

*GEOFFREY F. GRESH*

# *TO RULE EURASIA'S WAVES*

*THE NEW  
GREAT POWER  
COMPETITION  
AT SEA*



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POWER COMPETITION  
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Yale

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For Leigh, Audrey, Joan, and Gloria

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North Sea and Baltic Sea



Black Sea and Mediterranean Sea



Indian Ocean



East Asia



Arctic Ocean

# Eurasia's New Great Power Competition at Sea

*Who controls the rimland rules Eurasia;  
who rules Eurasia controls the destinies of the world.*

Nicholas John Spykman

COMPETITION AT SEA HAS BEEN WRITTEN about since the days of ancient Greece.<sup>1</sup> In *The Athenian Polity* from the fifth century BC, the Old Oligarch expounds on the importance of economics in establishing a *thalassocracy*, or “rule of the seas.” In one passage he notes, “There is no city which does not need to export or import; and these things it will not be able to do unless it accepts the bidding of the power that rules the sea.”<sup>2</sup> In the modern era, this sentiment was similarly articulated by the famous explorer Sir Walter Raleigh: “Whosoever commands the sea, commands the trade. Whosoever commands the trade of the world commands the riches of the World, and consequently the world itself.”<sup>3</sup> To rule the seas through maritime commerce or other means remains significant for all great powers today, but the real competition that has emerged in recent years is taking place across maritime Eurasia between the continent’s main rivals—China, Russia, and India—as they vie to achieve great power status and to expand beyond their regional seas. This rising competition will dominate and shape the upcoming century as each power increases its geo-economic, geopolitical, and naval embrace of maritime Eurasia from the Baltic, Black, and Mediterranean Seas to the Indian Ocean, Pacific Asia, and the Arctic.

Maritime Eurasia has long been the focus of renowned strategists and histo-

rians. The U.S. naval strategist Alfred Thayer Mahan wrote in *The Problem of Asia and Its Effect upon International Policies* about the great geopolitical position of Eurasia between China and the Mediterranean. He believed it was one of the most critical bands in the world and was “destined to be a disputed area between Russia, the great land Power, and the sea Powers.”<sup>4</sup> But what Mahan, the geographer Nicholas Spykman, and others never imagined was the melting of the Arctic, the subsequent growing unification of maritime Eurasia’s disparate regions, and the emerging competition between Eurasia’s land powers at sea. Today, more than 90 percent of the world’s goods transit the sea, bringing into relief the continued importance of the stability and security of the global commons. As China, Russia, and India grow their geoeconomic interests and investments across maritime Eurasia, securing them, along with the sea lanes of communication, will become ever more critical.

For the near term, the United States will remain as a global superpower, especially in maritime Eurasia, but U.S. preeminence and the post–World War II order that has long been dominated by the United States and the West are being challenged increasingly by China, Russia, and India. Certainly, along with the United States, other maritime powers such as Japan, South Korea, France, Great Britain, and Australia, among others, play important roles in this larger, albeit shifting, dynamic of maritime Eurasia, but they are not the main focus here because they have not undergone the same rapid maritime geoeconomic and geostrategic development in recent years compared to Eurasia’s three continental powers. Japan in particular has made noticeable leaps with the expansion of its Maritime Self-Defense Force (MSDF) in locations such as Djibouti, but as one observer asserted recently, “The MSDF is still essentially a defensively oriented force, and one that is mostly channeled through the U.S.-Japan alliance.”<sup>5</sup>

Today, the world order appears to be shifting increasingly away from one largely defined by the West toward a new one where Eurasia’s emerging continental powers play a more significant and influential role, contributing paradoxically to greater insecurity. Even though China still lags behind the United States in defense spending, China’s current defense budget exceeds those of its primary regional neighbors combined, including Japan, South Korea, the Philippines, and Vietnam. Much of China’s increased defense spending is translating into more focus on maritime security and power projection capabilities along Eurasia’s sea lanes of communication and other vital waterways. Eurasia’s vast maritime regions, for example, include some of the world’s most important stra-

tegic maritime choke points: the Danish Straits, the English Channel, the Strait of Gibraltar, the Bosphorus, the Suez Canal, the Bab al-Mandab, the Strait of Hormuz, the Strait of Malacca, and the Bering Strait. Eurasia's maritime domain also possesses twenty-seven of thirty of the world's largest container ports. Trade between Asia and either northern Europe, the Mediterranean, or the Middle East amounted to an estimated 27.7 million twenty-foot equivalent units (TEUs) on an annual basis in recent years, making the east–west and west–east trade routes some of the largest and busiest in the world. Framed another way, “Something like 87 percent of East Asian GDP in 2008 could be credited to seaborne trade, and that has almost doubled over the past two decades.”<sup>6</sup>

Across maritime Eurasia, geoeconomics and security are two of several primary drivers pushing China, Russia, and India and their ever-increasing seaward tilt and blossoming maritime competition. China was recently named as the world's largest trading partner, surpassing the United States with about \$4 billion in annual trade volume. Some estimates also predict that China will dominate seventeen of the world's top twenty-five bilateral trade avenues. The 2013 launch of its One Belt, One Road or Belt and Road Initiative (BRI) and Maritime Silk Road (MSR) aligns with this larger dynamic that sees China's geoeconomic and security interests increasingly interwoven owing to mounting maritime and global trade. Between 2003 and 2014, for example, Chinese international trade multiplied significantly, growing from \$851 billion to more than \$4.16 trillion. China also views peace in its peripheral territories and maritime waterways as critical for domestic harmony and thus its future development. This is why China is concerned about preventing or mitigating the undue influence of external powers, especially those trying to undermine or block its BRI projects. The BRI is indeed a risky endeavor because it is an agglomeration of many competing interests that will be hard to manage toward one singular strategic goal, as some critics argue. But even moderate success rates across the BRI and MSR could bring China significant geoeconomic and geostrategic victories as it seeks to alter a U.S.-led world order.<sup>7</sup>

India's burgeoning embrace of the sea is part of a similar natural trajectory as China and aligns with Eurasia's larger growing maritime trade and security trends. The dilemma for India is twofold. First, it relies on the sea for 95 percent of its trade by volume, or an estimated 10 percent of its GDP. Second, it must also contend with the fact that, from a trade perspective, China has surpassed India throughout the Indian Ocean region. In 2012, China was the largest trad-



ing partner with Bangladesh and Pakistan and the second-largest partner to Sri Lanka. India's current top trading partner is the United Arab Emirates to its west, but to the east an estimated 55 percent of Indian trade traverses the South China Sea, making it further vulnerable to China's rise. India recently teamed up with Japan to announce the Freedom Corridor in direct response to China's Belt and Road Initiative. Nevertheless, China is currently India's second-largest trader, growing steadily from \$1.5 billion in 2001 to \$60 billion in 2016, further complicating the maritime flows to and from India in the event of a South China Sea conflict.

Last, to the north, Russia similarly stands to gain economically through its maritime investments in natural resources and energy exports with the growing aperture of a melting Arctic. Russia is taking advantage of a shifting Arctic landscape by reinforcing or strengthening twelve regional military bases lining the High North, which could protect or help Russian businesses access significant amounts of untapped natural resources, as well as secure the emergent sea lanes of communication. Russia possesses approximately 30 percent of the world's natural gas and 13 percent of its oil reserves.<sup>8</sup>

In addition to growing geoeconomic investments and interlinked security interests across maritime Eurasia, China, Russia, and India seek great power status and more international prestige. For Russia and China, this also means challenging the American-dominated world order to suit their respective global interests. Here the term "great power" is defined as a country that demonstrates "global structural power" or has "the ability to shape governance frameworks in the economic, military, and political-diplomatic sectors."<sup>9</sup> But for a nation to achieve great power status, a critical component has historically included the buildup and deployment of a blue-water navy that can project power and protect interests more fluidly in far-flung corners of the world. In the words of the scholars George Modelski and William R. Thompson, "There can be no global system without global reach. Only those disposing of superior navies have, in the modern world, staked out a good claim to world leadership."<sup>10</sup> Developing blue-water navies is therefore seen as an essential instrument of national power through which to establish great power status and reshape world order. Recently, China and Russia put their growing blue-water naval capabilities on display during the Joint Sea 2017 exercises held for the first time ever in the Baltic Sea and Sea of Okhotsk on opposite sides of Eurasia. Two years earlier, they also held their first joint exercises in the Mediterranean under the umbrella of the

same joint maneuvers. By comparison, India has begun to assert itself in the maritime space or at least is starting to strategically balance against China's growing maritime might. In 2017, India held its annual Malabar naval exercise jointly with the United States and Japan in the Bay of Bengal. While this is the twenty-first occurrence of the event, the 2017 exercise was only the second year in which Japan was invited as a permanent participant.<sup>11</sup>

The wider takeaway from China's, Russia's, and India's increased naval development and activity beyond their regional seas is that if these competitive naval trends persist and remain increasingly interwoven with each nation's developing geoeconomic interests, the possibility of an inadvertent clash or unintended outbreak of conflict at sea will likely grow over time between the three powers and other rival states. Though China's, Russia's, and India's navies still lag behind in their blue-water capacities and ability to project and operate globally compared to navies similar to that of the United States, the three nations' combined and growing European and Pacific Asian presence, maritime trade and geoeconomic investments, and enhanced naval capabilities raise crucial questions about how maritime competition is changing and how it will affect Eurasia's larger order, especially in combination with the perception of declining U.S. leadership on the world stage.<sup>12</sup>

### Growing Competition on the High Seas

Competition sits conceptually midway along a spectrum between conflict and cooperation, where the two can also coexist, albeit in tension with each other. For much of Eurasia, internal and external competition and conflict have been a consistent theme during centuries of historical interactions. When we examine the emerging maritime competition today between China, Russia, and India, the purest elements contributing to their growing maritime proclivities can be distilled down to calculating geoeconomics, seeking global prestige or great power status, and safeguarding geostrategic interests. As many maritime historians and experts have noted, economic prosperity, great power status, and maritime power are strongly intertwined. These categories, however, are still broadly conceived and therefore break down further into three more refined and maritime-specific elements: maritime geoeconomics, the hunt for great power status and subsequent response to rising navalism, and security of Eurasia's vital sea lanes of communication (SLOCs), particularly along the High North, where the

Arctic is beginning to open up. These are the main elements that help to explain why China, Russia, and India have grown more active across maritime Eurasia in recent years. This conceptual framework helps to tell a more robust story of Eurasia's changing politics and how new dynamics and strategic regional alignments at sea will reshape world politics. These three primary drivers also tie into a broader discussion about sea power and its renewed international importance, including ongoing debates that stem from the writings of Alfred Thayer Mahan. As the historian E. B. Potter notes, "The elements of sea power are by no means limited to combat craft, weapons, and trained personnel but include the shore establishment, well-sited bases, commercial shipping, and advantageous international alignments."<sup>13</sup>

### Critical Components of Global Maritime Power and Strategy

Before elaborating on the book's analytical framework, it is crucial to contextualize first how strategists and historians have thought about rising or hegemonic maritime powers' competitive use of the ocean as a strategic avenue for transportation and shipping, as an arena for power projection and thus global prestige, and as a source for natural resources and economic prosperity. The historian Walter McDougall wrote that "all truly grand and successful strategies have been essentially (if not exclusively) maritime."<sup>14</sup> Though the collective rise of China, Russia, and India is a relatively new phenomenon in the twenty-first century, scholars and strategists have been thinking about what causes the rise and fall of maritime powers for centuries. What has changed in the last decade or more is the push by China, Russia, and India to increase both their maritime geoeconomic investments and their strategic focus on developing their blue-water naval forces that can move beyond their regional or near seas. In other words, "a power aspiring to, or exercising, world leadership requires capacity for global reach and seapower is tailor-made for that purpose."<sup>15</sup>

None of the three Eurasian land powers examined here have achieved global maritime dominance similar to that of the United States today or Great Britain at the end of the nineteenth century, but the work of Mahan in his opus *The Influence of Seapower upon History, 1660–1783* helps contextualize which characteristics assist a great power in achieving global preeminence on the high seas. Though some of Mahan's thinking is outdated (e.g., his discussion on colonialism) and debatable (e.g., absolute "command of the sea"), there is still much to

ponder when applying some of his thinking to the modern era and how we understand maritime competition today. Furthermore, China, Russia, and India all apply elements of Mahan's thinking to their own maritime strategies today.<sup>16</sup>

Mahan stressed six main attributes that influence sea power and how great powers can use the sea to influence world affairs, achieve great power status, and thus affect the course of history: (1) geographical position, (2) physical conformation, (3) extent of territory, (4) size of population, (5) national character, and (6) character and policy of governments. The first three elements are mainly tied to geography, making them relevant to Eurasia today, especially to Russia and the opening of its High North. Russia is already taking advantage of this fact, but the melting Arctic may soon assist Russia in reasserting itself as a global maritime power. Size of population refers to those involved in maritime commerce such as a merchant marine, as well as those able to serve in the navy. National character and character of governments generally mean a population's shared desire or culture of embracing the sea and the government's support for taking advantage of the ocean's lucrative attributes—from trade and employment to exploration and exploitation (i.e., the hunt for raw materials and colonialism). The government is also responsible for supporting the navy and protecting the sea lanes of communication during times of peace, as well as in war, to ensure that it is ready to defend a nation and its assets. Forward strategic basing (former colonies or coaling stations) similarly is a significant component of Mahan's list.<sup>17</sup>

China, Russia, and India continue to apply analogous thinking in their maritime strategies today, but they also employ certain elements from both the British maritime strategist Sir Julian Corbett and the *Jeune École*, or Young School. First, many have cited Corbett's comments on seaborne trade being the Achilles' heel for many great powers: "When other things are equal, it is the longer purse that wins. . . . The most effective means we can employ to this end against a maritime State is to deny him the resources of seaborne trade."<sup>18</sup> Though we have not witnessed a physical maritime trade war in recent memory, it is not out of the realm of the possible as China, Russia, and India grow concerned about maritime shipping routes, international investments, and strategic choke points. In addition to Corbett and his writings on seaborne trade, the *Jeune École* believed that reliance on foreign trade (colonialism) for capitalism made a country's economy vulnerable, especially through maritime trade. This nineteenth-century school of thought emerged in France as naval strategists began thinking

through alternative strategies to challenge Great Britain as the global naval superpower. The *Jeune École* strategy still resonates today as smaller or weaker powers think about using maritime commerce as a weapon to threaten or challenge a more powerful nation or navy in a *guerre de course*, or commercial war. The greatest fear today, however, is that China, Russia, and India are moving increasingly away from a strategic naval approach that is more akin to the *Jeune École* while beginning to project greater “Mahanian proclivities” that are more offensive and proactive in nature as these nations develop their blue-water capabilities.<sup>19</sup>

Commercial war aside, Corbett’s thinking on sea power as a relative construct, not an absolute one, still resonates in current debates. In contrast to Mahan, Corbett argued that a nation needed both land and sea forces to carry out successful operations. He thought that a nation could possess fewer ships and still maintain a successful strategy at sea. Naval partners might be perceived as decentralized and weak, but if organized well, they could quickly unite to become more formidable, dominating certain choke points or maritime regions. Corbett called this a “fleet in being” or “a collection of ships that can quickly coalesce into a unified fleet when necessary.”<sup>20</sup> This is an important point because today many in the United States believe that as the dominant naval power, it can handle anything that comes its way and therefore will remain a superpower in the long term. The U.S. Navy is one of world’s largest in size by tonnage and strongest in capabilities globally with 288 ships even though it is the smallest it has been since before the First World War. As any good maritime historian knows, however, in direct reference to Corbett, it does not take a lot for an emerging power such as Germany or France during the nineteenth century, or Russia and China today, to control certain strategic sea lanes of communication or to be a menace on the high seas, especially along the narrow maritime pinch points that line Eurasia. The further challenge for the United States is how to perceive a growing Russian or Chinese naval presence throughout Eurasia. Many accept the narrative of Russia as an international spoiler that needs to be managed or deterred, but how to handle or view China’s (naval) rise is still hotly debated.<sup>21</sup> Hopefully, the world will never witness another great battle on the high seas or the closure of a major choke point by a state actor. But if perceived trends of a U.S. global leadership decline persist, then China, Russia, India, and others will continue filling the maritime void that is left as a result,

and thus the chances for a potential unintended conflict will increase as competing global national security interests intensify.

One additional fear is that, with an apparent U.S. retrenchment, we are witnessing a period of rising Eurasian navalism similar to the 1890s with expanding industrialization, manufacturing productivity, maritime commerce, and competition at sea between Great Britain, France, Russia, and Germany, ultimately setting the stage for the First World War. In a further complicating factor with noteworthy parallels to today, Germany's and Great Britain's economies were significantly intertwined despite the strong imperial rivalry of the period. On the eve of the First World War, Germany was Great Britain's second-largest trading partner ahead of British India and France. From the German perspective, Great Britain was Germany's largest export market, while Germany received approximately 20 percent of its imports from the entire British Empire during the same time frame. Concurrently some perceived that Germany feared Great Britain's navalism, "that is, the use of naval predominance to deny the world the freedom of the seas and to tamper with national independence." As Corbett argued in defense of British navalism, however, "We had the power to close the oceans. . . . Instead of closing the seas we threw them open to all the world, and not only that: for during the long years of our peaceful domination the British Navy was set to work charting their remotest recesses, finding new paths, and clearing them of the dangers that beset honest trade from Algiers to the furthest East. And all this was a gift to the world for which no return was asked." By contrast, Admiral Alfred von Tirpitz, state secretary of the German Imperial Navy Office (1897–1916), argued in his memoirs that "only the navy can bring to a conclusion the great work of restoring the essential character and nature of the German[s] to their rightful place in the world." An analogous dynamic and debate exist today over rising navalism between China, India, Russia, and the United States.<sup>22</sup>

### Maritime Geoeconomics

With the major maritime strategic schools of thought contextualized, we turn now to maritime geoeconomics as the first category or primary driver behind China's, Russia's, and India's mounting embrace of the maritime space that is leading to heightened maritime competition. "Geoeconomics" is a term that has

come back into fashion in recent years as “more states are waging geopolitics with capital, attempting with sovereign checkbooks and other economic tools to achieve strategic objectives that in the past were often the stuff of military coercion or conquest.”<sup>23</sup> This is particularly the case for China, Russia, and India as they extend their economic arms regionally and throughout Eurasia. Stated another way, geoeconomics is the economics of geopolitics, or what has also been referred to as economic statecraft. Robert Blackwill and Jennifer Harris provide a good working definition of geoeconomics, which I use here: “the use of economic instruments to promote and defend national interests and to produce beneficial geopolitical results; and the effects of other nations’ economic actions on a country’s geopolitical goals.” But even this definition is broad and needs to be narrowed further when employing a saltwater perspective. In general, as noted by Blackwill and Harris, seven main geoeconomic instruments are used by states: trade policy, investment policy, economic sanctions, the cybersphere, aid, monetary policy, and energy and commodity policies. When we apply these as part of the book’s main analytical framework, three of the primary instruments are most applicable to Eurasia’s maritime competition: trade policy, investment policy, and energy and commodity policies. The cybersphere is still developing but is of growing importance owing to the vulnerabilities posed to the physical cables laid along the oceans’ floors and through Eurasia’s narrow strategic choke points, in addition to other shipping technology innovations tied to cybersecurity such as the Automatic Identification System (AIS), an open-source tracking system for commercial vessels and navies. Foreign aid is another critical factor of maritime geoeconomics, although it is similarly harder to lump into distinct maritime categories. Foreign aid and the cybersphere will therefore be handled in a secondary manner. I unpack the three other main geoeconomic tools that are most relevant to the maritime domain here.<sup>24</sup>

The first two elements are global maritime trade and investment. Many view global trade in a post-Cold War era as more inclined toward cooperation as opposed to conflict resulting from rising economic interdependence and the complex and international nature of the shipping industry and supply and logistics chains. At the same time, others point toward a darker period during the age of mercantilism and the staunch competition that emerged between the Dutch and British East India companies of the seventeenth and eighteenth centuries. During this period, the European powers saw the sea as an avenue for wealth, power, and world dominance. In one telling ode for the Dutch East India Com-

pany directors, Joost van den Vondel (1587–1679) wrote: “Wherever profit leads us, to every sea and shore, for love of gain the wide world’s harbors we explore.” Competition was at the core of this system and drove the national interests of the European powers and their state-run enterprises, and one of the main ways to protect these valued and complex trading systems was to invest in the global maritime trade and port infrastructure.<sup>25</sup>

Today, China leads the effort in spreading its geoeconomic investments from east to west Eurasia, but many are concerned that it has adopted a mercantilist worldview that is similar to that of prior European colonial powers. China, for example, is using geoeconomic instruments to compel, and in some instances coerce, other states to fall in line with China’s larger strategic objectives and interests. Beginning in the fall of 2013, Chinese president Xi Jinping launched China’s Belt and Road Initiative, which aligned with China’s economic rise and broader push to expand well beyond its territorial and maritime borders. In a speech to the Indonesian Parliament that October, President Xi also announced his Maritime Silk Road and proposed the new Asian Infrastructure Investment Bank (AIIB) to potentially rival, though not explicitly, the World Bank and International Monetary Fund. President Xi described China’s plans to “strengthen maritime cooperation with ASEAN” and “build the Maritime Silk Road of the 21st century.” China’s rise in Asia is founded on a simple fact: its vast economy, measuring \$10.9 trillion in 2015, is larger than the other East and Southeast Asian economies combined. As part of its growing maritime presence, China has invested in an extensive array of ports and other shipping infrastructure from East Asia to the Mediterranean. According to one recent report, “In terms of container ports, China already rules the waves. Nearly two-thirds of the world’s top 50 had some degree of Chinese investment by 2015, up from about one-fifth in 2010.”<sup>26</sup>

In addition to China, India and Russia have begun to grow their investments in maritime trade and infrastructure. In India’s case, this growth is largely a response to China’s expanding maritime might through the Indo-Pacific. Each year, an estimated 30 percent of the world’s maritime trade passes through the Strait of Malacca, joining Pacific Asia with the Indian Ocean en route to Europe, and this will continue to grow over time with the region’s growing economies. The further concern for India is that China has begun to transform its geoeconomic investments into more geostrategic assets, such as a forward operating base. One Indian observer notes, “There is an inherent duality in the facilities



that China is establishing in foreign ports, which are ostensibly commercial but quickly upgradeable to carry out essential military missions. They are great for the soft projection of hard power.” This perception points toward growing anxiety for many in India, which has attempted increasingly in recent years to balance against China by focusing on trade and investments throughout the Indian Ocean and Southeast Asia. Since the early 2000s, India has attempted to expand its economic reach into a more sustained geostrategy symbolized by its Look East policy and then later Act East policy. Recently, India’s economic growth outpaced that of China, and this is expected to be a similar trend in the future. But even with this positive growth, China’s intensifying geoeconomic presence still creates friction and tension with India as the Indian Ocean’s regional hegemon.<sup>27</sup>

As for Russia, it is less dominant on the maritime trade and investment front along southern Eurasia. Some experts also view China’s economic rise as a potential threat to Russia’s position. As many analysts have pointed out, Russia needs China more than China needs Russia. Today the relationship is framed as a “comprehensive strategic partnership.” Russia may cooperate militarily with China at sea, but they are very much economic competitors in the same breath, where China holds the upper hand due in part to booming trade and low energy prices. In the near term, Russia will become more active in its regional seas such as the Baltic and Black Seas while it continues to focus more investment across the Arctic. The 2014 takeover of Crimea in Ukraine enabled Russia to have greater access to the Black Sea and Mediterranean, especially as it grew more immersed in Syria’s civil war. In Russia’s Far East, President Vladimir Putin has attempted to engage economically and politically with many of Russia’s Asian neighbors, but Russia’s trade throughout Pacific Asia still accounts for only 1 percent of the region’s total, and that is why he has placed more emphasis on the region’s development.<sup>28</sup>

These maritime trade and investment trends align with a third critical tool that includes the mounting importance of energy security and the transportation of vital natural resources via the sea. Because of Eurasia’s growing and developing population—estimated at 60 percent of the world’s population, with China and India accounting for 40 percent of it—India and China in particular are on the hunt for more natural resources to fuel their growing economies. Since the 1990s, 42 percent of the world’s expanding energy consumption is directly

linked to India and China. On the supply side, Eurasia—mainly the Middle East and Central Asia—accounts for 66 percent of proven oil reserves and an estimated 71 percent of proven natural gas. When broken down further, 40 percent of the world's energy resources are either located in the Indian Ocean region or must traverse it while headed to Asia or Europe. Russia's Arctic holds approximately 90 percent of its natural gas reserves and 60 percent of its oil reserves. As Russia's Arctic gas and oil come online increasingly over the next decade or more, these resources could account for an estimated 30 percent of Russia's GDP. The continued challenge for the continent's growing economies is that most of these resources must traverse the sea and travel via some of the world's most dangerous maritime choke points. More than 60 percent of the world's oil is shipped via the sea, for example, while the Strait of Hormuz alone handles approximately 20 percent of it, or an estimated 18.5 million barrels of oil per day. Similarly, around 80 percent of China's oil imports transit the Strait of Malacca. Anything that threatens the closure of such a vital and narrow waterway could present devastating global economic and political consequences.<sup>29</sup>

Despite aggressively pursuing supply diversity, as much as 70 to 80 percent of China's future oil imports could come from the Middle East and North Africa. To meet growing demand, over the past decade China has actively courted Iran and the Gulf Arab monarchies through various economic and political inducements. To the north, in one of the gas industry's largest deals, China signed a thirty-year \$400 billion natural gas deal with Russia in 2014; China will likely have to import more than 46 percent of its natural gas by 2035, according to some estimates. This latest gas deal dramatically aids Russia, which is under growing U.S. and European economic sanctions after its takeover of Crimea, in addition to other mounting tensions with the West. As a rentier state where more than 35 percent of the government's revenues come from hydrocarbon sales, shifting its geoeconomic focus eastward will help diversify and protect the Russian economy in times of future economic uncertainty. Moreover, since 2011 Russia has become heavily involved in the Middle East as it seeks to reshape the global energy markets through more robust Gulf partnerships. Aside from Russia and China, India must also compete with these two powers for energy security and likewise looks to the Middle East for greater access to oil and gas. Recent reports claim that some 85 percent of India's oil imports traverse the Indian Ocean region. As China and Russia further their regional presence,

the competition for energy security with India and others will grow in significance, placing the Indian Ocean region at the center of a major geoeconomic and geostrategic maritime arena.<sup>30</sup>

### Great Power Status and the Subsequent Rise of Navalism

The second main influence spreading maritime competition between China, Russia, and India is the three nations' pursuit of great power status. Subsequently, this drive for more international prestige has resulted in growing investments in strategic instruments of national power, namely, the navy. This in turn has resulted in a dynamic of heightened navalism and naval competition across maritime Eurasia. Navalism is a concept that has long been in our lexicon but is infrequently applied today. As the historian Craig Symonds writes, "Navalists were generally concerned with image, honor, prestige, and diplomatic clout. . . . To them a naval fleet was physical evidence of national adulthood."<sup>31</sup> During the late nineteenth century and the early twentieth, "navalism became a sort of ideology in which patriotism, economics, and self-interest embellished legitimate defense and security concerns." As a country grew its economy internationally, it needed to protect overseas markets, along with sea lanes of communication that transported a nation's commercial goods and treasures. Today navalism has morphed in part from what it was more than a century ago and can be broken down further into broadening investments in naval development (ships and personnel), naval or coastal defense technologies (weapons and cybercapacities), and general naval activities (naval diplomacy and exercises) in both regional and foreign seas. But at its core, historical navalism and enthusiasm for a nation's navy still resonate today. The world's great powers yearn for the creation and projection of a blue-water navy that will display gigantism, power, and national heroism for all to see and admire. Navalism similarly ties into a larger historical trajectory of great power status and naval mastery.<sup>32</sup>

The status of a state or the perception of being a great power in the larger global hierarchy has long been a core theme in international relations. Since the United States has been militarily, economically, and politically dominant in a post-Cold War era, and since China, Russia, and India have traditionally felt excluded from a U.S. or Western normative system that has supported the spread of democracy and human rights, each country has been motivated to seek greater

international prestige as a means to altering this current system—whether through international institutions, military might, or economic power. Stated another way, the quest for great power status is driven by what some social scientists have deemed as a “social competition.”<sup>33</sup>

Russia's foreign policy is woven deliberately around prestige and great power, and it endeavors to achieve this in part by hitting back against the United States wherever it can. As the historian Richard Pipes once noted, “When the Kremlin says ‘no’ to Western initiatives, Russians feel that they are indeed a world power.”<sup>34</sup> In certain Russian discourse, maintaining great power status is achieved through “policies of politico-military balancing and various state-organized geoeconomic projects in the region.”<sup>35</sup> As for China, achieving great power status similarly factors into its grand strategic calculus. The late political scientist Alan Wachman previously wrote that “continued economic growth and political stability were embraced as the foundations for future power as measured by prosperity, influence, security, and status.” In India's case, it is very much driven by a desire for recognition of its “rightful international status,” pushing it to embrace a more active role in regional institutions such as the Association of Southeast Asian Nations (ASEAN).<sup>36</sup>

As part of each country's drive to achieve a more established international status, China, Russia, and India have begun using their navies as an essential tool of statecraft. The bigger concern amid these dynamics is that greater emphasis placed by each nation on its individual navy means expanding trends of rising navalism and the emerging potential for the unintended outbreak of conflict, even if regionally based.<sup>37</sup> As the historian Paul Kennedy argues, “Strenuous competition among the leading naval powers of the world is going to be as much a feature of the present and future age as it was of, say, the Edwardian years. It suggests that we are at the onset of a new age of navalism.”<sup>38</sup>

As one perceives a more proactive push to achieve great power status by China, India, and Russia, one also sees parallel emphasis placed on each nation's naval capabilities and other maritime investments, resulting in additional points of friction and regional insecurity. As one well-known Chinese navalist put it, “When a nation embarks upon a process of shifting from an ‘inward-leaning economy’ to an ‘outward-leaning economy,’ the arena of national security concerns begins to move to the oceans. Consequently, people start paying attention to sea power.” One already witnesses, for example, mounting tension between China and India in the Indian Ocean owing to China's so-called String of Pearls

strategy, which threatens India's regional dominance. In reaction to China's growing naval and maritime presence, India has bolstered its maritime partnerships with many Indo-Pacific nations. This trending dynamic, however, complicates contested regions such as the South China Sea, where tensions are already high because of competing maritime claims and heightened competition.<sup>39</sup>

Though many in China still debate whether China is primarily a land power versus sea power, the importance of the maritime dimension and naval expansion features prominently in some of the analysis produced by Chinese scholars on China's rise. According to one Chinese author, "The 21st century is a Maritime Century. Facing the Maritime Century's call, the Chinese Nation's desire for resurgence has never been as strong, and its maritime connection has never been more inseparable." Another Chinese analysis asserted the point more directly: "China faces a grim naval strategic environment in the 21st Century. If the unfavorable maritime situation is allowed to continue deteriorating, if we continue to be surrounded in our coastal waters, then how can we speak of China rising to prominence? . . . How can a country with just a 'brown water' navy win the respect of other countries for its naval power, or have any right to prattle on about becoming a world power or to carry out an Asia-Pacific strategy, let alone a global one?"<sup>40</sup> Debates over global prestige and sea power aside, China's defense budget continues to increase at a staggering pace, with direct spillover implications for its future naval development. Indeed, considering a lack of transparency, it is challenging to cite precisely what China has spent on its defense budget, but the general assessment shows that China's defense spending has significantly increased over the past decade. According to some estimates, the defense budget grew about 330 percent over the past decade, in line with an economy that grew approximately 950 percent during the same period. In 2001, the estimated military budget was \$52 billion, while in 2018 the approximate budget was \$200 billion.<sup>41</sup>

As articulated during the Nineteenth National Congress of the Communist Party of China, this greater defense and security emphasis aligns with President Xi's broader ambition and grand strategy of moving China to "center stage" as a global superpower. He also expressed his desire to see China "work tirelessly to realize the Chinese Dream of national rejuvenation." This massive military spending supports these aspirations and has resulted in one of the largest military buildups of the past half century, especially on the naval front. In the next several years, the People's Liberation Army Navy (PLAN) will likely have more

than 330 warships, with this number possibly ballooning to around 430 surface ships and 100 submarines by 2030 if current production rates continue. The PLAN currently has more than 300 ships, submarines, and advanced missile boats.<sup>42</sup>

The bigger debate, however, is about how China's naval buildup will influence regional and global stability: "Is China's outward thrust just that of one undertaken by an essentially economic giant, acting brusquely perhaps but peacefully, in pursuit of its commercial expansion, or is it also acquiring a hard, geopolitical edge to it, like so many Great-Power expansions of the past?"<sup>43</sup> Some scholars argue that China's naval rise should be viewed more as a desire to see "good order at sea" through collaborative means such as combating piracy and terrorism at sea.<sup>44</sup> But the dilemma is that China appears to be gravitating increasingly toward hard geopolitics, particularly as it grows its naval force projection and succeeds in using Russia to project a further sense of strength and unity across Eurasia. China's outward expansion and maritime growth seem to align with the philosophies of the Chinese strategist Sun Tzu, who advocated engendering the nation's economic prosperity while preserving one's forces, using them only in the case of last resort: "The focus of all grand strategy must be the development of a prosperous, contented populace whose willing allegiance to the ruler is unquestioned. Thereafter, diplomatic initiatives can be affected, but military preparations should never be neglected. The primary objective should be to subjugate other states without actually engaging in armed combat, thereby realizing the ideal of complete victory. Whenever possible this should be achieved through diplomatic coercion, thwarting the enemy's plans and alliances, and frustrating its strategy."<sup>45</sup> Today, though China's specific strategic objectives are still widely debated domestically, China's actions in the maritime space can nonetheless be interpreted in a similar manner: that China has a grand strategy for Eurasia, and the maritime space is an integral element.<sup>46</sup>

Many in India take a similar view and believe China's larger aims could severely constrain India, specifically in the Indian Ocean. In 2003, India launched the goal of building a blue-water navy, including three aircraft carrier fleets and 130 ships. Today it is listed as the world's seventh most powerful navy with 137 ships, including one commissioned aircraft carrier, and maintains an estimated five-to-one advantage in combat capability over Pakistan's navy, its archrival. Though India has lagged in its stated aircraft carrier construction goals, in addition to a prior decline in naval development during the 1990s, it has increased

its defense budget in recent years, including a 17 percent increase in 2012. In 2017, India's defense budget expanded 5.5 percent to \$63.6 billion, placing it in the top five worldwide, directly behind Russia. In 2018 its defense budget rose to \$66.5 billion and increased another 6.6 percent in 2019. Naval development and advancement have remained a priority despite fluctuations in the naval budget allocation over the years. Though India remains mired in bureaucratic red tape and lacks a clear maritime strategy, analysts widely believe that India will continue to make naval development and modernization an important future priority in the nation's pursuit of great power status.<sup>47</sup>

Russia meanwhile has what is considered the world's third most powerful navy, but much of its fleet are Soviet legacy holdouts, and much of the fleet is still underfunded. Based on current estimates, Russia's naval fleet comprises around 280 ships, including submarines and surface ships. By comparison, the Soviet fleet had 657 ships at the time of the Soviet Union's demise in 1990. Russia's fleet still appears largely ill suited for long voyages, and its carrier *Admiral Kuznetsov* recently appeared in the Bay of Biscay off the coast of France and Spain being pulled by a tugboat. The *Admiral Kuznetsov* was returning home from Syria after a brief naval diplomatic visit in support of the Assad regime. Despite these embarrassing mishaps, and in a possible play derived from the *Jeune École*, Russia continues to invest heavily in its submarine fleet, which is currently estimated at seventy total. Though its submarine fleet has had a mixed record, including the sinking of the *Kursk* and the loss of its 118-person crew and another recent nuclear submarine incident that claimed the lives of fourteen sailors, Russia's submarine fleet and other naval vessels are more active farther and farther into the Atlantic, Pacific Asia, and Arctic Ocean, much to the chagrin of the United States and others. Russia's quest for global prestige means the Kremlin will continue to support the expansion and development of its naval programs, especially as the Arctic continues to melt.<sup>48</sup>

### Securing Eurasia's Sea Lanes of Communication

The last component driving China's, Russia's, and India's growing shift to the sea is the added value placed on securing Eurasia's sea lanes of communication. This is not surprising, considering the historic prominence of international maritime trade. As the historian Felipe Fernández-Armesto has argued, "Sea routes were more important for global history than land routes: they carried

more goods, faster, more economically, in greater amounts.”<sup>49</sup> Today a rise in maritime trade and geoeconomics places greater emphasis on securing the SLOCs so that ships are not affected by either nonstate actor threats such as piracy and terrorism or state-centered threats from a failing or collapsed state. At the same time, more naval ships on the high seas in an age of rising navalism complicate the security dynamic across maritime Eurasia, raising the possibility for unintentional conflict. Both the High North and Eurasia’s southern blue-water highways through narrow choke points such as the Bab al-Mandab and the Strait of Malacca will continue to feature prominently in each country’s focused maritime strategy. Additionally, access to basing, or logistics installations and maritime replenishment hubs, will grow significantly as China, India, and Russia enhance their blue-water capabilities and seek to secure more of maritime Eurasia.

