greater initiative, involvement, or predominance of one of the interlocutors over the other.

The analysis of the collocations of *can* with verbs of sensation reveals that both Marlowe and Shakespeare are inclined to use the modal with reference to two senses merely, that is *hear* and *see*. Only one example of *can* collocating with *look* has been found in Marlowe.

Could

The analysis of the modal verb *could* has shown that the most numerous type of modality denoted by the verb in both corpora is the broad category of dynamic possibility, including ability, power, wishing, and neutral modality. Other interpretations of the verb found in both Shakespeare and

Marlowe include emotional *could*, the use of the verb in conditional and hypothetical contexts, as well as with past reference.

As far as marginal meanings are concerned, only rational modality was excluded from detailed statistical testing since merely three instances of this type were found in Marlowe's corpus and no more than nine examples in Shakespeare's plays. The results of the chi-square test applied for the meanings and use of the modal verb *could* reveal no significant differences in the distribution of the verb in Marlowe and Shakespeare.

Emotional *could* is used by both playwrights not only with similar frequency, but also with the same implication, namely to signify desire and distress. Shakespeare, additionally, uses the modal to indicate extreme anger of the speaker.

May

The modal verb *may* has been found in Shakespeare's and Marlowe's plays with various meanings and contexts. The most numerous in both corpora is dynamic interpretation of the verb. Other include epistemic *may* as well as the indication of purpose, wishing, ability, permission, power, forbidding, and concession, although forbidding and concession were not numerous enough to undergo statistical testing. Statistics of the chi-square test calculated for the modal meanings of *may* in the works of Marlowe and Shakespeare reveal significant differences in the distribution of the verb. The modal verb *may* reveals significant differences within two meanings, namely dynamic possibility and ability. The former is more numerous in Marlowe's plays whereas the latter is more frequently used by William Shakespeare.

Might

In both Marlowe and Shakespeare, the modal verb *might* was found to denote a variety of meanings including epistemic and dynamic modality, power, wishing, and purpose, as well as to occur in a conditional, hypothetical, and a past tense context. Only *might* indicating ability, although found in both corpora, was not frequent enough to be tested statistically. The application of the chi-square test calculated for the modal meanings and uses of *might* reveal no significant differences in the distribution of the modal verb *might* in Marlowe and Shakespeare.

Will

The modal verb *will* was found in both corpora to indicate a variety of meanings and interpretations including predictive, declarative, volitive, willingness, agreement, promise, threat, and a polite request. Additionally, the instances when the verb indicates its lexical meaning or is not followed by a main verb were also calculated. Statistics of the chi-square test calculated for the modal meanings of *will* reveal significant differences in the distribution of the verb in the works of Marlowe and Shakespeare.

The application of the z-test has proved that in both corpora the modal verb *will* exhibits significant differences in terms of a predictive and declarative modality and the omission of the following verb. Predictive *will* is more numerous in Marlowe's plays, whereas Shakespeare more frequently uses the verb in a declarative context. What is more, Shakespeare more often than Marlowe tends to use the modal verb without the following main verb.

Would

The modal verb *would* was found in both corpora to indicate epistemic and emotional meanings as well as to denote willingness. On top of that, the research showed that the verb is used by both authors in conditional and hypothetical contexts, as well as in rhetorical questions. The statistics of the chi-square test calculated for the meanings of the modal verb *would* reveal significant differences in the distribution of the modal verb in Marlowe and Shakespeare.

The results of the z-test show that significant differences are observed in all modal meanings of the verb. *Would* indicating epistemic modality, as well as willingness, is more frequently used by Shakespeare, whereas emotional *would* is more often found in Marlowe. Apart from that, Marlowe more often tends to use the verb in hypothetical contexts and rhetorical questions. Only the use of the verb in conditional sentences is equally frequent in both corpora.

Shall

In both corpora the modal *shall* has been found to indicate prediction, prophecy, promise, threat and command. Additionally, the verb in both, Shakespeare and Marlowe, occurs in conditions of agreements, interrogatives of equality, requests for advise and for permission, as well as in the structures without a main verb. Statistics of the chi-square test calculated

for the modal meanings of *shall* in the works of Marlowe and Shakespeare reveal significant differences in the distribution of the modal verb *shall* in both corpora.

Application of z-test has showed significant discrepancy in terms of predictive modality, as well as prophecy, promise and threat indicated by the modal verb *shall*. All of these meanings are more often found in Marlowe than in Shakespeare. Other meanings or structures in which the modal verb *shall* occurs seem to be used with a similar frequency by both authors.

Should

In both Marlowe and Shakespeare *should* is found in a great variety of different meanings and structures. The most common interpretation of the verb in both corpora is dynamic modality. Other meanings include evaluative *should*, threat, sorrow and regret, disapproval, emotional questions, as well as a hypothetical and past tense context. The results of the chi-square test calculated for the modal meanings of *should* have revealed significant differences in the distribution of the modal verb *can* in Marlowe and Shakespeare.

The results of the z-test have shown that Marlowe, more often than Shakespeare, tends to use the verb to indicate threat, whereas Shakespeare more frequently uses dynamic and evaluative *should*. What is more, Marlowe more often places the modal in emotional questions and hypothetical contexts, whilst *should* indicating past tense is more common in Shakespeare.

Must

In both corpora, *must* is most frequently found to denote dynamic modality. Other interpretations of the verb include rational modality, fatal destiny and imposing obligation. What is more, in both Marlowe and Shakespeare *must* is found in rhetorical questions as well as in structures with the verb *need*. The results of the chi-square test calculated for the modal meanings of *must* in the works of Marlowe and Shakespeare have showed no significant differences in the distribution of the modal verb *must* in both corpora.

Summary and conclusions

The most varied modality in terms of the number of modal verbs used to convey the meaning is dynamic possibility. In this context, both authors tend to use six different modal verbs, namely *can*, *could*, *may*, *might*, *should*, and *must*. This type of modality is also the most diverged in terms of the differences between both corpora. Three verbs, namely *can*, *may*, and *should*, reveal a significantly higher frequency distribution in one of the corpora than the rest of the dynamic modals. In general, Marlowe, more frequently than Shakespeare, uses dynamic *can* and *may*, whereas Shakespeare favours the modal verb *should* in the same context. These discrepancies become more comprehensible when considered in terms of different subkinds of dynamic possibility.

To start with subject-oriented dynamic modality, including ability, power, and rational possibility, a general conclusion can be drawn that Marlowe more frequently than Shakespeare uses *can*, whilst Shakespeare more often chooses *may* to convey the same meaning. This tendency is observed exclusively in the contexts where the subject of the verb is animate, enabled to act by the fact of possessing some particular skills or abilities, including the ability to make judgements about the rationality of human behaviour and performance. On the other hand, no significant differences have been reported in the distribution of the verbs whose subjects are inanimate lifeless entities empowered to act by virtue of their special qualities. All verbs found in this context, namely *can*, *could*, *may*, and *might*, are used by both authors with a similar frequency distribution. The discrepancies thus in the distribution of subject-oriented dynamic modals are noted only within the verbs corresponding to animate subjects. This observation points to the fact that possessing certain skills and abilities not only creates favourable circumstances enabling one to act, but also increases the chances that a potential hypothetical action will be in fact performed by the subject.

As far as neutral possibility is concerned, only two dynamic modals are found in this context in both corpora, namely *can*, and *could*, with the former being more often used by Shakespeare than by Marlowe. This observation is not surprising in the light of the fact that the modal verb *can* is favoured by Marlowe in subject-oriented dynamic modality. Shakespeare, on the other hand, prefers the verbs *may* and *should* in other dynamic modal contexts, whereas *can* is his favoured choice for neutral possibility.

Generally speaking, although some differences in the frequency of occurrence have been observed, both Marlowe and Shakespeare use *can* in

all subtypes of the dynamic modality, which makes it the most universal dynamic modal verb in both corpora. What is more, apart from subject-oriented modality, the verb is also found in discourse-oriented deontic contexts with similar distribution in the plays of both authors. Within deontic modality, *can* has been found in both corpora to play different performative functions, namely forbidding, making a polite request, and giving permission (exclusively in Shakespeare), although the actual number of each of these functions is too marginal to consider them separately in terms of statistical testing.

Additionally, it has been observed that in both Marlowe and Shakespeare the modal verb *can* has the tendency to collocate with verbs of oral communication and of sensation. In both corpora, the most frequent communicative verbs following the modal verb *can* are *tell* and *speak*. Other less common verbs used by both playwrights include *answer*, *call* and *ask*. In addition to this, Marlowe uses *witness*, *request*, and *talk*, whereas Shakespeare mentions *say*, *deliver*, and *utter*. Irrespective of these minor discrepancies, it can be concluded that the two playwrights favour the same verbs of oral communication collocating with *can*. Similar accord has been observed within collocations of *can* with verbs of sensation. In both corpora, the only instances which have been encountered are the verbs corresponding to the senses of sight and hearing, that is *see* and *hear* respectively. Additionally, one example of *look* has been found in Marlowe.

Evaluative modality is indicated by both Marlowe and Shakespeare by means of the modal verb *should* exclusively. In both corpora, the verb has been found to express a wide range of emotional states, from the most dramatic and negative emotions, including sorrow and regret, disapproval, anger (only in Marlowe), or even despair, and a desperate cry to God, to the positive ones, such as hope and expectation. Evaluative *should* has been found to be more frequent in Shakespeare than in Marlowe. Marlowe, on the other hand, more often than Shakespeare poses emotional questions, which in both corpora, just as evaluative modality, are expressed by means of *should* exclusively.

In both Marlowe and Shakespeare, three modal verbs, namely *would*, *may*, and *might*, have been found to indicate epistemic necessity. Although no discrepancies have been revealed within the distribution of *may* and *might*, epistemic *would* has been proved to be more often used by Shakespeare. Marlowe, on the other hand, favours *would* in emotional contexts as well as in rhetorical questions. This choice seems consistent in the light of the fact that rhetorical questions are naturally produced under the influence of emotional states, hence, they may be also considered as

emotional utterances.

The greatest homogeneity between the two corpora has been observed within the distribution of the modal verb *will*.

Shakespeare's histories – tragedies analysis

Can

In terms of dynamic modality, five different modal meanings underwent detailed statistical testing, namely clear dynamic possibility, ability, power, rational and neutral. Statistics of the chi-square test calculated for the modal meanings of *can* in the histories and tragedies of Shakespeare have showed that the meanings and use of the modal verb *can* do not differ significantly depending on the genre.