Base politics and basing access for military or naval forces are one of the oldest and enduring features of international relations among nations and empires. The terms “installation,” “base,” and “facility” are used interchangeably throughout. Traditionally, a military base is viewed as a point of support to the fleet or point d’appui. It also performs two main functions of supply and repair for a fleet. The base politics dynamic mainly applies to China as it enlarges its blue-water footprint throughout Eurasia. In the words of the scholar Kent Calder, foreign military bases are essential for “detering aggression, reinforcing alliance relations, inhibiting balance-of-power conflict, providing formidably efficient global logistics networks, assuring smooth resource flows, and helping most recently to combat terrorism.”<sup>50</sup>

Historically, a foreign and global military presence is essential for the power projection and longevity of many great powers or empires. Thucydides, for example, described basing access competition between Sparta and Athens and the general dynamics of alliance politics between the warring Greek city-states in the *History of the Peloponnesian War*. In the fifteenth century, the famed Chinese admiral Zheng He sailed with an impressive fleet through the South China Sea and Indian Ocean, searching for locations to expand China’s global maritime ambitions from Suzhou in eastern China to Arabia and East Africa. Some Chinese commentators have also remarked that the PLAN’s emergence as a blue-water navy marks the six-hundred-year anniversary of Zheng He’s outward-going and historic naval voyages. During the fifteenth and sixteenth centuries, the Holy League, Venice, Genoa, and the Ottoman Empire engaged in an epic



struggle for strategic bases leading up to the historic battle or “galley clash” at Lepanto in 1571. The battle marked the end of a basing system associated with technologies and politics attached to Mediterranean warfare and the geopolitics of European oceanic sailing ships.<sup>51</sup>

By the end of the sixteenth century and beginning of the seventeenth, the Portuguese, Spanish, British, French, and Dutch all competed for global bases to build up their colonial empires. In *The Influence of Seapower upon History*, Mahan regarded the combination of complete sea control and preeminent basing access as essential to the rise and fall of imperial powers; “Ironically, the supersession of sailing vessels by those powered by steam increased the dependence of major powers on bases, that is, coaling stations.”<sup>52</sup> Indeed, access to bases around the globe remained important to the European colonial powers for future centuries.

By the twentieth century and the end of the Second World War, the United States emerged as the global superpower, including the construction of 4,433 military bases and installations around the world, continuing a century-old tradition. The United States arrived as the next great maritime and military power and quickly surpassed Great Britain as the largest overseas military power by the height of the Cold War. After the initial postwar reconstruction efforts, the United States and Soviet Union continued unabated in their global competition for influence, power, and resources. In an interesting parallel to what we see China beginning to do today, the U.S. military during the Cold War realized the vital importance of using its global military presence to protect the world’s sea lanes of communication, particularly for U.S. maritime trade traveling from the Suez Canal to U.S. military bases in Pacific Asia, including Korea, Japan, and the Philippines. And the U.S. military’s need for oil access and other natural resources grew to new heights during the Vietnam War in the 1960s and 1970s. At the height of the war, regular oil shipments arrived at U.S. bases in the Philippines en route to Vietnam, since an estimated 85 percent of the oil used by the United States in the Vietnam War originated from the Gulf.<sup>53</sup> Today the United States no longer relies on oil or gas from the Middle East in the same manner due in part to the shale gas revolution of the past decade. As a result, China and India have started to fill the void to secure the region’s energy resources.

Since the end of the Cold War, the United States has remained the global hegemon, with approximately 514 overseas bases in forty-five foreign countries, according to recent official estimates. Though no Eurasian country currently

rivals the global basing presence of the United States, it is nonetheless important to note the shifting geopolitical changes taking root across Eurasia, beginning with China's establishment of a naval base and logistics hub in Djibouti in 2016. Since 2009, an international coalition, including China and India, has participated in antipiracy and maritime security operations in the Arabian Sea through the Combined Task Forces (CTF) 150 and 151. By most accounts, CTF-150 and CTF-151 have been a remarkable success and aided in bringing Arabian Sea piracy down to historically low levels. At the same time, the task forces have also enabled China to deploy and train more than twenty-five thousand PLAN personnel through several dozen missions.<sup>54</sup> China's growing naval presence and establishment of a base in Djibouti symbolically represent another dilemma for China: a growing need for forward strategic basing access. For any blue-water navy or aspiring superpower, basing access and securing the SLOCs are critical factors in solidifying great power status and reestablishing a new world order.

China, Russia, and India have begun to expand their maritime presence beyond their traditional regional seas, exhibiting intensifying blue-water naval capabilities. If the competition for superior resources and control over Eurasia's sea lanes of communication continues, geoeconomic competition could morph into intensifying military and security friction. And if such trends prevail, this coming period may mark the beginning of a new Eurasian maritime century with the United States looking unprepared.

## Russia, Maritime Europe, and the Emergence of the Black and Baltic Seas

RUSSIAN CULTURE WAS NOT SIMPLY inward looking but active with its outward thrust. According to the Russian American historian Michael Karpovich, this was “an elemental movement on the part of the Russian people.” It is what the historian Robert J. Kerner called “the urge to the sea” in his 1942 book on the history of Russia. Kerner reflected on how limited Russia was in its original access to hospitable oceanic shores yet was consistently in search of a warm-water port, equating this access with wealth and modernization.<sup>1</sup>

After a several-decades-long lull since the end of the Cold War, Russia appears more menacing and arguably resurgent, and much of this resurgence is taking place at sea along its southern and northern maritime borders in the Black and Baltic Seas. It is as if Russia hit a long pause button in the 1990s and has now roared back, helped in part by the booming oil prices of the early 2000s, which enriched its coffers once again. Certainly, Russia has challenging days ahead both domestically and financially. But recently reelected president Putin desires to set Russia on a stronger course toward reestablishing the nation as a great power after close to three decades of subjugation under a Western-dominated world system. Or in the words of the Russian scholars Piotr Shchedrovitsky and Efim Ostrovsky, “To create a new image of Russia . . . means to participate in the ongoing remaking of the world and to execute velvet revenge after the defeat of our country in the Third World War, the Cold War.”<sup>2</sup>

To regain Russia’s international prestige, Putin understands that Russia’s strategy, like that of other great powers before it, must entail a significant maritime component in addition to access to a growing number of bases and other

maritime access points. To begin, Russia has set its sights on the near waters of the Black and Baltic Seas, historically considered part of Russia's traditional spheres of influence. With the takeover of Crimea in 2014, Russia now has a newly established perch from which to carry out its larger naval and maritime ambitions. At the same time, it continues to press forward with its military and naval modernization efforts. Despite recent programmatic and financial setbacks, Moscow remains dedicated to ensuring that Russia's naval modernization remains front and center. As Russia seeks to move beyond its traditional seas and garner great power status, modernization efforts are vital, since naval vessels can play an important role in power projection. Furthermore, Russia seeks to gain more control of the sea lanes of communication essential for transporting Russian oil and gas exports or providing critical access beyond smaller regional seas through constrained maritime choke points.

Russia is not alone, however, in its growing interest in projecting power and seeking out geoeconomic investments in the Black and Baltic Seas. China is also emerging as a vital competitor throughout Europe's maritime regions. At present, despite their fraught relationship during the Cold War, Russia and China appear to follow China's "win-win" strategy of supporting harmony and cooperation in an array of policy issues. Both powers seek to dismantle the status quo that has long been dominated by the United States and its North Atlantic Treaty Organization (NATO) allies, and that goal is keeping the two nations more united for the time being. Putin sees the United States and the West as a greater external threat compared to China's global rise.<sup>3</sup> As part of the broadening Sino-Russian cooperation, they now hold annual Joint Sea exercises throughout Europe's maritime regions, as well as in Pacific Asia, though these exercises are a more symbolic gesture than anything else. They also have an important energy security relationship: Russia needs China's energy market in an age of sanctions, and China thirsts for Russia's oil and gas to fuel its booming economy.

On the geoeconomic front, China is quickly becoming a critical investor in Europe's maritime spaces, which Russia may perceive differently in the future. Through its focus on shipping routes, port expansions, and other maritime infrastructure projects, China is developing an independent global supply chain and logistics system in which Europe is fast becoming an essential Western anchor of this larger Eurasian network. And this emerging trade system may soon be beyond the point of leverage from Western powers that previously presided over most of the global trade routes and maritime commercial points of entry.

The reason for the major focus on shipping and maritime routes is because maritime commerce and trade will be one of the main engines through which Xi Jinping achieves his “Chinese Dream.” In the past forty years, international maritime trade has quadrupled, and this number is expected to double again over the next decade and a half.<sup>4</sup> A lot of money is tied into the global shipping and maritime trade system, and China is attempting to corner as much of this system as possible to fuel its burgeoning economy; securing these strategic maritime investments is another component that will also follow suit. Though China is still a relative newcomer to Europe geoeconomically, it has already made significant maritime and shipping route investments throughout the Baltic and the Black Sea that tie into its Belt and Road Initiative. This may one day set Russia and China on a collision course, especially if Chinese economic investments need to be secured or foreign nationals need to be rescued in Ukraine or Georgia, but for the time being, the two nations appear in sync and cooperating in rather significant ways. Some have also viewed this emerging cooperation as threatening to either U.S. or NATO interests, further producing a distressing regional security situation.

Russia’s behavior in the region is largely driven by its deep regional history and yearning for a strategic warm-water port. But what is more troubling today is that Russia’s growing naval aggression is spreading both regional insecurity and navalism. Russia is also using elements of hybrid warfare on the high seas through cybertools and other forms of manipulation, challenging the region’s security. The arrival of more international or littoral naval vessels on these European seas—whether from NATO, the United States, Russia, or China—means that these already constricted maritime regions become more congested and thus increases the likelihood of inadvertent collisions or conflict, further escalating tensions. For the time being, however, maritime geoeconomics will largely influence the region’s near-term development, particularly in northern Europe, where the region is poised to sit on the new maritime commercial and shipping routes that tie into a melting and largely untapped Arctic.

### Visions of Historical Maritime Grandeur

Russia’s drive to the sea and desire to establish itself as a global sea power has been an important theme that Russian imperial or Soviet rulers frequently liked to cite despite being consumed more often by the nation’s territorially

focused history and politics. Tsar Peter the Great was one of the first emperors to view access to the sea as a strategic necessity for the success of the state. He helped build up Russia's first naval fleet, which assisted in defeating Sweden, Russia's archrival at the time. Or in the words of the Russian poet Alexander Pushkin, Russia sought "to gall our haughty neighbor" in the Great Northern War (1700–1721). In fact, Peter used captured Swedish soldiers and other conscripts to help build the Russian Empire's new imperial capital and coastal city on the Baltic, Saint Petersburg, which was viewed as Russia's window to Europe. The city symbolized Peter's massive reorientation efforts to move Russian citizens out of the forests, promoting greater connectivity between Russia's riverine populations and the wider world.<sup>5</sup>

After Peter the Great over several centuries, the Russian Empire, and later the Soviet Union, aspired to achieve maritime greatness as part of its core interests. Though inner Eurasia consumed much of imperial Russia's attention, it still recognized the importance of the sea for its larger development, since at its height it touched three oceans and thirteen seas and had an estimated thirty-eight thousand kilometers of shoreline. Since the end of the Cold War, Russia has struggled to maintain its naval capacity across these diversified maritime regions, extending from Europe to Pacific Asia and the Arctic. Its leaders, however, still hark back to the glory days of Peter the Great and others, including the Soviet naval achievements of Admiral Sergei G. Gorshkov, commander in chief of the Soviet Union's naval forces for twenty-nine years (1956–1985). Before examining Russia's strategy and attempts at naval modernization today, it is first important to understand how the Soviet legacy continues to help frame and influence Russia's core maritime interests, especially across Europe's main maritime arenas—the Black and Baltic Seas. Russia's desire to control its regional seas, in addition to its push for greater international prestige, is constant. Since the Cold War, Russia has also been consistently concerned about NATO's eastward expansion and the threat it poses to Russia's regional national interests via the sea, including its territorial sovereignty and ability to project power to support allies such as Syria and Egypt in the Mediterranean and beyond.<sup>6</sup>

### *The Soviet Naval Legacy*

During the early days of the Soviet Union, its leaders put greater emphasis on building up land power, and as a result, the navy was frequently given short shrift. But Joseph Stalin understood that, to be considered a great power, a na-

tion's forces had to be accompanied by a strong and dominant navy able to project power worldwide. On May 27, 1936, Stalin gave orders to "build a large sea and ocean fleet." Adopting a Mahan-like perspective, Stalin saw maritime dominance as being an important factor in establishing hegemony.<sup>7</sup>

Stalin never saw his aspirations carried out in full before his death in 1953, but beginning in the 1930s, the Soviet navy did embark on a submarine buildup to become more competitive against surface war powers such as the United States and other European states. Nikita S. Khrushchev, Stalin's successor, also later affirmed this thinking and believed that submarines would be critical if there were ever a need to disrupt sea lanes of communication. After World War II, the Soviet Union felt buoyed by victory to pursue a more robust naval program to defend its growing global interests. During the Potsdam Conference at the end of the war (July–August 1945), the Soviet delegation pushed for the establishment of bases in the Black Sea to defend its territory. Stalin also later grew concerned about a growing U.S. presence in the Mediterranean, in addition to the news that Turkey was joining the North Atlantic Treaty Organization.<sup>8</sup>

At another conference later in the fall of 1945, and in a further sign of growing regional aspirations, Soviet foreign minister Vyacheslav M. Molotov announced Stalin's support of a Soviet guardianship of Italy's former colony in Tripolitania, Libya. As Molotov asserted, "On the Mediterranean Sea we would like to have the ability to use this maritime route and to have a foothold there for our ships, since in the present time of peace commerce will flourish, and in this commerce the Soviet Union would like to obtain its deserved place." Though the Soviets did not have an enduring naval force in the Mediterranean until 1958, they began to use their regional port visits as a way to project power farther southward into the Mediterranean, beginning with Albania in 1954.<sup>9</sup>

Traditionally, the Soviets categorized their maritime doctrine into three main zones: an inner, a middle, and an outer zone. The inner zone was to be fully controlled, while the middle zone could deny enemy entry, and the outer zone could deny further freedom of action. The Soviets viewed most of the Baltic Sea as an inner zone under primary Soviet influence and as an important buffer zone to protect certain Soviet industries. At the time, the Baltic possessed 75 percent of all Soviet wharves used for repair and shipbuilding.<sup>10</sup>

*The Ghost of Admiral Gorshkov*

As the Soviet Union grew in stature and power throughout the Cold War, it pursued a much larger and more global naval strategy under the efforts and leadership of Admiral Gorshkov. Gorshkov did not begin his career advocating entirely for a big-ship navy, but he still believed in the strong correlation between great power status and powerful navies. When he was named head of naval forces in 1956, he was initially more restrained in his strategy, since he had to serve under Khrushchev, who did not want to build big aircraft carriers and a large oceangoing navy. Instead Khrushchev preferred to continue a buildup of the Soviet submarine fleet because it was more cost-efficient and an important stealth force. In March 1959, Gorshkov approved the commission of the K-3, the Soviet Union's first nuclear-powered submarine. A revolution for the fleet, the future submarine force would no longer be constrained by refueling and only had to worry about resupplying provisions and other supplies. In essence, Gorshkov began by constructing a navy right from the *Jeune École* playbook, including smaller, more maneuverable, and highly technological vessels. It is a strategy frequently seen today as well for developing navies that desire to build a blue-water navy. In other words, start smaller and more focused on specialized craft before constructing aircraft carriers.<sup>11</sup>

When Leonid Brezhnev succeeded Khrushchev in 1964, he supported Admiral Gorshkov's pursuit of developing and transforming the Soviet navy into a blue-water fleet with global ambitions. In alignment with a Mahanian viewpoint, Gorshkov wrote, "It has been necessary for the force structure of the armed forces to include a potent navy that corresponds to the interests of a great power." He also later wrote that "naval might has been one of the factors which has enabled individual states to advance into the ranks of the great powers. Moreover, history shows that those states which do not have naval forces at their disposal have not been able to hold the status of a great power for very long. And, it cannot be otherwise, for the sphere of naval operations are the seas and oceans which occupy seven-tenths of the surface of our planet."<sup>12</sup>

In his well-known *The Sea Power of the State*, Gorshkov solidified his thinking and made the further case for greater "sea-mindedness" among leaders of the armed forces, arguing that economic strength was tied to sea power. He also promoted the navy's capacity to fight an enemy on land or at sea, in addition to



projecting an ability to threaten maritime commerce and other strategic communication avenues. Moreover, he asserted the importance of nuclear submarines as part of a larger “unified strategy” among the armed forces.<sup>13</sup>

Aside from the hard power elements of his naval strategy, Gorshkov appreciated the significance of soft power or naval diplomacy during times of peace. It was a critical element of sea power and a means of “holding in check” satellite or allied states. The naval force was also another way to help promote a communist agenda and Soviet influence. In the following passage from *The Sea Power of the State*, Gorshkov elucidates the influence of the navy as a critical foreign policy tool: “The Soviet navy is also used in foreign policy measure by our state. . . . Friendly visits by Soviet seamen offer the opportunity to the peoples of the countries visited to see for themselves the creativity of socialist principles in our country, the genuine parity of the peoples of the Soviet Union and their high cultural level. In our ships they see the achievements of Soviet science, technology, and industry.”<sup>14</sup>

Indeed, port visits and the greater buildup of bases became another critical element of the Soviet Union’s naval strategy that Russia is trying to resurrect today. During Gorshkov’s time, the navy actively sought the use of regional and global ports and cited the increased visits as a sign of the Soviet Union’s growing naval stature. In 1975, for example, Soviet naval ships visited eighty-two ports in fifty nations, which amounted to an estimated eighty thousand personnel going ashore. Since the Soviet Union controlled most of the Black Sea, in addition to most of the southern Baltic, port access was less of a problem, but the Soviets did remain concerned about naval attacks on their seaside cities and industrial factories. The Soviet Union was also anxious about the choke points it had to traverse where it did not control. It had to sail through German, Danish, and Turkish waters to sail into either the Atlantic or Mediterranean. An even more pressing issue was achieving sustainability and access to ports and other facilities well beyond its near and regional seas.<sup>15</sup>

Access to facilities in the Mediterranean was seen as an essential springboard to Africa, Asia, and the rest of the world. Albania, Yugoslavia, Syria, and Egypt, for example, soon became essential access nodes supporting the Soviet Union’s larger naval operations. The Soviets also gained maritime access near Alboran Island, approximately 150 nautical miles east of the Strait of Gibraltar, a critical choke point and opening to the Atlantic Ocean in the western Mediterranean Sea where the Soviets could monitor NATO and U.S. fleet activity. In the

south-central portion of the Mediterranean, they had access near Tunisia's Gulf of Hammamet, just south of the Strait of Sicily. In the eastern portion of the sea, they had anchorage privileges in several places, including one in Kithira, east of Crete, one northeast of Cyprus, and another one just north of the Gulf of Sollum. The eastern Mediterranean locations had the added benefit of being closer to the Aegean Sea and the Bosphorus and the Suez Canal feeding into the Red Sea and Indian Ocean.<sup>16</sup>

Though Gorshkov's navy was certainly not free from critiques about its global sustainability or the navy's inefficiency in repairs, support, or fleet maintenance, Gorshkov is still cited for transforming the navy from a coastal force into a powerful nuclear-missile-carrying blue-water navy capable of confronting the United States. Upon Gorshkov's retirement in 1985 (and death in 1988), the Soviet navy had at long last achieved the level of respect that he sought, even though it never really dominated or controlled Europe's major maritime choke points.<sup>17</sup> Even so, the Gorshkov era, as some refer to it, would soon come to an end with the demise and dissolution of the Soviet Union in 1991. The Soviet naval program would begin a long period of decline, neglect, and naval force atrophy.

### Putin's Navy

The Soviet/Russian navy sat in massive disrepair throughout the 1990s until it found a new champion in President Putin. When Putin became president in 2000, it was not long before he began to hit reset on a long-decaying naval program. Though the nation was continually affected by domestic economic challenges and demographic decline, Putin understood that if Russia wanted to regain its international prestige and stature, it would need an accompanying navy to support and defend its larger national security aims, in addition to having greater "freedom of action" globally. The objective of Russia's maritime strategy has been to reestablish Russia as a "great maritime power" and thus contributes to the larger trend of rising navalism. According to the researcher Katarzyna Zysk, "The conviction that demonstration of strength and its perception by others may be as important as force application itself has a long-standing tradition in Russia and is still referred to by the political and military leadership as an important role of the navy today. Together with an improved economic situation fueled by high oil prices, re-establishing Russia's strong po-

sition in international affairs has been one of the driving forces behind the increased focus on sea power.”<sup>18</sup>

Putin inherited a naval program that had fallen deep into disrepair with continued readiness woes, but the high oil prices of the mid-2000s helped support a naval renaissance of sorts in the past decade. Since 2008, Russia sought ways to revive its past shipbuilding programs and modernize the navy. For the 2011–2020 State Armament Program, the budget earmarked approximately \$70 billion for the navy. This amounted to about one-quarter of the entire armed forces modernization program. Several years later, the Ministry of Defense detailed an extra “modernization road map” for the navy. In Action Plan 2013–2020, Russia’s navy was reportedly set to receive 70 percent of the entire budget to modernize its equipment by 2020, up from 40 percent in 2013. In vessel terms, this would entail eight new strategic missile submarines, nine conventional submarines, up to six nuclear attack submarines, fifteen new frigates, and up to twenty new corvettes. Some reports also cite a new aircraft carrier program.<sup>19</sup> The feasibility of the navy’s expansion is still widely questioned, especially as oil and gas prices have dipped in recent years, but the broader intent of reconstructing Russia’s decaying naval fleet is well apparent. Today the fleet is estimated at 270 vessels, but according to some reports, only about 125 remain operational. Even here, only about 45 surface ships and submarines are believed to be fully operational and oceangoing.<sup>20</sup>

Despite the grand designs to modernize and update Russia’s naval fleet, its shipbuilding programs continue to be plagued by cost overruns, bureaucratic ineptitude, design flaws, system-integration woes, inaccessibility to the latest (foreign) technology, rampant corruption, outdated shipbuilding techniques, and other systemic challenges. As the naval analyst Dmitry Gorenburg recently noted, “Some of the most prominent naval procurement projects have been scaled back, while others have been postponed for years at a time.”<sup>21</sup> The Russian frigate *Admiral Gorshkov* is just one example of how fraught the process has been. Construction on the *Admiral Gorshkov* began in 2006, and the ship’s specifications on paper formidably appear as one of the largest vessels constructed since the fall of the Soviet Union, with a range of 4,500 nautical miles. Twin gas-diesel turbine engines help it reach speeds of up to twenty-nine knots, and the sleek hull design makes it harder to detect on radar screens. But the challenge is that the first ship of about four on order is still being tested at sea before going into full service, while the others are in varying degrees of con-

struction or tests. The development grew so problematic in 2011 that the navy launched a parallel Project 11356 with a slightly altered but improved design for a new class of *Admiral Grigorovich* frigates. More setbacks, however, emerged in 2014 after Russia's invasion of Crimea in Ukraine. The Russian navy relied on Ukrainian-built gas-turbine engines for their frigate designs and had to scramble to begin production on a Russian version of the same engine.<sup>22</sup>

Despite the sizable setbacks to its surface vessels, the growth of Russia's underwater capacity, historically the strongest element of its fleet, continues to make substantial gains. In the last six years, Russia augmented its subsurface activities four to five times, according to some estimates. On the one hand, Russia authorized thirteen new nuclear and conventional submarines since 2014, which do not appear to be experiencing the same delays as the frigate-class construction, as the submarine program remains a priority for the Kremlin despite other military cuts. On the other hand, it also began engaging in non-traditional or "hybrid" activities below the ocean's surface by tapping into or meddling with undersea cables that the world depends on for internet and telecommunications. Russia frequently uses the guise of "oceanic research" or "search-and-rescue missions" to hide illicit actions deep along the ocean's floors. Combined, these growing undersea capabilities will do a lot to further enhance Russia's projection of power and reemergence as a stronger and more formidable maritime power. Russia has already used its submarines in the eastern Mediterranean to support Syria's Assad regime, in conjunction with several of its surface fleet in the Caspian Sea, to launch missiles at targets, developing a potential anti-access / area denial (A2/AD) "bubble" off Syria's coast in the Levant region. This type of maneuver could also be replicated in the Black and Baltic Seas, much to the chagrin of NATO and U.S. forces operating in these same overcrowded spaces. The fact remains that Russian submarine deployments are at their highest levels since the end of the Cold War.<sup>23</sup>

Putin's naval esprit de corps appears dedicated to the buildup of the Russian navy in the months and years ahead. In fact, on July 26, 2015, in a ceremony of great pomp, Putin announced a new version of Russia's naval doctrine aboard the deck of the *Admiral Gorshkov* in Baltiysk in the Baltic Sea during Russia's annual navy day festivities. "The doctrine describes the 'inadmissible character' of NATO's deployment of military capabilities closer to Russian borders that justify the focusing of Russia's naval 'attention' toward the Atlantic. The doctrine sets targets for developing Russia's military infrastructure in Crimea

. . . and will become a foundation for a resumed Russian presence in the Mediterranean.”<sup>24</sup> Russia will unlikely be able to carry out all aspects of its new maritime doctrine, but it will presumably become more aggressive and menacing across Europe’s three main seas, demonstrated most recently in the Black Sea when a Russian Su-27 jet came within five feet of a U.S. Navy plane in January 2018. A similar event occurred in the Black Sea the year before, when four different Russian warplanes buzzed the USS *Porter* while it was returning from joint exercises with the Romanian navy. In one instance, an armed Russian Su-24 plane, flying at an altitude of 90 meters, came within 180 meters of the U.S. ship.<sup>25</sup>

Russia’s newly placed emphasis on the buildup of its navy is part of the new norm that Europe, the United States, and other world actors must contend with. Though Russia will still struggle with setbacks to its program, it will likely follow “the long Russian tradition of using the navy more as a diplomatic instrument of deterrence and display than as the creation of a deliberate warfighting instrument.” Russia’s navy is not something that can be overlooked any longer.<sup>26</sup>

## The Black Sea

The Black Sea has received many names throughout history, largely based on who controlled the surrounding territory, but one of the earlier references to the Black Sea emerged in Greek as *Pontos Axeinos* (the dark or somber sea). Its depths, reaching more than two thousand meters, are comparatively greater than the Caspian Sea, thus pointing toward a certain practicality of the name; the Black Sea is also known for being “unwelcoming” with its often-unpredictable weather. During the Middle Ages, it was called the Great Sea, but when the Ottomans conquered Anatolia, it became *Kara Deniz*, or the Black or Dark Sea. An additional interpretation is that *kara* in Ottoman Turkish can also mean “great” or “terrible,” thus corresponding with earlier references to the Great Sea.<sup>27</sup>

Russia has viewed the Black Sea region as an important regional sea and necessary warm-water outlet into Europe and the rest of the world. During the Cold War, it was considered a “Soviet lake.” Covering about 423,000 square kilometers, including five hundred rivers emptying into it, the littoral states have regarded the saltwater landscape as critical for transportation, energy shipments, and trade, as well as an arena of great powers. Additionally, it is the main mar-

itime transport route to the Mediterranean and Southwest Asia. As the controversial Russian strategist Alexander Dugin recently remarked on the Black Sea's geostrategic importance: "It is an absolute imperative in Russian Black Sea geopolitics for Moscow to have total and unmitigated control over the entire territory from Ukraine to Abkhazia. The northern coast of the Black Sea has to be exclusively Eurasian and under Moscow's centralized control."<sup>28</sup> The Russian author Alexander Prokhanov also recently described the takeover of Crimea as akin to the "rebirth of the Russian Empire . . . imperial in a sense that it is a symphony, it is a union of spaces, it is a union of peoples, cultures, faiths and languages."<sup>29</sup> Sentiment aside, the security of Russia's southern flank along the Black Sea still features prominently in Russia's regional foreign policy calculus. That said, Russia's geoeconomic interests should not be discounted and will continue to grow regionally as it builds its investments and trade beyond the Black Sea. As noted in one recent report, "In 2013, 117 million tons of freight transited through Novorossiysk, which is the first commercial port of Russia, far from Saint Petersburg figures (58 million tons) or even Primorsk (75 million tons). . . . Nearly three-quarters of the tankers sailing through the Turkish Straits are heading to or from Russia."<sup>30</sup>

Since the 2008 Russo-Georgian War, Russia has become more assertive from a maritime perspective, resulting in greater international attention to the region's emerging geopolitical maritime dynamics. According to one analysis, there has been "an unprecedentedly high number of air and naval maneuvers and border violations by Russia, with 400 intercepts of Russian military aircraft near NATO members' airspace in 2014, twice the number in 2013, according to NATO." This type of behavior has pushed many to call Russia a regional "predatory hegemon" or "one that uses its power to structure the system to its own advantage and extract rents."<sup>31</sup>

Many in Putin's orbit strongly desire to dismantle the "Atlanticist Axis" led by the United States, United Kingdom, and other European powers. They seek to build up Russia's image as a great power, and Putin also believes in using Russia's navy as an important tool of statecraft to lift Russia's international prestige. One of the culminating events to symbolize Russia's growing use of its naval power came with its 2014 takeover of Crimea in Ukraine, but the combined events of the past decade have also resulted in a greater securitization of the Black Sea and a rise in regional insecurity from Russia's more emboldened naval approach. Russia is using its increasingly established maritime perch in

Crimea to continue its naval modernization efforts, in addition to carrying out a more proactive naval doctrine that seeks to expand into the Mediterranean and beyond. Despite a spike in U.S. and NATO efforts to contain its growing navalism in the Black Sea, Russia has made significant headway in solidifying its naval strength in the Black Sea, contributing further to regional unease. As one observer remarked, “Tensions are high and great potential exists for military conflict.”<sup>32</sup> To complicate matters, China has also started creeping into the Black Sea with its growing geoeconomic and security interests, but Russia still dominates most of the Black Sea littoral militarily and is likely to do so in the near future despite growing Sino-Russian naval cooperation. Even so, China is beginning to make more inroads geoeconomically as part of the BRI and MSR.

#### *Russia's Black Sea Geoeconomic Interests*

For Russia, the Black Sea is vital for several reasons, but economically it is important for maritime trade and energy security, especially since it is the fastest route into the Mediterranean and beyond. Unfortunately, commercial fishing has declined since the 1980s owing to overfishing and new technologies. Today only about six variants of fish exist for industrial fishing, compared to twenty-six varieties at its height during the mid-twentieth century. Nonetheless, Russia is still proactive in maritime trade and has tried to push other competitors to the side. Russia's merchant marine has been in decline since the fall of the Soviet Union, but President Putin attempted to revive the sector in recent years. In 2011, Russia passed a law providing a tax break and other incentives to aid Russian commercial shipbuilding and shipping companies. Currently, most of the commercial shipbuilding output is produced by the state-controlled United Shipbuilding Corporation. According to some recent estimates, Russia has 1,787 commercial ships, surpassing much of the region's other shipping competitors. Russia's main Black Sea port, Novorossiysk, currently handles around 30 percent of all Russian maritime exports. Now that Russia controls Crimea and the Kerch Strait into the Sea of Azov, it will have a greater competitive edge over other regional powers for the Black Sea maritime trade routes. By some estimates, 40 percent of the world's wheat shipments come from the Black Sea region. Ukraine, in particular, is known for its wheat exports, as well as corn, steel, and other natural goods, but Russia hopes to financially squeeze Ukraine now that it controls more of its ports, sea routes, and coastlines. Ukraine's neigh-

bors, Romania (Constanta, Midia, Mangalia) and Bulgaria (Burgas, Varna), also fear that Russia will start placing similar pressure on their seaports.<sup>33</sup>

In a sign of Russia's growing maritime and SLOC aggression, it is using maritime shipping technologies that are vulnerable to attack to manipulate data, blurring traditional lines between maritime shipping and security, or what some have referred to as the maritime "gray zone." Specifically, Russia has been called out for cyberhacking technologies related to the Automatic Identification System (AIS). AIS can be particularly useful for sharing weather or when trying to prevent collisions, especially through narrow waterways.<sup>34</sup> The problem emerges when AIS or another type of system is penetrated and manipulated. According to one former U.S. Department of Defense official, "AIS-based data manipulations can reroute or reprogram ships for purposes other than that for which they were intended. In the worst case, manipulations of the AIS can trigger false alerts, manipulate weather data, or draw ships into dangerous waters—potentially leading to a collision or grounding."<sup>35</sup> Aside from AIS, ships also rely on the Global Positioning System (GPS), which is equally as susceptible to hacks or data manipulation. The two main threats to GPS are jamming a device so that it stops working, or "spoofing" a GPS into computing false information. Jamming is a cheap yet effective tool that even rogue state actors can use against an enemy. Russia, for example, used jamming devices against Ukrainian forces during its takeover of Crimea in 2011. North Korea has also deployed jamming tactics against the South Koreans. Spoofing devices are equally as cheap, as demonstrated at a recent hackers conference by a group of Chinese from e-retail giant Alibaba who constructed a spoofing device for less than \$300. Russia also reportedly used spoofing tactics for some of its ships in the Black Sea, in addition to vessels sailing in the North Sea. The bigger challenge as Russia builds up both a stronger navy and stronger commercial fleet is its ability to dominate the Black Sea's maritime space and SLOCs in a more robust manner, which places NATO allies and the status quo regional order in a more vulnerable position.<sup>36</sup>

On the energy security front, Russia similarly dominates the region with its natural gas exports and other (undersea) pipeline projects. By virtue of the largely unexploited maritime deposits, many actors have been interested in developing offshore exploration throughout the Black Sea, which only has about a hundred oil wells, compared to about seven thousand in the North Sea. Since



its takeover of Crimea, Russia has targeted Ukraine's coastline and nationalized one of its natural gas companies in another point of contention between the two nations. Russia now controls much of Ukraine's Exclusive Economic Zone (EEZ) and has nationalized a subsidiary of Naftogaz in Crimea. Naftogaz oversees the gas subsidiary Chernomorneftegaz, valued at around \$1 billion for its growing output and production levels. Before its nationalization, Chernomorneftegaz ran four Black Sea gas deposits, in addition to three deposits onshore in Crimea. One of these areas included the Pallas gas and oil field, located near the Kerch Strait at the opening of the Sea of Azov. Projections estimate that Pallas possesses approximately 75 billion cubic meters of natural gas and about 490 million tons of oil. Russia also expanded into the Sea of Azov to the north of Crimea. It is unclear who will continue with the field's exploration, but one thing does remain certain: in total, Russia's takeover of Ukraine's Black Sea shelf assets was conservatively valued at around \$40 billion. As Russia fortifies its position in Crimea, it will gain greater control over many of the region's valuable sea lanes of communication that feed into Russia's larger interests in the Mediterranean and Middle East.<sup>37</sup>

As part of its larger geoeconomic projects, Russia recently announced construction of the TurkStream pipeline to link Russia and Turkey via an undersea pipeline. (The pipeline is also seen as a way to cut uncooperative neighbors such as Ukraine out of the natural gas supply routes to inflict more significant financial damage.) In May 2017, the *Pioneering Spirit*, which can house 571 people, was seen pulling a 24,500-ton decommissioned oil platform from the North Sea to the Mediterranean and through the Bosphorus en route to start work on the TurkStream project. The 900-kilometer undersea pipeline will begin in southern Russia close to Anapa (about 100 kilometers from Crimea), run through northwestern Turkey and continue into Anatolia, and have a capacity of 15.75 billion cubic meters. Another proposed pipeline offshoot with a similar capacity would continue into Greece and southeastern Europe. TurkStream, inaugurated in early 2020, is headed by Russia's natural gas giant Gazprom; the project was temporarily sidelined after Turkey shot down a Russian jet along the Syrian border in 2015. Due to a recent thaw in relations, and as Russia strategically tries to drive Turkey and its president Tayyip Erdoğan farther away from the "Atlanticist Axis" of NATO, it has given the green light on the project. Russia is currently responsible for most of Turkey's (and Europe's) natural

resources, including more than half of its natural gas and about 10 percent of its oil.<sup>38</sup>

### *Russia's Growing Naval Might*

Since the 2000s, Russia has been on the hunt to reassert itself in its “near abroad.” It has felt hemmed in by the Euro-Atlantic Alliance and seeks to overturn the current status quo. Though some of its regional European assertiveness occurs on land along eastern Europe’s borders, much of what takes place has a strong maritime component. The illegal annexation of Crimea in 2014 has given Russia a new pedestal from which to implement more dominant foreign policy directed by Putin. Before Crimea’s takeover, Russia only had access to about 570 kilometers of coastline along the Sea of Azov, in addition to about a 450-kilometer stretch from the Sea of Azov’s opening at Kerch Strait to the Russian-backed breakaway region of Abkhazia next to the Republic of Georgia northeast of the Black Sea.<sup>39</sup> Now, the Sea of Azov has become a virtual Russian lake; Ukraine still has about 350 kilometers of coastline but very little way of defending itself now that Russia has taken over. Toward the end of 2018, the Russian navy captured two Ukrainian gunboats and a tug near the Crimean Peninsula, citing Ukraine’s violation of Russian waters. Russia then went on to block the entrance to the Kerch Strait with a tanker, which is shared territory per a prior treaty agreement. Though Russia still faces significant domestic and financial constraints on carrying out its naval expansion and modernization efforts, Russia’s recent aggressive behavior symbolizes the rising securitization and maritime security challenges of the Black Sea region. In the event of any broadening conflict between Russia and Ukraine, Russia wants to be able to protect this vital buffer region, denying outside powers access to the Black Sea. It also wants its Black Sea Fleet to be able to sustain and support Russian naval operations in the Mediterranean. It is quickly moving toward achieving these capabilities. All these developments place NATO’s regional powers, such as Romania, Bulgaria, and Turkey, in an increasingly vulnerable position as Russia builds up its naval capacity and A2/AD capabilities, making NATO’s future defense of the Black Sea more challenging.<sup>40</sup>

In 2010, then Russian president Dmitry Medvedev signed a basing lease agreement for Sevastopol with then Ukrainian president Viktor Yanukovich to extend Russia’s Black Fleet contract from 2017 to 2042, including a five-year

renewal option. The annual rent was about \$700,000. In return, Ukraine received 30 percent gas discounts up to \$40 billion, with a contract ending by 2019. When Russia took over Crimea in the spring of 2014, prior bilateral agreements that had limited the size and scope of Russia's Black Sea Fleet were abrogated with Crimea's March 16 referendum. Russia immediately took hold of the coveted Sevastopol base, including almost eighty vessels from Ukraine's fleet that also shared the base (many were returned to Ukraine's navy after further inspection), and its deepwater port with eight substantial berths. Sevastopol is also an essential resupply port for Russia's naval forces fighting in Syria, in addition to supporting the long-term operations of the Mediterranean Fleet. With Russia's navy no longer constrained, it now also has access to Ukraine's other important maritime assets, including ports and naval or marine infantry bases such as Yevpatoria, Feodosiia, Myrnyi (Donuzlav Lake), Saky, Balaklava, and Novoozerne on Donuzlav Bay. Additionally, these strategic locations include vital ship repair and construction facilities, providing Russia the further ability to enhance its future fleet and maritime power projection capabilities in the Black Sea, Mediterranean, and beyond.<sup>41</sup>

Since 2011 and the outbreak of Syria's civil war, Russia has made a concerted effort to both modernize its fleet (in 2014 the average combat-ready ship was twenty-seven years old) and adequately provide housing for its navy personnel stationed in Crimea. The efforts began that year with the launch of a project to build twenty thousand housing units for naval personnel, their dependents, and other civilian service members living in Sevastopol. According to some sources, the Black Sea Fleet has between 12,000 and 16,000 personnel, mainly spread across Crimea. Some personnel are also located at Russia's only naval base in the Sea of Azov, Temryuk, Novorossiysk, and in the disputed territory of Abkhazia near Georgia. Recently, and on top of the Black Sea Fleet personnel numbers, Russia reportedly created seven new military formations and eight new military units, practically doubling the size of Russia's Crimean military personnel. In total, Crimea has an estimated 24,000 military personnel, but that number is expected to increase to 43,000 by 2020, according to some reports. Russia has purportedly spent approximately \$750 million on upgrading its Crimean forces in the last several years.<sup>42</sup>

For the Kremlin, the Black Sea Fleet remains an important focal point. In the future, if all goes according to plan, the fleet is slated to receive up to six new *Admiral Grigorovich*-class frigates (with a strong antisubmarine warfare capa-

bility), two Buyan M-class missile corvettes, six Kilo-class diesel-powered submarines, Su-30SM interceptors and Su-34 tactical bombers, and nuclear-capable Tu-22M3 long-range bombers.<sup>43</sup> Currently only three ships have been commissioned, but all six of the submarines have arrived and are active. Despite this, the number of Russian submarines rose from one to seven since 2014; four of them have also been deployed to Syria to carry out support operations for Assad. Recent estimates place the Black Sea Fleet at forty-two ships and six submarines. (By comparison, the U.S. Sixth Fleet, housed in Spain on the far edge of the western Mediterranean, has just one command ship and four destroyers. NATO's Standing Naval Forces comprise four maritime groups, two frigate groups, and two mine countermeasure groups, which are all integrated into a larger rapid-reaction force. The frigate groups vary in composition and are regularly deployed across the European theater. A Standing Maritime NATO Group is typically composed of between two and seven ships from as many NATO member states.) In combination with its other newly positioned territorial assets—to include aircraft and missile systems—Russia's military has a growing advantage over much of the Black Sea littoral. The Kilo-class submarines alone can launch Kalibr missiles capable of hitting most any target in the Black Sea or farther afield. Building up its submarine fleet will also permit Russia to strategically occupy maritime zones near Crimea and a broader Ukraine while at the same time acting as an important deterrent to NATO maritime forces.<sup>44</sup>

The submarines can also be used as critical elements of Russia's developing A2/AD capabilities, which extend deep into the Black Sea, as well as a growing A2/AD capacity in the Mediterranean near Syria. In 2015, as part of Russia's A2/AD efforts, Putin announced the establishment of its Bastion mobile coastal defense missile system in Crimea; it also later deployed the S-400 "Triumph," one of Russia's strongest anti-air defense missile systems, to reinforce some of its other established high-tech capabilities. Combined with systems already in place farther along its coastline toward the North Caucasus and in Abkhazia, Russia now has greater control over about one-third of the Black Sea and can effectively target any ship in that part of the Black Sea. As noted recently by Russia's chief of the General Staff, Valery Gerasimov, the "Black Sea Fleet should be able—and it has already demonstrated this capability—to destroy a potential enemy's amphibious force on the way, starting from the ports of embarkation. . . . The Black Sea Fleet has all essential means of reconnaissance capable of identifying targets as far as 500 kilometers away and means of

attack.”<sup>45</sup> With the further reinforcement and perfection of the A2/AD system over time, Russia will ensure that the Black Sea becomes a Russian fortress that will be hard to penetrate for either NATO or U.S. forces in a future conflict or in the event that Russia desires to go after another littoral state. Russia will be further aided in its efforts if Putin follows through on his investment promises in modernizing Crimea’s shipyards to assist in the repair, maintenance, and general sustainability of the Black Sea Fleet’s future operations.<sup>46</sup>

With a greater defense of the Black Sea, Russia can begin focusing on its other strategic efforts beyond the littoral. It can cast a wider net into the Mediterranean and Indian Ocean (the focus of the next several chapters) to protect its emerging global and strategic interests. If Russia can align its Black Sea A2/AD system with that of its A2/AD system in the Mediterranean, it will be able to develop more of a monopoly over the SLOCs that feed into the Suez Canal and thus the Red Sea and Indian Ocean.<sup>47</sup> In sum, the growing assertiveness of Russia’s navy has negative spillover effects for regional security, especially throughout Europe. It is resulting in a rise in navalism and increasing the chances of inadvertent conflict over the vital sea lanes of communication that either traverse the Black Sea or other routes that feed from the Mediterranean into the Black Sea.

### *Russia Pushes South, While China Pushes West and North*

All Russian maritime routes to the Mediterranean and Indian Ocean run through Turkey’s narrow Bosphorus. Russia and Turkey have a long and complex past filled with both war and alliance formation. Russia is currently trying to drive a wedge between Turkey and the West to suit Russian needs and interests. Meanwhile, China is also beginning to make inroads into the Black Sea. It has conducted joint naval exercises with Russia, though more symbolic than anything else, but the more interesting trend is China’s growing geoeconomic investments from the Belt and Road Initiative. For the time being, Russia appears to tolerate China’s growing economic and security interests, but this might change if China grows as a threat to Russian interests in its near seas. In the distant future, this could be a lever Europe and NATO might use to counter the growing Sino-Russian rapprochement.

Russia and Turkey have always had a delicately balanced relationship as the main anchors of the Black Sea, which has swung between war and peace over the past several centuries from the Ottoman Empire to the present. Between

1677 and 1914, the Ottoman Empire and Russian Empire waged war thirteen times over geopolitical rivalries that echo today, including free and open access to the Mediterranean. Since 1936 and the signing of the Montreux Convention, however, Turkey's sovereignty over the Bosphorus and Dardanelles farther to the south has been established, in addition to the rules dictating what types of warships can traverse the strategic maritime choke point during times of war and peace. Black Sea fleets are given special priority, and these transiting naval ships in peacetime cannot surpass 15,000 tons; for non-Black Sea countries, a ship's size cannot exceed 10,000 tons (or a total of nine aggregate ships not totaling more than 30,000 tons) and are limited to a twenty-one-day trip. Submarines are only permitted to transit if they are from a Black Sea nation. In other words, it is harder for non-Black Sea littoral fleets to operate regionally without express approval—and even then there are strict legal restrictions—from Turkey to transit the Bosphorus.<sup>48</sup>

Needless to say, Russia needs Turkey if it is going to successfully carry out its naval doctrine and growing ambitions to dismantle the Western-dominated regional order. According to one recent report, Putin tasked Alexander Dugin “with the mission of cultivating elements within the Turkish military and government bureaucracy that are pro-Eurasianist and pro-Russian.”<sup>49</sup> The Turk-Stream project aligns with this larger mission, but one also sees improving military-military ties outside the Syrian conflict. In the spring of 2017, the two nations hosted joint naval exercises, which some have called PASSEX, a passing exercise between two navies. Russia deployed three Black Sea Fleet vessels, including the *Admiral Grigorovich*-class frigate and a minesweeper, to exercise with two Turkish naval ships, a frigate and a corvette. Though Turkey and Russia openly and contentiously differ in their stances toward Syria to the south—and the situation has only grown worse in Syria over the past several years—the recent naval rapprochement might add additional stress to the NATO alliance structure. That said, most still believe that President Erdoğan is an opportunist and only using the recent thaw to gain more leverage in NATO, much to the chagrin of Turkey's European allies. From Russia's perspective, it stands to gain from this Turkish thaw because it helps establish Russia's regional maritime presence and power. One analyst recently noted that “for Moscow, it is a chance to show Western governments and the world that NATO can't even keep its own members from cooperating with the Russian military.”<sup>50</sup> Whether improved relations will blossom into something larger is a looming question, but

in the interim, Russia's maritime trajectory has been strengthened by regional events and its concerted efforts to fortify its naval posture and control over the region's SLOCs.

China's arrival and presence across the Black Sea are still emerging. Based on trends in other parts of the world, China's geoeconomic influence and security interests are likely to grow, especially as it expands and deepens its maritime footprint in the Mediterranean. China's growth, however, may cause friction with Russia in the future. According to one Chinese professor I recently spoke with, Russia is not inclined to partner fully with China in the Black Sea because Russia views the Black Sea as its traditional sphere of influence. This point was also reiterated to me separately by a Bulgarian official who follows the changing maritime politics of the region. For the time being, China and Russia appear more cooperatively aligned, notably from a naval perspective, across Europe's maritime spaces. But China's growing geoeconomic investments may soon encroach on Russian economic and political interests.

On May 9, 2015, after a visit by President Xi Jinping to commemorate Russia's victory over the Nazis, a joint Sino-Russian naval flotilla left Russia's naval base at Novorossiysk—the first time the Chinese navy had ever visited. The nine-ship joint exercise took place over several weeks between the Black Sea and Mediterranean. To get to the Russian naval base in the Black Sea, Chinese ships steamed through the Bosphorus for the first time. For the occasion, the PLAN flew the Turkish flag along the Bosphorus out of diplomatic respect. It was also the first time since World War I that an Asian navy had entered European waterways in such a capacity; the last time was when the Japanese Imperial Navy was asked to conduct escort missions. The focus of the exercise was primarily antisubmarine warfare and air defense, as well as establishing a common operating picture.<sup>51</sup> In addition to building greater confidence and interoperability between the powers, joint exercises provide an opportunity to learn from each other. Both gain insights, for instance, into the technology and platforms that are used. For China, this is particularly helpful to glean information about Russia's advanced naval technology capabilities. The Joint Sea exercises are also global in nature and are held on both the European and Asian sides of the Eurasian continent. These exercises again symbolize the growing maritime synergy between Russia and China across Eurasia's quickly changing maritime landscape.

Joint naval exercises aside, China's increased focus on the Black Sea's mar-

itime geoeconomic prospects is equally significant. In the past several years, China has made some textbook moves similar to its other global investments associated with the Belt and Road Initiative, focusing much of its Black Sea efforts on ports, shipping routes, and additional maritime infrastructure investments to gain leverage and access to Black Sea states. Though China's Black Sea investments are in their early days, recent projects in Georgia and Ukraine represent some of what is to come for the region.

In Georgia, China has begun to take a more targeted look at its maritime and trading hub potential. From Georgia's perspective, it also hopes that it can link into China's enormous capital investments. In 2016, Georgia joined the Asian Infrastructure Investment Bank (AIIB), and one of the first loans it received was for \$114 million to construct the Batumi Bypass Road, traveling from Georgia's interior to its port at Batumi. In 2017 the two countries inked a bilateral free trade agreement, which came into force in January 2018. On the port investment front, Chinese investors lost an initial bid in early 2016 for the \$2.5 billion Anaklia Black Sea Deep Water Port Project to an American-Georgian consortium. Located about two kilometers south of Abkhazia and about an hour's drive from the Georgian port city of Poti, Anaklia used to house part of the Soviet Union's Black Sea Fleet. In addition to its geostrategic location, Anaklia is known for its deep canyon, permitting a sixteen-meter draft. Despite losing the initial bid, the Chinese company Shanghai Zhenhua Heavy Industries (ZPMC) was recently awarded a \$50 million contract to assist with the port's construction. Anaklia is slated to handle about 900,000 TEUs per year by 2020 after phase 1 is complete with two main berths, compared to Poti, which is currently only equipped to handle around 600,000 TEUs owing to its shallow berths and antiquated infrastructure. South of Anaklia, China is also focusing on Poti as another accompanying investment. The China Energy Company Limited (CEFC) recently purchased a 75 percent stake in Poti's free industrial zone. The future looks promising for Sino-Georgian relations, and Georgia will likely grow as a critical transshipment node for Chinese goods. And for the time being, China has maintained a certain distance from Georgia's political territorial disputes tied to Russia in Abkhazia and South Ossetia.<sup>52</sup>

Moving to the west, China also started making important investments in Ukraine's maritime space right under Russia's nose—a major strategic portion of China's recently announced \$7 billion in investments across Ukraine. China, for example, won several port expansion and construction bids to dredge, expand,



and construct several of Ukraine's ports, including Yuzhny north of Odessa and Chornomorsk to the south of Odessa. China Harbor Engineering Company (CHEC) won the tenders for both contracts and has already completed dredging work at Yuzhny port. Yuzhny is integrated into the bigger \$150 million Cargill-Ukraine project seeking to expand Ukraine's grain export capability by 15 percent, which will also benefit China. In Chornomorsk, CHEC bid \$15.5 million to beat out Dutch and Ukrainian firms, coming in about 10 percent lower than its competitors. CHEC is able to rely on its equipment about forty kilometers away in Yuzhny port. China also began exploring other port-related projects in the Sea of Azov at Mykolaiv, Mariupol, and Berdyansk. In Mykolaiv, Chinese firms engaged in minor port projects such as constructing a grain silo and port elevator, while in Mariupol and Berdyansk, they began studying dredging feasibility after a call by the Ukrainian Sea Ports Authority for dredging proposals. What is interesting about these activities is that the only way to gain access to these ports is via Crimea and the Kerch Strait, which is now controlled by Russia. Moreover, Chinese companies have had to sail under the newly constructed Russian bridge that connects Crimea to Russian territory. In the short term, China's entrance into Ukraine's maritime and geoeconomic space will greatly benefit Ukraine's fledgling economy. China will also play an important balancing role for Ukraine against further Russian aggression. But if China becomes more geoeconomically entrenched in Ukraine, especially in its ports, it might pose a point of friction between Russia and China if Chinese investments are ever threatened by a future Russian incursion.<sup>53</sup>

### *Constricted Maritime Space*

The issue for NATO and U.S. forces is that their Black Sea access is so inherently limited or constricted by the Montreux Convention for non-Black Sea fleets. As a result, it will be harder for NATO forces to take on a more robust strategy when it lacks sufficient access. Meanwhile, Russia is taking advantage of its growing maritime might to assert itself geoeconomically and militarily. In a sign of its growing hubris, several incidents have occurred in recent years where Russian aircraft buzzed NATO or U.S. forces conducting exercises or conducting allied partner visits in naval diplomatic tours of the region. In an April 2014 incident, two Su-24, or Fencer, fighter jets flew within 900 meters at an altitude of 150 meters above sea level near the U.S. destroyer *Donald Cook* while it was traversing international waters in the Black Sea. The two planes

conducted twelve “close-range, low-altitude passes” over a ninety-minute period, further ratcheting up tensions during the tense period of Crimea’s annexation. In another close encounter from 2016, a Russian Su-27 fighter jet reportedly came within ten feet of a U.S. Navy P-8A Orion reconnaissance flight in international airspace over the Black Sea. This type of behavior has become a more regular experience for many U.S. or NATO naval ships steaming in the Black Sea. One scholar recently noted that Russia is growing more powerful, and the United States’ and NATO’s ability to counter or contain Russia’s rise is being increasingly called into question.<sup>54</sup> As generally remarked on by the former U.S. secretary of defense Chuck Hagel in a September 2014 speech: “China and Russia are also developing anti-ship, anti-air, counter-space, cyber, electronic warfare, and special operations capabilities that appear designed to counter traditional U.S. military advantages.” In another speech around the same period, Hagel remarked that the United States has been more focused on nontraditional fights or irregular warfare for the past decade and a half, and it must not lose sight of progress that Russia and China have made in the buildup and modernization of their forces. For its part, the European Union also lacks a more robust strategy for the Black Sea region, further complicating a strategic way forward in managing or deterring Russia.<sup>55</sup>

NATO’s current strategy for the Black Sea relies primarily on its allied nations of Romania, Bulgaria, and Turkey. Ukraine’s and Georgia’s fleets are discussed as part of the equation, but their navies are no match for Russia’s navy. Despite ongoing modernization efforts, most littoral nations recognize their forces will be insufficient in the event of a conflict outbreak with Russia owing to a lack of naval fighting capabilities. In Turkey’s defense, it does possess a decent antisubmarine warfare capacity that can directly challenge Russia’s underwater fleet, but its attention is divided between the Black Sea and Mediterranean, which places additional strain on Turkey. The U.S. Navy recently announced it would maintain a more regular rotational presence in the Black Sea, even though Russia adamantly opposed such a move and claimed it violated the Montreux Convention. The United States also publicized in 2017 that it would station more troops at bases in Bulgaria and Romania, including greater assistance for the Romanian port of Constanta. Even so, Russia is well on its way toward reshaping the region’s maritime dynamics and will continue to maintain an upper hand so long as NATO and the United States fail to adopt a more robust and comprehensive regional strategy. The challenge, according to one an-

alyst, “is that the potential for escalation and perhaps miscalculation in the region is likely to remain high in the medium term, creating a more challenging maritime security environment for all six littoral states and the United States.”<sup>56</sup> It is a classic security dilemma, likely to grow more complex as China enters the picture. Rising navalism means that an unintended accident could escalate into something far worse.

### The Baltic Sea

Similar to the Black Sea, the Baltic Sea acts as an important maritime anchor along the Baltic-Black Seas axis for Russia. Spanning about 420,000 square kilometers, including Kattegat and Skagerrak where the Baltic Sea meets the North Sea, with a mean depth of fifty-four meters, the Baltic Sea has emerged in recent years as another critical geoeconomic and military arena for competition and trade between Russia, China, and Europe. The Baltic region’s climate will nevertheless still play an important factor in the region’s development, since large portions of the Baltic Sea, especially the Bay and Sea of Bothnia and Gulf of Finland where Saint Petersburg sits at the far eastern edge, are prone to freeze between January and March of each year; the ice freeze can also last between five to seven months. On average, the Baltic Sea area might freeze 40 to 45 percent during a given year, but Baltic Sea ice has been on a steady and accelerated average decline since the 1980s as a result of climate change.<sup>57</sup> Climate aside, Russia has started reasserting itself geoeconomically and militarily, and China has also commenced penetrating the region geoeconomically. Furthermore, the PLAN began demonstrating an interest in the region through its initial engagements with the Russian navy and through joint naval exercises.

Historically, the Baltic is a complex fabric of rich cultures and languages—from the Vikings, Germans, and Slavs to the Russians, Balts, and Finns. The name “Baltic” (in Latin, *mare Balticum*) emerged in the eleventh century as a description of a maritime region that resembled a belt, stretching as far as the Scythian regions and Greece. Others referred to the waterway as the Barbarian Sea or Scythian Sea. Today, Denmark, Sweden, and Finland call the Baltic the Eastern Sea, and the Estonians call it the Western Sea. Russia, Poland, Latvia, and Lithuania use variations of *Balticum*. Over the past several centuries, attempts have been made to control either the maritime trade and commerce or the broader politics and security of the region. The Hanseatic League, a com-

mercial trading guild, emerged in the twelfth century to act as a protector over the region's vital maritime commerce and trade routes. This was later followed by Dutch attempts in the sixteenth and seventeenth centuries to dominate the area during the height of the Dutch age of sail and international commerce.<sup>58</sup>

Russia's relationship with the Baltic similarly has a unique and significant history. Russia's establishment of a Baltic Fleet emerged under Peter the Great during his reign from 1682 to 1725, even though Russia never achieved the same global success as the Dutch—in part due to the frozen climate conditions. During the middle of his rule in 1703, Peter the Great also launched the construction of Saint Petersburg. After Peter the Great, Russia primarily focused inward as it sought to expand the Russian Empire across central Eurasia. But with the birth of the Soviet Union, Russia's maritime ambitions pushed into the foreground again as it sought to establish a *mare Sovieticum*, or Soviet lake. Even here, it was not until 1939 and the Molotov-Ribbentrop Pact that the Soviet Union succeeded in exerting control over the three Baltic States—Latvia, Estonia, Lithuania—and Finland. Despite centuries of attempts, however, there has never been one fully unified Baltic, due to the disparate and diversified communities that line the littoral. As a regional predatory hegemon, Russia is making moves again to reclaim what it views as its “near seas” and a vital transportation corridor to Europe and beyond.<sup>59</sup>

What is playing out in the Baltic is similar to that of the Black Sea. Russia has long viewed the Baltic as a strategic military and economic artery, and it views physical control of territory as a sign of political might and international legitimacy and prestige. The Russian National Security Strategy of 2015 also asserted that “resources, access to markets and control over transportation arteries [are] objects of struggle in the context of increasing global and regional instability.”<sup>60</sup> As examined in the next section, Russia's regional geoeconomic interests appear to be growing, especially from a natural resource perspective. Oil and gas shipments, as well as a new undersea pipeline project, are emerging in prominence. The Baltic region is one of the busiest shipping corridors in the world, with an average of between 3,500 and 5,000 ship passages per month.<sup>61</sup> Second, Russia is using its perch from Kaliningrad for its military and navy to intimidate its neighbors and project power farther afield. Russia, however, might soon be challenged—especially geoeconomically—by an emerging China, which has begun boosting its regional maritime investments. In similar trends to other parts of Europe, China's economic interests also necessitate greater security

protection, playing out initially through more symbolic joint naval exercises with the Russian navy. The sum total of these dynamics means that the Baltic Sea region is becoming a more congested and potentially contested maritime region that is placing NATO and its allies in an increasingly challenging position when trying to manage or contain these changing maritime dynamics.

### *Russia's Maritime Geoeconomic Interests*

Russia's regional economic interests date back centuries, but in the post-Cold War era, energy security has largely dictated Russia's geoeconomic aims. Since the 1980s, the Soviet Union (and now Russia) has been the world's largest natural gas exporter—with Qatar and Norway in second and third behind Russia today. There are two main ways to get Russia's gas out—via pipeline or the sea—and much of it also has to traverse the Baltic Sea region via sea or land. Currently, Gazprom provides around 40 percent of Europe's entire gas supply. In 2017 the amount increased by about 8 percent to 193.9 billion cubic meters (bcm). Gazprom's total gas production also rose about 12.4 percent for a total of 471 bcm.<sup>62</sup> Certainly, Gazprom uses both exporting methods, but it was the construction of the undersea Baltic pipelines—including the recent announcement of a second underwater pipeline—that will tie Russia increasingly to the Baltic Sea.

Between 2011 and 2012, Russia inaugurated the two parallel Nord Stream pipelines, run by Russia's Gazprom, which leave Vyborg, Russia, and travel more than 1,200 kilometers underwater—the world's longest undersea pipeline—to the Hanseatic city of Greifswald, Germany. The gas is actually piped in from the western Siberian field Yuzhno-Russkoye. The capacity for Nord Stream is 55 bcm of gas per year. After Nord Stream went online, another proposal was put forward for a second set of lines, called Nord Stream 2. After several years of discussions—in part due to the international sanctions slapped on Russia for political meddling in the United States and elsewhere—major European gas firms put together substantial financing to push the project forward in 2017. Construction of a second set of two undersea pipelines began in 2018. Nord Stream 2 will leave from Ust-Luga in Russia, just south of Saint Petersburg, and will also arrive at Greifswald. Nord Stream 1 and 2 will have a combined capacity of 110 bcm of gas per year. According to some reports, “Nord Stream 2 would transport 80 percent of Russia's current gas exports to Europe through

one single pipeline system, which would run counter to European Union energy policy and diversification of supply.”<sup>63</sup>

Nord Stream 2, slated for completion in the next several years, is significant in part because it will provide Russia an opportunity to bypass Ukraine’s transit pipelines, placing it under further economic duress. Russia is using the pipeline as part of its economic warfare against Ukraine and hopes to knock Ukraine’s GDP down by 2 to 3 percent, or about \$2 billion, based on the transit revenue it will lose in the process. Trade between Russia and Ukraine has already fallen about 80 percent between 2012 and 2016. Moreover, Russia is known to use energy as a “coercive” weapon or geoeconomic instrument of policy against noncomplying or uncooperative states. In 2003, for example, Russia cut off the oil flow along the Druzhba, or Friendship, pipeline to Latvia after Latvia refused to let Russia take over its Ventspils port. Russia took similar action with Lithuania in 2006 when Russia was denied ownership of Lithuanian oil facilities.<sup>64</sup>

One additional concern about the new Nord Stream pipeline is its significant political and security implications. The littoral states fear that pipelines will mean Russia can further justify an increased naval and security presence. (There are also significant environmental concerns related to digging, laying, and maintaining the pipeline.) Furthermore, an increased naval presence could mean greater threats to Baltic SLOCs and general maritime trade and commerce. Finland, for example, conducts more than 80 percent of its foreign trade via the sea. In a possible sign of things to come, Russia recently blockaded Lithuania’s Klaipeda port in March 2014 after Lithuania openly criticized Russia’s takeover of Crimea. Later that fall, Russia similarly enacted a trade blockade on Lithuanian or other foreign-registered vehicles entering Russia or Kaliningrad. Despite these growing economic trade concerns, however, Sweden, Finland, and others approved the pipeline project to bypass their national seabeds en route to Germany. If Europe was trying to establish greater energy independence from Russia, the trends are not pointing in this direction, despite recent calls to do so.<sup>65</sup>

In addition to the pipeline projects, oil and natural gas shipments to Europe remain equally as important and have recently expanded. About 9 percent of freight traffic and 11 percent of global oil shipments traverse this congested region—meaning that about 20 percent of ships traversing the Baltic are tank-

ers, a number that is likely to grow. When ships depart Russia's Saint Petersburg or Baltic region, most leave from the port of Primorsk. According to some recent statistics from Transneft, 38 percent of oil products head to Rotterdam, Netherlands, 19 percent to Germany, 15 percent to the United Kingdom, and 11 percent to France. From 2018 to 2020, diesel exports are expected to rise from 18.3 million tons of diesel per year to 23.9 million in 2020. Growing economic interests mean more revenues for Russia and a greater likelihood of more assertive and aggressive behavior in the region. In the words of the Atlantic Council scholar Agnia Grigas, "We know that when Russia exports its gas, it also exports its influence and corruption. I don't think any country has done well acting as a transit point for Russian gas."<sup>66</sup>

### *Naval Force*

Russia's boosted energy exports contribute to its overall budget to build up its military and naval might. As in the Black Sea, a noticeable spike occurred in Russia's naval and military activities in recent years, and it has been a point of concern for many littoral nations, as well as NATO writ large. Russia's Baltic Fleet, located in the exclave of Kaliningrad in the port of Baltiysk, has grown in prominence and might, aligning with Russia's larger ambitions and great power trajectory. The Soviet Union negotiated control over Kaliningrad (Königsberg), nestled between Poland and Lithuania, at the end of the Second World War during the Potsdam Conference. Its geographic location has further significance because it gave the Soviets an ice-free port outside the Gulf of Finland; Stalin also viewed the territory as an adequate territorial spoil for helping defeat Nazi Germany during the war. Kaliningrad was named after Mikhail Kalinin, the former president of the Soviet Union, who died in 1946.<sup>67</sup>

Beginning in 2010, as part of a larger trend associated with Russia's growing militarization of the region, Kaliningrad emerged an area of angst for many Western or European analysts when Russia reconstituted a former air squadron that was previously disbanded, among other strategic moves and buildups. Known as the 689th Guards Aviation Regiment, the air squadron's mission today is to protect Russia's Baltic Fleet homeported in Kaliningrad, in addition to securing a wider territory housing Russia's tactical nuclear weapons. The air regiment has been outfitted with some of Russia's latest high-tech weaponry and fighter jets capable of threatening NATO ground and naval forces. According to recent estimates, the Baltic Fleet consists of a 336-person naval infantry

brigade, two submarines, six destroyers, thirty patrol craft, ninety combat aircraft, and twenty-five armed helicopters. Across Kaliningrad there are about eighteen thousand armed forces personnel.<sup>68</sup> Among other units, the Baltic Fleet also possesses twelve mine warfare vessels that could be effective in relatively shallow waters or narrow straits in some portions of the wider Baltic Sea region.<sup>69</sup> In 2017, Russia also finished standing up the 4th Naval Guards Aviation Regiment, including Su-24 bombers and Su-30SM fighters. Other units are also equipped with sophisticated surface-to-air missiles that further contribute to Russia's offensive and defensive capabilities. Though debatable, the advancement of Russia's weapons systems points toward another potential A2/AD bubble along northern Europe's coastlines if conflict breaks out in the Baltic region. U.S. general Curtis M. Scaparrotti, commander of EUCOM, testified recently that "Russia is attempting to exert its influence, expand its power, and discredit the capability and relevance of the West."<sup>70</sup>

Since 2013, many in the region have perceived an augmentation in Russian provocations on the high seas, attributed in large part to its more common "snap" exercises, involving elements from its Northern Fleet as well. In 2015, 76,000 troops participated in one of these exercises, including 65 ships, 15 submarines, and more than 200 military aircraft. The 2015 exercises were disconcerting to regional powers because they appeared to simulate taking over the Åland Islands in the southern portion of the Gulf of Bothnia, the Danish island of Bornholm off the coast of southern Sweden, and a portion of northern Norway.<sup>71</sup>

The regional exercises might appear provocative, but Russia has also become more noticeably aggressive toward other powers and NATO allies, including the United States, on the high seas, toeing a fine line between violating and upholding principles of international law or the United Nations Convention on the Law of the Sea. In October 2014, Sweden detected signals deep beneath the sea, located within Swedish territorial waters, that pointed toward a Russian submarine close to the coastline near Stockholm. Sweden has the difficult task of defending its thirty thousand islands and rugged ridges where a submarine can hide. Russia's submarine program has been rather successful in helping Russia project itself as a credible military threat and instilling fear among its smaller Baltic neighbors. Nonetheless, the incident, along with other accompanying Russian air incursions in Swedish airspace, signals the rising Baltic tensions over growing Russian provocations and a more assertive navy. In another event



from April 2016, two Su-24 jets conducted nearby flying maneuvers around the USS *Donald Cook*, with some of their flyovers appearing as “simulated attack” runs. Many smaller NATO nations are particularly concerned that they will be equally vulnerable to Russian takeover or other hybrid attacks similar to Ukraine or Georgia. In an official statement, the United States European Command stated, “These actions have the potential to unnecessarily escalate tensions between countries, and could result in a miscalculation or accident that could cause serious injury or death.”<sup>72</sup>

In a sign of Russia’s expanding naval projection capacity, European powers have also noticed Russia sending more ships out of the Baltic through the English Channel and into the Mediterranean to support Russia’s interests in Libya, Syria, and elsewhere. While Russia’s fleet exhibited varying degrees of success as it left either the North Sea or the Baltic, European and NATO powers are paying close attention to Russia’s increased naval outings. According to one recent British naval officer I spoke with, the British Royal Navy has been following or escorting Russian naval vessels sailing through the Channel on an almost weekly basis for the past several years. Considering its own pinched resources and generally reduced fleet, Great Britain has often struggled to meet these growing escort duties. In the event of any future conflict, Russia’s ability to maneuver beyond the Baltic Sea through the Strait of Dover and out of the Channel will be critical for its overall success. Furthermore, if it desires to move easily into the Mediterranean Sea, its A2/AD capabilities might prove crucial should additional conflict spring up beyond its near abroad. Unquestionably, Russia’s navy still has much development and many financial hurdles to overcome now and in the future. But its naval capacity has grown remarkably over the past several years and will continue to do so in the near future, testing NATO’s resolve and ability to contain or manage Russia’s burgeoning maritime might.<sup>73</sup>

#### *Growing Sino-Russian Naval Cooperation in the Baltic*

As in the Black Sea, naval cooperation and collaboration between Russia and China in the Baltic has expanded. The Sino-Russian naval exercises of the past several years are more symbolic than substantial for the time being, but they still gesture toward the shifting regional order being rewritten by Russia’s and China’s growing interests and investments. Both countries have a desire to push back against the status quo overseen by NATO and its allies, in addition to their

collective desire to achieve great power status. A simpler practicality also exists for the exercises: Russia and China lack a similar multilateral security cooperation organization like NATO and therefore benefit from such joint endeavors and exercises, which may blossom into something more robust to challenge NATO. For the time being, however, Russia still largely dominates the Baltic Sea region with a superior navy compared to the littoral states, and it now has a stronger grip on the region's SLOCs and trading system. China certainly understands Russia's position and seeks to gain and learn from it through more joint maneuvers and exercises, especially in a confined and congested maritime space such as the Baltic, encompassing the Kattegat Sea and Skagerrak Strait.<sup>74</sup> China's emergence in the region follows its growing geoeconomic interests, outlined in greater depth in the following section.