Could

In Shakespeare's histories and tragedies, the modal verb *could* was found in dynamic and neutral modality, as well as in conditional sentences, hypothetical contexts, and with reference to the past. The statistics of the chi-square test calculated for the modal meanings of *could* in the histories and tragedies of Shakespeare have shown that the meanings and use of the modal verb *could* do not differ significantly depending on the genre.

May

The modal verb *may* appears in both corpora in epistemic and dynamic modality. Moreover, it is used to indicate ability, wishing, purpose, as well as in a permissive context. The statistics of the chi-square test calculated for the modal meanings of *may* in the histories and tragedies of Shakespeare have revealed that the meanings and use of the modal verb *may* do not differ significantly depending on the genre.

Might

In both histories and tragedies of William Shakespeare, the modal verb *might* is used to indicate dynamic modality and wishing, as well as in hypothetical contexts and with reference to the past. The statistics of the chi-square test calculated for the modal meanings of *might* in the histories and tragedies of Shakespeare have shown that the meanings and use of the modal verb *might* do not differ significantly depending on the genre.

Will

The modal verb *will*, in both histories and tragedies, has been found to denote a variety of modal meanings, including predictive, declarative, volitive, willingness, agreement, promise, threat, as well as with the omission of the lexical verb. The results of the chi-square test calculated for the modal meanings of *will* in the histories and tragedies of Shakespeare have revealed that the meanings and use of the modal verb *will* do not differ significantly depending on the genre.

Would

In both histories and tragedies of Shakespeare, the modal verb *would* is used to indicate epistemic modality and willingness. Moreover, it is found in conditional sentences and hypothetical contexts. The calculation of the meanings of the modal verb *would* in the histories and tragedies of William Shakespeare have shown that the meanings and use of the modal verb *would* do not differ significantly depending on the genre.

Shall

Predictive modality and prophesying, as well as deontic meanings, including a promise, threat and a command are indicated by the modal verb *shall* in both corpora. The statistics of the chi-square test calculated for the modal meanings and uses of *shall* have shown that the meanings and use of the modal verb *shall* differ significantly depending on the genre, thus the calculation of the z-test for the modal meanings of *shall* in the histories and tragedies of Shakespeare had to be applied. The results of the statistical testing show that predictive *shall* is significantly more frequent in the tragedies than in the histories of William Shakespeare, whereas *shall* indicating threat has a higher distribution in the histories.

Should

In both corpora, the modal verb *should* is used by the playwright to indicate epistemic, dynamic, and evaluative modality. Moreover, it commonly denotes sorrow and regret, and is found in emotional questions, hypothetical contexts as well as in the utterances with a reference to the past. The calculation of the chi-square test for the modal meanings and uses of *should* have shown that the meanings and use of the modal verb *should* do not differ significantly depending on the genre.

Must

In both the histories and the tragedies of Shakespeare, the modal verb *must*, apart from indicating dynamic and rational modality, serves to impose obligation as well as to denote fatal destiny. Moreover, it has a high distribution in rhetorical questions, and frequently collocates with the modal verb *need*. The statistics of the chi-square test calculated for the modal meanings and uses of *must* have revealed that the meanings of the modal verb *must* differ significantly depending on the genre.

Statistical testing of the modal verb by means of the z-test has shown that *must* indicating fatal destiny is significantly more frequent in the tragedies than in the histories of William Shakespeare.

Summary and conclusions

The distribution and the use of the modal verbs in order to indicate a particular type of modality or modal meaning in the histories and the tragedies of William Shakespeare is quite unified and consistent. In general, the detailed statistical analyses fail to reveal a great number of discrepancies between the two corpora. The majority of cases, concerning both the individual modal verbs and their meanings show similar frequencies of occurrence in the two genres.

In the first place, no discrepancies have been noticed in the distribution of the verbs indicating dynamic possibility. Dynamic modals found in both histories and tragedies include *can*, *could*, *may*, *might*, *should*, and *must*. Ability is denoted by means of *can* and *could*, whereas the power of inanimate subjects is expressed by *can* exclusively. *Can* and *must* indicate rational modality, whilst *can* and *could* point to the neutral one. All in all, the most universal dynamic modal is *can*, which is found in all dynamic meanings. As mentioned above, all of the dynamic modals have similar distribution in both corpora.

As for epistemic modality, it is indicated by means of *may*, *would*, and *should* in both the histories and the tragedies, with no significant differences between their distribution in the two corpora. Similarly, no discrepancies between the two genres have been found within the frequency of occurrence of the modal verb *should* indicating evaluative modality, sorrow and regret, as well as occurring in emotional questions. Moreover, *will* and *would* denoting volitive modality, willingness, and agreement, as well as the modal verb *will* with no following lexical verb, are also used by Shakespeare with a similar distribution in both the histories and the tragedies. Furthermore, conditional and hypothetical

modal verbs, as well as the modals with past reference, namely *could*, *would*, *might*, and *should* respectively, have a similar frequency of occurrence in the two corpora. Also, wishing expressed by means of *may* and *might*, as well as *may* indicating purpose and permission, are similarly often used by the playwright in both genres. Similarly, no discrepancies between the two corpora have been noted in the distribution of *must* imposing obligation, co-occurring with the modal verb *need*, and used in rhetorical questions.

Nevertheless, three significant differences in the distribution of modal verbs have been revealed concerning particularly the modal verb *shall* indicating a predictive modality and a threat, as well as *must* denoting fatal destiny. Whilst predictive *shall* is more frequent in the tragedies than in the histories of William Shakespeare, *shall* indicating a threat has a higher distribution in the histories. On the other hand, *must* denoting fatal destiny, is favoured by the author in the tragedies.

The prevailing distribution and extended use of the latter in the tragedies is natural and predictable taking into consideration the typical plots of Shakespearian tragedy, in which the central character is doomed to an inevitable and ultimate fall. Additionally, in both corpora, fatal destiny is expressed by means of *must* exclusively, and since there is no other modal verb which would act as an alternative indicating this meaning, the use of *must* in this context is increased.

Similarly, the fact of predictive *shall* being more frequent in the tragedies than in the histories of Shakespeare, finds a plausible explanation in the connection between its meaning of obligation and the nature of a Shakespearian tragedy. When the weakened sense of obligation, denoted by the modal *shall*, is transmitted onto the future, it comes to refer to what is inevitable and destined, hence, the predominant distribution of predictive *shall* in the tragedies is in accord with the tragic fate of Shakespearian characters.

Also, *shall* foretelling inextricable future events is closely related to a threat, which serves to express the speaker's malicious and wicked intentions concerning the destiny of the interlocutor. Whilst pure predictive *shall* has a higher distribution in the tragedies, in which the fate of a character is doomed by some adverse circumstances or conflicting acts of gods, in the histories, William Shakespeare favours *shall* to indicate a threat, which sets the focal point on the relations between the characters and the driving motivating power behind their deeds.

CONCLUDING REMARKS

The detailed analysis of the collected data and the application of the statistical tests have revealed some important facts about the distribution and meanings of modal verbs in the works of the two most prominent writers of Early Modern English period, Christopher Marlowe and William Shakespeare. Nine central modal verbs have been investigated, eight of which constitute four present-past pairs as follows: *can-could*, *will-would*, *shall-should*, *may-might*, and the detached *must*. The organisation of the material has opened full potential for a twofold analysis, namely for a comparison of Shakespeare's and Marlowe's use of the modals, as well as for contrasting Shakespeare's handling of the verbs in the history plays and tragedies.

The primary Shakespeare-Marlowe analysis has made it possible to draw conclusions in terms of the similarities and discrepancies between the use of modal verbs by the two authors, and, as a result, to verify the hypothesis that Shakespeare's use of the modals cannot be regarded as being representative of the Early Modern English period.

To start with, certain minor differences have been noticed with regard to the individual modal verbs used to denote particular meanings. For instance, in a handful of cases Shakespeare uses *shall* to ask for orders, whereas no such examples have been observed in Marlowe. Marlowe, on the other hand, uses *must* to indicate strong advice or strong expectations, whilst no such instances have been attested in Shakespeare. The cases where the two authors use the same modal verb to denote an entirely different meaning have been observed and described, nevertheless, their distribution proved to be marginal, and thus had to be excluded from the statistical analysis.

The most considerable differences between Shakespeare's and Marlowe's language have been observed in terms of the type of modality indicated by the particular modal verbs. The analysis has shown that the majority (15 out of 23) of the statistically significant discrepancies result from the higher frequency distribution of the particular modals denoting a given type of modality observed in Marlowe's plays. This means that Marlowe considerably more often than Shakespeare tends to use a given modal verb to indicate a particular type of modality. For instance, both playwrights indicate dynamic possibility by means of six modal verbs, i.e.,

can, *could*, *should*, *may*, *might*, and *must*. However, Marlowe more often than Shakespeare uses *can* and *may* in this context, whereas Shakespeare tends to use *should* for the same purpose.

Another difference has been observed in terms of rational possibility, which is denoted by *can* and *must* in both corpora. Marlowe, more often than Shakespeare, uses the modal *can* in this context. Shakespeare, on the other hand, more often than Marlowe employs *can* to indicate neutral possibility, which is also denoted by *could* in both corpora.

In terms of epistemic modality, *would* tends to be more frequently used by Shakespeare than by Marlowe, although other verbs, namely *may* and *might*, are also used for this purpose by both authors.

The modal verbs which exhibit the greatest diversification in terms of the denoted meanings are *shall*, *should*, and *would*. *Shall* is more frequently used by Marlowe than by Shakespeare to indicate not only predictive modality, but also prophecy, promise, and threat. What all these meanings have in common, is the reference to futurity. Thus it may be concluded that Marlowe employs *shall* more often than Shakespeare in order to indicate future events. Although Shakespeare uses *shall* to convey the same meanings, it is difficult to indicate the areas in which the verb would be more often used than in Marlowe. As for *should*, it is more often used by Shakespeare to denote not only dynamic, but also evaluative modality, whereas Marlowe prefers to adopt this verb in order to emphasise emotional questions, hypothetical context, and threats. Emotional and hypothetical meanings, as well as rhetorical questions are also more often denoted by Marlowe by means of the modal *would*. Marlowe's preferences concerning the use of *would* in these contexts, however, do not overlap with those of Shakespeare, who tends to more often adopt *would* to denote the willingness of the speaker and, as mentioned earlier, epistemic modality.

Another discrepancy that needs to be mentioned is the use of *can* to denote ability in Marlowe's plays, and the use of *may* for the same purpose in Shakespeare's.

A list of modal verbs used to denote different meanings in both corpora is given in Table 255. The statistically significant differences in the distribution of the verbs denoting a particular meaning are indicated in the two right-hand columns of the table, pointing to the playwright who tends to use a particular modal verb in a given context more often than the other.

Table 255. Statistically significant differences in the distribution of modal verbs denoting particular types of modality and other meanings in Marlowe and Shakespeare.

Types of modality and other meanings denoted	Modal verbs attested in both C.M. and W.Sh.	Distribution prevailing in C.M.	Distribution prevailing in W.Sh.
epistemic	<i>would</i> <i>may</i> <i>might</i>		<i>would</i>
dynamic possibility	<i>can</i> <i>could</i> <i>should</i> <i>may</i> <i>might</i> <i>must</i>	<i>can</i> <i>may</i>	<i>should</i>
deontic	<i>can</i>		
rational possibility	<i>can</i> <i>must</i>	<i>can</i>	
neutral possibility	<i>can</i> <i>could</i>		<i>can</i>
predictive	<i>will</i> <i>shall</i>	<i>will</i> <i>shall</i>	
prophecy	<i>shall</i>	<i>shall</i>	
fatal destiny	<i>must</i>		
declarative	<i>will</i>		<i>will</i>
evaluative	<i>should</i>		<i>should</i>
sorrow and regret	<i>should</i>		
disapproval	<i>should</i>		
emotional	<i>could</i> <i>would</i>	<i>would</i>	
emotional questions	<i>should</i>	<i>should</i>	
volitive	<i>will</i>		
willingness	<i>will</i> <i>would</i>		<i>would</i>
agreement	<i>will</i>		
promise	<i>will</i> <i>shall</i>	<i>shall</i>	

threat	<i>will</i> <i>shall</i> <i>should</i>	<i>shall</i> <i>should</i>	
command	<i>shall</i>		
conditions of agreement	<i>shall</i>		
imposing obligation	<i>must</i>		
request for advice	<i>shall</i>		
request for permission	<i>shall</i>		
ability	<i>can</i> <i>could</i> <i>may</i>	<i>can</i>	<i>may</i>
power	<i>can</i> <i>could</i> <i>may</i> <i>might</i>		
wishing	<i>could</i> <i>may</i> <i>might</i>		
purpose	<i>may</i> <i>might</i>		
permissive	<i>may</i>		
omission	<i>will</i> <i>shall</i>		<i>will</i>
polite request	<i>will</i>		
lexical verb	<i>will</i>		
hypothetical	<i>could</i> <i>would</i> <i>should</i> <i>might</i>	<i>would</i> <i>should</i>	
conditional	<i>could</i> <i>would</i> <i>might</i>		
rhetorical question	<i>would</i> <i>must</i>	<i>would</i>	
past reference	<i>could</i> <i>should</i> <i>might</i>		

co-occurring with <i>need</i>	<i>must</i>
interrogatives of equality	<i>shall</i>

●n the basis of the comparative Shakespeare-Marlowe analysis and the results obtained, it is justified to conclude that both authors use modal verbs in a different way. All in all, 23 discrepancies have been revealed.

The differences in the use of the verbs by both playwrights may stem from the fact that the modal verbs were undergoing a series of transitions of meanings, and in Early Modern English period these changes resulted in the verbs being very unstable. The fact that Marlowe uses *can* more often than any other verb to indicate ability, and Shakespeare uses *may* in the same context, reflects the confusion and rivalry between the two verbs in Early Modern English period, as pointed by Blake (2002: 128). Marlowe tends to employ the verb which, according to Facchinetti (1993: 212), in EModE still exhibits its ●E values, whereas Shakespeare opts for the one which starts to lose its subject-oriented sense ‘be able’ to the modal *can* (Warner 1990: 181).

What is more, the rivalry between the two verbs has been also observed in Marlowe’s plays. Both *can* and *may* are used by Marlowe to indicate dynamic possibility more often than any other verb. Although Warner (1990: 181) argues for the decline of dynamic *may* in EModE, Marlowe still seems to use it interchangeably with *can*. Contrary to Kakietek’s (1972: 54) findings, the same has not been observed in the plays of Shakespeare, who tends to use *should* more than any other verb in this context.

The analysis of the corpora has shown that Shakespeare seems to take more liberty in terms of the use of different modal verbs to indicate a variety of meanings, whereas Marlowe tends to adhere to more traditional usage of the verbs. These differences have been observed especially in terms of the marginal instances which proved too scarce to undergo a statistical analysis, and yet gave the impression of Shakespeare’s language being more experimental and creative.

These differences may be partially explained by the fact that both dramatists received a different level of formal education. Although both attended grammar schools, Marlowe received a scholarship which enabled him to continue higher education at Corpus Christi College in Cambridge, England, where he proved to be an intelligent and astute student (“Marlowe’s life” 2016), whereas Shakespeare was probably forced to discontinue education at the age of 15 (“Shakespeare’s life” 2016).

However, the lack of excellent educational background did not hamper his literary career; on the contrary, it enabled him to master the language liberated of the shackles of formal education.

The analysis has confirmed the hypothesis that Shakespeare's plays cannot be regarded as being representative of the Early Modern English language. Apart from being a language of drama, adapted to meet the requirements of this special type of text, it displays many differences in the use of the modal verbs in comparison to Marlowe's language. One would expect the two corpora to be more homogeneous in terms of the use of the modals, if they were to reflect the common language of the Early Modern English period.

The secondary histories-tragedies analysis has made it possible to draw conclusions in terms of the similarities and discrepancies between the use of modal verbs in the two corpora, and to verify the hypothesis that Shakespeare's use of the modals is dependent on the genre.

The analysis has revealed a far smaller number of statistically significant discrepancies in the distribution of modal verbs and their meanings, than the comparison of both authors. The only verbs whose distributions are different in the two corpora are *shall* and *must*.

In both histories and tragedies, the modals *shall* and *will* are employed in a predictive context. However, predictive *shall* is more frequent in the tragedies than in the histories. On the other hand, the modal *shall* denoting threat has higher distribution in the histories than in the tragedies, and appears in this function more frequently than *will*, which is also used in both corpora in this context.

The third statistically significant difference has been observed in regard to the modal verb *must* indicating fatal destiny, which displays higher distribution in the tragedies of Shakespeare than in his histories.

A list of modal verbs used to denote different meanings in histories and tragedies is given in Table 256. The differences in the distribution of the verbs denoting a particular meaning are indicated in the two right-hand columns of the table, pointing to the genre in which a particular modal verb in a given context tends to be used more often than the other type of text.

Table 256. Statistically significant differences in the distribution of modal verbs denoting particular types of modality and other meanings in the histories and tragedies of Shakespeare.

Types of modality and other meanings denoted	Modal verbs attested in both histories and tragedies	Distribution prevailing in the histories	Distribution prevailing in the tragedies
epistemic	<i>would</i> <i>should</i> <i>may</i>		
dynamic possibility	<i>can</i> <i>could</i> <i>should</i> <i>may</i> <i>might</i> <i>must</i>		
rational possibility	<i>can</i> <i>must</i>		
neutral possibility	<i>can</i> <i>could</i>		
predictive	<i>will</i> <i>shall</i>		<i>shall</i>
prophecy	<i>shall</i>		
fatal destiny	<i>must</i>		<i>must</i>
declarative	<i>will</i>		
evaluative	<i>should</i>		
sorrow and regret	<i>should</i>		
emotional questions	<i>should</i>		
volitive	<i>will</i>		
willingness	<i>will</i> <i>would</i>		
agreement	<i>will</i>		
promise	<i>will</i> <i>shall</i>		
threat	<i>will</i> <i>shall</i>	<i>shall</i>	
command	<i>shall</i>		

imposing obligation	<i>must</i>
ability	<i>can</i> <i>may</i>
power	<i>can</i>
wishing	<i>may</i> <i>might</i>
purpose	<i>may</i>
permissive	<i>may</i>
omission	<i>will</i>
hypothetical	<i>could</i> <i>would</i> <i>should</i> <i>might</i>
conditional	<i>could</i> <i>would</i>
rhetorical question	<i>must</i>
past reference	<i>could</i> <i>should</i> <i>might</i>
co-occurring with <i>need</i>	<i>must</i>

It may be concluded that in Shakespeare's language, the modal verbs and the meanings which they denote are in general unaffected by the genre in which they occur, which means that they exhibit a considerable homogeneity within the plays written by one and the same dramatist, regardless of the literary type of the text. Thus the hypothesis that the use of the modal verbs in Shakespeare's plays is dependent on the genre has been rejected. This finding also supports the assumption that the composition of the corpora does not have a significant influence on the results of the Shakespeare-Marlowe comparison.

The biggest weakness of the conducted analysis of modal verbs in Shakespeare's and Marlowe's plays is that it has not managed to take into account the most recent findings regarding the authorship of *King Henry the Sixth*. The dispute over the authorship of Early Modern English plays attributed to William Shakespeare, as well as of those still remaining anonymous, has been going on for a few decades. Until recently, the attempts at assigning Shakespearean plays to other writers of the period had failed to provide substantial evidence, and thus had been widely

dismissed. However, very recent studies in the field of word adjacency carried out by Segarra, Eisen, Egan and Ribeiro (2016) turned out to be groundbreaking in this respect.

In brief, following a careful investigation of words' proximity in the samples of texts under study, the researchers established Word Adjacency Networks (WANs) which they subsequently compared with other texts of the same author and with texts of other writers.

The findings have shown that certain parts of *King Henry the Sixth* were actually written by Christopher Marlowe. In *King Henry the Sixth, Part One*, three scenes are now attributed to Marlowe, namely 1.1, 1.5, and 1.6. In *King Henry the Sixth, Part Two* – ten scenes – 1.1, 1.3, 1.4, 2.2, 2.3, 2.4, 4.1, 4.3, 4.5, and 4.7, and in *King Henry the Sixth, Part Three* – nine scenes – 1.1, 2.3, 2.4, 3.3, 4.2, 4.5, 4.7, 5.2 and 5.7 (Segarra, Eisen, Egan and Ribeiro 2015).

In light of these most recent findings, further comparative studies of Shakespeare's and Marlowe's plays should take into account the postulated contribution of Christopher Marlowe in *King Henry the Sixth*. Also, in order to obtain a more complete account of Shakespeare's use of modal verbs, the investigation should be expanded onto other works of Shakespeare, including poems and sonnets.

To sum up, the plays of William Shakespeare and Christopher Marlowe disclose many differences in the use and meanings of modal verbs. These suggest that, contrary to commonly held assumptions, Shakespeare's language cannot be regarded as being representative of Early Modern English in general. What is more, the use of modal verbs in Shakespeare's plays does not seem to be dependent on the genre in which they occur, since only trace differences have been observed in this regard.

APPENDIX

Table 257. Statistics of the chi-square test calculated for the modal meanings of *can* in the works of Marlowe and Shakespeare.