China and Russia only joined forces in the Baltic during the summer of 2017 as part of that year's Joint Sea exercises. For the joint maneuvers, the PLAN sent a small flotilla consisting of a destroyer, a frigate, and a replenishment ship. The twenty-sixth naval escort task force departed Hainan Province in late June and arrived near Saint Petersburg about a month later for the exercises from July 21 to 28. For its part, Russia contributed two corvettes, along with Su-24 bombers and helicopters flying from Russia's onshore bases. As reported in the Chinese press, the goal of the drills was to "consolidate and advance the Sino-Russian comprehensive strategic partnership of co-ordination, and deepen friendly and practical co-operation between the two militaries." An additional intent was to conduct rescue missions and drills that support the protection of maritime investments and security of the SLOCs. Antisubmarine, anti-air, and antisurface warfare were other important exercise elements. Part two of Joint Sea 2017 took place in the Far East, near the Sea of Japan and Sea of Okhotsk. After the completion of the Baltic portion of the exercise, a PLA-sponsored website published a Beijing-based naval expert stating that "by sending its most advanced guided-missile destroyers, China is expressing its sincerity to Russia and also sends a strong signal to other countries who plan to provoke us."<sup>75</sup>

Aside from the growing ties between China and Russia, the PLAN's deployment to the Baltic is a remarkable achievement for a navy that was not too long ago confined to its near seas, with a fleet incapable of sustaining international tours. Diplomatically, the choreographed PLAN port visits before and after the Joint Sea exercises also signaled the increasingly refined nature of China's naval diplomatic abilities as a great power. After the exercises in the Baltic, the PLAN

flotilla made port calls across northern Europe, with visits to Denmark, Belgium, the Netherlands, and France, and made its first historic visit to London in September 2017. The PLAN's global naval tour has fascinating parallels with U.S. president Theodore Roosevelt's Great White Fleet, which was deployed similarly as an important diplomatic and power projection tool for a young United States that had only just begun emerging as a rising power toward the end of the nineteenth century. Roosevelt also came under the influence of Alfred Thayer Mahan and his writings on sea power, which are not entirely dissimilar from some of China's naval thinking about sea power and great power today.<sup>76</sup>

#### *Rising Chinese Maritime Geoeconomic Investments in Northern Europe*

China's PLAN deployments signal its growing geoeconomic interests and maritime investments, as well as the BRI's extensive reach into the far western edges of Eurasia. Much of the Baltic region appears to have welcomed China's growing investments with open arms. For many of the smaller states, China's involvement has helped balance against an increasingly imposing Russia. In April 2017, Finland was pleased to host President Xi Jinping, marking the hundred-year anniversary of its independence (from Russia). Yet for the Baltic region as a whole, China's geoeconomic and maritime footprint has only just started expanding. If trends persist similar to its other maritime investment models, China will soon have a greater maritime geoeconomic presence throughout the region's ports of entry. For now, shipping is a more cost-efficient manner to transport goods. Though it takes longer—between 35 and 45 days from coastal China to Klaipėda, Lithuania—it is still cheaper than transporting goods via rail, which can cost between 80 and 100 percent more than shipping. (In comparison, goods transported via rail can take between 15 and 18 days from southwest China to Germany.)<sup>77</sup> China is very much in the process of making investments to gain greater access to, and control over, northern Europe's main maritime trade routes and supply chain nodes or port terminals. Northern Europe will also feed into the Arctic trade routes, which are of huge potential benefit to China (and Russia).

Though not located directly on the Baltic Sea, China recently picked up a big win in northern Europe that will have direct spillover implications for the Baltic region, along with the rest of northern and western Europe. In January 2018, COSCO Shipping Ports successfully purchased a majority share of Bruges-

Zeebrugge Port, Belgium's second largest, after APM (A. P. Møller) Terminals agreed to sell its 51 percent majority stake, which it had owned since 2006. Zeebrugge is strategically located near the ports of Hamburg and Le Havre, while also being a close sail to Great Britain or the Baltic Sea. According to some reports, COSCO has held a 24 percent stake in Zeebrugge since 2014, and the Shanghai International Port Group held the remaining 25 percent. In the final agreement, COSCO owns a 90 percent stake in a fifty-year concession of the port, while the other shipping conglomerate, CMA CGM, owns 10 percent. Speaking at the signing ceremony in 2018, China's ambassador to Belgium stated, "The launch of [the] Belt and Road Initiative between China and Belgium in 2014 has laid a solid foundation for today's signing ceremony. . . . The cooperation between China and Belgium is win-win. By actively exploring cooperation opportunities with China, Zeebrugge port has gained importance in [the] international sea freight market, especially Northwest European routes." Zeebrugge has a naturally deep harbor and transships an estimated 40 million tons of goods annually. The port also contains a transshipment LNG terminal that handles Arctic gas shipments from Yamal Peninsula before heading to East Asian markets. With this latest acquisition, China now controls an estimated one-tenth of all European port capacity, and this number will likely grow in future years. In addition, Zeebrugge will act as an important anchor in northern Europe to help unify China's other main port investment in Piraeus, Greece, among other locations in southern Europe.<sup>78</sup> China's aspiration to develop independent maritime supply and logistics routes is coming to fruition.

Nearby in Rotterdam, Europe's largest port, China is similarly making inroads, as well as other spots along Europe's northern coastline. In 2016 a subsidiary of COSCO Shipping Corporation purchased a 35 percent stake, worth an estimated \$47 million, in Rotterdam's Euromax Terminal, an automatic container terminal. COSCO acquired its share from a subsidiary of Hutchison Port Holdings, owned by the Hong Kong billionaire Li Ka-shing. The terminal has the capacity to handle around 3.2 million TEUs every year. According to recent estimates, about a quarter of all goods offloaded at Rotterdam arrive from China. Elsewhere, and farther to the east in the Baltic Sea, COSCO Shipping Lines recently announced the establishment of a new container shipping line called the Poland-Finland Express at the Port of Riga, which will connect all of the Baltic Sea's main ports. The Baltic Sea route will operate on a big loop (Gdańsk–Helsinki–Riga–Klaipėda–Gdańsk), returning to the Port of Riga every

week.<sup>79</sup> China's newly acquired maritime investments are still in their relative infancy but will likely grow in due course, helping to alter the region's political and geoeconomic dynamics more in China's strategic favor.

Despite success with Zeebrugge, China has fallen short with some of its other proposals in the Baltic region and northern Europe. In Lithuania, the government appeared to renege on a memorandum of agreement to expand port operations at the last moment in 2017 as a result of the Lithuanian government's apparent reluctance to transfer the port's operations to a Chinese firm. China Merchants Group and the Port of Klaipėda, one of the Baltic's largest container ports, had previously signed the agreement in 2015. It will be interesting to follow the spillover effects this has for Lithuania in its future trade and investment partnership with China. Lithuania currently receives the most Chinese outbound direct investments (ODI) among other Baltic nations, accounting for about 75 percent of the region's ODI. In addition to Lithuania, Iceland and Norway also reportedly froze talks on potential Chinese investments in several ports located in each country.<sup>80</sup> This might temporarily slow some of China's regional plans, but it is unlikely to halt its larger strategic maritime initiatives.

### Reshaping the Regional Status Quo

Over the past decade, Russia and China began dismantling the Western-dominated political and economic order present since the end of the Cold War. The Baltic-Black Seas axis is one of the first strategic areas witnessing this shift. From Russia's perspective, this makes sense, since it has long viewed the Baltic and Black Seas as part of its near or territorial seas. Russia has benefited from relatively high, albeit fluctuating, oil and gas prices to help spur its recent military and naval modernization efforts. Flush with greater cash flows, Russia has been able to take on a more assertive security role, much to the detriment of regional security at both ends of the Baltic and Black Seas. Meanwhile, China has also started to achieve significant geoeconomic gains across these two critical European maritime regions. What is emerging across the Baltic and Black Seas also fits into a larger great power competition between the United States and a growing Sino-Russian partnership. This observation was similarly asserted in the latest 2017 U.S. National Security Strategy: "After being dismissed as a phenomenon of an earlier century, great power competition returned. China and

Russia began to reassert their influence regionally and globally. Today, they are fielding military capabilities designed to deny America access in times of crisis and to contest our ability to operate freely in critical commercial zones during peacetime. In short, they are contesting our geopolitical advantages and trying to change the international order in their favor.”<sup>81</sup>

Increased Sino-Russian cooperation, whether in the naval realm or elsewhere, does not necessarily mean the two nations have formed a lockstep partnership that will quickly push back against the NATO alliance of western Europe. Russia and China equally have a strained history that Europe could leverage to its advantage. As stated to me recently by several European military officers, some in Europe view China’s growing military or naval presence in a more affirming light. They view an opportunity to help shape China’s rise in Europe, as opposed to the more fraught and historical tensions with Russia. Many European nations desire to integrate China into a common framework and understanding for principled behavior as dictated by international legal standards. Moreover, some observers similarly believe that there could be ways to create distance between Russia and China over potential clashing geoeconomic interests. Rising Chinese maritime investments in Ukraine and Georgia on the Black Sea or Poland and Latvia on the Baltic Sea might one day pose greater challenges to Russia’s own geoeconomic and geostrategic interests, especially as they relate to energy security. This could be an area where Europe could lure China away from Russia’s European orbit if opportunities presented themselves accordingly.

For now, however, Russia and China appear to be in sync and mutually benefiting from their broadening cooperation, and this could pose problems for NATO, the European Union, and the United States in the future. With these shifting dynamics, the United States must first remember the great and historically important role that NATO has played for decades in support of global security and stability. NATO currently has the upper hand regionally over this emerging Sino-Russian partnership. As a result, in the interim, NATO should continue with more regional military exercises at sea or via land, in conjunction with continued intelligence sharing and other joint and combined maneuvers that promote interoperability across Europe. Additional naval exercises such as the BALTOPS exercise in the Baltic Sea will be vital. Also, NATO must continue maintaining its extensive basing apparatus throughout Europe as another important check on growing Russian military and naval aggression.<sup>82</sup>

Even with such recommendations, problems still emerge related to growing

regional securitization and rising navalism. Russia's increased maritime might means that it is pushing back and responding to NATO or U.S. action in a more robust manner. As many have remarked, a growing security dilemma is emerging, in which it is becoming increasingly challenging to distinguish between offensive versus defensive capabilities and intentions. Furthermore, the likelihood of inadvertent collisions or cross-wired communications could quickly escalate into something more hostile or lethal between Russia and NATO countries. As noted in one recent analysis, "In the coming decades, it is likely that the maritime domain will become increasingly congested and competitive. This development is driven by global megatrends, including the rise of new powers, climate change, disruptive technologies, and urbanization and littoralization. These factors will make the maritime environment more complex, and will include security challenges from both non-state and state actors."<sup>83</sup>

To help stave off any future accidental or deadly encounters between the various regional and great powers, diplomacy must rule the day. Russia, China, the European Union, and the United States must continue to engage diplomatically. Keeping open dialogue channels will help alleviate some of these potential conflicts, which may start small but can quickly escalate without a means to resolve them at lower levels. The United States and others must also remember that many of these changing dynamics are driven by geoeconomics and might require more of a geoeconomic solution than a military one. China, for one, is already well on its way toward developing new supply chain and logistics routes that might help buffer it from any future conflicts that emerge between Russia and the West.

## Vying for the Mediterranean

ON MARCH 17, 2011, A DRAMATIC vote took place at the United Nations Security Council (UNSC) supporting the authorization of airstrikes against Libyan president Muammar al-Qaddafi's forces, in addition to allowing the establishment of a no-fly zone. It was a win for France, Italy, the United Kingdom, and the United States, which were the primary backers of the resolution. Russia and China (and India, too) sat on the sidelines and abstained during the vote, allowing for UNSC Resolution 1730's final passage. Their foreign policies had traditionally been one of nonintervention in a foreign nation's domestic politics. But in this particular case, they abstained primarily because of the Arab League's influence, which supported overthrowing Qaddafi owing to his unpopularity.<sup>1</sup>

With respect to China and Russia, the case of Libya is interesting for what occurred before and after the overthrow of Qaddafi. The case symbolizes the shifting geoeconomic and security dynamics and greater rapprochement between the two powers in the Mediterranean. Before the UNSC vote in March, with the Qaddafi regime on the verge of collapse, China was confronted with a nightmare scenario to rescue the estimated thirty-six thousand Chinese nationals scattered across Libya. Chinese nationals in Libya worked across many sectors, including energy, telecommunications, and infrastructure projects for Chinese state-owned corporations. The first rescue missions began on February 24, when the Chinese government started rescuing small numbers of Chinese nationals using PLA Air Force and Air China civilian airplanes. Other Chinese nationals crossed into Tunisia or Egypt on organized motor coaches. But the vast majority of those remaining were rescued by sea with the help of the PLAN, leaving



from the ports of Tripoli in the west and Benghazi in the east. The scale and pace of the mission left the PLAN largely unprepared despite having a ship deployed near Djibouti to support international antipiracy operations. The PLAN lacked a sufficient number of vessels and was forced to rent ferries and other civilian ships from Greece. Greece helped provide about 40 percent of the Chinese nationals with safe passage out of Libya.<sup>2</sup>

The PLAN frigate *Xuzhou* deployed for Libya arrived on March 1. As documented by one report, “The deployment of a naval vessel in support of the operation marked for China a ‘change of concept’ in the use of the armed forces abroad. It was a demonstration of the widening spectrum of China’s military operations, with a growing role played by ‘military operations other than war.’”<sup>3</sup> The number of Chinese citizens living in Libya at the time of Qaddafi’s overthrow also represents how much China’s regional geoeconomic interests have grown across the Mediterranean basin’s ports and harbors. As China expands its economic investments throughout Eurasia and seeks out greater access to valuable natural resources in the broader Middle East and North Africa region, it makes sense that it will also need to secure these resources and investments. By some estimates, it is believed that China lost an estimated \$20 billion in investments after the fall of Qaddafi and the ensuing civil war. Since 2010 the PLAN has expanded its naval presence, making port calls across the Mediterranean from Israel, Syria, and Turkey to Greece and France. In the case of Israel and Turkey, the PLAN’s summer 2012 visits coincided with the arrival of a Russian naval flotilla in Syria, possibly symbolizing the shifting regional order. Part of the PLAN’s emerging naval presence corresponds with a massive influx of Chinese nationals traveling abroad. According to Chinese official data, approximately 98 million Chinese travel abroad each year, and since 2009, this number has increased about 10 million per year on average. The safety and security of Chinese citizens have therefore risen in importance, especially where Arab uprisings have led to extensive instability and insecurity.<sup>4</sup>

The security of growing infrastructure projects will only become more pronounced as port investments and maritime commercial assets grow over time. The problem, however, is that the Mediterranean is already frequented by NATO forces, the United States, Russia, and other European actors. The fear is that a chance accident or misunderstanding could lead to conflict or that some other form of cross-wired communication could further strain regional relations. After Libya, it is also more likely that the PLAN might seek out basing access in the

Mediterranean in a place such as Greece or another country with good port access. China does not want to be caught flat-footed again, as it was in Libya (or Yemen and Syria), when it comes to protecting investments and rescuing its citizens. At the UNSC level, China also saw its abstention vote as having more unfortunate trade-offs and outcomes than if it had opposed the resolution, and it did not want to repeat that elsewhere.<sup>5</sup> As it builds up its massive port and maritime infrastructure projects as part of the MSR, China will proceed with caution to avoid jeopardizing its growing geoeconomic interests across the Mediterranean basin.

By comparison, Russia also repositioned itself regionally after the Libya conflict by seeking to project greater power amid the chaos, and it was able to do so with its new perch in Syria. Before Qaddafi's overthrow, Russia frequently used Libya's ports to support its naval outings in the Mediterranean; it also had deeper historical ties with Qaddafi during the Cold War. But with the overthrow of Qaddafi, "Moscow may well have been seeking to seize the opportunity to fill the strategic void in the Mediterranean while Western attention was focused elsewhere. Whatever the reasoning, Russia moved quickly to establish itself—through its naval presence, in large part—as a major player in the region."<sup>6</sup>

In the spring of 2017, General Thomas D. Waldhauser, U.S. commander of AFRICOM, stated that Libya and North Africa were growing in their threat to the United States, especially as Russia sought to install former Libyan general Khalifa Haftar to power. In fact, at the start of 2017, Russia's only aircraft carrier, *Admiral Kuznetsov*, was spotted off Libya's shoreline welcoming General Haftar to much ceremonial pomp. Haftar was also purportedly welcomed into the interior quarters to hold a discussion with Russia's defense minister via a secure line. Russia's more menacing and proactive presence in the Mediterranean is part of Putin's larger Middle East and Mediterranean strategy. After his takeover of Ukraine, he pushed Russian naval forces farther into the Mediterranean. He first succeeded in keeping Syrian president Bashar al-Assad in power, including the establishment of a base at Tartus, and now has expanded Russian sites and interests elsewhere, like Libya. Recently, Russia also reportedly deployed out of a base in western Egypt to assist and keep an eye on the situation in Libya, possibly in an effort to recuperate a foothold from its Soviet Union days.<sup>7</sup>

Libya represents all that is changing across the Mediterranean: China has growing geoeconomic and geostrategic interests and thinks increasingly about

nontraditional security threats such as those highlighted in Western doctrine on terrorism, illegal migration, and transnational crime just as much as on traditional security threats affecting its national development.<sup>8</sup> Russia has attempted in a similar fashion to help rewrite the regional order as a revisionist power seeking to gain greater influence and prestige. It does not have the same burgeoning geoeconomic interests, but its more aggressive actions are placing NATO on an increasingly defensive footing and may result in mounting tension—even unintended collisions—on the high seas.

### Maritime Geoeconomics of the Mediterranean

The Mediterranean may be small by oceanic standards at approximately 2.5 million square kilometers, but it is complex and has been subjected historically to the winds of change between East and West, by forces from both inside and outside the Mediterranean littoral. In Latin, *mediterraneus* means “between lands” or “in the middle of the earth,” and in German the Mediterranean is called the Mittelmeer, or Middle Sea. Mediterranean cultures, especially its vast array of seaports and diversity, benefit from a vibrant history of maritime transport and commercial interactions. It began as a rather closed-off and self-contained sea dating back to the Romans, who referred to it as *mare nostrum*, “our sea,” but over time the Mediterranean successfully became part of a larger oceanic tradition, both contributing to and borrowing from the Baltic and North Atlantic technologies, before being overtaken by the oceanic cultures of northern Europe.<sup>9</sup>

Today, forces emerging from beyond the Mediterranean basin are beginning to transform the post–Cold War dynamics that have mainly been dominated by Europe, NATO, and the United States. Russia’s increasing naval presence and buildup form just one component of the shifting regional and global order. In addition to Russia’s growing naval aggression and maritime force projection, the Mediterranean’s emerging economic importance is noteworthy as well. About 15 percent of the world’s natural gas shipments and approximately 5 percent of oil shipments traverse the Mediterranean either from North Africa or via the Suez Canal. Many anticipate that natural gas and oil exploration will soon become another valuable asset from which both regional states and other Eurasian powers such as Russia, China, and India can benefit. At the same time, it is likely to be a point of contention, since the EEZs are still widely disputed between Israel and Lebanon or Greece and Turkey. The eastern Mediterranean

basin, especially near Cyprus, Lebanon, Egypt, and Israel, is forecasted to have an estimated 3.45 trillion cubic meters of gas and 267 million tons of oil.<sup>10</sup>

China is quickly stepping into the foreground to take advantage of the region's economics with its massive maritime investment and infrastructure projects, with a focus on ports. Some have referred to it as the "port plus industrial park" model. In the past several years, China has invested about \$47 billion in an estimated forty port projects.<sup>11</sup> It began a global project that ultimately aspires to rewrite the global economic order, creating a new and independent system that moves beyond the reach of traditional leverage by other outside powers. As described by one scholar, the BRI and MSR project attempts to "unbundle different segments of the production chain. It attempts to create a set of political and institutional tools with which China can start to reorganize global value chains and stamp its imprint on the rules governing the global economy."<sup>12</sup> Like Mahan, China understands the correlation between maritime commerce, wealth, and the historical sustainment of great powers. Here the Mediterranean has emerged as an important arena again with the rising interests and maritime activities of Russia and China (and slowly that of India). But for China, the Mediterranean is a critical junction that links Europe to the BRI and MSR that is valued at 30 percent of global GDP.<sup>13</sup>

China and Russia are beginning to focus more significant amounts of energy and efforts to maintain footholds and secure national security interests. For China, it is more geoeconomic in nature, while Russia's efforts are more tied to national security concerns and access beyond the Black Sea. In 2016, Chinese exports to the European Union were priced at more than half of its imports, creating a trade deficit of an estimated \$215 billion. This is significant, but placed in a wider context, China's foreign direct investment (FDI) across Europe is estimated at less than 5 percent, which means China has massive room for growth, despite other investors already active there. At the same time, however, 85 percent of all trade between Asia and Europe is maritime trade.<sup>14</sup>

Together, Russia and China have started challenging the status quo, reordering a region previously dominated by western Europe, NATO, and the United States. This is changing the region's dynamics in significant ways, and if both the current geoeconomic and security trends prevail, increased potential for inadvertent clashes exists between a power such as Russia and the United States or Europe. But perhaps a more interesting aspect is the growing relationship between China and Russia. As previously detailed, Russia views Europe and its

maritime spaces as historically part of its sphere of influence, and it will do whatever it can to defend its territory. For now, the two countries appear to seek what China refers to as a “win-win” partnership, but as China increases its economic footprint and creeps deeper into the Black and Baltic Seas, Russia’s support of China’s regional change may shift. Chinese scholars also know that Russian interests in the Mediterranean do not always overlap, and some have even referred to Russia’s diplomacy as “opportunistic,” gesturing toward the continued complexity and delicacy of the bilateral relationship.<sup>15</sup>

To understand China’s broader strategic and geoeconomic objectives, we need look no farther than to its burgeoning network of ports and other maritime infrastructure projects. The Chinese are one of the largest port operators in the world, and though China appears in step with other global port operator giants such as Maersk, Dubai Ports World, and Switzerland’s Shipping Co., China’s growing numbers are still significant: China Merchants and COSCO currently operate 36 ports in 18 countries and 47 terminals in 13 countries correspondingly. On the shipping side, China’s top five shipping companies carried 18 percent of all container shipping from the world’s top twenty firms in 2015. Moreover, the growing number of Chinese-friendly harbors means that China will never be beholden to any one route; it could also potentially shut down routes to rivals or for leverage over a host nation unable to pay back its loans. Alternatively, controlling the import and export routes means China is more self-sufficient, reducing any outside country’s ability to apply political or economic pressure. From a logistics and supply chain perspective, China can also always choose the fastest and most efficient route to help defray costs and cut shipping times. It has purchased or invested in so many port facilities across Europe in recent years that China now controls about 10 percent of all European port capacity. At the same time, China has also amassed a global monopoly on the building of harbor container cranes. In fact, this is a broader strategy that China has deployed with success: after it purchases a local company, it will then use the newly acquired local company to buy other competitors, especially in high-tech industries, or to assist in its need for a larger volume of production, as in the case of infrastructure projects. What China is doing now is not for the short-term but for the long-term horizon. It wants to create an independent system and geoeconomic dominance to secure its larger economic and strategic interests.<sup>16</sup>

The other benefit to the growing number of ports worldwide is that they can

serve as “dual-use” facilities. If there is a humanitarian crisis or need for disaster relief, the PLAN has a greater ability to send in ships to either support a local population or rescue Chinese nationals, as in the case of Libya in 2011. It also helps that these newly acquired port investments and takeovers are run by Chinese state-owned enterprises such as Hutchison Whampoa and China Ocean Shipping Company (COSCO), which have close relationships to the PLA. COSCO, for instance, was historically an offshoot of the Chinese navy. After a series of mergers and acquisitions in recent years, COSCO is one of the world’s biggest shipping companies outside of Europe, as well as one of the biggest port operators. China has the third-largest merchant vessel fleet in the world. Likewise, China Merchants Port Holdings (CMPH) handles even more cargo worldwide and continues to buy ports globally.<sup>17</sup>

The frenzy of Chinese investments, however, comes with particular risk for European nations, since China does not always offer the most favorable terms for its loans. Chinese loans elsewhere around the globe have been cited as anywhere between 6 and 8.8 percent (such as in the case examined later on Sri Lanka’s variable interest rate loans). China’s significant investments and big loans across maritime Europe mean that it will only grow stronger and more influential over time, especially if smaller and more financially troubled European nations such as Greece or Montenegro fail to make their loan payments to China. China’s potential future debt leverage over these smaller countries could have significant negative consequences. One recent report expressed concerns about China’s growing presence in Europe, stating that “China is not just ‘at [Europe’s] gates’—it is now already well within them.”<sup>18</sup>

*The “Pearl” of the Mediterranean: Piraeus, Greece*

Beginning in 2004, Greece and China bonded over the transfer of the Olympics and the deeply shared respect for their historic civilizations, but it was the shipping industry that really brought the two nations closer together. Starting in 2006, the two formed a “strategic partnership” focused mainly on shipping, trade, and tourism. China was interested in Greece’s powerful shipping industry as one of the world’s largest merchant fleets, possessing about 20 percent of the world’s merchant vessels. The Greek-owned fleet was responsible for 40 percent of Europe’s total tonnage, as well as an estimated 60 percent of China’s imports and approximately 50 percent of its exports. Furthermore, China has constructed about four hundred Greek ships in the past decade or more.<sup>19</sup>

China also saw Greece as an important clearinghouse and entryway for its products into southeastern and central European markets. It similarly helped that Greece expressed a willingness to consider the privatization of its ports. Additionally, China viewed Greece as a receptive partner for its broader foreign policy agenda. Through its growing geoeconomic partnership, China was able to gain buy-in from Greece for its One-China policy, or resistance to Taiwan's independence, over and above receiving Greece's qualified disapproval of the European Union's arms ban against China. Greece also never openly acknowledged an EU reference to an International Court of Justice ruling that contradicted China's legal claims in the South China Sea, and in June 2017 Greece blocked an unfavorable EU proclamation at the United Nations against China on human rights. China repaid the favor in kind by supporting Greece's stance on Cyprus, among other important regional political and financial concerns. China frequently adopts a similar foreign policy strategy with other nations and cites it as a "win-win" strategy for all nations that engage with China in these types of economic partnerships.<sup>20</sup>

In 2006, Greek prime minister Kostas Karamanlis traveled to China to sign the Comprehensive Strategic Partnership agreement with his Chinese counterpart, premier Wen Jiabao. During his state visit, Karamanlis also met with the president of COSCO, Captain Wei Jiafu, to begin preliminary discussions about Greece's port management and operations. Jiafu visited Greece in 2007 for the inauguration of the *Cosco Hellas*, the Chinese-built but Greek-owned container ship. Another head-of-state visit followed in 2008, when Chinese president Hu Jintao traveled to Greece, and the two nations solidified a \$5.3 billion landmark agreement that enabled COSCO to run two of Piraeus's container terminals. The deal granted COSCO a thirty-five-year lease to operate piers 2 and 3 in Piraeus, located around eleven kilometers from downtown Athens. Access to Piraeus meant that Chinese goods arriving from the Suez Canal could offload straight at Piraeus onto trains and avoid the additional twenty to thirty days previously required to make the voyage through the Mediterranean and Strait of Gibraltar en route to Europe's northern ports. Amid Greece's tumultuous debt crisis in 2009, China continued to invest heavily in Greece, placing China on favorable ground with the Greek government. In 2010, for example, the two countries signed eleven bilateral agreements totaling over \$10 billion. China's massive investments over the past decade in Greece are already paying off with both a fivefold increase in Piraeus's container flows and overall bilateral trade.<sup>21</sup>

The biggest news of all, however, occurred on August 10, 2016, when COSCO announced it had acquired a 67 percent stake in pier 1 from the company operating the port, Piraeus Port Authority SA. This meant that COSCO would assume all official business and future port operations, including all the software, technology, and equipment used to monitor and protect the port. In a short period, COSCO transformed Piraeus into one of the Mediterranean's busiest harbors, making it an essential European entry node for China's BRI. Rising quickly to number two behind the Spanish port of Valencia, Piraeus hopes soon to take the top regional port position. The majority stock purchase will be carried out in two phases. During phase 1, COSCO invested \$316 million for a 51 percent claim. In phase 2, China will purchase an additional 16 percent stake by 2021, totaling \$99 million. This consolidation of COSCO control over all three of Piraeus's piers will enable it to compete with Europe's largest ports in Rotterdam, Hamburg, and Antwerp. Furthermore, by acquiring the cruise terminal, Chinese naval vessels could potentially rent the space for docking, replenishment, and repair. Based on discussions with one official in Athens, three warships could hypothetically dock four to five months in winter for approximately seven million dollars per month, and the Greek government would support such an arrangement. In 2017 three PLAN ships stopped at Piraeus for a four-day diplomatic visit in what was presumably a trial run. According to several Greek officials, the PLAN will likely increase its visits and presence moving forward.<sup>22</sup>

Prime minister Alexander Tsipras's decision to sell the port was met with steep resistance within Greece and from terminal workers, who took to the streets in protest. When asked about Chinese activities in Greece, Costas Douzinas, the head of the Greek Parliament's foreign affairs and defense committee and member of the then governing Syriza party, quipped, "It's a kind of neocolonialism without the gunboats." Despite some domestic outcry and workers' fearing the jeopardization of their jobs at the port, Tsipras pushed ahead with the massive billion-dollar privatization scheme. The workers were nevertheless correct to be concerned, as the company began relying heavily on subcontractors with short-term contracts and lower wages compared to the average dockworker's salary.<sup>23</sup>

Piraeus is key to China's larger vision for its investments in Europe, as it will link into central and eastern Europe's burgeoning economies, where China also has many projects in the works. China's ambassador weighed in on the Piraeus



deal, highlighting its significance as a valuable “dragon head” in Europe and noting that the larger project represents the “five pillars of the Belt and Road Initiative, namely policy coordination, facilities connectivity, unimpeded trade, financial integration, and people-to-people bonds.”<sup>24</sup> Chinese prime minister Li Keqiang, who traveled to Piraeus in June 2014, also referred to it as “the pearl port” of the Mediterranean.

COSCO continues to actively and openly seek to expand its holdings, ship repair facilities, and port access in Greece. According to one Greek official I spoke to in Piraeus, COSCO intends to construct a fourth terminal in the next several years as part of a larger \$880 million modernization and expansion investment project that would drastically enhance its operations and ability to dock ships and offload cargo. It has also expressed interest in Neorion Holdings, the struggling shipbuilding owner that possesses either a majority or full stake of Greece’s second- and third-largest shipbuilding enterprises. COSCO likewise remains curious about Greece’s largest ship repair yard, Hellenic Shipyards. Currently Piraeus has around ten to twelve Greek-owned ship repair firms, but they are slowly being pushed out of business by COSCO. Each year, COSCO has raised port fees and other duties around 15 to 20 percent, contributing to a slowdown in the ship repair business because shipping companies are unwilling to pay the higher fees. When Greek ship repair firms begin to fold, COSCO-linked companies appear to fill the void, tightening COSCO’s already firm grip over the port. In 2018, in a sign of things to come, COSCO transported a new Panamax floating dock to Piraeus, which can support ships, including naval vessels, with a carrying capacity of up to 80,000 tons and maximum dimensions of 249 meters long by 35 meters wide. Aside from ship repair, COSCO has bid to manage and run the port of Thessaloniki, in addition to trying to garner a greater stake in the connecting Hellenic Railways Organization, which would act as a seamless maritime-rail transportation link to the rest of Europe. Eleven tenders across Greece are also up for future privatization, and it is likely that COSCO and other Chinese firms will bid on them. Last, on the tourism front, Fosun International Holdings began seeking out joint financing to transform an old airport by the sea near Athens into a Monaco-like tourist hub for wealthy Chinese and international tourists. Estimates speculate that the new resort town could attract more than 1.5 million tourists per year. As prime minister until 2019, Tsipras helped clear the investment path toward construction even though it meant eliminating two refugee camps in the process. Greece will

most certainly continue to act as a vital gateway linking China to western Eurasia and all its lucrative markets.<sup>25</sup>

As China begins monopolizing a larger maritime supply chain and logistics network across maritime Eurasia, it holds increasing amounts of geoeconomic leverage over other countries or international shipping corporations that want to use the newly built Chinese port and maritime transportation system. Japanese ships, for example, have allegedly experienced problems arriving at Piraeus. This is a trend that could easily transpire elsewhere, given China's growing dominance over certain shipping routes and ports.

China's dominance over new infrastructure, transportation, and port projects in central and eastern Europe, however, is not a *fait accompli*. Several central and eastern European countries—mainly Poland and the Czech Republic—have recently pushed back against China's aggressive infrastructure investments. In December 2018, Poland and Czech Republic issued separate official statements warning against involvement with Chinese telecommunications firms owing to nontransparent business practices and potential intellectual property theft. Though not all other European nations have adopted similar pushback strategies, such resistance does signal to China the types of challenges that it might have to confront for other BRI or MSR projects. China will need to work on reassuring partner nations that it is continuing to make the BRI transparent, environmentally friendly, and “fiscally sustainable” if it wants to overcome this latest round of European rancor.<sup>26</sup>

### *The Eastern Mediterranean*

China's growing footprint in Greece ties into other maritime commercial activities and investments throughout the Mediterranean, especially in Turkey and Israel. Though not on the same scale as Piraeus, they will help to further China's more massive BRI agenda to build up an east–west trading empire, including control and access to ports and other outlets or transportation corridors and SLOCs. The Suez Canal factors into this strategy, but I analyze it in the next chapter on the Red and Arabian Seas.