<i>Can</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$
dynamic	230	359	589	231.7458	357.2542	0.013152	0.008531
ability	40	27	67	26.36158	40.63842	7.055973	4.577111
power	15	17	32	12.5906	19.4094	0.461073	0.299092
rational	56	35	91	35.80453	55.19547	11.39121	7.38932
neutral	121	279	400	157.3826	242.6174	8.410653	5.455873
deontic	7	6	13	5.114933	7.885067	0.694726	0.450659
n.j	469	723	1192				

Table 258. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *can* in the works of Marlowe and Shakespeare.

df	5	result	conclusion
p-value	8.2407E-09	$\chi^2 > \chi^2 \alpha$	the results of the test reveal significant differences in the distribution of the modal verb <i>can</i> in Marlowe and Shakespeare
χ^2	46.20738		
$\chi^2 \alpha$	11.0705		

Table 259. Calculation of the z-test for the modal meanings of *can*.

<i>Can</i>	p_1	p_2	\bar{p}	\bar{q}	n	z	supported hypothesis
dynamic possibility	0.970	0.952	0.959	0.041	145.520	58.062	H ₁
ability	0.168	0.071	0.109	0.891	145.520	3.88	H ₁
power	0.063	0.045	0.052	0.948	145.520	1	H ₀
rational possibility	0.236	0.093	0.148	0.852	145.520	4.931	H ₁
neutral possibility	0.510	0.740	0.651	0.349	145.520	-5.897	H ₁
deontic	0.029	0.015	0.021	0.979	145.520	1.272	H ₀

Table 260. Statistics of the chi-square test calculated for the modal meanings of *could* in the works of Marlowe and Shakespeare.

<i>Could</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				nij [^]		(nij-nij [^]) ² /nij [^]	
dynamic	52	87	139	53.94977	85.05023	0.070466	0.044698
ability	6	11	17	6.598174	10.40183	0.054229	0.034399
power	8	6	14	5.43379	8.56621	1.211941	0.768769
wishing	5	7	12	4.657534	7.342466	0.025181	0.015973
neutral	34	62	96	37.26027	58.73973	0.285274	0.180957
emotional	5	10	15	5.821918	9.178082	0.116035	0.073605
conditional	15	25	40	15.52511	24.47489	0.017761	0.011266
hypothetical	27	26	53	20.57078	32.42922	2.0094	1.274619
past tense	18	34	52	20.18265	31.81735	0.236042	0.149728
n.j	170	268	438				

Table 261. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *could* in the works of Marlowe and Shakespeare.

df	g	result	conclusion
p-value	0.58251016	$\chi^2 < \chi^2_{\alpha}$	the results of the test reveal no significant differences in the distribution of the modal verb <i>could</i> in Marlowe and Shakespeare
χ^2	6.580345		
χ^2_{α}	15.50731		

Table 262. Statistics of the chi-square test calculated for the modal meanings of *may* in the works of Marlowe and Shakespeare.

<i>May</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$		
epistemic	48	53	101	53.19522	47.80478	0.507383	0.564595
dynamic	206	163	369	194.3469	174.6531	0.698722	0.77751
ability	10	24	34	17.9073	16.0927	3.491617	3.885331
power	11	6	17	8.953652	8.046348	0.467691	0.520428
wishing	25	25	50	26.33427	23.66573	0.067603	0.075226
purpose	67	53	120	63.20225	56.79775	0.228203	0.253935
permissive	8	13	21	11.06039	9.939607	0.846806	0.942291
n.j	375	337	712				

Table 263. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *may* in the works of Marlowe and Shakespeare.

df	6	result	conclusion
p-value	0.03812244	$\chi^2 > \chi^2_{\alpha}$	the results of the test reveal significant differences in the distribution of the modal verb <i>may</i> in Marlowe and Shakespeare
χ^2	13.32734		
χ^2_{α}	12.59159		

Table 264. Calculation of the z-test for the modal meanings of *may*.

<i>May</i>	P ₁	P ₂	\bar{p}	\bar{q}	n	z	supported hypothesis
epistemic	0.157	0.163	0.160	0.84	157.106	-0.206	H ₀
dynamic possibility	0.675	0.503	0.586	0.414	157.106	4.410	H ₁
ability	0.032	0.074	0.054	0.946	157.106	-2.333	H ₁
power	0.036	0.018	0.027	0.973	157.106	1.500	H ₀
wishing	0.081	0.077	0.079	0.921	157.106	0.190	H ₀
purpose	0.219	0.163	0.190	0.81	157.106	1.806	H ₀
permissive	0.026	0.040	0.033	0.967	157.106	-1.000	H ₀

Table 265. Statistics of the chi-square test calculated for the modal meanings of *might* in the works of Marlowe and Shakespeare.

<i>Might</i>	Marlowe	Shakesp.	n _{i.}	Marlowe	Shakesp.	Marlowe	Shakesp.
				n _{ij} [^]		(n _{ij} -n _{ij} [^]) ² /n _{ij} [^]	
epistemic	6	8	14	7.187919	6.812081	0.196323	0.207154
dynamic	58	47	105	53.9094	51.0906	0.310392	0.327517
power	5	6	11	5.647651	5.352349	0.07427	0.078368
wishing	26	17	43	22.07718	20.92282	0.697032	0.735489
purpose	14	15	29	14.88926	14.11074	0.053111	0.056041
conditional	16	11	27	13.86242	13.13758	0.329615	0.347801
hypothetical	16	21	37	18.99664	18.00336	0.472709	0.498789
past tense	12	20	32	16.42953	15.57047	1.194236	1.260125
n _{.j}	153	145	298				

Table 266. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *might* in the works of Marlowe and Shakespeare.

df	7	result	conclusion
p-value	0.44583645	$\chi^2 < \chi^2_{\alpha}$	the results of the test reveal no significant differences in the distribution of the modal verb <i>might</i> in Marlowe and Shakespeare
χ^2	6.838973		
χ^2_{α}	14.06714		

Table 267. Statistics of the chi-square test calculated for the modal meanings of *will* in the works of Marlowe and Shakespeare.

<i>Will</i>	Marlowe	Shakesp.	n _{i.}	Marlowe	Shakesp.	Marlowe	Shakesp.
				n _{ij} [^]		(n _{ij} -n _{ij} [^]) ² /n _{ij} [^]	
predictive	318	379	697	274.4845	422.5155	6.898738	4.481722
declarative	383	670	1053	414.6803	638.3197	2.420284	1.572322
volitive	110	149	259	101.9964	157.0036	0.628038	0.403001
willingness	90	130	220	86.63787	133.3621	0.130473	0.084761
agreement	20	19	39	15.35853	23.64147	1.402688	0.911248
promise	70	86	156	61.43413	94.56587	1.194356	0.775906
threat	45	56	101	39.77466	61.22534	0.686472	0.445962
polite request	11	16	27	10.63283	16.36717	0.012679	0.008237
omission	5	122	127	50.01368	76.98632	40.51354	26.31937
lexical meaning	42	57	99	38.98704	60.01296	0.232845	0.151266
n _{.j}	1094	1684	2778				

Table 268. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *will* in the works of Marlowe and Shakespeare.

df	χ^2	result	conclusion
p-value	2.2715E-15	$\chi^2 > \chi^2_{\alpha}$	the results of the test reveal significant differences in the distribution of the modal verb <i>will</i> in Marlowe and Shakespeare
χ^2	89.27891		
χ^2_{α}	16.91898		

Table 269. Calculation of the z-test for the modal meanings of *will*.

<i>Will</i>	p_1	p_2	\bar{p}	\bar{q}	n	z	supported hypothesis
predictive	0.309	0.269	0.286	0.714	593.334	2.222	H ₁
declarative	0.373	0.476	0.432	0.568	593.334	-5.15	H ₁
volitive	0.107	0.105	0.106	0.894	593.334	0.166	H ₀
willingness	0.087	0.092	0.090	0.91	593.334	-0.454	H ₀
agreement	0.019	0.013	0.016	0.984	593.334	1.2	H ₀
promise	0.068	0.061	0.064	0.936	593.334	0.7	H ₀
threat	0.043	0.039	0.041	0.959	593.334	0.5	H ₀
polite request	0.010	0.011	0.011	0.989	593.334	-0.25	H ₀
omission	0.004	0.086	0.052	0.948	593.334	-9.111	H ₁
lexical verb	0.040	0.040	0.040	0.96	593.334	0	H ₀

Table 270. Statistics of the chi-square test calculated for the modal meanings of *would* in the works of Marlowe and Shakespeare.

<i>Would</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$		
epistemic	13	55	68	25.05795	42.94205	5.802316	3.385822
willingness	68	162	230	84.75483	145.2452	3.312192	1.932762
emotional	12	7	19	7.001486	11.99851	3.568549	2.082353
conditional	50	94	144	53.06389	90.93611	0.176908	0.103231
hypothetical	96	102	198	72.96285	125.0371	7.273703	4.24442
rhet. quest.	9	5	14	5.15899	8.84101	2.859738	1.668741
n.j	248	425	673				

Table 271. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *would* in the works of Marlowe and Shakespeare.

df	5	result	conclusion
p-value	7.8603E-07	$\chi^2 > \chi^2_{\alpha}$	the results of the test reveal significant differences in the distribution of the modal verb <i>would</i> in Marlowe and Shakespeare
χ^2	36.41074		
χ^2_{α}	11.0705		

Table 272. Calculation of the z-test for the modal meanings of *would*.

<i>Would</i>	p_1	p_2	\bar{p}	\bar{q}	n	z	supported hypothesis
epistemic	0.067	0.157	0.125	0.875	124.688	-3.103	H ₁
willingness	0.350	0.464	0.423	0.577	124.688	-2.59	H ₁
emotional	0.061	0.020	0.034	0.966	124.688	2.562	H ₁
conditional	0.257	0.269	0.265	0.735	124.688	-0.307	H ₀
hypothetical	0.494	0.292	0.364	0.636	124.688	4.697	H ₁
rhetorical question	0.046	0.014	0.025	0.975	124.688	2.461	H ₁

Table 273. Statistics of the chi-square test calculated for the modal meanings of *shall* in the works of Marlowe and Shakespeare.

<i>Shall</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$
predictive	521	491	1012	551.2472	460.7528	1.659681	1.985652
prophecy	181	78	259	141.0801	117.9199	11.29572	13.51426
promise	85	58	143	77.89363	65.10637	0.648326	0.775661
threat	50	33	83	45.21099	37.78901	0.50728	0.606913
command	35	41	76	41.39801	34.60199	0.988805	1.183012
cond. of agree.	7	5	12	6.536528	5.463472	0.032862	0.039317
inter. of equal.	21	32	53	28.86967	24.13033	2.145215	2.566548
req. for advice	18	26	44	23.96727	20.03273	1.485706	1.777507
inter. of prior.	7	10	17	9.260082	7.739918	0.551612	0.659951
req. for perm.	7	5	12	6.536528	5.463472	0.032862	0.039317
omission	7	10	17	9.260082	7.739918	0.551612	0.659951
n.j	939	789	1728				

Table 274. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *shall* in the works of Marlowe and Shakespeare.

df	10	result	conclusion
p-value	2.6665E-06	$\chi^2 > \chi^2_{\alpha}$	the results of the test reveal significant differences in the distribution of the modal verb <i>shall</i> in Marlowe and Shakespeare
χ^2	42.49621		
χ^2_{α}	16.91898		

Table 275. Calculation of the z-test for the modal meanings of *shall* in the works of Marlowe and Shakespeare.

<i>Shall</i>	p ₁	p ₂	\bar{p}	\bar{q}	n	z	supported hypothesis
predictive	0.707	0.585	0.642	0.358	392.066	5.083	H ₁
prophecy	0.245	0.092	0.164	0.836	392.066	8.5	H ₁
promise	0.115	0.069	0.090	0.91	392.066	3.285	H ₁
threat	0.067	0.039	0.052	0.948	392.066	2.545	H ₁
command	0.047	0.048	0.048	0.952	392.066	-0.1	H ₀
conditions of agree.	0.009	0.005	0.007	0.993	392.066	1	H ₀
inter. of equality	0.028	0.038	0.033	0.967	392.066	-1.111	H ₀
request for advice	0.024	0.030	0.027	0.973	392.066	-0.75	H ₀
inter. of priority	0.009	0.011	0.010	0.99	392.066	-0.4	H ₀
request for permission	0.009	0.005	0.007	0.993	392.066	1	H ₀
omission	0.009	0.011	0.010	0.99	392.066	-0.4	H ₀

Table 276. Statistics of the chi-square test calculated for the modal meanings of *should* in the works of Marlowe and Shakespeare.

<i>Should</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$		
threat	5	5	10	3.385714	6.614286	0.769681	0.393983
dynamic	124	263	387	131.0271	255.9729	0.376874	0.192914
evaluative	23	76	99	33.51857	65.48143	3.300867	1.689645
sorrow & regret	5	11	16	5.417143	10.58286	0.032122	0.016442
disapproval	6	11	17	5.755714	11.24429	0.010368	0.005307
emotional quest.	30	34	64	21.66857	42.33143	3.203382	1.639744
hypothetical	39	38	77	26.07	50.93	6.412923	3.282641
past tense	5	25	30	10.15714	19.84286	2.618465	1.340337
n.j	237	463	700				

Table 277. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *should* in the works of Marlowe and Shakespeare.

df	7	result	conclusion
p-value	0.00067518	$\chi^2 > \chi^2_{\alpha}$	the results of the test reveal significant differences in the distribution of the modal verb <i>can</i> in Marlowe and Shakespeare
χ^2	25.28569		
χ^2_{α}	14.06714		

Table 278. Calculation of the z-test for the modal meanings of *should*.

<i>Should</i>	p ₁	p ₂	\bar{p}	\bar{q}	n	z	supported hypothesis
threat	0.028	0.015	0.020	0.98	113.168	41.113	H ₁
dynamic possibility	0.704	0.829	0.784	0.216	113.168	-3.289	H ₁
evaluative	0.130	0.239	0.200	0.8	113.168	-2.945	H ₁
sorrow & regret	0.028	0.034	0.032	0.968	113.168	-0.375	H ₀
disapproval	0.034	0.034	0.034	0.966	113.168	0	H ₀
emotional questions	0.170	0.107	0.129	0.871	113.168	63.45	H ₁
hypothetical	0.221	0.119	0.156	0.844	113.168	3	H ₁
past tense	0.028	0.078	0.060	0.94	113.168	-2.272	H ₁

Table 279. Statistics of the chi-square test calculated for the modal meanings of *must* in the works of Marlowe and Shakespeare.

<i>Must</i>	Marlowe	Shakesp.	ni.	Marlowe	Shakesp.	Marlowe	Shakesp.
				n_{ij}^{\wedge}	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$		
imp. obligation	23	20	43	18.34205	24.65795	1.182882	0.879898
dynamic	142	184	326	139.0584	186.9416	0.062228	0.046289
fatal destiny	15	23	38	16.20926	21.79074	0.090214	0.067106
co-oc. with need	5	13	18	7.678068	10.32193	0.934096	0.694836
rational	20	23	43	18.34205	24.65795	0.149863	0.111477
rhetorical quest.	7	22	29	12.37022	16.62978	2.331347	1.734195
n.j	212	285	497				

Table 280. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *must* in the works of Marlowe and Shakespeare.

df	5	result	conclusion
p-value	0.14124117	$\chi^2 < \chi^2_{\alpha}$	the results of the test reveal no significant differences in the distribution of the modal verb <i>must</i> in Marlowe and Shakespeare
χ^2	8.28443		
χ^2_{α}	11.0705		

Table 281. Statistics of the chi-square test calculated for the modal meanings of *can* in the histories and tragedies of Shakespeare.

<i>Can</i>	Histories	Tragedies	ni.	Histories	Tragedies	Histories	Tragedies
				n_{ij}^{\wedge}		$(n_{ij}-n_{ij}^{\wedge})^2/n_{ij}^{\wedge}$	
dynamic	230	129	359	230.3208	128.6792	0.000447	0.0008
ability	15	12	27	17.32218	9.677824	0.311306	0.557202
power	12	5	17	10.90656	6.093445	0.109624	0.196214
rational	24	11	35	22.45467	12.54533	0.106349	0.190353
neutral	179	100	279	178.9958	100.0042	9.78E-08	1.75E-07
n.j	460	257	717				

Table 282. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *can* in the histories and tragedies of Shakespeare.

df	4	result	conclusion
p-value	0.83153744	$\chi^2 < \chi^2_{\alpha}$	the meanings and use of the modal verb <i>can</i> do not differ significantly depending on the genre
χ^2	1.472295		
χ^2_{α}	9.487729		

Table 283. Statistics of the chi-square test calculated for the modal meanings of *could* in the histories and tragedies of Shakespeare.

<i>Could</i>	Histories	Tragedies	n _{i.}	Histories	Tragedies	Histories	Tragedies
				n _{ij} [^]		(n _{ij} -n _{ij} [^]) ² /n _{ij} [^]	
dynamic	46	41	87	46.47436	40.52564	0.004842	0.005552
neutral	31	31	62	33.11966	28.88034	0.135658	0.155571
conditional	13	12	25	13.3547	11.6453	0.009421	0.010804
hypothetical	15	11	26	13.88889	12.11111	0.088889	0.101937
past tense	20	14	34	18.16239	15.83761	0.185923	0.213214
n _{.j}	125	109	234				

Table 284. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *could* in the histories and tragedies of Shakespeare.

df	4	result	conclusion
p-value	0.92286035	$\chi^2 < \chi^2_{\alpha}$	the meanings and use of the modal verb <i>could</i> do not differ significantly depending on the genre
χ^2	0.91181		
χ^2_{α}	9.487729		

Table 285. Statistics of the chi-square test calculated for the modal meanings of *may* in the histories and tragedies of Shakespeare.

<i>May</i>	Histories	Tragedies	ni.	Histories	Tragedies	Histories	Tragedies
				nij [^]		(nij-nij [^]) ² /nij [^]	
epistemic	33	20	53	31.38369	21.61631	0.083243	0.120856
dynamic	97	66	163	96.51964	66.48036	0.002391	0.003471
ability	9	15	24	14.21148	9.78852	1.911098	2.774631
wishing	20	5	25	14.80363	10.19637	1.824034	2.648226
purpose	30	23	53	31.38369	21.61631	0.061006	0.088571
permissive	7	6	13	7.697885	5.302115	0.06327	0.091858
n.j	196	135	331				

Table 286. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *may* in the histories and tragedies of Shakespeare.

df	5	result	conclusion
p-value	0.08505989	$\chi^2 < \chi^2 \alpha$	the meanings and use of the modal verb <i>may</i> do not differ significantly depending on the genre
χ^2	9.672655		
$\chi^2 \alpha$	11.0705		

Table 287. Statistics of the chi-square test calculated for the modal meanings of *might* in the histories and tragedies of Shakespeare.

<i>Might</i>	Histories	Tragedies	ni.	Histories	Tragedies	Histories	Tragedies
				nij [^]		(nij-nij [^]) ² /nij [^]	
dynamic	29	18	47	28.64762	18.35238	0.004334	0.006766
wishing	11	6	17	10.3619	6.638095	0.039294	0.061338
hypothetical	12	9	21	12.8	8.2	0.05	0.078049
past tense	12	8	20	12.19048	7.809524	0.002976	0.004646
n.j	64	41	105				

Table 288. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *might* in the histories and tragedies of Shakespeare.

df	3	result	conclusion
p-value	0.9695966	$\chi^2 < \chi^2_{\alpha}$	the meanings and use of the modal verb <i>might</i> do not differ significantly depending on the genre
χ^2	0.247403		
χ^2_{α}	7.814728		

Table 289. Statistics of the chi-square test calculated for the modal meanings of *will* in the histories and tragedies of Shakespeare.

<i>Will</i>	Histories	Tragedies	ni.	Histories	Tragedies	Histories	Tragedies
				nij [^]		(nij-nij [^]) ² /nij [^]	
predictive	210	169	379	214.5549	164.4451	0.0967	0.126166
declarative	368	302	670	379.2924	290.7076	0.336198	0.438645
volitive	92	57	149	84.35009	64.64991	0.693788	0.9052
willingness	83	47	130	73.59404	56.40596	1.202163	1.568488
agreement	9	10	19	10.75605	8.243948	0.286696	0.374059
promise	42	44	86	48.68529	37.31471	0.918	1.197734
threat	36	20	56	31.70205	24.29795	0.582688	0.760245
omiss. of v	72	50	122	69.06518	52.93482	0.124711	0.162713
n.j	912	699	1611				

Table 290. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *will* in the histories and tragedies of Shakespeare.

df	7	result	conclusion
p-value	0.20173495	$\chi^2 < \chi^2 \alpha$	the meanings and use of the modal verb <i>will</i> do not differ significantly depending on the genre
χ^2	9.774193		
$\chi^2 \alpha$	14.06714		

Table 291. Statistics of the chi-square test calculated for the modal meanings of *would* in the histories and tragedies of Shakespeare.