As a country that straddles both the Black and Mediterranean Seas with the Bosphorus connecting the two, Turkey hopes to attract further Chinese regional maritime investments to build up several of its Mediterranean ports. In 2015 a conglomerate of several Chinese firms—China Merchants Holdings International, China Investment Corporation, and COSCO—raised capital to purchase

a 65 percent stake in Istanbul's main port terminal, Kumport, worth about \$920 million. Kumport terminal is part of the larger Istanbul Ambarli port and is Turkey's third-largest port, processing about 2.7 million TEUs annually. In addition, China is surveying three other prospective ports to expand its foothold in Turkey. The first two ports are located in the İzmir region along the western edge of the country or eastern shores of the Aegean Sea. The first port, Çandarlı, is north of İzmir and has an annual capacity of 4 million TEUs, but it still lacks the requisite land and railroad connections to make it fully operational. The second port, Alsancak, is in İzmir and is considered one of the leading export terminals for Turkey. The third port, Mersin, is located closer to Turkey's south-east border near Cyprus.<sup>27</sup>

South and east of Turkey lies Israel, where China is equally interested in creating an additional node in its larger east–west shipping and trade network; Israel might also someday act as a contingency transportation corridor, albeit on a much smaller and largely uneconomical scale, to the Suez Canal. With China's growing regional interests, it must mitigate the risk that is posed to its east–west trade routes and transportation corridors. Finding alternative ports and routes therefore fits with its increasing focus on Israel. Israel also benefits, since 99 percent of its imports and exports travel via the sea. The Israeli government's bigger objective is to privatize several terminals at two of its largest ports—Haifa and Ashdod—to raise more capital for the government. Additionally, as I examine later in the chapter, Israel desires to upgrade and expand its terminals to stay competitive with other regional transshipment ports. With these port projects, Israel can showcase greater stability for other FDI projects, especially since Ashdod was the target of a Hamas rocket attack launched from Gaza in the spring of 2014.<sup>28</sup>

Several years ago, China started exploring ways to link Ashdod to Eilat, located at the northern tip of the Red Sea in the Gulf of Aqaba. In 2011, Israel's minister of transportation signed a cooperation agreement with China to move forward on a proposal allowing Chinese firms to survey the possibility of what is called the Med-Red rail project. At the time, the local lore was that the then Chinese ambassador to Israel rented a four-wheel-drive jeep and drove it through parts of the desert from Ashdod to Eilat with the intent of exploring a possible alternative multimodal transportation route. In 2012, Israel's cabinet approved moving forward with the project despite internal disagreement about how to finance the project. The proposal, which still appears as a proof of con-

cept more than anything else, was to construct a 320-kilometer railway for freight and up to 3.5 million passengers between Eilat and Ashdod. The initial cost estimates were around \$6.5 billion but could go up to \$13 billion if construction ever begins. The massive infrastructure project would entail sixty-three new bridges spanning up to 4.5 kilometers, along with 9.5 kilometers of tunnels. One of the initial challenges in Eilat was finding enough space to build a container port terminal; dredging is also difficult owing to environmental concerns. Eilat mainly handles bulk exports, livestock, and car imports. If Israel joins forces with Aqaba in Jordan, it might be able to attract larger ships and in turn make the railroad project more feasible. Unless the Suez Canal becomes impassable—which is unlikely at present—the project will likely remain at the proposal stage.<sup>29</sup>

While the Med-Red rail project stalls at the proposal phase, China has made progress on establishing significant footholds at the ports of Ashdod and Haifa. By some accounts, China is investing around \$2.9 billion in port investments, including terminal expansion and other requisite upgrades. The two ports handle around 3 million TEUs collectively per year, or around 1.5 million TEUs at each port. Each port has the capacity to handle around 2.5 million TEUs, but with the terminal expansion projects under way, the hope is to double each port's capacity to 5 million TEUs per year, or a total of 10 million TEUs. The terminal expansion projects have grown in urgency since 2017, when Israel witnessed a spike in ship waiting times to offload cargo. For container ships, wait times have been anywhere between thirteen and fifteen hours at either port. In prior years, the waiting time was closer to four or five hours on average.

In 2014, after outbidding two Israeli conglomerates, Israel granted Pan-Mediterranean Engineering Ltd., a subsidiary of China Harbour Engineering Company, the right to begin construction on a new \$930 million terminal at Ashdod. According to one Israeli official, the Israeli government tried to persuade and lobby several U.S. firms at the time to bid on Israel's two main port projects, but the American firms declined to bid. China's competitive bid on Ashdod fits into a broader pattern of constructing its own trading and logistics system by monopolizing regional and global maritime economies, making it harder to leverage or control down the road. Over the next several years, the Chinese subsidiary will construct the new terminal, in addition to other modernization efforts in Ashdod, including an expansion of the deepwater berths and the construction of new docks, warehouses, and jetties. It will also include

a 1,000-meter pier and 2,800-meter breakwater. Unfortunately for local Israelis, the new port projects come with certain risks for dockworkers. Similar to what has played out in Greece, newly minted agreements have been met with resistance and strikes by dockworkers protesting the privatization potential to exploit union workers in the future. China has a poor labor and construction reputation that it is trying to amend across many of its BRI projects, and the Israeli government has similarly tried to reassure critics that it will continue to monitor and manage labor practices of the Chinese firms.<sup>30</sup>

To the north in Haifa, Israel awarded the Shanghai International Port Group (SIPG), majority owned by the China Merchants Group, a twenty-five-year concession in 2015 to manage and operate the new Haifa terminal being constructed for about \$1 billion by Shapir Engineering and the Ashtrom Group, two Israeli companies. The new bay terminal, which sits next to the Haifa airport, is expected to be fully operational by 2021. The SIPG chairman recently commented, “Investing in Haifa will help strengthen relations between Shanghai port and other ports along the Maritime Silk Road and form a closer trade network between Shanghai port and ports in Europe.”<sup>31</sup> The deal faced greater international scrutiny when retired U.S. admiral Gary Roughead, speaking at a conference at Haifa University in August 2018, openly questioned whether he would still dock U.S. Sixth Fleet ships at Haifa port if the new terminal was going to be operated by the Chinese. As pointed out to me repeatedly during my Haifa visit, the new Chinese-operated terminal is about one kilometer away and not within line of sight of the existing terminal that traditionally docks U.S. warships. It was also argued that one could easily just rent an apartment atop the ridgeline that overlooks the port to equally gather any signals intelligence or to monitor incoming and outgoing ship activity. In other words, it would not matter if SIPG was installed at the new terminal or not because one could either use remote cybercapabilities or other means to gather intelligence on U.S. and Israeli forces. Moreover, Israel is currently negotiating a security annex that would enable anyone from Israel’s various security or customs agencies to access all SIPG computer systems at a moment’s notice. Many within the U.S. government still remain skeptical, and Israel’s port security will continue to be a hot-button issue for both the United States and Israel, especially as SIPG becomes permanently installed at the new Bay Terminal in the next few years. When it takes over the terminal’s operations, SIPG will likely have between 200 and 300 employees.

Despite increased pressure from the United States and others, China and Israel continue to strengthen bilateral ties. In 2016 they began the first of several rounds of negotiations regarding the establishment of a China-Israel Free Trade Area. The second round of trade talks resumed in the summer of 2017. According to recent estimates, China is the third-largest trading partner with Israel, reaching about \$11 billion in trade.<sup>32</sup> The future looks promising for the geo-economic relationship between China and Israel. China's influence over Israel's main ports has already been largely fulfilled.

### *The Southern Mediterranean and North Africa*

Libya has proved to be a no-go zone since the fall of Qaddafi in 2011, but toward the western edges of the Mediterranean, Morocco and Algeria are emerging as two additional and important transshipment hubs or ports. The proximity to the Strait of Gibraltar makes Morocco a particularly strategic asset toward constructing a new and increasingly independent supply and logistics chain of maritime transportation networks. Tunisia is a rather small nodal point owing to its small economy and population, but it hopes that a new shipping line between its Rades port and China's Qingdao port will help bolster bilateral ties while aiding China's expanding presence on the African continent.<sup>33</sup>

The Strait of Gibraltar handles about 20 percent of the world's shipping traffic, passing along Morocco's northern tip. This amounts to around 100,000 ships nearing or traversing the strait each year. Recognizing Morocco's geostrategic location, King Mohammed VI launched the \$7 billion Tanger Med port project in 2003, which includes a 1,000-hectare port facility and an accompanying 5,000-hectare industrial zone. On a clear day, the Rock of Gibraltar and southern Spain, just fourteen kilometers away, are clearly visible and symbolize the importance of Morocco's emerging transshipment hub. Morocco completed the first phase of the project in 2007, and business has been booming. It currently serves 169 ports and 68 countries around the globe and is inching forward to hopefully reach a top twenty position among the world's ports, especially when the port is at full capacity. It can handle around 3 million TEUs per year—making it one of Africa's largest—but hopes to expand to 9 million TEUs with the 2019 opening of the Tanger Med 2 port, which added 1.6 kilometers of docks and an additional capacity of 5 million TEUs.<sup>34</sup>

China's economic relationship with Morocco has only become more noticeable in the last several years. In 2015, China was only Morocco's fourth-largest

trading partner. Bilateral trade, however, increased 195 percent in 2014 while increasing 95 percent the following year. When the king traveled to China in 2016, the two partners signed a bilateral strategic partnership similar to that of Greece. One deal from the visit was an agreement for China to build a \$10 billion industrial city next to Tanger Med. Two hundred Chinese firms will join the industrial zone project, launched in late 2017, purportedly with plans to create up to a hundred thousand jobs. Tanger Med and Tanger Med 2 are currently run by European port operators, but China began paying closer attention to maritime investment opportunities in the country and hopes to transform the Tanger Med into a major BRI hub. At a recent China-Africa investment forum held in Marrakesh, Chinese investment firms promised billions in projects to invest in Tanger Med's industrial zone and other maritime logistic operations.<sup>35</sup>

From Morocco, China has turned its vision eastward to Algeria. China's growing interest in Algeria follows a trend of rising bilateral trade between the two nations. In 2017, China was the largest exporter to Algeria, worth approximately \$7.3 billion. This amounted to about 19 percent of Algeria's total imports. Some speculate that lower oil and gas prices spurred Algeria's government to think more about diversifying its economic portfolio beyond oil and gas, which accounts for about 94 percent of Algeria's export revenues and an estimated 60 percent of state revenues.

China commenced construction on a transregional port at El Hamdania, about eighty kilometers west of the capital, Algiers. With the project, Algeria hopes to pull maritime commerce away from Morocco and southern Europe. The 2,000-hectare plan is to build up to twenty-three shipping berths with a projected vision of handling an estimated annual capacity of 6.3 million TEUs and 26 million tons of goods, making El Hamdania Africa's second-largest port after Morocco's Tanger Med. As in Israel, the China Harbor Engineering Company, in collaboration with the China State Construction Engineering Corporation, purchased a 49 percent concession in the port. Algeria's Port Authority owns the other 51 percent of the project. The loan agreement for \$3.3 billion is being backed by Chinese firms, as well as about \$900 million from the African Development Bank. Construction on the port began in 2017, and the first berths are supposed to open around 2021. The full opening is expected by 2023, when the port will be transferred to SIPG for operations and logistics management. According to some reports, COSCO shipping has proposed making El Hamdania its regional hub in the western Mediterranean. Nevertheless, Algeria is

optimistic for the port's future and believes it can become an important hub for regional trade throughout northern and western Africa, especially with upgraded roadways like the Trans-Sahara Highway that traverses to the southern portion of the country.<sup>36</sup>

*The Northern Mediterranean and Western Europe*

With the aim of tapping into the European Union's Trans-European Transport Network policy initiative, China expanded its regional system of ports, railways, and other multimodal transportation projects across southern Europe. China appears to be more focused on Spain, and Italy is emerging as another front. France and Portugal are developing locations for China, but there has not been huge movement on the port front for these two countries. That said, China's maritime investments are likely to grow over time as it gains increasingly stronger port footholds across the Mediterranean, and certainly across southern Europe. In 2013, China Merchant Holdings acquired a 49 percent advantageous stake from CMA CGM (Compagnie maritime d'affrètement—Compagnie générale maritime) in its subsidiary Terminal Link. Terminal Link owns thirteen terminals in eight countries, including four terminals in France, two in Morocco, one in Malta, and one in South Korea, among others. The CMA CGM group is the third-largest container shipping company in the world, serving 420 ports worldwide. The group is headquartered in Marseille, France, with 110,000 employees worldwide. Aside from investing in Terminal Link, Chinese firms have also explored the eastern coast of the Adriatic Sea in countries such as Croatia and Montenegro for possible maritime investment opportunities, albeit on a much smaller scale compared to Spain and Italy.<sup>37</sup>

Spain's three main Mediterranean ports are Algeciras, Valencia, and Barcelona, moving from west to east along the coastline. Since 2012, the Chinese have slowly been expanding their investments in Spanish ports in the north and south. Hutchison Port Holdings, a subsidiary of the Hong Kong-based Hutchison Whampoa Limited, began by investing approximately \$387 million in the port of Barcelona, in addition to \$184 million financing for a terminal enlargement. Since then, COSCO has been vying for Spain's ports as well. In 2017, COSCO succeeded in purchasing a 51 percent share, worth about \$228 million, in Noatum Port Holdings, which owns Valencia (where it is headquartered) and Bilbao (in northern Spain). COSCO also owns major inland terminals in Madrid (Conterail) and Zaragoza (Noatum Rail Terminal Zaragoza). Before COSCO's



move, Noatum was acquired by JP Morgan Asset Management and APG Asset Management in 2010. A majority stake allows COSCO to take over the ports' operations. In a statement, COSCO called Noatum "a perfect fit" for the company's strategies of developing a global terminals portfolio, strengthening control and management of the ports and terminals business, and bringing into full play the synergies with the container fleets of COSCO Shipping. This latest purchase moves China closer and closer to developing a new maritime logistics and supply chain system in which it controls the major port entry points throughout the Mediterranean. These investments also ensure that these ports support COSCO's merchant fleet, as well as the recently formed Ocean Alliance between CGM CMA, COSCO, and two other major shipping companies. The Ocean Alliance competes against the other shipping alliances of 2M Alliance and THE Alliance (Ocean Network Express, Hapag-Lloyd, and Yang Ming Line) and hopes to entice customers with its more than forty east-west maritime services through one hundred ports of call, 350 container ships, and seven trade lanes.<sup>38</sup>

Aside from Valencia and Barcelona along the Mediterranean coast, the next port to watch is Algeciras. In 2018, Algeciras extended a deadline to bid on a new terminal. For the past several years, it extended bidding deadlines for companies proposing terms to construct a new terminal spread out over more than thirty hectares in the Isla Verde portion of the port.<sup>39</sup> COSCO could make a move here as well, but the Ningbo-Zhoushan Port Company was reportedly also looking at the additional terminal in Algeciras. If the project moves forward, the concession for the new Algeciras terminal would be for fifty years, given to the most competitive bidder.<sup>40</sup>

Similar to other European countries searching for a capital infusion at a time when their economies have remained stagnant, the Spanish government is no different and openly welcomes the arrival of Chinese investments across Spain. Spain's secretary of commerce recently commented, "We want the maritime connection between China and Europe to end in Spain, in our ports, Barcelona, Valencia, in all of our ports in the Mediterranean, or even beyond, in our country."<sup>41</sup> By locking in Spain's main Mediterranean ports, in combination with the ports of North Africa, China guarantees its growing monopoly on certain trade routes in the western Mediterranean and its further access into the Mediterranean.

By comparison, Italy aligns more with the Greece model—albeit less suc-

cessfully—in trying to attract and tap into China’s Maritime Silk Road for the benefit of the estimated 160,000 Italian firms, worth approximately 220 billion euros, that work in the logistics and port sectors. In 2019, Italy inked a BRI memorandum of understanding with China, making Italy the biggest EU economy and the only G7 country to join the initiative. Thus far, growing trade has been a mixed bag. Since 2010, exports from Italy grew on average about 21 percent per year. By comparison, imports from China to Italy are down around 2.1 percent on average. In 2016, Italy exported about \$12.3 billion to China, while China imported about \$30.2 billion to Italy during the same period. Currently, China is Italy’s largest trading partner in Asia, and Italy is China’s fifth-largest EU trading partner.<sup>42</sup>

In addition to trade, China and Italy are jointly financing the “Five Ports Alliance” as part of the larger North Adriatic Ports Alliance (NAPA) between Ravenna, Venice, Trieste (Italy), Capodistria (Slovenia), and Fiume (Croatia), which aims to attract a greater interest in the Adriatic region and routes to western and central Europe. The further plan is for Venice to establish itself as a Venice Offshore Onshore Port System to manage the arrival and departure of ships with a capacity of 18,000 TEUs or larger. NAPA also recently began construction of a \$2.44 billion offshore platform near Venice at Malamacco with a megaship landing and offloading capability. In 2015 these collective efforts appeared to pay off when a Chinese delegation arrived and made promises to ensure that Venice would be an end destination along the Maritime Silk Road.<sup>43</sup> Elsewhere in Italy, COSCO, along with Qingdao Port International Development, bought a majority stake in terminal Vado Ligure at the Savona-Vado port. They purchased a 40 percent and 9.9 percent stake respectively, amounting to an approximately \$86.5 million investment in the terminal. APM Terminals is the other major holder. COSCO, as well as the China Communications Construction Company, also plans to seek out more opportunities in Genoa and Trieste owing to the two cities’ rail access and free customs zones.<sup>44</sup>

To entice China further, Italy has tried to avoid taking a firm stand on some of China’s foreign policy platforms, including Taiwan and the South China Sea dispute, even though it opposes the nine-dash line. In a partial sign of how the dynamics are changing in Europe, Italy and the PLAN recently conducted joint exercises in the Tyrrhenian Sea.<sup>45</sup> China might not be as prevalent in Italy’s port investments, but in February 2017 the China State Shipbuilding Corporation won a contract with the Italian shipyard Fincantieri to build large cruise ships

in Shanghai. This is an additional maritime industry for China to add to its assets list, and it also has significant “dual-use” benefits. First, China benefits from learning about technology transfers. Second, and more auspiciously, Fincantieri has offered to take over France’s STX shipyard, which both handles cruise ships and acts as a dry dock for the French navy, including its aircraft carrier. France succeeded, albeit temporarily, in blocking Fincantieri—which sought a 48 percent stake—from gaining greater access at STX, but in the end, Fincantieri succeeded in securing a controlling stake in STX. The final agreement, however, articulated a requirement to formally cooperate with the French Naval Group. Last, in a separate but noteworthy agreement, Fincantieri and Ferretti—China’s newly acquired Italian yacht company—agreed to construct military ships for Abu Dhabi. The agreement means that China will continue to seek out ways to bolster its shipbuilding abilities for military and nonmilitary purposes.<sup>46</sup>

### Vital Sea Lanes and Growing Navalism in the Mediterranean

Aside from China’s significant maritime economic investments throughout the Mediterranean, Russia has enhanced its naval presence regionally in an attempt to achieve its perceived and rightful place as a great power. With the continued turbulence in the Middle East and North Africa since the outbreak of the Arab uprisings in 2011, Russia saw a strategic void to fill as NATO and the West seemed more hesitant to intervene in conflicts such as Libya and Syria at the same level as Iraq and Afghanistan. The U.S. Sixth Fleet is responsible for the Mediterranean and typically only deploys two to three ships at a time, which does not make for a sizable or dominating presence. As a result, Russia has taken full advantage of this smaller naval footprint and general Western reluctance to take a more aggressive and menacing stance where the EU or United States has not. In the last several years, however, NATO has begun to think more strategically about how to manage Russia’s increased naval activity, including larger and more frequent maritime exercises and patrols across NATO’s area of responsibility, including Operation Active Endeavour, Sea Breeze, Dynamic Manta, and Dynamic Mongoose.<sup>47</sup>

Russia’s military and expansionist vision has been enabled to a significant extent by Russia’s takeover of Crimea, in addition to its intervention on behalf of President Bashar al-Assad in Syria. Many also cite the Russo-Georgian War of 2008 as another critical historical marker for the start of Russia’s growing

naval activism and expansion into the Mediterranean. Russia views the Mediterranean increasingly as a new first line of defense to protect its newly obtained assets in the Black Sea region. As noted previously, Putin began relying on his navy as a much more valuable statecraft tool, including the more regular deployment of naval forces to the Mediterranean in a symbolic show of force. It is also believed that Putin sees great value in the formation of a combined Black Sea–Mediterranean axis to develop A2/AD capabilities and further defend Russia’s strategic assets and territory along its southeastern flank. According to one official report, antiship cruise missiles are sufficient to establish a surface naval A2/AD zone off the coast of Syria.<sup>48</sup> Moreover, Russia is using its navy—especially its submarine program—to help reshape the regional security dynamics in its favor. It is using its newly established naval base in Tartus, Syria, to become more of a menace to other Western powers such as NATO and the United States. Russia also started using its more substantial regional naval presence to push beyond the Mediterranean into the Indian Ocean region, including the Red and Arabian Seas.

The end result is that the Mediterranean is becoming more securitized, and the risk of inadvertent crashes or miscommunication between Russia and the West is growing as Russia’s regional interests and investments grow. At the same time, one also witnesses increasing Chinese naval activity and more interactions between Russia and China in the maritime domain. This is likely to lead to further concerns and tensions with NATO and the United States in the long run, especially as Russia and China secure the region’s vital sea lanes of communication.

#### *Russia’s New Mediterranean Naval Base*

Russia has historically eyed the Mediterranean Sea as an important geostrategic arena, despite being limited by geography and basing access for more sustainable operations. Turkey will always control Russia’s full and open access to the Mediterranean from the Black Sea (along with the 1936 Montreux Convention) thanks to its oversight of the Dardanelles and the Bosphorus. This is why Russia has historically relied on its Northern Fleet and other forces in the Baltic to sail around western Europe and through the Strait of Gibraltar before entering the Mediterranean. Admiral Gorshkov once remarked that “the Mediterranean Sea from Ancient times has been of immense economic and strategic importance to Russia.”<sup>49</sup> In many respects, Russia today is trying to reclaim much

of the presence it once had during the Cold War. This might be a tall order, but Russia is nevertheless using its growing naval capabilities and submarine force to inject greater chaos into the status quo.

Beginning in early 2013, after a series of large-scale eastern Mediterranean naval drills, Russia began to express interest in having a more dedicated Mediterranean naval presence. Russia's defense minister Sergey Shoigu weighed in and asserted that the "Mediterranean region was the core of all essential dangers to Russia's national interests." In March 2013, Admiral Viktor Chirkov, commander in chief of Russia's navy, announced that Russia was working toward the establishment of a permanent task force in the Mediterranean by 2015 under the command of Russia's Black Sea Fleet headquarters. The only problem, however, was that it lacked critical basing access to support its fleet. With a perceived lack of a robust naval presence by the United States and NATO, Russia sought to fill this void and set its sights on reinforcing Syria's Assad regime, or what was left of it.<sup>50</sup>

Russia's naval relationship with Syria dates back to the Cold War. The Soviet Union first gained basing access to Syrian ports after the 1967 Arab-Israeli War. The port of Tartus was viewed in particular as a critical end point of a naval supply avenue and arms delivery chain from the Soviet Union's Black Sea Fleet headquarters in Sevastopol, in addition to being an essential ship repair and maintenance location for the Mediterranean fleet. Russia also viewed access to the port as a means both to protect its regional interests in Syria, Libya, and Egypt and to counter U.S. naval power. In many respects, one witnesses a recasting of these interests and behavior today, albeit under different conditions and dynamics. Like the Soviet Union, however, Russia struggles with questions regarding the sustainability of its naval operations in the Mediterranean and beyond.<sup>51</sup>

Even so, since the 2011 outbreak of internal strife and civil war in Syria, Russia has shown keen interest in ensuring that President Bashar al-Assad remains in power. Syria remains an important ally for Russia today, and Putin hopes to prevent another regional nightmare similar to Libya, where Russia lost a \$4 billion arms sales deal as a result of Qaddafi's overthrow. Before the start of the civil war in 2011, Syria was an important trading partner for Russia, including an estimated \$20 billion in projects from 2009 onward. On the arms side of the equation, the Syrian regime purchased about 78 percent of its weap-

ons from Russia between 2007 and 2012. Approximately one hundred thousand Russian citizens also lived in Syria at the start of Syria's civil war.<sup>52</sup>

Though tens of thousands of lives have tragically been lost, and hundreds of thousands have been displaced during Syria's civil war, Russia has taken strategic advantage of Syria's maritime coastal assets to begin developing a larger Mediterranean presence. In the past seven to eight years of the conflict, Russia has relied on its Northern, Black Sea, and Caspian Fleets to take on a more prominent role in the Syrian conflict. Located about ninety kilometers from each other, the ports of Tartus and Latakia have been critical for these fleets, as well as Syria, to ensure a relatively free flow of supplies and open access to valued sea lanes of communication and commerce. Russia recently signed an agreement with Cyprus as well to allow tankers and other naval vessels to have access to Cypriot ports such as Limassol for additional support in refueling and resupply efforts of Russia's Mediterranean Fleet. Some analysts have also speculated that Russia's newly established naval fleet access was aided in part by Russian promises to loosen the terms of a 2011 \$3.1 billion loan to Cyprus in return for port access. Elsewhere in the Mediterranean, Russia has gained port access to Malta and Greece. Spain also granted access to Russian naval ships in its small North African enclaves of Ceuta and Melilla, nestled into Morocco's coastline. Since 2011, an estimated sixty Russian naval vessels, including an attack submarine, have reportedly put into one of these Spanish ports.<sup>53</sup>

Since 2011, Russia's has provided indirect support to the Assad regime, but in 2015 it intervened directly to ensure that Assad stayed in power. Upon entering the conflict, Russia focused on rebuilding the naval base of Tartus after years of disrepair to help with resupply and cargo offloading efforts via the sea and to build up its military presence and capabilities elsewhere in the country. According to some recent estimates, of the 4,000 Russian military personnel in Syria at the height of the war, anywhere between 1,000 and 1,700 military personnel and engineers worked in Tartus.<sup>54</sup>

Throughout the Syrian war, many reports cited a significant and growing Russian naval presence and engagement in Syria and its surroundings. Some mentioned Russia's rising naval presence as possessing an air of "gunboat diplomacy" where limited force is deployed: "It's also a political tool to be used alongside economic and diplomatic instruments to reassert Russian power and influence along the whole sweep of its long, and historically troubled, southern

frontier.”<sup>55</sup> Russia’s deployment of its naval forces since 2015 certainly fits into the “gunboat diplomacy” narrative and the outward push. At the same time, its naval presence serves to menace NATO and U.S. naval forces, even if only symbolically. Moreover, the deployment aligns with Russia’s larger desire to boost its status to that of a great power.

Russia began with limited use of its naval forces in the Syrian conflict starting in 2015. In early fall, Russia’s Caspian Fleet reportedly launched twenty-six cruise missiles at Syrian rebel or Islamic State targets, followed by more missile launches in November. In December, on the Mediterranean side, it was reported that a Russian Kilo-class submarine, *Rostov-on-Don*, launched Kalibr-variant missiles at more targets. In August 2016 more Kalibr cruise missiles from two Buyan-M corvettes in Russia’s Black Sea Fleet also struck at rebel-held positions or terrorist targets in Syria from as far as 1,500 kilometers away. The Kalibr missile is significant because its sophisticated guidance, navigation, and targeting system has a reported accuracy of a less-than-five-meter radius. It can also hold up to five hundred kilograms of high-explosive material, and some reports also cite the capacity to hold a nuclear warhead. Later in the fall, in a symbolic move, an eight-ship flotilla arrived in Syria, including the Soviet-era aircraft carrier *Admiral Kuznetsov*. Though *Kuznetsov* is seen in a perpetual state of mechanical unpredictability and disrepair, it made several journeys since 2011 to Syria from its Northern Fleet home port north of the Arctic Circle. Most recently and though unconfirmed, Russian media reports stated that Sukhoi Su-33 fighter jets used the aircraft carrier to fly bombing raids around the city of Aleppo in the fall of 2016. The frigate *Admiral Grigovich* was also part of the flotilla and was spotted firing more Kalibr missiles at Syrian targets in another display of Russia’s offensive naval capabilities.<sup>56</sup>

According to Russia’s naval doctrine issued in the summer of 2017, high-precision sea-launched cruise missiles will be the weapon of choice until 2025, when Russia begins to integrate more “hypersonic missiles and diverse robotic systems, including autonomous unmanned underwater vehicles, will enter service with the navy’s submarine, surface and coastal forces, according to the document.”<sup>57</sup> One of its other future objectives is to build up its nuclear attack submarine capabilities, along with other surface naval vessels and aircraft. Russia’s defense spending declined 20 percent from 2016 to 2017, but between 2017 and 2018, it fell only 3.5 percent to \$61.4 billion owing to lower oil prices and other fiscal woes. (Its defense budget is still 27 percent higher than in 2009.)

This will inevitably have spillover implications for the navy, but despite this, Russia continues to forge ahead with its naval modernization efforts even if curtailed on other fronts.<sup>58</sup>

Budget questions aside, Russia is already using its presence in the eastern Mediterranean basin to test and hone new technologies and what some call “hybrid war” ships. Russia is using oceanographic research vessels (ORVs), for example, to conduct surveillance and intelligence missions. The *Yantar* is one of these ORVs spotted in recent action. The *Yantar* holds two limited-sized manned underwater vehicles that can submerge up to six thousand meters, lasting up to twelve hours in one outing. In 2016 observers noted the *Yantar*’s position over certain submarine cables near Syria in the eastern Mediterranean. This type of unconventional activity is not new per se, but Russia will continue to ratchet up tensions with European states and the United States, especially if they begin taking a more aggressive stance on meddling with undersea cables responsible for the vast majority of communication and internet connectivity.<sup>59</sup>

Russia’s use of ORVs or other search-and-rescue vessels aligns with the larger trend of growing regional navalism or use of Russia’s navy as an important coercive diplomatic tool to secure Russian interests. This trend is unlikely to dissipate in future years. Toward the end of 2016, President Putin cemented Russia’s growing naval use by signing into law an agreement with Damascus permitting Russia’s naval expansion at Tartus, including the transfer of real estate and other port assets to Russia. The agreement also gave Russia access to all Syrian ports and coastal waters. In Tartus, the lease agreement remains for forty-nine years, with an automatic twenty-five-year renewal, and similarly states that up to eleven Russian naval vessels, either nuclear powered or otherwise, can be housed there.<sup>60</sup>

Russia has already begun taking advantage of this newly minted agreement to expand and sustain more of its operations in the eastern Mediterranean. In the fall of 2017, additional satellite imagery showed the continuation of an eight-ship flotilla in Tartus, albeit in a varying form compared to a prior visit of the *Kuznetsov*. The ships were not moored, but this event included a landing ship, a frigate, two Kilo-class submarines, a survey vessel, a repair ship, a tug, and a modified tanker. Plans also reportedly exist for Russia to assist in the expansion of the port over the next five years to include a greater ability for repairing, maintaining, and resupplying its current fleet. Some even speculate that Russia is hoping to make the port big enough to dock an aircraft carrier. A



greater Russian presence means that it can bring in more long-range cruise missiles possessing nuclear warheads, but others believe the base will be more for sustaining Russia's greater Mediterranean presence. According to Rear Admiral Dror Friedman, Israeli navy chief of staff, "You see [Russia's] activities in the field and you see them putting down roots, you see their activities in the Port of Tartus and you understand that this isn't the activity of someone who is planning to pack their bags and leave tomorrow morning."<sup>61</sup> Russia is very much shifting the regional order strategically and more in its favor.

### *The Rise of Sino-Russian Naval Cooperation*

Though China's navy has taken more of a diplomatic stance in the Mediterranean and is not nearly as robust as that of Russia, its presence has become more noticeable in recent years. China's growing activities follow the trajectory of its emerging geoeconomic assets through the Mediterranean basin; it also aligns with President's Xi "Chinese Dream" to achieve a "modern socialist country that is prosperous, strong, democratic, culturally advanced and harmonious by the 100th anniversary of the establishment of the People's Republic of China in 2049." The Chinese Dream also entails a promise to foster military might proportional to the status of a great power. According to one official U.S. report, a growing need existed for the PLAN to operate in "more distant maritime environments to protect Chinese citizens, investments, and critical sea lines of communication." As the report asserts, China will "most likely seek to establish additional military bases in countries with which it has a longstanding, friendly relationship and similar strategic interests . . . and with which there is a precedent for hosting foreign militaries." Certainly, hosting a Chinese base is sensitive for most nations and will more likely emerge where China has a strong commercial and port foothold. A military basing outpost, however, would ensure that the PLAN can conduct humanitarian and rescue missions for its citizens similar to those in Libya in 2011, in addition to projecting and sustaining more global naval operations and protecting other essential sea lanes far from China's near seas. A retired PLAN rear admiral recently stated that "the PLAN was tasked with two primary missions: the preservation of China's maritime security (including territorial integrity) and the protection of China's burgeoning and far-flung maritime economic interests."<sup>62</sup>

Since the Mediterranean is newer terrain for the PLAN, it appears China is cooperating on a larger scale with Russia than with other European or NATO

powers. This growing cooperation has the potential to form a powerful bloc in the future if relations sour further between Russia and the European Union or with the United States. But cooperation also comes with certain risks, since both China and Russia lack a strong history of prolonged and binding relations because of traditionally opposing interests. One recent example came in September 2016. Shortly after Russia and China held joint exercises in the South China Sea, China refused to join Russia in one veto vote on the UN Security Council for a resolution on Syria. One scholar recently framed the relationship as an “axis of convenience,” and another called it “friendly neutrality.” The two nations’ divergent foreign policy objectives will indeed grow more profound as China expands farther into Russia’s traditional European spheres of influence.<sup>63</sup>

For the time being, their collective desire to push back and reframe regional order and norms traditionally formulated by the West is a prominently shared goal. Many also view the arrival of President Trump and the perceived erosion of the NATO-EU alliance as possible weaknesses for Russia and China to exploit. In June 2016, in a sign of a broadening and deepening relationship, Putin traveled to China, where he and President Xi signed a “joint statement on strengthening global strategic stability.” That year also marked the twentieth anniversary of the establishment of the Sino-Russian strategic partnership, by which the two nations already covered a lot of diplomatic and political ground, including joint opposition to missile defense, the formation of the Shanghai Cooperation Organization (an increasingly important Eurasian security and economic bloc), and energy cooperation, among other issues. Many in China proceeded with caution after the June 2016 signing ceremony and remain reluctant to call the relationship a more formal “alliance”: “The reality is that a ‘flexible partnership’ [*tanxing de huoban moshi*] serves both sides’ interests much better than an alliance would. . . . China does not have a ‘political culture’ of alliances and does not follow a policy of ‘political blocs’ [*meiyou gao jituan zhengzhi*]. That said, it sees Russia as a key strategic partner in advancing China’s vision of a future international order.”<sup>64</sup> This shared worldview about a newly established world order drives much of their burgeoning relationship and might transform into something more significant in the future if they continue aligning their larger and global strategic objectives.

Recently, greater Sino-Russian cooperation took the form of joint naval exercises along the western and eastern fringes of the Eurasian continent. Before 2011, the PLAN rarely frequented the Mediterranean and Europe’s waterways.