<i>Would</i>	Histories	Tragedies	n _i .	Histories	Tragedies	Histories	Tragedies
				n _{ij} [^]		(n _{ij} -n _{ij} [^]) ² /n _{ij} [^]	
epistemic	35	20	55	28.49879	26.50121	1.483071	1.594861
willingness	86	76	162	83.94189	78.05811	0.050461	0.054265
conditional	43	51	94	48.70702	45.29298	0.668694	0.719098
hypothetical	50	52	102	52.8523	49.1477	0.153931	0.165534
n _j	214	199	413				

Table 292. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *would* in the histories and tragedies of Shakespeare.

df	3	result	conclusion
p-value	0.18003781	$\chi^2 < \chi^2_{\alpha}$	the meanings and use of the modal verb <i>would</i> do not differ significantly depending on the genre
χ^2	4.889916		
χ^2_{α}	7.814728		

Table 293. Statistics of the chi-square test calculated for the modal meanings of *shall* in the histories and tragedies of Shakespeare.

<i>Shall</i>	Histories	Tragedies	ni.	Histories	Tragedies	Histories	Tragedies
				nij [^]		(nij-nij [^]) ² /nij [^]	
predictive	272	219	491	289.9772	201.0228	1.114498	1.607672
prophecy	52	26	78	46.06562	31.93438	0.764493	1.102788
promise	36	22	58	34.25392	23.74608	0.089005	0.128391
threat	26	7	33	19.4893	13.5107	2.174999	3.137454
command	28	13	41	24.21398	16.78602	0.59197	0.853922
n.j	414	287	701				

Table 294. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *shall* in the histories and tragedies of Shakespeare.

df	4	result	conclusion
p-value	0.02089519	$\chi^2 > \chi^2 \alpha$	the meanings and use of the modal verb <i>shall</i> differ significantly depending on the genre
χ^2	11.56519		
$\chi^2 \alpha$	9.487729		

Table 295. Calculation of the z-test for the modal meanings of *shall* in the histories and tragedies of Shakespeare.

<i>Shall</i>	p_1	p_2	\bar{p}	\bar{q}	n	z	supported hypothesis
predictive	0.547	0.640	0.585	0.415	202.591	-2.735	H ₁
prophecy	0.104	0.076	0.092	0.908	202.591	1.4	H ₀
promise	0.072	0.064	0.069	0.931	202.591	0.47	H ₀
threat	0.052	0.020	0.039	0.961	202.591	2.461	H ₁
command	0.056	0.038	0.048	0.952	202.591	1.2	H ₀

Table 296. Statistics of the chi-square test calculated for the modal meanings of *should* in the histories and tragedies of Shakespeare.

<i>Should</i>	Histories	Tragedies	$n_{i.}$	Histories	Tragedies	Histories	Tragedies
				n_{ij}^{\wedge}	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$	$(n_{ij} - n_{ij}^{\wedge})^2 / n_{ij}^{\wedge}$	
epistemic	21	24	45	27.2561	17.7439	1.435963	2.205758
dynamic	161	102	263	159.2967	103.7033	0.018212	0.027975
evaluative	49	27	76	46.03252	29.96748	0.191298	0.29385
sorrow & reg.	5	6	11	6.662602	4.337398	0.41489	0.637305
emotional qu.	22	12	34	20.5935	13.4065	0.096062	0.147559
hypothetical	20	18	38	23.01626	14.98374	0.395278	0.60718
past tense	20	5	25	15.14228	9.857724	1.558384	2.393806
$n_{.j}$	298	194	492				

Table 297. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *should* in the histories and tragedies of Shakespeare.

df	6	result	conclusion
p-value	0.10791274	$\chi^2 < \chi^2_{\alpha}$	the meanings and use of the modal verb <i>should</i> do not differ significantly depending on the genre
χ^2	10.42352		
χ^2_{α}	12.59159		

Table 298. Statistics of the chi-square test calculated for the modal meanings of *must* in the histories and tragedies of Shakespeare.

<i>Must</i>	Histories	Tragedies	n _i .	Histories	Tragedies	Histories	Tragedies
				n _{ij} [^]		(n _{ij} -n _{ij} [^]) ² /n _{ij} [^]	
imp. obligation	13	7	20	10.94737	9.052632	0.384868	0.465422
dynamic	98	86	184	100.7158	83.28421	0.073231	0.088558
fatal destiny	7	16	23	12.58947	10.41053	2.481614	3.001022
co-oc need	6	7	13	7.115789	5.884211	0.174961	0.211581
rational	17	6	23	12.58947	10.41053	1.545159	1.868565
rhetorical qu.	15	7	22	12.04211	9.957895	0.726546	0.878614
n _j	156	129	285				

Table 299. Degree of freedom, p-value and the results of the chi-square test for the modal meanings of *must* in the histories and tragedies of Shakespeare.

df	5	result	conclusion
p-value	0.03618199	$\chi^2 > \chi^2 \alpha$	the meanings of the modal verb <i>must</i> differ significantly depending on the genre
χ^2	11.90014		
$\chi^2 \alpha$	11.0705		

Table 300. Calculation of the z-test for the modal meanings of *must*.

<i>Must</i>	p ₁	p ₂	\bar{p}	\bar{q}	n	z	supported hypothesis
imp. obligation	0.094	0.063	0.080	0.92	61.209	0.911	H ₀
dynamic	0.710	0.781	0.741	0.259	61.209	-1.29	H ₀
fatal destiny	0.050	0.145	0.092	0.908	61.209	-2.638	H ₁
co-occurring with need	0.043	0.063	0.052	0.948	61.209	-0.714	H ₀
rational	0.123	0.054	0.092	0.908	61.209	1.916	H ₀
rhetorical question	0.108	0.063	0.088	0.912	61.209	1.25	H ₀

BIBLIOGRAPHY

Primary sources

- Perseus Collection. Perseus Digital Library Project. Tufts University. *The Works of Christopher Marlowe*. Accessed July 31, 2011.
<http://www.perseus.tufts.edu>.
- Perseus Collection. Perseus Digital Library Project. Tufts University. *The Works of William Shakespeare*. Accessed July 31, 2011.
<http://www.perseus.tufts.edu>.

Secondary sources

- Aarts, Bas. "Conceptions of gradience in the history of linguistics." *Language Sciences* 26 (2003): 343–389.
- Abbott, Edwin A. *Shakespearian grammar. An attempt to illustrate some of the differences between Elizabethan and modern English*. New York: Dover Publications, Inc., 1870.
- Adamson, Sylvia, Vivien Law, and Nigel Vincent, ed. *Papers from the 5th International Conference on English Historical Linguistics, Cambridge, 6–9 April 1987*. Amsterdam: John Benjamins, 1990.
- Aijmer, Karin. "The semantic development of will." In *Historical semantics, historical word-formation*, edited by Jacek Fisiak, 11–21. New York: Mouton, 1985.
- Aijmer, Karin. "Epistemic modality as a discourse phenomenon. A Swedish-English cross-language perspective." In *From Ælfric to the New York Times. Studies in English corpus linguistics*, edited by Udo Fries, Viviane Müller, and Peter Schneider, 215–226. Amsterdam: Rodopi, 1997.
- Aikhenwald, Alexandra Y. *Evidentiality*. Oxford: Oxford University Press, 2004.
- Allan, Keith. *Natural language semantics*. Oxford and Malden: Blackwell Publishers, 2001.
- Anderson, John. "Some proposals concerning the modal verb in English." In *Edinburgh studies in English and Scots*, edited by Adam J. Aitken, Angus McIntosh, and Hermann Pálsson, 69–120. London: Longman, 1971.

- Anderson, John M. *A notional theory of syntactic categories*. Cambridge: Cambridge University Press, 1997.
- Ando, Sadao. *A descriptive syntax of Christopher Marlowe's language*. Tokyo: University of Tokyo Press, 1976.
- Andrews, Kenneth. "The semantic development of can and could from Old English to the present." In *Historical Linguistics, 1989: Papers from the 9th International Conference on Historical Linguistics, Rutgers University, 14–18 August, 1989*, edited by Henk Aertsen and Robert J. Jeffers, 37–46. Amsterdam: Benjamins, 1993.
- Amovick, Leslie. "Proscribed collocations with shall and will: the eighteenth-century (non-)standard reassessed." In *Taming the vernacular: From dialect to written standard language*, edited by Jenny Cheshire and Dieter Stein, 135–151. London: Addison Wesley Longman, 1997.
- Amovick, Leslie K. *Diachronic pragmatics: Seven case studies in English illocutionary development*. Amsterdam: Benjamins, 1999.
- Bach, Ulrich. "Wills and will-making in 16th and 17th century England. Some pragmatic aspects." In *Historical Pragmatics: Pragmatic developments in the history of English*, edited by Andreas H. Jucker, 125–144. Amsterdam: John Benjamins, 1995.
- Barbiers, Sjef, Frits Beukema, and Wim van der Wurff, eds. *Modality and its interaction with the verbal system*. Amsterdam: John Benjamins, 2002.
- Bas, Aarts, David Denison, Evelien Keizer, and Gergana Popova, ed. *Fuzzy grammar: A reader*. Oxford: Oxford University Press, 2004.
- Berry, Roger. "The pedagogic grammarian's dilemma: modality and personality in grammatical description." *Studia Anglica Posnaniensia* 45, no. 1 (2009): 117–135.
- Biber, Douglas, Susan Conrad, and Randi Reppen. *Corpus linguistics. Investigating language structure and use*. Cambridge: Cambridge University Press, 1998.
- Blake, Norman Francis. *A grammar of Shakespeare's language*. Basingstoke: Palgrave Macmillan, 2002.
- Bolinger, Dwight L. "Syntactic blends and other matters." *Language* 37, no. 3 (1961): 366–381.
- Bolinger, Dwight L. "Gradience." In *Fuzzy grammar: A reader*, edited by Bas Aarts, David Denison, Evelien Keizer, and Gergana Popova, 311–320. Oxford: Oxford University Press, [1961] 2004.
- Butler, Christopher. *Statistics in linguistics*. Oxford: Blackwell, 1985.

- Butler, Johnny. "A minimalist treatment of modality." *Lingua* 113, no. 10 (2003): 967–996.
- Bybee, Joan. "The semantic development of past tense modals in English." In *Modality in grammar and discourse*, edited by Joan Bybee and Suzanne Fleischman, 503–517. Amsterdam: Benjamins, 1995.
- Bybee, Joan, Revere Perkins, and William Pagliuca. *The evolution of grammar. Tense, aspect, and modality in the languages of the world*. Chicago: The University of Chicago Press, 1994.
- Bybee, Joan, and Suzanne Fleischman, ed. *Modality in grammar and discourse*. Amsterdam: Benjamins, 1995.
- Carnap, Rudolf. *Meaning and necessity. A study in semantics and modal logic*. Chicago: The University of Chicago Press, 1956.
- Cheshire, Jenny, and Dieter Stein, ed. *Taming the vernacular. From dialect to written standard language*. London: Longman, 1997.
- Coates, Jennifer. *The semantics of the modal auxiliaries*. London: Croom Helm, 1983.
- Cruse, Alan. *A glossary of semantics and pragmatics*. Edinburgh: Edinburgh University Press, 2006.
- Culpeper, Jonathan. *History of English*. London: Routledge, 2005.
- DeLancey, Scott. "The mirative and evidentiality." *Journal of Pragmatics* 33, no. 3 (2001): 369–382.
- Dendale, Patrick, and Liliane Tasmowski. "Introduction: Evidentiality and related notions." *Journal of Pragmatics* 33, no. 3 (2001): 339–348.
- Denison, David. *English historical syntax: Verbal constructions*. New York: Longman, 1993.
- Denison, David. "Combining English auxiliaries." In *Pathways of change: Grammaticalization in English*, edited by Olga Fischer, Anette Rosenbach, and Dieter Stein, 111–147. Amsterdam: John Benjamins, 2000.
- Diaz-Vera, E. Javier, ed. *A Changing world of words. Studies in English historical lexicography, lexicology and semantics*. Amsterdam: Rodopi, 2002.
- Ehrman, Madeline. *The meanings of the modals in present-day American English*. The Hague: Mouton, 1966.
- Facchinetti, Roberta. "Can vs. may in Early Modern English." In *English Diachronic Syntax*, edited by Maurizio Gotti, 209–221. Milano: Guerini, 1993.
- Facchinetti, Roberta, Manfred Krug, and Frank Palmer, ed. *Modality in contemporary English*. Berlin: Mouton de Gruyter, 2003.

- Fischer, Olga, Anette Rosenbach, and Dieter Stein, ed. *Pathways of change: Grammaticalization in English*. Amsterdam: John Benjamins, 2000.
- Fischer, Olga, Ans van Kemenade, Willem Koopman, and Wim van der Wurff. *The Syntax of Early English*. Cambridge: Cambridge University Press, 2004.
- Fisiak, Jacek, ed. *Historical semantics. Historical word-formation. Trends in Linguistics, Studies and Monographs 29*. Berlin: Mouton de Gruyter, 1985.
- Fisiak, Jacek. *An outline history of English. Volume One: External history*. Poznań: Wydawnictwo Poznańskie, 2000.
- Fisiak, Jacek, and Marcin Krygier, ed. *Advances in English historical linguistics (1996)*. Berlin: Mouton de Gruyter, 1998.
- Fitzmaurice, Susan, and Irma Taavitsainen, ed. *Methods in historical pragmatics. Topics in English Linguistics 52*. Berlin: Mouton de Gruyter, 2007.
- Folger Shakespeare Library. "Shakespeare's Life." Accessed November 20, 2016.
<http://www.folger.edu/shakespeares-life>.
- Frawley, William, ed. *The expression of modality*. Berlin: Mouton de Gruyter, 2006.
- Fries, Udo, Viviane Müller, and Peter Schneider, ed. *From Ælfric to the New York times. Studies in English Corpus Linguistics*. Amsterdam: Rodopi, 1997.
- Fries, Charles C. "The expression of the future." *Language* 3, no. 2 (1927): 87–95.
- Giannoni, Davide Simone. "Auxiliary verbs shall be used consistently: Standardisation and modality in directive texts." *Linguistica e Filologia* 16 (2003): 7–28.
- Goossens, L. "The auxiliarization of the English modals: A functional grammar view." In *Historical development of auxiliaries*, edited by Martin Harris and Paolo Ramat, 111–143. Berlin: Mouton de Gruyter, 1987.
- Gotti, Maurizio, ed. *English diachronic syntax*. Milan: Guerini Studio, 1993.
- Gotti, Maurizio. *Pragmatic uses of SHALL future constructions in Early Modern English. Studies in the History of the English Language. A Millennial Perspective*. Berlin: Mouton de Gruyter, 2003.
- Gotti, Maurizio, Marina Dossena, Richard Dury, Roberta Facchinetti, and Maria Lima. *Variation in central modals: A repertoire of forms and*

- types of usage in Middle English and Early Modern English* (Linguistic Insights: Studies in Language and Communication 4). Bern: Peter Lang, 2002.
- Greenbaum, Sidney, Geoffrey Leech, and Jan Svartvik, ed. *Studies in English Linguistics for Randolph Quirk*. London: Longman, 1980.
- Haiman, John, ed. *Iconicity in syntax*. Amsterdam: John Benjamins, 1985.
- Hale, Mark. *Historical linguistics: Theory and method*. Cornwall: Blackwell, 2007.
- Hare, Richard Mervyn. *The language of morals*. Oxford: Clarendon Press, 1952.
- Harper, Douglas. *Online Etymology Dictionary*. Accessed August 25, 2012.
<http://www.etymonline.com/index.php>.
- Harris, Martin, and Paolo Ramat, ed. *Historical development of auxiliaries*. Berlin: Mouton de Gruyter, 1987.
- Harrison, George B. *Introducing Shakespeare*. Harmondsworth: Penguin, 1957.
- Hart, David, ed. *English modality in context*. Bern: Peter Lang, 2003.
- Hock, Hans Henrich. *Principles of historical linguistics*. Berlin: Mouton de Gruyter, 1991.
- Hock, Hans Henrich, and Brian D. Joseph. *Language history, language change, and language relationship. An introduction to historical and comparative linguistics*. Berlin: Mouton de Gruyter, 1996.
- Hogg, Richard. *An introduction to Old English*. Edinburgh: Edinburgh University Press, 2002.
- Hopper, Paul J., and Elizabeth Closs Traugott. *Grammaticalization*. Cambridge: Cambridge University Press, 1993.
- Huddleston, Rodney. "Some Theoretical Issues in the Description of the English Verb." *Lingua* 40 (1976), 331–383.
- Huddleston, Rodney, and Geoffrey K. Pullum. *A student's introduction to English grammar*. New York: Cambridge University Press, 2005.
- Jaszczolt, Katarzyna M. *Representing time: An essay on temporality as modality*. Oxford: Oxford University Press, 2009.
- Jespersen, Otto. *A modern English grammar on historical principles*. Copenhagen: E. Munksgaard, 1931.
- Jespersen, Otto. *Essentials of English grammar*. London: Routledge, 2006.
- Joos, Martin. *The English verb. Form and meanings*. Madison and Milwaukee: University of Wisconsin Press, 1964.
- Kakietek, Piotr. *Modal verbs in Shakespeare's English*. Poznań: Wydawnictwo naukowe Uniwersytetu im. Adama Mickiewicza w Poznaniu, 1972.

- Kastovsky, Dieter, ed. *Studies in Early Modern English*. Berlin: Mouton de Gruyter, 1994.
- Kaufmann, Stefan, Cleo Condoravdi, and Valentina Harizanov. "Formal approaches to modality." In *The expression of modality*, edited by William Frawley, 71–106. Berlin: Mouton de Gruyter, 2006.
- Kiefer, Ferenc. "Modality and Pragmatics." *Folia Linguistica* 31, no. 3–4 (2009): 241–254.
- Killie, Kristin. *Early Modern English subject modifiers*. Oslo: Novus Press, 1993.
- Klinge, Alex. "The English modal auxiliaries: From lexical semantics to utterance interpretation." *Journal of Linguistics* 29, no. 2 (1993): 315–357.
- Kopytko, Roman. *Polite discourse in Shakespeare's English*. Poznań: Adam Mickiewicz University Press, 1993.
- Kopytko, Roman. "Linguistic politeness strategies in Shakespeare's plays." In *Historical Pragmatics: Pragmatic developments in the history of English*, edited by Andreas H. Jucker, 515–540. Amsterdam: John Benjamins, 1995.
- Krug, Manfred. *Emerging English modals. A Corpus-based study of grammaticalization*. Berlin: Mouton de Gruyter, 2000.
- Kytö, Merja. "On the use of the modal auxiliaries indicating 'possibility' in Early American English." In *Historical development of auxiliaries*, edited by Martin Harris and Paolo Ramat, 145–170. Berlin: Mouton de Gruyter, 1987.
- Kytö, Merja. *Variation and diachrony, with Early American English in focus: Studies on 'can/may' and 'shall/will'*. Frankfurt am Main: Peter Lang, 1991.
- Langacker, Ronald W. "Observations and speculations on subjectivity." In *Iconicity in syntax*, edited by John Haiman, 109–150. Amsterdam: John Benjamins, 1985.
- Leech, Geoffrey N. *Meaning and the English verb*. New York: Longman, 1988.
- Leech, Geoffrey N. *A glossary of English grammar*. Edinburgh: Edinburgh University Press, 2006.
- Leech, Geoffrey, and Jennifer Coates. "Semantic indeterminacy and the modals." In *Studies in English Linguistics for Randolph Quirk*, edited by Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik, 79–90. London: Longman, 1980.