With the overthrow of Qaddafi, however, the PLAN was catapulted into the region as part of its humanitarian rescue mission. Since the Libyan crisis, the PLAN has deployed with greater frequency across Europe's main seas. Before holding their first joint exercises in Europe, China and Russia both participated in an official joint and internationally sanctioned mission off the coast of northern Syria in Latakia in January 2014. The mission was to escort a Danish ship assigned the Hague-based Organization for the Prohibition of Chemical Weapons to transport diluted chemicals to the waiting USS *Cape Ray*, where the substances were ultimately neutralized and destroyed.<sup>65</sup>

After this significant joint operation, the first joint naval European exercise came in May 2015 with the launch of Joint Sea 2015. The nine-ship exercise was not grandiose in any sense but was framed as "practicing joint actions to ensure secure navigation in the World Ocean." The maneuvers were more emblematic than significant and were seen by both nations as a means to further and deepen bilateral relations. The exercises were also viewed as an important learning moment for both countries in trying to build up their blue-water capabilities. One of the challenges that emerged from the exercise, however, was the lack of "interoperability" between the two navies. Their technological systems and operational cohesiveness between the varying platforms still needed work for a more fluid exercise experience. In 2016 and 2017, they carried out more Joint Sea exercise maneuvers and have no doubt continued to improve and enhance their exercise capabilities. As mentioned previously, the two powers held exercises in 2017 for the first time in the Baltic Sea, sending additional symbolic messages about the scope and growth of their naval cooperation.<sup>66</sup>

Although China is holding more and more European naval exercises, most European or NATO allies do not view China the same way that they view Russia. In fact, during Joint Sea 2017, Italy hosted the PLAN in its own joint exercise in the Tyrrhenian Sea. The PLAN also made strategic port visits throughout Europe, including visits to Greece in the Aegean Sea and Romania in the Black Sea.<sup>67</sup> Many of the Europeans officers I spoke with view China's regional and naval rise as an encouraging opportunity for cooperation, and one that can be shaped and influenced in a positive direction, which cannot be said for Russia, as most pointed out. They also see positive trade benefits to be gained. Additionally, Europe might be able to use China as a buffer against a more menacing and manipulative Russia so long as China does not prove to be too much of a burden or threat to Western powers.

Russia and China may be bolstering their ties in the maritime domain, but China also risks upsetting the budding partnership as it pushes deeper into Russia's traditional zones and areas of influence. Russia has not been pleased about NATO's eastern expansion into what Russia perceived as its historical lands. With China's massive geoeconomic engine and growing European investments, it also risks unsettling Russia as it penetrates farther into Europe.

### A More Congested Mediterranean

So why is this all significant? More maritime geoeconomic investments mean more of a need to secure these assets through naval means, especially on the part of China. China is already well on its way to establishing an independent maritime logistics, shipping, and supply chain system set to become more resilient over time as China's geoeconomic reach solidifies through its control of the region's ports and shipping lanes. It is moving quickly toward greater dominance and influence over regional maritime commerce and trade. At the same time, albeit still in a developing stage, Russia is seeking to carve out a greater economic share of the region's economy—mainly its dominance in natural gas exploration in the eastern Mediterranean basin. In 2013, for example, Gazprom concluded a twenty-year agreement with the Israeli Levant LNG Marketing Corporation to buy LNG from the Tamar field; another agreement was also struck in early 2014 with Palestinian president Mahmoud Abbas to develop Gaza's gas fields. An additional Russian firm similarly signed an EEZ exploration agreement with President Assad of Syria around the same period as the Gaza deal.<sup>68</sup> Though Russia is no China in terms of its maritime geoeconomic investments, it does value its regional allies, Syria, Egypt, and Libya, and has demonstrated its willingness to take a proactive stance in defending them.

Meanwhile, Russia and China are collectively pushing back against the status quo traditionally dominated by NATO, the United States, and other European powers. Both nations seek to establish themselves as great powers, and this desire is playing out in significant ways on the high seas. One sees that both Russia and China support greater naval activity and rising navalism when protecting their interests. As one analyst recently argued, "China's maritime strategy was not about establishing military bases and territorial control on foreign soil, but rather using maritime dominance and gunboat diplomacy to establish economic and political control over ports and shipping lanes."<sup>69</sup>

Another challenge, however, emerges with the growing naval activity and crowding in certain areas across the Mediterranean. The increasing traffic of naval vessels signals the heightened chance of an unexpected collision between rival powers. Owing to the increased Russian and Chinese naval activities associated with either Libya or Syria, NATO and the United States have stepped up their responses and naval deployments. The United States' main naval base in the Mediterranean is Rota, Spain, where four *Arleigh Burke*-class guided-missile destroyers are typically housed. During the 2014 invasion of Crimea, the United States increased its deployment to as many as six ships, by some estimates. During these deployments, the U.S. ships frequently came into close and dangerous proximity with several Russian vessels (and buzzing Russian aircraft) either in the Black Sea or in the eastern Mediterranean. Though a Cold War dynamic has not returned, the security tensions have become more delicate in recent years, and this will only continue as Russia and China increase their regional presence. And the more Russia and China push into the Mediterranean, the more likely it is to see accidents or general miscommunication between either Russia, China, NATO, the United States, or EU allies. As one observer explained, "For the first time since China's re-emergence as a power to be reckoned with, Western powers are being confronted with scenarios involving the risks of clashes with Chinese military forces outside the Asian giant's backyard. . . . There may be a possibility whereby the [PLAN] may not directly take part in hostilities, but PLAN or Russian ships could attempt to create a line at sea to prevent Western ships from approaching Syria to launch military operations against it, or to prevent an embargo."<sup>70</sup>

Russia and China will likely continue cooperating for now, with their interests largely aligned against a Western-dominated world order, which will in turn place greater pressure on the NATO alliance to devise a strategy to counteract or manage this emerging dynamic. One initial thought is for the United States to build up a larger NATO and U.S. Sixth Fleet basing structure inside the Mediterranean basin that can be used for naval forces, in addition to enhancing its overall presence. Shutting down the Allied Maritime Command Naples in 2013 might have made sense for streamlining NATO's maritime command-and-control structure, but one trade-off is that NATO lost a strategic regional foothold closer to the eastern Mediterranean basin. Nevertheless, remaining just outside the Strait of Gibraltar in Rota, Spain, or Portugal's Azores and Madeira islands will be critical to monitor traffic entering and exiting the region. Still,

Europe should be on the lookout for ways to bring China's PLAN closer into its orbit. This certainly comes with high risks and increased vulnerability, but China could serve as an important balance against an aggressive Russia. It also might help to isolate Russia that much more. Regardless, the fact remains that China and Russia are more in sync today, and their relationship is likely to grow stronger in the near future as they advance interoperability functions through joint exercises and other power-sharing measures and continue to reshape the regional and global order.

## Anchoring the Seas of Southwest Asia

DURING ONE OF MY FIRST NIGHTS in Djibouti, located at the opening of the Bab al-Mandab and the center point connecting the Red and Arabian Seas, I walked over to the adjacent casino, Aden Bay, from my hotel. It was mid-February, and after the casino doorman checked my passport, I entered a modest-sized room with high ceilings, filled with about twenty slot machines and seven game tables. To my surprise, about 95 percent of the people gambling that night were Chinese, mainly huddled around the roulette and poker tables. The room was also bedecked with red Chinese lanterns with yellow tassels and pictures of what looked like Akitas or chows to celebrate the Chinese New Year, the Year of the Dog. The decorations were left over from a Chinese New Year celebration the casino had hosted shortly before my arrival.

My experience in the casino was emblematic of what I would see during my trip to Djibouti. On the surface, Djibouti appears as a rather sleepy, hot, and dusty maritime city-state with significant potential for development. But with a light scratch of the surface, one quickly appreciates that the Chinese are everywhere, and it is just the beginning of their massive project to develop Djibouti into a critical node along the MSR and BRI. The Chinese run the ports and the railroads; they have just opened their first military base; and they have their fingers in most of the major building and infrastructure projects, including an enormous forty-eight-square-kilometer free trade zone currently under construction. As one European diplomat pointed out to me, China is at long last getting revenge for having been dominated by a liberal economic order. It is now China's

turn to recraft a global economic and trading system that upholds China's interests and needs.

Djibouti serves multiple purposes for the Chinese: it is an important anchor on the far western edges of the Indian Ocean; it is an essential entryway into Africa's largely untapped markets and China's other critical investments; and it is an increasingly critical perch and catapult into the Red Sea, Mediterranean, and the broader Middle East. As noted by one former official from the PLAN, "We can no longer accept the Indian Ocean as an ocean only for the Indians."<sup>1</sup> Certainly, Djibouti is just one connection among many that the Chinese are developing. Farther to the north and east of Djibouti, near the opening of the Strait of Hormuz and the Persian Gulf, for example, China is developing Gwadar, Pakistan. Gwadar offers another vital maritime logistics hub and potential base for easier access to the Gulf, as well as a starting point along the China–Pakistan Economic Corridor (CPEC) feeding into China's Xinjiang Province, China's restive far western province, largely populated by Uyghurs. To the north and west of Djibouti on the Red Sea, China is also working with Egypt to establish a free trade zone and other maritime geoeconomic-related projects tied to the Suez Canal.

This chapter focuses primarily on these nodal points that rest along the Indian Ocean's northwestern saltwater periphery to examine the growing importance of what I am calling the seas of Southwest Asia: the Red Sea, the Arabian Sea, and the Persian Gulf. This chapter looks at what China has been doing from a maritime perspective in Egypt, Djibouti, and Pakistan, but also begins examining Russia's growing attempts to project power in the maritime space, including establishing stronger toeholds from Egypt down to Somaliland and up to Pakistan. Energy security is the primary driver behind China's and India's growing interests across Southwest Asia, whereas Russia hopes to export more of its energy exploration technologies and natural resources farther afield. Along with geoeconomic interests, the region's sea lanes of communication are also rising in importance. There is already rampant speculation about possible future Chinese bases or access points beyond the recent opening of a PLAN base in Djibouti to assist in protecting the SLOCs. As reported in an article by members of China's Naval Research Institute, officials are examining the possibility of basing footholds such as Sittwe, Myanmar, Gwadar, Pakistan, and Hambantota, Sri Lanka, among others. The bottom line is that the Indian Ocean region is



similarly experiencing rising navalism and the growing securitization that feeds into Eurasia's other main maritime regions. As the author Robert Kaplan reasons, "If we are entering a phase of history in which several nations will share dominance of the high seas, rather than one as in the recent past, then the Indian Ocean will play center stage to this more dynamic and unstable configuration."<sup>2</sup>

### The Geostrategic Significance of the Indian Ocean and Its Western Seas

For centuries, Arab navigators have referred to the Indian Ocean as *al bahr al Hindi*, and many view it as an "interregional arena." With its valuable maritime offshoots of the Red Sea and Persian Gulf in the west and the Strait of Malacca in the east, the Indian Ocean has been referred to as the "world's most influential" ocean by some historians. For the local and regional powers, the Indian Ocean was a magnet of sorts and a regular venue for traders after the routine monsoon seasons above the equator.<sup>3</sup> But it also acted as one of the most profound avenues for the transfusion of people, religion, and ideas. For Europeans, the Indian Ocean was viewed as one of the most essential blue-water highways to the Far East. The Chinese previously referred to it as the Western Ocean but in recent history refer to it as the Indian Ocean. It is the world's third-largest ocean, making up 27 percent of the earth's saltwater surface, or roughly 68.5 million square kilometers. The Indian Ocean's waters are generally warm and thus possess comparatively less rich marine life. Another contributing factor is that the continental shelves are narrower, which is a space typically beloved by fish. As a result, the warm-water fish are generally fewer and less fleshy, hence poorer in food value. The tastiest fish, such as cod, have historically thrived in cold-water zones of the North Atlantic. The Indian Ocean today produces about 14 percent of the world's fish catch.<sup>4</sup>

The Indian Ocean region is one of the most geographically complex and culturally intertwined. It is also home today to an estimated 25 to 30 percent of the world's population. If one includes the important offshoots of the Red Sea and Persian Gulf, there are thirty-three largely undeveloped or developing nations, including a series of bays, islands, and coastal markets from East Africa to the western tip of Sumatra. The far western edge through the Red Sea also acts as an important artery connecting Eurasia's far western edges to the Indian

Ocean, from the Strait of Gibraltar through the Mediterranean to the vital pinch point of the Suez Canal. The influence of the Indian Ocean's sea lanes on the spread of people, cultures, and ideas is often depicted by the spread of Islam from the seventh century until around the sixteenth century, including surpassing the rival religions of Buddhism and Hinduism along the eastern edge of the Indian Ocean rim in places like Sumatra and Java. Today Asia, including South and Southeast Asia, possesses 62 percent of the world's Muslim population. Culturally, the ocean pivots around the Indian peninsula, where the subcontinent dominates. Even so, the Indians share the northwestern portion of the Indian Ocean with the Arabs and Persians, while speakers of Swahili are located to the south, along Africa's shores. On the eastern stretch of the rim, the Chinese and Malays largely dominate the space. By comparison with the Mediterranean, this is significant because no single power or culture has ever dominated the whole ocean—though during the nineteenth century, the British came close in setting up a free trade system across the Indian Ocean and into the Far East, embedding it into a larger global economy. Indeed, India historically played much less of a role in its neighboring seas than China did in its own backyard, but that is changing rapidly today with India's expressed desire to become a greater guarantor of regional maritime security.<sup>5</sup>

Economically and commercially, the Indian Ocean has been a point of attraction for the two other regional oceanic traditions: the China Seas and the North Atlantic. Chinese trade dates back to the tenth century and the Song dynasty. The most famous historical voyages came with the seven expeditions of Zheng He under the Ming dynasty during the early fifteenth century. Zheng He's expeditions sailed some of the largest fleets and ships that the Indian Ocean region had ever seen. Several of his voyages included thirty thousand men sailing on sixty large ships, in addition to several hundred smaller boats. He also reached as far as the Arabian Peninsula and the shores of eastern Africa. In addition to the Chinese, the European colonial legacy of the Portuguese, Dutch, and British also has a lingering political, cultural, and economic influence across the region. Vasco da Gama's arrival in Calicut while sailing for the Portuguese in 1498 marked the beginning of Eurasia's newly established prominence at the "center of the world" for Europe's rival powers. India was indeed most frequently the focus and lure of the outside world. While India's basic wealth derived from a highly successful agricultural system, it also exported raw materials—from luxury goods such as gems to bulk commodities such as timber, rice, and other

foodstuffs like pepper, ginger, and sugar. India also exported finished goods, carpets and artisan textiles, and cashmere and fine cottons.<sup>6</sup> The Indian Ocean's lure never dissolved over centuries of dynamic interactions with outside powers. What has changed today, however, is that India has started to exert itself more proactively across its regional waters. This comes just as China has grown more active and present in the Indian Ocean, with an increasing possibility that the two rival powers may clash on the high seas.

The other important element factored into the Indian Ocean's prominence and significance is that it is home to some of the world's most vital maritime choke points, including the Suez Canal, the Bab al-Mandab, the Strait of Hormuz, and the Strait of Malacca. Maritime choke points, narrow channels along global sea lanes of communication, transit high volumes of oil and natural gas, essential to global energy security and trade. The Strait of Hormuz (connecting the Persian Gulf to the Arabian Sea and Indian Ocean) and the Bab al-Mandab (linking the Indian Ocean to the Red Sea and Suez Canal) are two of the world's most strategic maritime choke points and certainly the focal points of Southwest Asia. As an old saying went, "If the world were an egg, Hormuz was its yolk." This dated back to Portugal's maritime dominance in the Indian Ocean region from Hormuz to Malacca. Today the geostrategic importance remains, but the region's significance hinges on the energy resources that flow in and out of the Gulf. On average, 18.5 million barrels of oil pass through the 48-kilometer-wide Strait of Hormuz daily, while an estimated 4.8 million barrels traverse the 30-kilometer-wide Bab al-Mandab. The two choke points combined account for an estimated 35 percent of the world's seaborne-traded oil and other liquids.<sup>7</sup>

### The Quest for Energy Security

Today, the free flow of energy and maritime trade has been an important focus and concern of China, Russia, and India, in addition to the international and business community. As an energy exporter and rentier state, Russia is concerned about prices and in 2016 conspired with Saudi Arabia and the rest of the Organization of the Petroleum Exporting Countries (OPEC) to decrease production levels by 1.8 million barrels per day to increase global oil prices. By initial accounts, the negotiated deal worked, pushing oil up from \$30 a barrel in 2016 to more than \$70 a barrel in 2017, but by the end of 2018, it appeared that some countries, mainly Russia and Saudi Arabia, were not consistently holding

up their ends of the pact. In early 2020, Russia was further strained by a precipitous drop in oil prices due to the global outbreak of covid-19 and the price war between Russia and Saudi Arabia. Southwest Asia and the larger Indian Ocean region sit at the epicenter of the global energy trade, with about two-thirds of the global oil trade transiting the Indian Ocean, while an estimated 40 percent of the world's offshore petroleum is pumped from the region. According to some estimates, the Persian Gulf region accounts for about 45 percent of the world's gas reserves and about 60 percent of proven crude oil. Additionally, the Indian Ocean is known to have heavy mineral deposits along its coastlines and continental shelf. As for the Suez Canal/SUMED pipeline, about 9 percent of international oil shipments and approximately 13 percent of the world's natural gas transit the waterway annually.<sup>8</sup>

Aside from pricing and maritime trade routes, the international energy market also depends on the safe and secure transport of these vital energy resources. India and China rely on these high-volume maritime routes between the Strait of Hormuz and the Strait of Malacca to fuel their burgeoning economies; Russia's reliance on these routes is also vital as an energy exporter and as it increases its reach into new markets. As a result, the freedom of navigation and sea lane security along these routes are growing in strategic importance for each of these countries at a time when U.S. reliance on energy from the region is decreasing and its nearly two-decade military involvement in Iraq is winding down. Maritime choke points leave oil tankers susceptible to pirates, terrorist attacks, and political unrest in the form of wars or hostilities. Each nation worries that even temporary blockage of a choke point can cause massive increases in energy costs around the world. Any disruption, attack, or blockade by a menacing state such as Iran or a nonstate armed group from Yemen or Somalia, for example, would reverberate across the global economy. The narrow maritime straits are also prone to shipping accidents, which can lead to disastrous spills.<sup>9</sup>

In recent years, total world oil production amounted to approximately 100 million barrels per day, with tankers moving 63 percent on fixed maritime routes. According to some recent projections, global energy demand will increase by roughly one-third over the next two decades, with China and India accounting for almost two-thirds of this consumption. The global coal (and iron ore) trade is also expected to almost triple by 2030.<sup>10</sup> In 2019, China imported nearly 70 percent of its oil, reaching a peak consumption level in April at 10 million barrels per day. This percentage is expected to increase to 80 percent by 2035. This

is compared to 36 percent in natural gas imports, where the number is projected to rise to 42 percent over the same time period. As for India, in 2018 it took in an estimated 4.6 million barrels per day, compared to around 19.65 million metric tons for the year in natural gas. Robert Kaplan comments, “India, soon to become the world’s fourth largest consumer after the United States, China and Japan—is dependent on oil for more than 90 percent of its energy needs, and 90 percent of that oil will soon come from the Persian Gulf by way of the Arabian Sea. . . . Indeed, before 2025, India will overtake Japan as the world’s third largest net importer of oil after the U.S. and China.” Part of India’s challenge, then, is the lack of capacity to process its growing energy imports. By 2025, for example, it hopes to more than double its current natural gas capacity to 56.5 million metric tons per year.<sup>11</sup>

China appears to have an upper hand over India in securing more energy resources from the broader Persian Gulf region. In Iraq, for example, China has become one of Iraq’s largest international investors owing to investment in the oil and gas sector, surpassing the United States. As one recent colleague told me in Shanghai, “The United States likes to break things, while China likes to build or rebuild them.” According to some estimates, “China’s import of Iraqi crude oil jumped by almost 50 percent in 2013, reaching 165 million barrels, which was almost entirely attributable to the expanded investment in Iraq’s oil wells.”<sup>12</sup>

In the southern Arabian Peninsula, before the outbreak of Yemen’s horrific civil war, China was active in the exploration of Yemen’s oil reserves, projected at nearly 3 billion barrels of oil and approximately 481 billion cubic meters of gas. Unfortunately, the instability and violence ravaging Yemen in recent years make production and export a challenge. In 2014, Yemen only produced 130,000 barrels per day compared to its peak production of 440,000 barrels per day in 2001. The situation in Yemen has become so dire that a Chinese-owned oil company ceased all operations in early 2015 at the east Al Hajr field. In August 2018, Yemen did manage to ship one 500,000-barrel shipment of crude oil to a Chinese firm; it was the country’s first outbound oil shipment since 2015. Oil production and output are expected, however, to remain at record low levels in the near future.<sup>13</sup>

Maintaining security at the Arabian Peninsula’s two strategic choke points is a real concern for China and other international actors that rely on the region’s maritime trade. The effects of a small cutoff within either strait could have significant economic and security ramifications for China. Due to the delicacy of

the Arabian Peninsula's politics and security situation, President Xi's desire to secure the BRI will likely strengthen as China seeks to solidify and protect new trade networks at sea and over land. The PLAN, for example, placed greater emphasis on protecting SLOCs, especially those flowing from the Persian Gulf, across the Indian Ocean, through the Strait of Malacca, and into Pacific Asia. In 2015 a defense strategy paper emphasized China's "far seas" strategy, detailing its desire for greater and more proactive naval projection beyond its near seas, specifically the South China Sea. As one scholar noted, the white paper emphasized that "China has enhanced overseas interests, is building a blue-water fleet to conduct far seas operations and the Indian Ocean is slated to become an active area of operations for the PLAN."<sup>14</sup>

### The Red Sea and the Suez Canal

In the past, the Greeks referred to the region that encompassed the Red Sea, the Arabian Sea, and the Persian Gulf as the Erythraean Sea. Some argued that the name "Erythraea" was given to describe the reflection of the sunburned mountains in the sea's waters. During the time of the Ottomans, the Red Sea was considered an Ottoman lake, but the name "Red Sea" only really made an appearance in historical Ottoman documents after the nineteenth century, when Europe played a more dominant role on the high seas. In Ottoman documents, the Red Sea was originally referred to as *Bahr-ı Süveys*, named after the port city of Suez. It later turned to *Bahr-ı Aḥmer*, or Red Sea. Measuring around 2,000 kilometers in length and 280 kilometers in width at its widest point, the Red Sea possesses the vital Suez Canal in the north and the "Gate of Lamentation," or *Bab al-Mandab*, in the south. Toward the southern portions of the sea that merge with the Arabian Sea near the Gulf of Aden, trade patterns have historically been influenced by the northeast monsoon, which covers all of southern Asia. As William Facey writes, "As a sweeping historical generalization, one might say that the Red Sea is an extreme example of a sea on the way to somewhere else."<sup>15</sup> The Red Sea's inhospitable coastline and high surface temperatures have made sustained agricultural communities virtually impossible. But the sea lanes that cross the region are of vital importance, linking Europe and the Mediterranean to the Indian Ocean and maritime Asia.

The Red Sea's rise to more prominence came in 1869 with the opening of the Suez Canal. After fifteen years of construction, the 164-kilometer-long canal

opened to much fanfare. Overnight, the voyage between Europe and South Asia was decreased by around 6,400 kilometers. Before the opening of the canal, a trip from Liverpool to Calcutta around the Cape of Good Hope was 18,700 kilometers, but with the opening of the canal, the voyage was reduced to 12,700 kilometers. The British would later refer to the new canal as the “lifeline of the Empire . . . and the very spring of British trade, wealth, and power with four-fifths of the traffic using it in 1875 being from the sea-faring nation.”<sup>16</sup> During the twentieth century, the then member of Parliament Anthony Eden similarly commented on the geostrategic importance of the canal in a speech: “If the Suez Canal is our back door to the East, it is the front door to Europe of Australia, New Zealand, and India. If you like to mix your metaphors it is, in fact, the swing-door of the British Empire, which has got to keep continually revolving if our communications are to be what they should.”<sup>17</sup> Fast-forward to today, it is now China, India, and Russia that are beginning to home in on the Red Sea’s importance. China very much views the Suez Canal as a “front door” into Europe and began investing significantly in the space through its maritime economic initiatives. Russia also desires to gain greater prestige regionally, especially in Egypt and the Arabian Peninsula, while projecting its power and influence farther into the Indian Ocean. Russia started focusing its efforts on the regional energy and trade sectors to establish a stronger political and geoeconomic footing. With this, it began exploring a larger and more prolonged military presence, including seeking ways to balance its relations with India and China. India has not developed the same maritime presence in the Red Sea, but it is certainly watching the developments closely. In 2018, India signed a logistics exchange agreement with France, enabling India to access French military installations, especially in Djibouti and at Réunion in the southern Indian Ocean. India is unlikely to further develop its presence in Djibouti for the time being, but as discussed in the next chapter, it already sought out nearby locations for a more robust presence in such countries as Oman.<sup>18</sup>

### *Russia’s Southward Projection from Egypt*

Russia, Egypt, and the Arabs more broadly have a deep and complex history. During the Cold War, the Soviet Union was largely supportive of Egyptian president Gamal Abdel Nasser’s pan-Arab nationalist movement that spread across the region. Egypt’s geostrategic location and control over the Suez always remained front and center in the Soviet Union’s calculus. In 1956, the Soviet

Union was unable to support Nasser during the Suez Canal Crisis between Israel, Great Britain, and France because it lacked adequate naval power to support Egypt in the conflict; the Soviet Union later rectified this shortcoming with the establishment of a Mediterranean squadron in the late 1960s. Throughout the Cold War, Soviet-Egyptian ties remained relatively close as the Soviets tried to achieve their larger foreign policy objectives of pushing back against the strong U.S. presence while also combating other concerns like the rise of Zionism. The closure of the Suez Canal in 1967 after the Six-Day War, however, was a huge blow to the Soviet Union's supply chains from the Black Sea to the North Vietnamese during the Vietnam War. The closure added about twenty-eight days to arms supply shipments and lasted until 1975.<sup>19</sup>

Since the end of the Cold War, especially since the 2000s, Russia and Egypt primarily bonded over shared disagreement regarding U.S. foreign policy in the Middle East—from the first and second Iraq Wars to U.S. support for the Arab uprisings in Egypt and elsewhere. In fact, during the Gulf War of 1991, Russian sources arguably claim the war resulted in about \$40 billion in political and economic losses. Russia also historically supported the Palestinian cause, in addition to fighting the spread of violent extremism and terrorism. Most importantly, Egypt is again at the geostrategic center of a competition between Russia, China, India, and the West in their attempts to influence or dominate the sea lanes of communication running through the Suez Canal. Egypt has welcomed the growing focus on its geostrategic location and is trying to leverage more of an “Egypt First” foreign policy that seeks greater independence while regaining its historic and regional prestige.<sup>20</sup> Nonetheless, Russia is trying to demonstrate its utility and allegiance to Egypt. Similar to China, Moscow has growing geoeconomic interests and investments that, until recently, have focused mainly on Egypt's energy sector and trade, but that is now morphing into a desire to bolster military and security ties.

Beginning in 2014, President Putin and Egyptian president Abdel Fattah el-Sisi began discussions over their many shared interests. Since then, their bilateral ties have flourished across a multitude of sectors from energy to trade and national security. In 2017, Russia's exports to Egypt hit a record high of \$6.2 billion, compared with about \$505 million in Egyptian exports to Russia. In the same year, Russian investments in Egypt totaled around \$4.6 billion, including eighty Russian delegation visits to Egypt over the year. Of this number, about 60 percent fell under the oil and gas sectors.<sup>21</sup>



On the energy front, Russia sought out local investments as a way to gain greater market share and assist its desire to export its own technologies and expertise. It also sees Egypt as a potential export market. In the summer of 2017, the Russian company Rosneft delivered its first LNG shipment of 129,000 tons to Egypt. Rosneft likewise began to capitalize on Egypt's recent discovery of offshore oil and gas fields. In the fall of 2017, Rosneft acquired a 30 percent stake in Egypt's Eni-run Zohr field, which was discovered in 2015. The Russian billionaire Mikhail Fridman also recently acquired a stake in Egypt's West Nile Delta natural gas project, owned in part by a German energy company. As these new energy projects come online, Egypt's government hopes both to meet local demand and to begin exporting to Europe in the near future. To assist in facilitating Egypt's growing natural gas exports, Russia struck a \$30 billion deal with Egypt in 2016 for the financing and construction of a nuclear power plant in Al-Dabaa. It is another big announcement—as only the second nuclear power plant for Africa—that will further Russia's longevity and influence in Egypt and elsewhere.<sup>22</sup>

Aside from supporting Egypt's energy exploration and development, Russia is seeking ways to bolster bilateral trade across the Suez Canal Zone. China is currently the largest investor across the zone, which covers 461 square kilometers and comprises four sections and six ports. Russia recently completed a fifty-year agreement worth \$7 billion with the Egyptian government to establish an industrial zone east of Port Said along the Mediterranean, covering an area of five million square meters near the Suez Canal Zone. Construction will take place over the next thirteen years, and more expansion projects are expected over the next several decades. A Russian deputy minister recently declared that “the industrial park in Egypt was critical to open African markets for Russian goods.”<sup>23</sup> Thus Russia is positioning itself well to take advantage of Egypt's location on multiple levels. It also gets at why the strategic sea lanes of communication throughout the Mediterranean and Red Sea are of growing importance as Russia aims to expand its political and geoeconomic reach beyond the Mediterranean.

As Russian and Egyptian geoeconomic ties grow, security cooperation appears to be following suit—a common trend occurring with China as well. In recent years, there has been talk of increased weapons sales, joint exercises, and the opening of military bases to Russian troops. The growing military ties—certainly those between the navies—resurfaced when the Russian cruiser

*Varyag* made its first strategic visit in 2014 to Alexandria in northern Egypt after a several-decade lull in naval visits. In late 2017, Putin visited Egypt to highlight the nations' growing bilateral ties. During the visit, the two countries struck a preliminary deal to allow Russian warplanes to use Egyptian airspace and bases in a direct snub to Washington. It will provide Russia with its most significant presence since 1973 while also sending a strong message to the United States, despite more than \$70 billion in U.S. defense spending on Egypt since the 1970s. As Matt Spence, a former deputy assistant secretary for Middle East policy in the Obama administration, noted, "Power abhors a vacuum and when the United States pulls back we can't be under the impression that the world is going to stand by and wait for us. The danger, and the reality is that other countries will take advantage of the opportunity presented when America chooses to pull back."<sup>24</sup> Whether one agrees with this assertion or not, the fact remains that Russia's political, economic, and perceived military relationship with Egypt is on the rise. It aligns with Russia's blossoming desire to push beyond the Mediterranean Sea and into the Red Sea and Indian Ocean.

Reports in the past year or more have also cited Russia's desire to establish more long-term basing footholds in locations such as Sudan and Somaliland, just beyond the opening of the Bab al-Mandab. As the scholar Andrej Kreutz has noted, "Putin's Russia is determined to have access to the warm seas and the world's oceans, including the Indian Ocean. The southern trajectory of its policy is thus a strategic necessity, which is increased by the growing American presence in Transcaucasia and Central Asia and the sociopolitical upheaval in the region."<sup>25</sup>

In late 2017, one witnessed Russia's more concerted global strategy, including greater diplomatic efforts in the Indian Ocean region. One could argue now that Russia has a stronger naval presence and influence over the SLOCs of the Mediterranean, and it is able to keep pushing southward through the Suez Canal and into the Red Sea and Indian Ocean. In November, for example, Sudanese president Omar al-Bashir traveled to the Russian Black Sea resort town of Sochi, where he met with President Putin. During a series of meetings, Bashir praised Putin and Russia for its intervention in Syria, in addition to discussing setting up a base along the Red Sea in Sudan. According to a Russian news outlet, the Russian deputy chairman of the State Duma defense committee stated that a maritime base could be established within six months. Aside from Sudan, some reports also speculate a desire by Eritrea, a former Italian colony, to see a Rus-

sian basing foothold established where Saudi Arabia and the UAE already have bases in Assab to assist war-fighting efforts against the Houthis in Yemen. Russia and Eritrea are reportedly in the process of finalizing plans for the construction of a naval logistics center that could support Russian warships and submarines transiting the region.<sup>26</sup>

Farther to the south, near the opening of the Bab al-Mandab, an increasing number of reports assert that Russia is in discussions with Somaliland over establishing a basing installation there, too. Somaliland is ideally located on the southern border with Djibouti, which already has a significant international basing presence. If negotiations are confirmed and continue apace, Russia might establish a base in Zeila, about fifty kilometers from Djibouti City, which could house an estimated 1,500 military personnel. According to one report, “The base is expected to be home to two destroyer sized ships, four frigate class ships, two large submarine pens, two airstrips that can host up to six heavy aircraft and fifteen fighter jets, and other facilities.” In return, Russia will both support Somaliland in its efforts at international legitimacy and recognize its independence. The UAE already has a military base in the Somaliland port of Berbera.<sup>27</sup> If the reports come to fruition, this would further heighten the securitization and rising navalism of the western Indian Ocean and dramatically increase tensions between Russia and China on one side and India, Japan, the United States, and other European nations on the other. But even this construct is not perfect. For one, it is void of Southwest Asian nations and the rising tensions between the Gulf Arab monarchies and Iran. Second, China and Russia may be aligned more today compared to previous decades, but this is not necessarily destined to last. As one analyst asserts, “Even though it’s by far the junior partner in its relationship with China, Russia punches above its weight in key states like Egypt. As China moves to become Eurasia’s hegemon, Russia will have to keep punching if it wants to preserve its influence on the world stage.”<sup>28</sup> For now, China and Russia appear to have great commonality in their foreign policies seeking to undermine the U.S.-dominated world order, but with their growing geoeconomic interests and investments, the time may come when they diverge in their policy prescription in places such as Yemen or other Gulf nations.

#### *China and the Port plus the Industrial Zone Model for Suez*

Similar to Russia, China took a comparable approach to Egypt, expanding its geoeconomic, diplomatic, and military engagements in recent years. During

President El-Sisi's first of two trips to China in 2014 and 2015, the two nations signed a "comprehensive strategic partnership" agreement, signaling Egypt's growing foreign policy posture away from the United States, and China's growing focus on Egypt and its vital maritime choke point. China's foreign policy of nonintervention in domestic politics was another strong selling point for El-Sisi after the Arab uprisings of 2011 and the overthrow of then president Hosni Mubarak.<sup>29</sup>

Compared with Russia, Egypt and the Suez Canal are equally important for China and its BRI. On the maritime geoeconomic front, China focused much of its attention and efforts on bolstering trade linked to Egypt and the Suez Canal Zone. Most recently, the Suez Canal generated nearly \$5.6 billion for the Egyptian government, including eighteen thousand ships that traversed the canal annually. This number of transiting ships peaked at 21,415 in 2008 before the global financial downturn. Currently, the canal generates more foreign capital for Egypt than any other sector of the economy. China has benefited from Egypt's 2015 Suez Canal expansion project, which now decreases transit time from eighteen to eleven hours, permits two-way traffic, and accommodates some of the world's largest container ships to more easily transit to ports in the Mediterranean basin and other destinations in Europe. The follow-on problem, however, is that not all the European ports are able to handle the largest vessels, such as the Triple-E Class ships. That said, this presents an incentive for China to continue buying up ports and expanding them so that they can more readily handle these megaships, many of which are Chinese flagged. The Egyptian government also hopes that shipping and government revenues from the canal expansion will more than double by 2023, but experts are skeptical of these projections, because global trade and shipping would have to increase approximately 10 percent per year to meet them. The daily amount of ships traversing the canal would have to jump from 50 (the current average) to around 97 ships every day. This number is unlikely to be achieved.<sup>30</sup>

On the investment side, China went from roughly \$500 million in investments, as Egypt's twenty-third-largest investor, to \$10 billion, when it increased financing for new projects in 2016. In the near future, China announced its intentions to invest a total of \$40 billion in development projects in Egypt—though Egyptian government negotiations with a Chinese firm for a \$20 billion deal to construct a new administrative capital east of Cairo recently fell through. In 2015, around 1,200 Chinese firms operated in Egypt, with this number easily

expected to grow. President Xi Jinping followed El-Sisi with an official state visit to Cairo in January 2016. During his visit, the two nations signed \$17 billion worth of agreements focused on the prior comprehensive strategic partnership agreement and other economic initiatives in technology, communications, and trade. One such project included a \$3 billion agreement to construct a central business district in Ismaila, about fifty kilometers east of Cairo, as part of the larger Suez Canal Zone investments.<sup>31</sup>

More investment means growing trade between the two nations. For the past several years, bilateral trade averaged around \$11 billion dollars, but this is up almost 96 percent since 2009. COSCO's shipping office in Egypt also expressed a desire to use Egypt as part of a new series of shipping routes. According to Xie Manding, managing director of China COSCO shipping company in Egypt, COSCO is looking at shipping routes between Egypt, Ukraine, Russia, and Turkey, in addition to other routes between either Egypt or Morocco and northern Europe. Like Russia, China is focused on developing the Suez Canal Zone; it also fits neatly into China's Maritime Silk Road. Through China's Tianjin Economic-Technological Development Area (TEDA) corporation, one of the oldest and largest developers of the Suez Canal Zone, it is focused on building up a seven-square-kilometer area in Ain Sokhna toward the south end of the canal in the Gulf of Suez. In 2013 TEDA signed a forty-five-year contract for the development project; in 2019 it reportedly signed a second deal initiating phase 2 of the project. Under Egyptian law, TEDA is only permitted to hold a 49 percent stake in the initial \$1.5 billion project. In many respects, this is a prudent law and helps prevent Egypt from a possible Chinese business monopolization should Egypt ever be unable to pay back its debts, as was the case in Sri Lanka. Thus far, seventy Chinese firms have signed up and are interested in further investment, trade, and development projects. According to Mohamed Fayez Farahat, head of the Asian Studies program at the Egyptian state-run Ahrām Center for Political and Strategic Studies, "[China's] initiative by nature provides support for the development process in Egypt because the maritime path of the Belt and Road passes through the Suez Canal. . . . By supporting Egypt, China would secure mega infrastructure projects passing through the Belt and Road Initiative's path."<sup>32</sup>

Growing maritime investment and trade also mean a greater need for security. Egypt is surrounded by conflict, whether in Libya to the west or Israel and Palestine to the east. But perhaps most pressing are the ongoing conflict and

ungoverned territory in large portions of the Sinai Peninsula, adjacent to the Suez Canal Zone. China has already learned difficult lessons from Libya and Yemen, and any threats of a Suez Canal shutdown and its other maritime geo-economic investments could prove devastating for China's economy and larger global ambitions. China's PLAN fleet first traversed the Suez Canal and docked in Alexandria in 2002 during its first circumnavigation voyage. Though the relationship still pales in comparison to military cooperation with the United States, the relationship continues to grow. From 1989 to 2008, for example, Egypt was China's largest weapons market in Africa behind Sudan and Zimbabwe. By comparison, the United States and France accounted for 80 percent of Egyptian arms imports, with Germany in third place from 2012 to 2016.<sup>33</sup>

The rising navalism witnessed in the Mediterranean and Red Sea regions indicates greater opportunities for interaction and joint engagements between Russia, China, and other regional navies. In one telling, albeit alleged, incident from 2012, some speculated that Chinese naval vessels assisted Russian ships operating near Syria. As reported in one document: "In July and August of 2012, Chinese warships passed through the Suez Canal and entered the Mediterranean Sea at the same time Russia dispatched its naval flotilla to Tartus in Syria. A website called *Turkish Navy* tracked all three ships—the *Qingdao* destroyer, *Yantai* frigate, and the *Weishan Hu* supply ship. However, *Weishan Hu* disappeared for a couple of days—with some speculating it was possibly replenishing Russian warships in support of the Assad regime. *Weishan Hu* can carry 10,500 tons of fuel, 250 tons of water, and 680 tons of ammunition."<sup>34</sup> Whether true or not, these types of interactions and growing mutual support initiatives will likely increase and directly oppose many regional interests of the United States, NATO, and other powers. Between 2013 and 2014, officials recorded nine separate security events in or near the canal. Two attacks—one of which was directly launched at a COSCO ship—were carried out between Ismailia in the middle and Port Said near the north by the Furqan Brigades located in the Sinai Peninsula, at the time declaring "their responsibility for targeting the international waterway of the Suez Canal which is the artery of the commerce of the nations of disbelief and tyranny."<sup>35</sup> The Furqan Brigades have not appeared active since 2013, but the attack still highlights the vulnerability of the Suez Canal for countries such as China or Russia that are growing their geoeconomic footprints.

## Djibouti and the Bab al-Mandab

The origin of the name “Djibouti” means “hot bowl” in Afar, one of the main local languages, and is an apt name for a country sitting at the vital crossover between Africa and Southwest Asia, with some of the hottest recorded temperatures on earth. Djibouti likes to sell itself as open for business to all nations. As Djiboutian president Ismail Omar Guelleh once stated, Djibouti is “African at heart, Arabist in culture, and universalist in thought.”<sup>36</sup> Its maritime geography has not changed in centuries, but in a post-9/11 world, it has cashed in on selling its geostrategic location in a volatile region of the world—with Somali piracy to the south and the Yemeni civil war to the north—to the highest bidders in a classic rentier state fashion. Today, most major Western or regional powers have locations in Djibouti in some form with military bases and facilities or business investments, but China has been the most aggressive in its quest for a larger military foothold and geoeconomic presence in the small maritime city-state.

With an estimated 884,000 inhabitants, Djibouti sits along one of the world’s busiest and most dangerous shipping routes. Its coastline measures around 314 kilometers, including a continental shelf of about 2,500 square kilometers, making it roughly the size of Massachusetts at 23,200 square kilometers. About thirty kilometers to the north, across the Bab al-Mandab, lies Yemen and the southern tip of the Arabian Peninsula, while Somalia sits to the east and Ethiopia to the west. Djibouti is particularly critical for Ethiopia because Djibouti is the main point of entry for an average of 86 percent of Ethiopia’s nonhydrocarbon goods, which enter Djibouti and then traverse overland to Ethiopia by train or truck.<sup>37</sup>

Djibouti is geostrategically significant, and with the help of China, it is quickly emerging as an important maritime transportation, trade, and naval hub. Djibouti also attracted the United States, Japan, Italy, France, Germany, and Spain, among others, which all have either a military basing presence or an official military presence. But after my visit in 2018, one could see that these state actors are increasingly crowded out by China’s growing monopoly over the Djibouti ports and maritime infrastructure system, as well as its growing dominance over Djibouti’s telecommunications, sea cables, and other geoeconomic activities. Furthermore, the establishment of China’s first overseas base in 2017 provides China and the PLAN with a highly strategic base as an anchor

along the western edges of the Indian Ocean rim. As asserted by Admiral Sun Jianguo, deputy chief of the Joint Staff Department, “President Xi Jinping instructed the PLA to steadily advance overseas base construction.” China needs to protect its growing interests and investments, and a permanent basing presence is a way to do it. Chinese investment in sub-Saharan Africa, as a result, ballooned from \$19.47 billion in 2008 to nearly \$280 billion by the end of 2018, according to some estimates. This number is highly debated, since many projects have yet to be carried out; annual investments have also plateaued or declined in recent years while China takes stock of its current BRI projects. China also concerns itself with the growing number of official Chinese laborers, which grew during the same time frame from 181,079 to 263,676, and even this number is estimated to be much higher and closer to one million Chinese workers if accounting for workers on more temporary contracts.<sup>38</sup> Though it took China a while to establish a formal base in Djibouti, and many believe that it does not want to make the same mistakes as the United States and other Western powers, it is likely that China will secure other Indian Ocean bases in the near future, as in the case of Gwadar examined later in the chapter.

*Djibouti’s Development as a Maritime City-State with a Chinese Imprint*

As noted by one European official I interviewed in Djibouti, “China is trying to build the next century. The United States built the last century, while France and Great Britain built the century before that. China will write its own rules. . . . They won’t be threatened by the U.S. with development because they will control the global system. . . . [BRI] is more than a project. It is a conquest of resources. That’s why they have a need for military bases to secure the transport of these resources. For China, investment in Djibouti is nothing. It is just 1 percent of the larger [BRI] project.”<sup>39</sup> Though some might dismiss these as gross generalizations, traveling to Djibouti certainly solidifies the idea that China has penetrated Djibouti’s national economy in a significant way, and Djibouti is just one important node across an emerging and increasingly potent maritime trade and infrastructure network that is quickly moving across Eurasia and into Europe. If China controls the infrastructure project loans, then it can influence which firms carry out the projects using Chinese-made equipment. And in the end, after building new ports, laying new undersea cables, establishing new shipping routes and intermodal transport hubs, all while controlling a nation’s



telecommunications system, China is creating an independent system that will be well beyond the reach, control, or leverage of others.

And that is what one witnesses China doing again and again from Djibouti to Piraeus, Greece, and beyond. It uses maritime geoeconomics and attractive infrastructure project loans as a soft entry into a nation, and then it builds up the system from there, finishing with the establishment of a military base, in the case of Djibouti. Moreover, as one local official remarked, China's advantage in Djibouti and elsewhere is that it can make decisions fast because it is so large and centralized. The PRC uses state-owned enterprises to cut out the underwriter middleman on large deals, which the United States and others cannot do with ease, if at all. The official I spoke with further observed that the Chinese state, in these cases, is the financial backer of any deals, and that puts China on a stronger footing compared to the United States. In contrast to the Western model, the Chinese do not need insurance for these large infrastructure projects, though there is growing concern among some in China that many projects are financially risky and need better oversight.<sup>40</sup>

Djibouti is a willing participant in China's larger strategy despite pushback from other international actors currently operating in Djibouti, such as the United States and Japan, which oppose Djibouti's increasingly enmeshed geoeconomic relationship with the Chinese. This being the case, Djibouti has a 40 percent official unemployment rate—for youth, the rate is at 80 percent unemployment—with a per capita GDP of around \$3,600. It needs to diversify its sources of revenue to stay afloat and continue with its lofty aspirations of becoming the Singapore of the Horn of Africa. Currently the Djiboutian government is the number one employer domestically, followed by the ports and the United States as the second- and third-largest employers respectively. As with any good investment strategy, it is important to seek out a diversity of revenue sources, and China happens to offer opportune additional sources of revenue and economic development.<sup>41</sup>

With such grand ambitions, Djibouti openly welcomed China's offer to finance many of the new infrastructure projects that dot the coastline near Djibouti City and elsewhere throughout the small country. As proclaimed by President Ismail Omar Guelleh in 2017, "The Chinese are the only ones to invest in us in all areas: railways, ports, banks, industrial parks, etc. The French and Europeans are largely absent subscribers. As for the Americans, who have expressed their interest in the Djibouti-Addis pipeline project, their goal is to earn

a lot, fast and alone: that is understandable but more complicated than expected. The reality is that no one but the Chinese offers a long-term partnership in Djibouti.”<sup>42</sup>

The problem with this sentiment, however, is that Djibouti has quickly entered dangerous territory with its loan practices. Many of the foreign diplomats or military officers I spoke with during my time in Djibouti frequently returned to their collective concern regarding stringent loan terms that the Djiboutian government signed up for with the Chinese. Here again is an astute tactic by the Chinese: offer what appears to be favorable loans to a host nation, but when the host nation is unable to meet the loan repayment scheme, the loan rate terms quickly become unfavorable (e.g., Sri Lanka) and thus enable China to swoop in to take either more concessions or, in some documented cases, physical land (e.g., Tajikistan). Though Djibouti has not defaulted on any of its loans with China, it may only be a matter of time before the loan rates become more problematic for the small maritime city-state. According to some estimates, Djibouti has borrowed up to \$957 million from China’s Export-Import Bank alone in recent years for various infrastructure projects.<sup>43</sup> But as a European diplomat contended, “Djibouti is not worried about debt because, in the end, they own the land. Djibouti will probably do an exchange of management for ten years in return for having China write off its debt. The Djiboutian mentality is: The harbor is done, the port is done. They think it is all theirs anyway, so they don’t care if they have to default on the debt. It is still their land. And for China, the debt is really minor in the grand picture. They want the location and by being installed in Djibouti they can get more and more.”<sup>44</sup> Djiboutians push back against this logic and frequently point to their masterful negotiating tactics to achieve a 67 percent Djiboutian / 33 percent foreign-entity split for many of the agreements that have been struck with the Chinese over their port, terminal, and free trade zone projects. But with all these loans, the devil is in the details, and it is hard to determine the exact terms of the loans, especially knowing what happens should a default or late payment ever occur.

The International Monetary Fund (IMF) publicly warned Djibouti about its dangerous borrowing practices with the Chinese, remarking that “in just two years, public external debt has increased from 50 to 85 percent of GDP, the highest of any low-income country. Much of the debt consists of government-guaranteed public enterprise debt and is owed to China Exim Bank. . . . China has provided nearly \$1.4 billion of funding for Djibouti’s major investment

projects, equivalent to 75 percent of Djibouti's GDP." Today, between fifteen and twenty state-owned corporations operate in Djibouti. In 2008 that number was just three.<sup>45</sup>

Most of the infrastructure projects are done by concession loans, but the exact terms of the loans are hard to come by, because they are often the most intricate and can take up to two years to negotiate, compared to a commercial loan, which is much faster to set up. Most of Djibouti's loans appear to hover around a 3 to 4 percent interest rate. According to Aboubakr Omar Hadi, CEO of the Djibouti Ports and Free Trade Zone (DPFTZ), the concession loan from China Merchants for the Doraleh Multipurpose Port (DMP) had a base interest rate of 1.85 percent, but as someone else from DPFTZ pointed out to me, this number likely did not include the Libor number of around 2.45 percent, which places the full interest rate on such a loan closer to 4.5 percent. In addition to interest rates, other important loan elements need to be accounted for as well. For the DMP, for instance, there is a seven-year grace period and a twenty-year payback period. During the first negotiated grace period, Djibouti pays the interest only. After that, it must pay the principle and interest.<sup>46</sup>

However, if the loans are not paid on time, the interest rate jumps up quickly—as one possible outcome. Another possibility is that the Chinese could take over a larger stake of a project or concession. As noted to me during a tour of the DMP by the port's public relations team, the Chinese could potentially take over the entire stake, or a 100 percent stake, of the port if Djibouti defaults on its payments or is unable to pay them back in full. One final disconcerting scenario is that China could shut down the railroad that connects Ethiopia to Djibouti, which is responsible for bringing massive amounts of khat—the leafy green flowering plant considered a drug in most countries—grown in Ethiopia and then sold in mass quantities at a subsidized rate by the Djiboutian government. In other words, if anything goes awry with Djibouti's Chinese loans, or if Djibouti defaults on its loans and fails to pay, China could use the khat trade to destabilize the government by not letting in daily khat shipments, causing massive upheaval from the local population addicted to the plant, which causes euphoria and excitement when chewed. These scenarios aside, many diplomats and foreign military officers in Djibouti also pointed out that for China, a Djiboutian default on its loans is not as worrying in the grand scheme of things because Djibouti is a small investment in relation to the entirety of the BRI. In this worst-case scenario, China would easily be able to write off the loss.<sup>47</sup>

According to some official observers, Djibouti has already asked for an extension on some of the loans associated with one or two of its recent projects because some of the projects are running behind schedule. The Chinese response thus far has not been flexible. According to one account, the Chinese appear unwilling to budge on the timeline. For 2017, the projection was that about 2 to 3 percent of the Djiboutian government's budget was dedicated to paying back its interest on loans. But by 2019, this would have increased to as much as 20 to 25 percent of the government's budget solely dedicated to interest and loans, with no correlating increase in the government's revenues. This is a huge jump, and by most estimates, it does not seem that port revenue or other infrastructure revenue will increase enough to cover the growing interest and loan payments. Moreover, if a slowdown in Ethiopia's economy occurs, it could have a direct and adverse effect on Djibouti's own economy and revenue projections. According to current projections by the IMF and others, the DMP, the Ethiopia-Djibouti Railway, and additional projects will provide only about a 7 percent GDP growth from 2017 to 2019.<sup>48</sup>

Though most ports (Hamerdjog, Ghoubet, Tadjoura, Obock, the Old Port of Djibouti) across Djibouti have plans to expand or modernize—largely with the help of the Chinese—much of the concern today focuses on the DMP and the Doraleh Container Terminal (DCT), because they are the most significant in terms of ownership and shipping. China is snaking its way toward carving out a larger stake in both ports, increasing its lock on the shipping traffic entering and exiting Djibouti, and thus creating a more independent transportation and maritime trade network. It also financed the critical Djibouti-Ethiopia Railway project intended to decongest the roadways and speed up trade headed to Ethiopia, decreasing transport times to six hours instead of the previous twenty-four, among other valued infrastructure projects.<sup>49</sup>

Djibouti hopes to turn the DMP, which opened in May 2017, into a major transshipment hub that will also be served by the massive international free trade zone being constructed about twenty kilometers away. It currently has five berths spread over 690 hectares of land with a total capacity of approximately 8.8 million metric tons per year. About eight hundred Chinese workers man the port's operations. No current plan exists for the addition of more berths, but some speculate that another berth will be specifically added for the PLAN on the other side of its base, away from the main DMP berths. The DMP is part of a larger joint venture between China Merchants and the Port de Djibouti Société

Anonyme (PDSA), created in conjunction with the Djibouti Ports and Free Zones Authority (DPFZA). China Merchants has a 23.5 percent stake in the port, and the remaining 76.5 percent of the DMP is owned and backed by Djibouti's government and the PDSA. In a sign of China's growing monopoly over maritime infrastructure projects in Djibouti and elsewhere, the China State Construction Engineering Corporation and China Civil Engineering Construction Corporation constructed the port, and Shanghai Zhenhua Heavy Industries (ZPMC) contributed the port's equipment of large-scale container machinery, bulk cargo handling machines, and heavy-duty steel structures. And China Merchants operates the port with a ten-year lease, automatically renewable for another ten years, for a total of twenty years.<sup>50</sup>

As to the international free trade zone, Dalian Port Corporation Limited, in which China Merchants owns a 21 percent stake, began construction on the project in early 2017, and it is expected to become one of the largest free trade zones in Africa when completed over the next decade. The Djibouti International Free Zone full financing terms are still being negotiated. Djibouti will have a 60 percent ownership and has put down \$150 million in initial capital during phase 1, while China will own the other 40 percent of the larger \$3.5 billion project. China's Development Bank is doing the financing, which will fall under the terms of a commercial loan worth \$385 million in phase 1 because it is faster than a concession loan by comparison. During the construction phase of the Free Zone, 65 percent of the workforce will be local workers, and 35 percent will be Chinese. During the operations phase, 70 percent will be local, and 30 percent will be Chinese for the first five years (presupposing Djibouti does not default on any terms of the loans). Then Djibouti will take over full operations with a 100 percent Djiboutian workforce over the long term. Djibouti also hopes to construct a new container terminal for the free trade zone. It is currently in negotiations with the French shipping company CMA CGM to build a \$660 million Doraleh International Container Port that can take care of the lucrative transshipment market, handling a projected 4 million TEUs per year when fully completed.<sup>51</sup>

The speed at which all these linked maritime projects are finishing is staggering. When talking about the construction process, several knowledgeable sources alleged that the reason for the enormous speed is because the Chinese sent over prisoners to complete the job. As one source told me, both the French and British carried out similar tactics at their colonial heights. No outside ob-

server can be certain on the concrete number of Chinese workers, but one official speculated that roughly five thousand Chinese prisoners were shipped in to help with infrastructure projects—though this is hard to independently verify. Another official added that if a Chinese national enters Djibouti with a valid passport, there is not much else the local government can do other than issue a valid visa. The government is not in a place to judge so long as the visitor does not violate any local laws or customs.<sup>52</sup> This may indeed be China's secret recipe to achieving these massive infrastructure projects over short periods of time, but either way, China has a massively capable domestic workforce that in many instances would be willing to uproot and work for Chinese firms abroad.

Aside from the DMP and the international free trade zone, the DCT made the news in late February and early March 2018 when the government announced that it would be terminating Dubai Ports World's contract, claiming DP World's failure to resolve a dispute dating back to 2012. Djibouti's government held a 67 percent stake in the port, and DP World owned a 33 percent tranche. The DCT is also the main container port for the entire country and one that the United States relies on heavily for its operations out of Camp Lemonnier, about thirteen kilometers away. As noted by U.S. AFRICOM commander General Thomas Waldhauser, "If China placed restrictions on the port's use, it could affect resupplying the U.S. base in Djibouti and the ability of Navy ships to refuel there. If the Chinese took over that port, then the consequences could be significant." Camp Lemonnier currently houses around four thousand personnel and acts as a main special operations base for U.S. forces operating in Somalia or Yemen. When the initial news broke, the Djiboutian government tried to reassure the United States and others that it would not be handing over DP World's stake to the Chinese. Though the termination of the DP World concession was a real black eye for the government, and legally complicated in its own right, the government said it would buy out DP World's stake and name another firm to take over the port's operations.<sup>53</sup>

### *The PLA Establishes a Base*

Gaining greater control over Djibouti's maritime infrastructure and supply chains is one thing, but establishing its first overseas military base brings China's position of greater regional and global prominence to a new level. India, Japan, the United States, and its European allies are growing increasingly concerned about the rising securitization of Djibouti and the Horn of Africa. According to

one top diplomat, the international diplomatic corps is worried about Djibouti's ability to meet its loan payments. Many are afraid that China will take more shares or a stake in various infrastructure projects if Djibouti cannot meet its loan payments. In the interim, all the foreign military officers, diplomats, or officials I spoke with appear to be watching China's every move with caution. The same high-level diplomat I spoke with in Djibouti also stated, "We have to watch how China develops its presence and its intentions. We need to watch carefully, but try to engage constructively." Most hoped that China's presence would be constructive toward regional stability and peace, but the broad consensus was more cynical about China's growing ambitions and intentions due in large part to its opaque manner of operating. In a symbolic sign of China's nontransparency, one European military officer said that observers frequently spotted Chinese industrial fishing trawlers docked at port with substantial antennae mounted aboard. The speculation was that the fishing trawlers were likely dual-use vessels equipped to pick up higher levels of local communications.<sup>54</sup>

If a foreign visitor desires to get a closer look at the outside walls of China's new military base at Doraleh Multipurpose Port, he or she can head over to the International Maritime Organization's (IMO) regional training center, located several hundred feet from the outside walls of the PLA base. There is not much more to see than tall concrete walls, including a chain-link perimeter fence with barbed wire. But the symbolism of the gray-walled behemoth is potent. This is China's first base outside of China, and it is here for the long haul. It takes several minutes by vehicle to drive around the perimeter of the base, highlighting its size, before arriving at the IMO's regional training center, which actually preceded China's base and was sponsored in part by Japan, which has a base on the other side of the city. Construction on IMO's center began in 2011, and today it supports antipiracy and other law-of-the-sea training workshops within the Djibouti Code of Conduct. Its presence also annoys the Chinese because it continues to host international events at its conference center.

The establishment of China's new base does not mean China is going to overtake or outshine the current worldwide U.S. military basing presence, which officially comprises around 514 overseas bases.<sup>55</sup> But tensions have mounted between the United States and China in Djibouti, exhibited in the recent allegations that the Chinese directed a high-grade laser at a U.S. plane flying over or nearby the new PLAN base, injuring two airmen aboard the plane. Currently

the base only houses around 2,000 military personnel, but some speculate that it might one day be able to hold up to 10,000 personnel. This new base fits into larger trends associated with China's growing development as a blue-water naval power and other maritime geoeconomic interests associated with the BRI and MSR spanning all of Eurasia, if not the globe. It also aligns specifically with China's "near seas defense, far seas protection" naval strategy, which cites the Chinese navy's responsibility to safeguard Chinese interests worldwide. Additionally, China is increasingly involved in UN peacekeeping missions across Africa and elsewhere, with President Xi Jinping recently pledging 8,000 troops to the UN peacekeeping standby force. China currently has around 2,500 peacekeepers deployed globally, with about half of these serving in East Africa near Djibouti.<sup>56</sup>

China's increased presence in Djibouti will bring it into closer contact and therefore possible competition with the United States, as well as India, from a security and military perspective. Djibouti has been critical of the United States since the early 2000s, when it first established a military base to assist its post-9/11 regional operations and to combat a rise in Somali piracy. Piracy has been on the wane in recent years due in part to the stepped-up efforts of various international actors, but the threat is still real. With thousands of troops, contractors, and other civilian personnel, Camp Lemonnier and additional in-country cooperative security locations currently support the U.S. Special Forces operations and other U.S. drone warfare activity in Yemen and Somalia. Djiboutian president Guelleh almost doubled the basing rent recently, but it did not deter the U.S. military from concluding another strategically valued ten-year agreement. In 2011, Japan also established its first base in Djibouti, the first of its kind outside of Japan since World War II for its Maritime Self-Defense Force. Similar to the United States, Japan was drawn to Djibouti as an important hub to assist in Combined Task Force 150 (CTF-150) naval operations and counter-piracy measures.<sup>57</sup>

The United States long held a monopoly over its military position in Djibouti, but the security and basing landscape—much to the dismay of Washington—has changed in the last several years with the increased presence and influence of China in Djibouti. To gain a greater regional foothold, China announced a bilateral security and defense cooperation agreement in February 2015 that included the establishment of a "logistical base," making it the seventh nation with a military presence. The agreement was reportedly for a ten-year lease, with



China paying \$20 million annually for the lease, almost four times less than the United States. The agreement also included support to build up Djibouti's navy and air force, including the purchase of Chinese weapons systems. The agreement was negotiated and signed by Chinese defense minister Chang Wanquan and his counterpart, defense minister Hassan Darar Houffaneh, but the PLAN would ultimately run the base. Shortly after this agreement was signed, the scholars Degang Sun and Yahia H. Zoubir cited press reports claiming China was instrumental in having the U.S. military removed from a small basing installation in the northern city of Obock: "In May 2015, the Djiboutian government apparently asked the United States to vacate its secondary base in Obock and turn it over to the Chinese, who have made Djibouti a much more attractive offer. Indeed, the Chinese provided \$3 billion to build a railroad (completed in 2015) from Addis Ababa to Djibouti and plan to modernize Djibouti's small port." When I asked about the future plans of Obock at DPFZA, officials only stated that the five-year plan was a \$200 million investment in Obock to establish it as a ship repair yard and dry dock with an ability to handle the future generation of ships.<sup>58</sup>

The PLAN base marks the culmination of many years of an active Chinese presence in Djibouti, beginning more formally with its arrival to participate in CTF-150 operations in late 2008 and early 2009. According to one assessment, CTF-150 "has been the first active operation beyond China's neighboring waters in more than 600 years, and also has been a crucial component of the PLAN's recent development. The 18 rotational deployments to the Horn of Africa to date have allowed China to develop a number of core naval skills, including replenishment-at-sea capabilities, some of which are relatively new for a navy that was, until ten years ago, confined to regional waters."<sup>59</sup> According to another estimate, China deployed more than twenty-six thousand personnel across thirty-two missions to the Gulf of Aden. Since China began its participation in CTF-150, the PLAN has accompanied more than six thousand Chinese or foreign ships.<sup>60</sup>

Since Djibouti is also only thirty-two kilometers from Yemen, this is of further interest to China and others to ensure the protection of the Bab al-Mandab's shipping lanes, in addition to protecting foreign nationals operating in many of these turbulent locations. In 2015, in an unprecedented event, China rescued around six hundred Chinese citizens and 255 foreign nationals from Yemen's Port of Aden and returned to Djibouti before heading home. Part of an addi-

tional concern related to Yemen is the turmoil spilling over from the civil war, jeopardizing the safety of the sea lanes. According to Djibouti's defense minister Houffaneh, China is primed to play a potential leading role in future regional security. It already started enhancing its regional naval operations for its increasingly frequent visits to regional ports such as Aden and Salalah. China has also taken advantage of its enlarged presence by using Djibouti as an important replenishment port en route to the Suez Canal and Mediterranean Sea, including stops to Jeddah, Saudi Arabia, and Istanbul, Turkey. But an increased presence comes with heightened responsibility for regional security. In Yemen, an estimated 180,000 local nationals have fled the conflict since its beginning, and thousands have traversed the sea seeking a final safe haven at the UN camp in Obock. Djibouti already houses approximately 12,800 Somali refugees and asylum seekers. If China wants to be seen as a legitimate security guarantor and legitimate stakeholder of the international system, it will need to adopt new measures that more proactively engage in regional politics and security.<sup>61</sup>

China was deliberate in taking its time to study and slowly roll out the establishment of its base at the DMP. But now that its basing presence is out in the open, it will face further dilemmas that other basing nations like the United States have confronted to balance their relationship with a host nation. China has so much financial leverage over Djibouti at the moment that it appears to be in an excellent position to continue its grand aspirations of building a new and independent trade, logistics, and communications system, in addition to projecting its military might farther afield.

### *PEACE Cables*

The last key component for China to establish more of a monopoly over Djibouti's general supply and maritime trade routes is seeking control over its telecommunications system, which links into a larger submarine cable system. Though country specific and regionally focused for now, the undersea cables tie into a much bigger and developing topic of concern linked to the future of global security. The current dynamic between China, Russia, and India is ripe for mounting competition over the vast submarine fiber-optic cables that line maritime Eurasia and its strategic waterways and choke points and remain physically vulnerable to a possible outside attack. The general populous fails to appreciate how relatively few cables there are compared to how many people are

connected to the internet on land. According to Nicole Starosielski, a professor of media and communication at New York University, “People would be surprised to know that there are a little over 200 systems that carry all of the internet traffic across the ocean, and these are by and large concentrated in very few areas.” The future challenge is that most of these cables, each about the width of a garden hose, remain vulnerable to physical attacks. As the journalist Steve Weintz writes, “If you wish to practice hybrid warfare—disruption and degradation with little overt engagement—then the ability to cut submarine cables at will and at depth gives you a very powerful weapon.”<sup>62</sup>

Increased dependency on cyberinformation flows is a significant problem, especially in maritime affairs and as Eurasian nations expand their internet connectivity. China and India, for example, top the list of per capita internet connectivity with 829 million and 560 million users respectively. For China, this is about 58 percent of its population, while for India it represents only 41 percent of its population. The United States is third on the list with 292 million users, and Russia ranks eighth with 109 million. As connectivity broadens for China and India, protecting the undersea cables and information flows will grow in consequence. The submarine cable systems are responsible for transmitting more than 95 percent of voice and data traffic; only about 5 percent travels via satellites. For the global shipping industry and regional naval forces, emerging maritime competition could result in threats posed to their navigation and positioning systems.<sup>63</sup>

With this larger cyber context as a backdrop, China is building what is termed the PEACE (Pakistan and East Africa Connecting Europe) submarine cable system, which will run initially from Pakistan to East Africa and then expand farther, linking back to cables in Asia, Europe, and Africa. It is not dissimilar to when the British inaugurated its “All Red Line” in 1902. At the time, 1,700 electric submarine cables, amounting to over 200,000 miles of cables, connected the British Empire and most of its colonies and outposts worldwide. Today, China has started on a comparable project, and when it completes its global undersea network of cables, it will ensure greater independence and control over valued information flows in and out of China and around the world. In fact, many official Chinese publications have discussed the importance of “network-centric warfare.” As a publication from the PLAN’s Dalian Ship Academy observes, “In the information age, information has become one of the main sources of combat power.”<sup>64</sup>

The Huawei Marine Networks Company recently conducted a feasibility study of the PEACE submarine cable system with hopes of completing phase 1 of the project in 2020. Phase 1 of PEACE spans 6,200 kilometers and links Gwadar and Karachi undersea with Djibouti, Somalia, and Kenya. The second phase of the project will then head north and south to tie in Europe and South Africa, spanning thirteen thousand kilometers. The cable connecting Marseille, France, with the rest of the Indian Ocean network, including the Seychelles, is expected to come online in 2021. It is part of China's goal to create a new and fast information highway linking China to the far reaches of Eurasia and Africa.<sup>65</sup>

Meanwhile, in Djibouti, a total of seven cables, divided across two landing stations, currently enter the country, signifying Djibouti's geostrategic significance. (By comparison, Russia has only two cable landing stations for its population.) Moreover, China has a growing lock on the cables entering and exiting Djibouti. In addition, according to one source, China is setting up a big data analysis center at the DMP to analyze the country's telecommunications, which include the six other nations with a military presence in Djibouti. According to another source, the seven cables run right in front of Camp Lemonnier. Aside from increasing control over the cables, China is branching into gaining a greater share of cell phone networks. At present, one is currently required to provide one's passport in Djibouti when buying additional minutes or SIM card data for a cell phone. Presumably, this is another way to further monitor all local telecommunications. If it is not already apparent, China is well on its way toward creating an alternative system with Chinese characteristics. One should also note that because a state actor today can more easily cut or tamper with submarine cables, no independent system of cables can be entirely protected.<sup>66</sup> Even so, additional redundancy lines might serve China well in the event of a flash point conflict with the United States or another rival.

### Gwadar, Pakistan

Northeast of the Bab al-Mandab lies Southwest Asia's last vitally strategic choke point, the Strait of Hormuz. Though China lacks a base in the Strait of Hormuz, it is building up an important maritime node to ensure greater energy security and access to the Gulf in future years. Sitting at the northern end of the Arabian Sea lies the seaside city of Gwadar, along the Makran coast in Balochistan Province. Gwadar is situated four hundred kilometers from the open-

ing of the Gulf and is assisting in the buildup of China's MSR. The other expectation is that Gwadar will be able to assist in sustaining China's "far seas" strategy. As asserted by some observers, "Beijing and Islamabad see Gwadar as the future jewel" in China's larger strategic initiatives.<sup>67</sup>

In addition to supporting the BRI, China benefits from Gwadar in three main ways. First, Gwadar keeps China in close proximity to the energy-rich Gulf region, from which 77 percent of the oil shipments are headed to Pacific Asia every day. Former president Pervez Musharraf has remarked on several occasions that "Pakistan would like to serve as China's energy corridor. . . . Crude oil from Iran and Africa can be shipped to Xinjiang via the port." He has also referred to Gwadar as the "economic funnel for the whole region."<sup>68</sup> Second, Gwadar feeds into the China-Pakistan Economic Corridor (CPEC) project tying trade routes from Gwadar to China's restive Xinjiang Province. The southern end of Xinjiang is approximately 4,500 kilometers west of the nearest Chinese port, but it is just 2,400 kilometers north of Gwadar. Despite concerted attempts to link Gwadar to Xinjiang via the high elevations of the Karakoram highway, most goods transported into China are either flown in or traversing longer maritime routes through the Strait of Malacca. Most of Pakistan's trade, for example, is with the Chinese maritime provinces of Guangdong and Zhejiang, located along China's south and eastern coasts. Third, China's presence in Gwadar and Pakistan writ large helps keep India in check. As the scholar Andrew Small asserts, "[China] wants Pakistan to do a more convincing job of combating Uyghur militancy. It would prefer Pakistan to run a better-functioning economy. But none of these concerns obviate the essential fact that an India that is forced to look nervously over its shoulder at its western neighbor is easier for Beijing to manage."<sup>69</sup>

Since 1947, China has forged a strong relationship with Pakistan to constrain and balance against India as its primary South Asian rival, but it was not until 1962 that the border war between China and India helped solidify a burgeoning Sino-Pakistani relationship. By 1963, both countries signed an accord on border relations, in addition to signing an agreement for the construction of a highway connecting China's Xinjiang Province with northern Pakistan. Thereafter, China supported Pakistan in its two wars against India in 1965 and 1971. Since the 1970s, both countries have signed various political, military, and economic agreements, furthering the development of their geostrategic relationship. Be-

ginning in 1976, China struck a deal to secretly support Pakistan in the development of its nuclear weapons technology. The strategic importance of the bilateral ties was more recently summed up by former Pakistani prime minister Nawaz Sharif, who characterized Pakistan's relationship with China as "sweeter than honey." Andrew Small again observes, "Pakistan is a central part of China's transition from a regional power to a global one." He also notes that China has entered the fray in a much more robust manner in recent years now that it appears the United States is strategically withdrawing from Afghanistan and the broader central Eurasian region.<sup>70</sup> The U.S. regional standing has similarly grown more complicated with the Trump administration's decision to withdraw from the Iran nuclear agreement in May 2018.