- Lima, Maria. "Notes on the history of the English modals of necessity." In *English diachronic syntax*, edited by Maurizio Gotti, 77–87. Milan: Guerini Studio, 1993.
- Löbner, Sebastian. *Understanding semantics*. London: Oxford University Press, 2002.
- Lyons, John. *Semantics*. Cambridge: Cambridge University Press, 1977.
- Lyons, John. "Deixis and subjectivity. Loquor, ergo sum?" In *Speech, place, and action: Studies in deixis and related topics*, edited by Robert Jarvella and Wolfgang Klein, 101–124. New York: John Wiley and Sons, 1982.
- Lyons, John. *Linguistic semantics*. Cambridge: Cambridge University Press, 1995.
- Lightfoot, David W. *Principles of diachronic syntax*. Cambridge: Cambridge University Press, 1979.
- Lightfoot, David. "Cuing a new grammar." In *The Handbook of the History of English*, edited by Ans van Kemenade and Bettelou Los, 24–44. Oxford: Blackwell, 2006.
- The Marlowe Society Home Page. "Marlowe's life." Accessed November 20, 2016.
<http://www.marlowe-society.org/marlowe/life/life.html>.
- Matthews, Richard. "Reference time and modality." In *Essays on tensing in English. Vol. II: Time, text and modality*, edited by Alfred Schopf, 189–246. Tübingen: Max Niemeyer Verlag, 1989.
- McCready, Eric, and Norry Ogata. "Evidentiality, modality and probability." *Linguistics and Philosophy* 30, no. 2 (2007): 147–206.
- McEnery Anthony, Richard Xiao, and Yukio Tono. *Corpus-based language studies: An advanced resource book*. London: Routledge, 2006.
- Mitchell, Raymond Bruce. *Old English syntax*. Oxford: Clarendon Press, 1985.
- Mitchell, Raymond Bruce, and Fred Robinson. *A guide to Old English*. Oxford: Wiley Blackwell, 2012.
- Minkova, Donka, and Robert Stockwell, ed. *Studies in the history of the English language. A millennial perspective*. Berlin: Mouton de Gruyter, 2003.
- Moléncki, Rafał. "Modals in past counterfactual conditional protases." In *Advances in English historical linguistics (1996)*, edited by Jacek Fisiak and Marcin Krygier, 241–251. Berlin: Mouton de Gruyter, 1998.
- Molina-Plaza, Silvia. "Modal change: A corpus study from 1500 to 1700 compared to current usage." In *A Changing world of words. Studies in*

- English historical lexicography, lexicology and semantics*, edited by Javier E. Diaz-Vera, 539–562. Amsterdam: Rodopi, 2002.
- Mustanoja, Tauno. *A Middle English syntax*. Helsinki: Societe' Neophilologique, 1960.
- Nagle, Stephen. *Inferential change and syntactic modality in English*. Frankfurt am Main: Verlag Peter Lang GmbH, 1989.
- Nakayasu, Minako. *The pragmatics of modals in Shakespeare*. Frankfurt am Main: Peter Lang, 2009.
- Nevalainen, Terttu. "Social mobility and the decline of multiple negation in Early Modern English." In *Advances in English historical linguistics (1996)*, edited by Jacek Fisiak and Marcin Krygier, 263–291. Berlin: Mouton de Gruyter, 1998.
- Onions, Charles Talbot. *A Shakespeare glossary*. Oxford: Clarendon Press, 1911.
- Oxford English Dictionary Online. Oxford: Oxford University Press. Accessed August 25, 2012. <http://www.oed.com/>.
- Palmer, Frank Robert. *A linguistic study of the English verb*. London: Longman, [1965] 1973.
- Palmer, Frank Robert. *The English verb*. London: Longman, 1988.
- Palmer, Frank Robert. *Modality and the English modals*. New York: Longman, 1990.
- Palmer, Frank Robert. *Mood and modality*. Cambridge: Cambridge University Press, 2001.
- Papafragou, Anna. *Modality: Issues in the semantics–pragmatics interface*. Oxford: Elsevier, 2000.
- Partridge, A. C. *The language of Renaissance poetry: Spenser, Shakespeare, Donne, Milton*. London: Andre Deutsch, 1971.
- Perkins, Michael R. "The core meanings of the English modals." *Linguistics* 18 (1980): 245–273.
- Plank, Frans. "The modals story retold." *Studies in Language* 8, no. 3 (1984): 305–364.
- Plungian, Vladimir A. "The place of evidentiality within the universal grammatical space." *Journal of Pragmatics* 33, no. 3 (2001): 349–357.
- Portner, Paul. *Modality*. New York: Oxford University Press, 2009.
- Pyles, T., and J. Algeo. *The origins and development of the English language*. New York: Harcourt Brace Jovanovich, 1982.
- Ruthrof, Horst. *Semantics and the body. Meanings from Frege to the postmodern*. Toronto: University of Toronto Press, 1997.

- Sabatini, Raymond N. "The disappearance of the impersonal construction in English." *The South Central Bulletin* 39 (1979): 151–153.
- Salkie, Raphael. "Degrees of modality." In *Modality in English. Theory and description*, edited by Raphael Salkie, Pierre Busuttill, and Johan van der Auwera, 79–104. Berlin: Mouton de Gruyter, 2009.
- Salkie, Raphael, Pierre Busuttill, and Johan van der Auwera, ed. *Modality in English. Theory and description*. Berlin: Mouton de Gruyter, 2009.
- Schneider, Edgar. "Investigating variation and change in written documents." In *The handbook of language variation and change*, edited by J.K. Chambers, Peter Trudgill, and Natalie Schiling-Estes, 67–96. Oxford: Basil Blackwell, 2002.
- Schopf, Alfred, ed. *Essays on tensing in English. Vol. II: Time, text and modality*. Tübingen: Max Niemeyer Verlag, 1989.
- Segarra, Santiago, Mark Eisen, Gabriel Egan, and Alejandro Ribeiro. "Attributing the authorship of the Henry VI plays by word adjacency." *Shakespeare Quarterly* 67, no. 2 (2016): 232–256.
- Silva-Corvalán, Carmen. "Modality and semantic change." *Historical Semantics. Historical Word-Formation. Trends in Linguistics, Studies and Monographs* 29 (1985): 547–572.
- Skorasińska, Monika. "Deontic modality indicated by shall in the works of Christopher Marlowe." In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka*, edited by Ewa Komorowska, Katarzyna Kondziola-Pich, and Ewa Panter, 227–234. Szczecin: Volumina.pl, 2010.
- Skorasińska, Monika. "Emotional implications of should in Shakespeare and Marlowe." In *Komunikacja międzyludzka. Leksyka. Semantyka. Pragmatyka III*, edited by Ewa Komorowska, Katarzyna Kondziola-Pich, and Anna Ochymowicz, 339–346. Szczecin: Zapol, 2012.
- Skorasińska, Monika. "Emotional colouring by means of selected modal verbs in the plays of William Shakespeare and Christopher Marlowe." In *Świat Słowian w Języku i Kulturze XIV. Wybrane zagadnienia z języków słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 273–280. Szczecin: Volumina.pl, 2013.
- Skorasińska, Monika. "Can in Shakespeare and Marlowe." *Studia Anglica Posnaniensia* 49, no. 1 (2014): 31–55.
- Skorasińska, Monika. "Epistemic modal verbs in Shakespeare and Marlowe." In *Subjectivity and Epistemicity. Corpus, Discourse, and Literary Approaches to Stance*, edited by Dylan Glynn and Mette Sjolín, 91–105. Lund: Lund University, 2014.
- Skorasińska, Monika. "Speech acts performed by means of modal verbs in the plays of Shakespeare and Marlowe." In *Świat Słowian w Języku i*

- Kulturze XV. Wybrane zagadnienia z języków, literatur i kultur słowiańskich i germańskich*, edited by Dorota Dziadosz and Agnieszka Krzanowska, 229–238. Szczecin: Volumina.pl, 2016.
- Standop, Ewald. “Syntax und semantik der modalen Hilfsverben im Altenglischen: Magan, motan, sculan, willan.” New York: Johnson Reprint Corporation, 1957.
- Steele, Susan. *An encyclopedia of AUX: A study in cross-linguistic equivalence*. Cambridge: MIT Press, 1981.
- Stein, Dieter. “The expression of deontic and epistemic modality and the subjunctive.” In *Studies in Early Modern English*, edited by Dieter Kastovsky, 403–411. Berlin: Mouton de Gruyter, 1994.
- Stein, Dieter, and Susan Wright, ed. *Subjectivity and subjectivisation*. Cambridge: Cambridge University Press, 1995.
- Taavitsainen, Irma, and Andreas H. Jucker. “Speech act verbs and speech act in the history of English.” In *Methods in historical pragmatics. Topics in English Linguistics 52*, edited by Susan Fitzmaurice and Irma Taavitsainen, 107–138. Berlin: Mouton de Gruyter, 2007.
- Trask, Robert Lawrence. *Historical linguistics*. Bristol: Auckland, 1996.
- Traugott, Elizabeth Closs. *A history of English syntax. A transformational approach to the history of English sentence structure*. USA: Holt, Rinehart and Winston, INC, 1972.
- Traugott, Elizabeth Closs. “On the rise of epistemic meanings in English: an example of subjectification in semantic change.” *Language* 65, no. 1 (1989): 31–55.
- Traugott, Elizabeth Closs. “Subjectification in grammaticalisation.” In *Subjectivity and subjectivisation*, edited by Dieter Stein and Susan Wright, 37–54. Cambridge: Cambridge University Press, 1995.
- Traugott, Elizabeth Closs, and Richard B. Dasher. *Regularity in semantic change*. Cambridge: Cambridge University Press, 2002.
- Tsangalidis, Anastasios, and Roberta Facchinetti, ed. *Studies on English modality. In honour of Frank Palmer*. Bern: Peter Lang, 2009.
- Twaddell, W. F. *The English verb auxiliaries*. Providence: Brown University Press, [1960] 1963.
- Urduan, Timothy C. *Statistics in plain English*. Mahwah: Lawrence Erlbaum, 2005.
- van der Auwera, Johan, and Vladimir Plungian. “Modality’s semantic map.” *Linguistic Typology* 2, no. 1 (1998): 79–124.
- van Kemenade, Ans. “The history of English modals; A reanalysis.” *Folia Linguistica Historica* 26 (*Historica* 13, 1–2) (1993): 143–166.

- van Kemenade, Ans, and Bettelou Los, ed. *The Handbook of the History of English*. Oxford: Blackwell, 2006.
- Verstraete, Jean-Christophe. "Subjective and objective modality: Interpersonal and ideational functions in the English modal auxiliary system." *Journal of Pragmatics* 33 (2001), 1505–1528.
- Visser, Frederik Theodoor. *An historical syntax of the English language. Part three. First half. Syntactical units with two verbs*. Leiden: E. J. Brill, [1969] 1978.
- Warner, Anthony R. *English auxiliaries. Structure and history*. Cambridge: Cambridge University Press, [1993] 2009.
- Warner, Anthony R. "Reworking the history of English auxiliaries." In *Papers from the 5th International Conference on English Historical Linguistics, Cambridge, 6-9 April 1987*, edited by Sylvia Adamson, Vivien Law, and Nigel Vincent, 537–558. Amsterdam: John Benjamins, 1990.
- Wischer, Ilse. "Markers of futurity in Old English and the grammaticalization of shall and will." *Studia Anglica Posnaniensia* 42 (2006): 165–178.
- Wischer, Ilse. "Will and shall as markers of modality and/or futurity in Middle English." *Folia Linguistica Historica* 29 (2008): 125–143.
- Wright, Susan. "The mystery of the modal progressive." In *Studies in Early Modern English*, edited by Dieter Kastovsky, 467–485. Berlin: Mouton de Gruyter, 1994.
- Zadeh, Lofti. "Fuzzy sets." *Information and Control* 8 (1965): 338–353.
- Zadeh, Lofti. "A fuzzy-set-theoretic interpretation of linguistic hedges." *Journal of Cybernetics* 2, no. 3 (1972): 4–34.