Historically, Gwadar was a slave port along the Makran Coast, but more recent memory describes it as a quiet fishing village. Today, it is still a smaller city of 263,000, but it is slowly morphing into a new logistics and supply hub for the Chinese, strategically located both near the opening of the Strait of Hormuz and about 130 kilometers east of Iran's border and 600 kilometers west of the rival port of Karachi. Over the next two decades, many aspire to grow the city to two million people, including tens of thousands of Chinese foreign nationals.<sup>71</sup> Gwadar was originally owned by the Sultanate of Oman dating back to 1783, but almost two centuries later, Sultan Said Bin Taimur sold it to Pakistan in 1958 for \$3 million, ceding his only overseas colony. Pakistan originally had visions of developing the naturally deep harbor into a port when it first took over the area in 1958.<sup>72</sup>

Formal talks on Gwadar did not emerge until 1993. Even then, the project never got off the ground until 2001, when China announced that it would invest in the project. By March 2002, China concluded an agreement to finance \$198 million of the \$248 million needed to complete phase 1 of the Gwadar port project, which included three multipurpose ship berths. Phase 1 was completed in 2006 and inaugurated in early 2007. Phase 2 has more robust ambitions and is estimated to cost around \$600 million or higher. The second phase included the construction of four more berths, a bulk cargo terminal, and other sophisticated port components, including an oil refinery, but the construction project never really took flight and has remained largely dormant for the past decade. The other contributing issue was that after Musharraf stepped down from power in 2008, Gwadar lost its primary champion and backer.<sup>73</sup>

During the initial years, the Port of Singapore Authority (PSA) received the operating contract, but the port was never fully operational, owing to an alleged dispute over the terms of the agreement, among other issues and security concerns, between the PSA and the Pakistani government. After years of prolonged legal battles and complications, PSA agreed to relinquish its control over the port despite having received a forty-year contract in December 2006 from the Pakistani government, thus paving the way for China to take full control of Gwadar. Beginning in 2012, the China Harbor Engineering Company began negotiations with PSA for the transition of management, and in 2013 a deal was struck by which PSA transferred the operations to China Overseas Port Holding Company, a company registered in Hong Kong. As part of its negotiated agreement, several reports claim that China will receive “91 percent of revenues until the port is returned to Pakistan in four decades time,” in addition to holding a tax-exempt status for the next twenty years. When the Chinese took over the port’s operations in February 2013, the port was operating at approximately 15 percent of its capacity, with only one ship docking during the four prior months; this could help explain how China received more favorable terms when it took control of the port.<sup>74</sup>

Shortly after this, China announced the creation of CPEC, as well as the BRI. CPEC was conceived as a series of infrastructure and energy projects worth an estimated \$62 billion to further economically link China and Pakistan—though more than 64 percent of the current projects focus on Pakistan’s electricity needs. Much debate continues over the exact number of Chinese investments in Pakistan over the past decade. A recent RAND study “puts the total level of financial assistance pledged from China to Pakistan between 2001 and 2011 at \$66 billion, but finds that only six percent of it ever came through. One leading Chinese expert pithily summarizes the economic section of his essay on Sino-Pakistan relations with the heading: ‘China-Pakistan Economic Ties: Tiny and Weak.’”<sup>75</sup>

The debate over the numbers aside, China still appears committed to Gwadar’s future development and prosperity. In fact, many Chinese officials, including President Xi Jinping, compare Gwadar’s potential to the port of Piraeus, Greece, expressing their desire to transform Gwadar into a transshipment and commercial hub. Though the regional competition is strong with other established ports in the UAE, Qatar, Oman, and Iran, China remains dedicated to Gwadar as a vital node along the MSR. According to some estimates, Gwadar’s

port trade is projected to grow from 1.2 million tons in 2018 to around 13 million tons by 2022. Three new cranes have recently been installed, and more dredging to accommodate bigger ships is expected in the near future. Local obstacles nonetheless remain, including common electricity blackouts and a general lack of access to potable drinking water, in addition to local security concerns.<sup>76</sup>

China still appears committed, and in early 2018, Chinese and Pakistani officials inaugurated phase 1 of Gwadar's economic free zone, a project of four phases covering a 923-hectare site that will also tie into CPEC. Speaking at the inauguration event, Zhang Baozhong, chairman of the China Overseas Ports Holding Company Pakistan, stated that "with the construction of the free zone, the port city of Gwadar will become a big commercial hub in the region. . . . Some 30 companies in different businesses such as hotel, bank, logistics and fish processing have entered the free zone with direct investment of about \$474.3 million and are expected to output annual value of \$790.5 million after full operation."<sup>77</sup> For any future revenue generated by the economic free zone, China will receive an 85 percent stake of the operations. After the January 2018 event, China and Pakistan also concluded an agreement, among several, establishing Gwadar and China's Tianjin as sister ports and Gwadar and Dalian as sister cities. In a further sign of China's growing commitment to Gwadar, since 2014, China has pledged an estimated and staggering \$800 million in additional local projects to help win over the hearts of local politicians. Some of the proposed projects have included the construction of a school and an airport and the expansion of a local hospital. China also promised to assist Gwadar with upgrading and modernizing its water infrastructure. The China Pak Investments Corporation also launched a recent advertising campaign in London. Spread across seventeen bus routes in London, it sponsored banners promoting "Gwadar: The Gateway to Emerging Pakistan."<sup>78</sup>

With the arrival of new Chinese investment and financing for new maritime infrastructure projects as part of CPEC, more Chinese workers will be exposed to greater security risks in southern Pakistan—and other parts of Pakistan pose equivalent danger for Chinese workers. This is typical for any great power operating in a foreign land, but it is a dynamic China has largely avoided in Pakistan, despite the strategic ramp-up of its geoeconomic presence. The main threats in southern Pakistan are Baloch separatists, terrorists, and other violent extremists. According to some estimates, since CPEC's launch, observers have wit-



nessed an apparent rise in militant violence. The Baloch separatist movement has been ongoing for the past decade or more and has mainly targeted the central government for its continued discriminatory policies and lack of investment across the province. The separatists also desire a greater cut of the natural resources that have been discovered in recent years. China, however, continues to work on bolstering local support through its initiatives to help create more jobs and development for the local economy and region. Balochistan Province is one of Pakistan's poorest and least developed, with a population of 13 million. Many locals are concerned that their livelihoods will be jeopardized once Gwadar blossoms into its full potential and begins full-scale operations.<sup>79</sup>

Many of the incidents targeting Chinese workers or engineers date back to 2004 and have occurred at hotels where Chinese workers stayed, at the airport, and against a bus transporting Chinese employees to the port. But many of these incidents targeting Chinese employees or infrastructure projects still go unreported. In a more recent incident from May 2016, a Chinese employee and his local driver were attacked in Karachi, and in the spring of 2017, Baloch separatists attacked and killed ten workers. In a statement from the leader of the Baloch Liberation Army, the group asserted, "This conspiratorial plan [CPEC] is not acceptable to the Baloch people under any circumstances. Baloch independence movements have made it clear several times that they will not abandon their people's future in the name of development projects or even democracy." As a result of the rising vulnerability associated with China's growing presence, the Pakistani army recently stood up a 20,000-person army division and instituted new security protocols dedicated to protecting CPEC projects, Chinese workers, and other infrastructure initiatives.<sup>80</sup>

It is no surprise that more incidents targeting Chinese maritime investment projects or Chinese workers in Gwadar and elsewhere require China to increasingly focus on security. First, China does not want to see a repeat of Libya or Yemen or be unprepared if something does occur. Second, to secure these assets, China must consider having a more robust military basing presence similar to that of Djibouti. Naturally, this is why there is growing speculation that China is planning an enhanced military or naval presence in Gwadar or in nearby Jiwani. Jiwani is about sixty kilometers from Gwadar and, according to some recent reports, could become a future Chinese military base. Jiwani is located in a naturally protected cove that would serve China's larger interests as well.

Either way, the transformation of China's BRI and MSR in Pakistan has begun to demonstrate that they are more than just geoeconomic investments promoting development and infrastructure projects. As many suspected, the BRI and MSR possess the dual benefit of being able to support greater military or naval partnerships, such as with Pakistan. In 2015, for example, China sold Pakistan eight submarines worth an estimated \$6 billion, allowing China to tap into the equipment resources that it sold to Pakistan for refueling and maintaining its own fleet during future stopovers.<sup>81</sup>

In the past several years, observers have also witnessed growing numbers of PLAN vessels docking at Pakistan's main naval base at Karachi, furthering speculation about China's growing navalism and strategic aspirations. During one of the visits from 2014, the Indians published images showing a Chinese attack submarine in Karachi. China's naval presence in Pakistan and elsewhere across the Indian Ocean is an important show of force that also helps place continued pressure on neighboring India. As noted by Chitrapu Uday, director at the Society for Policy Studies in Delhi and a former Indian Navy commodore, "China's naval presence in the Indian Ocean has become an 'inexorable reality.'"<sup>82</sup>

According to some estimates, Gwadar currently "harbors a small Pakistani naval base equipped with two Chinese-built 600-ton corvettes working with the 20,000-strong Pakistani Special Security Division team established in Balochistan to protect Chinese workers." The official line out of Beijing is that Gwadar is a commercial project, but a Chinese scholar with close ties to the PLAN was more guarded in a recent statement on the potential of a base at Gwadar: "Everything is changing; in the short term, we won't be seeking other naval support bases, in Gwadar or elsewhere but who knows what will come later; we may repeat what we did in Djibouti."<sup>83</sup> For the time being, it is more likely that China will use Gwadar as a listening and intelligence post, as one source postulated. In the near future, Gwadar will emerge as another supply, logistics, replenishment, and repair hub for the PLAN. A former Chinese ambassador to India, Pei Yuanying, also stated the same in a recent interview: "Gwadar port will become a logistics support base for supplies and maintenance along the route of large fleet[s] when the Chinese naval fleet goes to the Suez Canal, the Mediterranean, and the Gulf of Aden." But if the recent past is precedent, Gwadar will be similarly transformed, like Djibouti. During my visit to

Djibouti, several European military officers also speculated that China was in the process of establishing a brigade in the western Indian Ocean that will be split between Gwadar and Djibouti.<sup>84</sup>

### China Will Deepen Its Ties and Influence

Between the Suez Canal, Djibouti, and Gwadar, China is well on its way toward gaining a greater maritime geoeconomic and naval foothold along the western edges of the Indian Ocean and the offshoot seas of Southwest Asia. The United States may indeed dominate much of Southwest Asia, but it appears more land focused, while regional seas and global orders are shifting with rising competition between Russia, China, and India.

Russia has only just started pushing farther south into the Indian Ocean, but this is presumably a trend that will continue moving forward. Russia continues to bolster ties with Egypt, Sudan, Somaliland, and other Gulf nations. As it moves deeper into the Indian Ocean, Russia will also be confronted with balancing against India and Pakistan, as well as China. In fact, some recent, albeit unconfirmed, reports speculate that Russia is seeking access to Gwadar for its navy. Meanwhile, reports claim that Russia is attempting to keep a certain distance from China's orbit for fear of alienating India, Russia's historical partner.<sup>85</sup> Nevertheless, Russia's growing maritime geoeconomic and naval expansion farther into Southwest Asia only contributes to the rising navalism and competition between the various Eurasian powers.

For now, China remains the main actor primed to take a larger and more leading regional role as it works toward sustaining its blue-water naval capacity and reach. It is using new maritime geoeconomic investments from the Suez Canal and Red Sea to the Arabian Sea and Persian Gulf to create and fortify maritime trade and logistics networks that are growing increasingly independent from the global system that has been dominated for so long by the United States and the West. This system includes a new network of Chinese-dominated ports and infrastructure projects, in addition to a robust telecommunications network aided by submarine cables newly laid across the Indian Ocean. The emergence of this maritime network will ensure greater Chinese resiliency in the future should any conflicts break out between China and another great power.

The new maritime system that is emerging will also have staying power because of the main geoeconomic tool of statecraft that China is using: loans.

China is providing easy and fast loans, as well as the knowledge capital and skilled workforce to carry out the proposed projects in host nations such as Djibouti and Pakistan. However, China's involvement could come at a significant cost and threat to each nation's sovereignty if either Djibouti or Pakistan is unable to pay back their loans. Such significant loans will ensure that China continues apace with its larger ambitions to reorder the global system in its favor.

Last, China's maritime geoeconomic interests are giving way to growing navalism and rising regional securitization. China wants to avoid another Libya or Yemen scenario in the future. To do so, it will need to take a more proactive naval stance to secure its growing investments and regional interests. It cannot rely on another power and therefore will need to continue the forward projection of its military and navy. It will accomplish this with the establishment of its base in Djibouti and will likely follow suit with other facilities or logistics hubs. It is improbable that Chinese bases will start popping up in rapid succession, but the only way to secure its maritime geoeconomic investments from Europe to Pacific Asia is to have a force at the ready. This means having more basing facilities and a blue-water navy that can protect the sea lanes of communication running from west to east and east to west through some of the world's most fraught and dangerous choke points.

## The Indian Ocean as Arena

ANYONE WISHING TO UNDERSTAND the Indian Ocean's larger tug-of-war between India and China should travel to Sri Lanka's southern port of Hambantota. Some argue that the name Hambantota stems from "Sampan Thota," or the port frequented by Chinese sampans, seagoing vessels dating back to the fifteenth century and the Chinese explorer Zheng He.<sup>1</sup> Hambantota was once a quiet fishing village with little connection to the Indian Ocean's vibrant sea lanes of communication just ten nautical miles to its south. This all changed under Sri Lanka's president Mahinda Rajapaksa (2005–2015), who sought Chinese financial and political support at a time when most of the international community shunned Sri Lanka during its brutal twenty-five-year-plus civil war, killing an estimated 80,000 to 100,000 Sri Lankans. With the government declaring victory over the Tamil Tigers in 2009, Rajapaksa saw a willing partner in China and engaged in a robust reconstruction, infrastructure, and development plan for the entire country. He sought to develop his hometown district of Hambantota into a major hub for maritime commerce and trade, in addition to becoming a new tourist destination equipped with an airport and other amenities.

Hambantota is about a four- to five-hour drive from Sri Lanka's capital, Colombo, including stretches along the uncongested and new E01 expressway, built in part by the Japanese and Chinese.<sup>2</sup> When I first arrived in Hambantota, it was late at night, but when I awoke early the next morning, I was pleasantly surprised to hear the sound of massive crashing waves and to see long stretches of empty shoreline.

China first signed the \$1.3 billion Hambantota port project deal in 2007, and

it included a combination of financing from China's Exim Bank and the China Merchants Port Holdings (CMPH), while the port's construction was handled by China Harbor Engineering Company (CHEC).<sup>3</sup> Phase 1 of the project began in 2008 and finished in 2010, and phase 2 began in 2012 and terminated in 2016. Phases 3 and 4 are still under deliberation, with phase 3 originally slated for completion in 2023. Hambantota made major headlines in 2017 when President Maithripala Sirisena, Rajapaksa's successor, announced a \$1.1 billion concessionary deal with the Chinese for control over Hambantota port because of the country's mounting debt burden and inability to pay back the reportedly more than \$6 billion in loans that the government took out from the Chinese over the past decade. In the controversial deal, Sri Lanka relinquished the port in a ninety-nine-year lease to CMPH, which will maintain a 70 percent stake in the port, including the newly formed forty-two-hectare artificial island located at the opening to the harbor.<sup>4</sup> The artificial island was formed using sand from the port's dredging and now sits as an unsculptured island waiting for its Chinese masters to create another commercial masterpiece.

With operations and ownership transfer of the port to the Chinese, gaining access to the port has become increasingly difficult. In the lead-up to my visit, I tried multiple avenues to gain access. As many pointed out to me in the process, even the Sri Lankan government has diminishing power over the port, including who can and cannot access it. Most official channels ignored my request or shuffled it into the bureaucracy. Fortunately, I succeeded with a last-minute in-person request through the office of the Colombo Harbor Master of the Sri Lanka Ports Authority (SLPA). The SLPA maintains a 30 percent overall stake in Hambantota and assigns a deputy harbormaster to oversee a small team to coordinate ship arrivals, offloading, and other clerical tasks, but, as I observed, the SLPA has a limited and inconsequential footprint at Hambantota compared to CMPH and its contractors. CMPH currently outsources operations and management of the port, including security, to the Hambantota International Port Group (HIPG) and Hambantota International Port Services (HIPS), which also outsources to smaller contractors. By some accounts, the port employs between 500 and 600 workers at any given time, with the number flexing up to around 700 if a ship docks. Most port workers are Sri Lankan, but a small permanent cadre of about thirty-five Chinese employees live and work at the port in various functions.<sup>5</sup>

Despite much of the controversy over the port ownership, Hambantota re-

mains a rather sleepy port, handling only about one ship a day. Most of these ships are roll-on/roll-off (ro-ro) ships that carry cars and other wheeled cargo—though the port is capable of handling some of the world’s largest naval vessels if granted proper docking approval from the government.<sup>6</sup> The port also has one thirteen-story administrative building, which looks like a giant blue sail overlooking the Hambantota coastline, about five hundred meters from the main docks. From the top of the administrative building, a panoramic vista displays the artificial island, the oil terminal, the port’s two main cargo cranes, and other port buildings and equipment. There is also a view of a hideously large, boat-shaped concrete monument dedicated to the inauguration of the Magampura Mahinda Rajapaksa Port, now overgrown with trees and brambles (arguably symbolic in nature).

Hambantota is proof that China has once again established a significant outpost at the heart of the Indian Ocean close to the main maritime transportation routes that will only grow in significance. It also has the potential to one day rival Colombo, Sri Lanka’s primary commercial port. China’s growing presence most certainly caught the attention of the United States, India, Japan, and others alike. For India, however, China’s growing presence is perhaps most alarming because it is right in India’s backyard, where India has long assumed that its historical, cultural, and political bonds will continue to play in its favor. This is a faulty assumption, and India is quickly realizing this. As a result, India has made concerted efforts in recent years—especially in the maritime domain—to take a more proactive stance economically, politically, and militarily against China across the Indian Ocean. In fact, to directly counter China at Hambantota, India recently inked a forty-year lease agreement for control over the \$210 million Mattala international airport in Hambantota, dubbed the “world’s emptiest airport.” The airport’s two terminal gates and one 3.5-kilometer runway were constructed by the China Harbor Engineering Corporation from 2009 to 2013, but most commercial flights were suspended in 2018 owing to domestic politics, according to one airport official. India also recently opened up a consulate in Hambantota in a forward sign of growing unease with a rising Chinese presence. Though an important and symbolic move, China’s possession of the Hambantota port will provide long-term resiliency for China compared to India’s control over the airport.<sup>7</sup>

This type of emerging geoeconomic and geostrategic competition will only grow in prominence as both China and India push outward to protect their com-

peting spheres of influence and national interests across the broader Indian Ocean region. The situation at Hambantota, as well as across Sri Lanka, is also playing out across the Indian Ocean. In the near future, maritime geoeconomics are the primary driver behind the growing competition between India and China. More than 90 percent of India's export and import trade by volume, including energy, for example, traverses the sea. This growing geoeconomic competition, however, is resulting in greater regional securitization and rising navalism. As noted by the scholar David Brewster, "Strategic competition between India and China in the Indian Ocean is growing and has the potential to profoundly impact the stability and security of the region. . . . This could lead to a highly negative strategic dynamic between those countries, including in the maritime domain."<sup>8</sup>

Since India's prime minister Narendra Modi came to power in 2014, he has pushed India toward a growing embrace of its maritime domain. It is partly in reaction to China's rising presence in the Indian Ocean, but it is also part of a larger, natural trajectory of India's emergence and desire to become a great power. Though India still has much to achieve and overcome, many analysts and scholars believe that India has arrived on the world stage, and its reliance and ability to manage and secure the maritime domain economically, politically, and militarily will be a critical component of its trajectory. As articulated by Modi in 2018 at the Shangri-La Dialogue, "Our interests in the region are vast, and our engagement is deep. In the Indian Ocean region, our relationships are becoming stronger. We are also helping build economic capabilities and improve maritime security for our friends and partners."<sup>9</sup> In other words, India places great emphasis on its economic interests, the rule of law, and collective security of the global maritime commons.

The problem for India is its inability to think on the same timescale as China. Moreover, India's influence appears to be increasingly challenged by China across many of the region's smaller island nations, such as the Maldives or Mauritius, where China is already well on its way toward achieving significant elements of the MSR. As remarked on by retired Indian vice admiral Pradeep Chauhan and current director of India's National Maritime Foundation, "For China, the 'short-term' generally implies 30–50 years. This is an epoch that is far in excess of what in India passes as the 'long term.' . . . This permits China to achieve strategic surprise, particularly in terms of military strategy."<sup>10</sup> India arguably has started moving more quickly and strategically in recent years to



secure its regional interests. Geography and its historic and cultural ties to its fellow South Asian nations will buoy India in the short term to protect many of its geoeconomic interests, but over the long term, the growing navalism and competition between India and China could result in flare-ups and larger naval escalations at sea. Both countries have started preparing for the latter, all while Russia takes a more passive and neutral role as the changing dynamics play out in rapid succession.

### India's Growing Geoeconomic Reliance on the Sea

C. Raja Mohan, one of India's leading strategic thinkers, has stated that "Delhi's new interest in sea power is driven by the growing importance of trade, especially seaborne trade, in India's economy." India's economy has been on an upward trajectory since the 1990s; it was ranked as the world's twelfth largest in 1991, and by 2018 the IMF placed it at seventh in the world, worth over \$2 trillion, ahead of Italy, Canada, and Russia. India's 1.3 billion population is also expected to surpass China's population by 2027 to include an eligible working class of around 900 million. By 2029, India's economy is expected to move up to the third position, ahead of Japan, and Goldman Sachs predicts that by 2050 India's GDP (in U.S. dollars) will surpass that of the United States. A blossoming economy means India will indeed rely more on maritime trade and commerce in the near and distant future to fuel its sustained development. As a result, India must ensure the continued safety and security of the region's sea lanes of communication and India's EEZs. India must account for more than two million square kilometers of EEZs and more than 1,200 islands or islets, including the Andaman and Nicobar Islands near the Strait of Malacca and the Lakshadweep Islands along India's southwestern edges.<sup>11</sup>

A growing embrace of the maritime space will place India in direct and growing competition with China. The current fear for some is that economic competition will morph into something more dangerous. Retired Vice Admiral Chauhan again asserted that "there is a very significant risk of economic competition transforming into armed conflict." China is concerned that, in a time of crisis or heightened competition over vital natural resources, it will be unable to adequately protect the SLOCs or ships that are transporting energy across the Indian Ocean to China. India is equally vulnerable, since it is forced to transship most of its global trade and cargo because most of its ports lack the capac-

ity to handle the large megaships of today. According to some recent estimates, 48 percent of India's trade is transshipped through Colombo, Sri Lanka, compared to 29 percent of transshipments in Singapore, 15 percent in Malaysia, and 4 percent in the UAE. This not only is expensive for India but also puts India's cargo at risk as China buys up more access to, and control over, these vital transshipment points. India is aware of this problem and has worked in recent years to reduce its reliance on transshipping by loosening some of its cabotage provisions on foreign-flagged carriers operating domestically.<sup>12</sup>

India's growing reliance on the sea is exhibited by its maritime trading patterns. After the end of the Cold War, India began opening up and embracing the liberal economic age of globalization. India's imports and exports from 1990 to 1991 amounted to around 6 percent of India's GDP. From 2010 to 2011, that number jumped up to 52 percent, making India's economic growth forever tied to the sea. In the last ten years, India's container trade continued expanding around 6.5 percent annually. According to Indian commodore Gopal Suri, "Cargo traffic at Indian ports has doubled to 1 billion tons per annum over the last decade (FY 2005–2015) and is expected to reach 1.7 billion tons per annum by 2022. This amounts to a total of 95 percent of India's trade volume wherein lies the importance of the SLOCs and the International Shipping Lanes of the Indian Ocean in India's maritime security calculus." This is on top of the more than 100,000 ships that traverse the Indian Ocean annually—accounting for 50 percent of global container traffic.<sup>13</sup>

The free flow of energy imports and more offshore natural resource explorations are additional key components to India's future success and trajectory. If India's economy is to continue growing at the currently projected rate, which has averaged around 7 percent per annum in recent years, it will need to ensure stable and secure access to energy resources from Southwest Asia and Africa alike; the government also needs to better support the untapped heavy mineral placers that exist along India's territorial waters and EEZs. And the task of ensuring the safety and security of the energy trade will fall on the navy in future years as the energy shipments intensify. Additionally, similar to China's experience of the past several years, India must account for the potential need to rescue thousands of foreign nationals trapped in volatile situations such as Yemen in April 2015, Libya in February and March 2011, and Lebanon in July 2006. In 2015, India used a combination of air and sealift capabilities to rescue more than 5,600 people from Yemen, including around 1,000 non-Indians. In Libya, the

Indian government dispatched three naval vessels and chartered several passenger ships to rescue around 10,000 Indian foreign nationals in 2011 and airlifted an additional 5,000 Indian citizens.<sup>14</sup> Thankfully, India has geographic proximity on its side, unlike China, and has not been as hamstrung when forced to rescue its foreign nationals after the regional outbreak of a civil war.

Rescue missions aside, the competition over energy resources could turn the western Indian Ocean region into a contested area between India and China. Currently, around 70 percent of India's energy shipments arrive via the sea from Southwest Asia or Africa. According to one observer, "Without the 40,000 tankers to carry the oil that fuels India's thirsty economy, the GDP cannot be sustained." By 2025, domestic consumption is expected to double, where an estimated 95 percent of energy resources would arrive by sea, further solidifying India's place as the largest energy importer in the world. By 2030, India is also projected to become the third-largest energy consumer in the world. Access to and security of the Indian Ocean's sea lanes of communication that transport India's energy and commerce are therefore quickly becoming a lifeline for India's future existence and great power status.<sup>15</sup>

Last, India relies heavily on the growth of its fisheries and other aquaculture activities. An estimated 15 million people are employed across the fisheries and aquaculture sectors, ranking third behind China and Indonesia in fisheries and second behind China in aquaculture. Indian fish production accounts for about 6.3 percent of world fish production. Between 2004 and 2014, India was the fastest-growing export market at 14.8 percent. With an annual growth rate around 6 percent during the past decade, fisheries and aquaculture account for around 1.1 percent of India's GDP and 5.15 percent of its agricultural GDP. Given that, India still lags immensely behind China, which has an 18 percent share of global fish production and 62 percent of aquaculture. Part of China's success is the industrialization of its fishing industry, including a deeper reach into the Indian Ocean. According to recent UN statistics, 90 percent of commercial fishing stocks that it follows are either overfished or fully fished. The arrival of more Chinese industrial fishing trawlers places China squarely in competition with India for the region's valuable fishing stocks.<sup>16</sup>

### *Rising Concern about China*

As India grows its maritime geoeconomic presence and dependence on the sea, some have expressed greater unease with China in the region. Historically,

India has rejected “extraregional” powers in the Indian Ocean region, and today this sentiment has reemerged as China becomes more proactive. India regards China’s growing geoeconomic interactions and burgeoning engagement with India’s neighbors as alarming. A debate in Indian strategist circles has long existed about how to ensure India’s primacy, including the protection of its regional and maritime perimeters. Some have argued that India sought regional dominance through the equivalent of its own Monroe Doctrine. Regional dominance or hegemony remains a motivating factor in India’s great power trajectory today, with some saying India’s default setting has always been strategic autonomy. In contrast, others supported greater pragmatism, recognizing India’s need for deeper engagement with like-minded democratic nations such as Japan and the United States to counter China’s rise. C. Raja Mohan strikes a middle ground and believes that “India can navigate between the ‘two extremes’ of an uncritical U.S. alliance and what he calls the ‘slogans’ of a multipolar world. A somewhat more ambiguous outcome of this nature is likely both to be more realistic and to fit better with India’s strategic tradition and domestic political imperatives.”<sup>17</sup>

As India strategically navigates a changing seascape, it must also confront the reality that China similarly has regional, as well as global, aspirations. Though many still debate China’s exact Indo-Pacific strategy, Chinese officials have made comments dating back to the 1990s stating, “We are not prepared to let the Indian Ocean become India’s Ocean.” This contributes further to India’s angst and concern over China’s general nontransparent regional actions. As one Japanese analyst put it, “With the ‘dragon’ steadily encircling the ‘elephant,’ is there any chance they can avoid stepping on each other’s toes?”<sup>18</sup> The probability is unlikely.

India’s policy under Prime Minister Manmohan Singh (2004–2014) sought to engage China on shared Indian Ocean interests. This policy was largely seen as a failure in the end, and when Prime Minister Modi came to office in 2014, he took a more proactive stance to counter China; Modi also came to power after China’s announcement of the BRI and MSR. In a symbolic first sign of Modi’s shifting strategy, he invited the heads of state from Mauritius, the Maldives, and Sri Lanka to his inauguration to kick-start his more robust Indian Ocean strategy. Another early decision was to rebrand India’s Look East policy as the Act East policy, thus acknowledging India’s strong desire to engage the Indo-Pacific region more deliberately.<sup>19</sup>

China has not typically viewed India as a major threat, but there is an emerging perception that both nations see themselves as strategic competitors, if not rivals. Many Chinese, however, would still view any comparison with India as disparaging. By contrast, the more dominant view from India's side is that China poses a threat to Indian national interests. For some, especially in the security establishment, the perception is that India is being encircled by China and that China could be a real military threat in the future. Even so, there is a deep and historic mistrust between the two nations, and this could prove more problematic over time as competing interests grow more salient. The scholar John Garver remarked that twentieth-century Sino-Indian relations are characterized more by conflict than by long periods of cooperation. Xiaoyu Pu, another scholar, adds further nuance to the delicate relationship, arguing that "mistrust and competition still exist, and the asymmetrical perceptions of power and status continue to shape the trajectories of the relationship. . . . China may underestimate Indian concerns, while India may exaggerate the threat posed by China."<sup>20</sup>

Despite the general tension and mounting misperceptions between India and China, both countries benefited from the U.S. post-World War II international economic order, adding a further layer to the complex bilateral relationship. Bilateral trade between India and China, for example, rose from \$117 million in 1987 to an estimated \$89.6 billion between 2017 and 2018, making China India's largest trading partner.<sup>21</sup> Though robust trading nations like France and Great Britain have gone to war in prior decades, the current trading relationship between India and China might help maintain a certain status quo that we see today. However, India's growing desire to achieve great power status, combined with growing navalism between China and India and the race for more Indian Ocean islands and port access, makes the relationship and the overall dynamics of the Indian Ocean region a much more precarious environment.

### *India's Response to China's Maritime Silk Road*

Under the Modi government, India embarked on numerous cultural and geo-economic initiatives in the maritime space in direct response to China, reinforcing current regional ties and bolstering its own standing. As noted by a former executive director of India's National Maritime Foundation, Captain Gurpreet Khurana, "The sea has to be understood comprehensively, and then explored as

a medium of immense economic, scientific, political, social, and military potential so as to be [a] contributory factor in [the] building of comprehensive national power.”<sup>22</sup> Modi has pushed many initiatives that are both domestically and regionally focused. These initiatives feed into India’s larger vision of promoting its blue economy, including overhauling and developing India’s antiquated shipping and port sectors. The United Nations recently defined the blue economy as “marine-based economic development that leads to improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcities.” (Modi also recently linked the Indian national flag’s blue chakra to the “blue economy” in a symbol of the great importance attached to India’s maritime-based economy and future sustainable development.) For India, this means that it depends on the sea for many basic needs and general economic sustainability, including commerce, food security, energy, tourism, and transportation.<sup>23</sup>

The problem, however, is that most of Modi’s maritime initiatives remain mere paper proposals and need better funding and more integration into the strategic thinking and lexicon of government decision makers. Retired Vice Admiral Chauhan also claims that India has much work to do in the way of internalizing and implementing many of these maritime-themed policies: “If Delhi can generate [the] requisite degree of urgency . . . India can readily offer its bouquet of five initiatives—the International North–South Transport Corridor (NSTC), the Asia-Africa Growth Corridor (AAGC), Project Mausam, a free and open Indo-Pacific, and, the [Security and Growth for All in the Region (SAGAR)] concept—as a viable pan-regional alternative to China’s BRI.”<sup>24</sup>

Some of these programs emerged in the last couple of years, resulting from the growing partnership between Japan and India and their shared vision for the Indo-Pacific through proposed initiatives such as the Asia-Africa Growth Corridor and a free and open Indo-Pacific. But these programs are still largely in their conceptual phases and thus lack greater depth beyond preliminary vision statements. Project Mausam, meaning monsoon in Hindi, also lacks heft compared to China’s Belt and Road Initiative. It was launched in 2014 by the Ministry of Culture to “celebrate connectivity, interdependence, and diversity” through its promotion of the ancient spice route. Furthering the region’s deep civilizational and maritime ties from East Africa to Southeast Asia is important, but it must be backed with more substantive programming and development

projects similar to those of China. India began making progress on this front through the NSTC, SAGAR, and another recent initiative called Sagarmala, a more domestically focused project boosting shipping and port development.<sup>25</sup>

The idea for the NSTC was first established in 2002 when India, Iran, and Russia signed a multimodal agreement that included ship, rail, and road agreements. The NSTC later added other former Soviet republics such as Azerbaijan, Kazakhstan, and Ukraine, among others. Of particular interest here are the sea-based routes from India to Iran and the buildup of the Chabahar port project in Iran near the Strait of Hormuz. India seeks greater access to Iran's lucrative natural resources, including a larger share of natural gas from the Farzad-B gas field. Iran currently supplies about 10 percent of India's oil and 30 percent of its natural gas. By comparison, China is the top importer of Iranian petroleum while also being Iran's largest foreign investor. On the shipping side, Bandar Abbas currently handles approximately 85 percent of Iran's shipping but can only handle ships smaller than 100,000 tons, making Iran dependent on its neighbor, the United Arab Emirates. Chabahar is therefore viewed as a good alternative to help ease congestion and save money, including plans for the port to handle cargo ships up to 250,000 tons. India views Chabahar as an essential geoeconomic investment to protect its interests against CPEC and the rival port of Gwadar, seventy-two kilometers to its east. India has eyed Chabahar since the 1990s but most recently pledged more than \$500 million to further develop the port, including an agreement for India to take over two port jetties for the next ten years.<sup>26</sup>

India also views Chabahar as a critical node for trade with Afghanistan—and thus greater access to other untapped markets across Central Asia. It has worked with Iran and Afghanistan to construct and improve the roadways, including plans for rail linkages, integrating the larger transportation corridor. In May 2016, India, Iran, and Afghanistan solidified a trilateral transit agreement including Chabahar as the main point of entry. In late October 2017, Prime Minister Modi celebrated the first Indian wheat shipment of six, totaling 1.1 million tons, headed to Afghanistan via Chabahar. In a tweet, Modi wrote, "I congratulate Afghanistan and Iran on Indian wheat shipment being flagged off from Kandla to Afghanistan through Chabahar." Unfortunately, since the official inauguration of the port in December 2017, U.S. president Donald J. Trump formally announced in May 2018 that the United States would withdraw from the Joint Comprehensive Plan of Action (JCPOA), or the Iranian nuclear deal,

signed in 2015 that lifted the international sanctions on the Iranian regime. The end result is the return of international sanctions on Iran despite international protests from India, Russia, and China, to name a few (though many are trying to figure out what this will look like exactly). India is trying to toe a diplomatic line—it only follows UN sanctions and not unilateral restrictions—but many people I spoke with in Delhi are frustrated by the erratic and unpredictable nature of the current U.S. administration's foreign policy. It will make Indian future investments in Chabahar, or elsewhere in Iran, much more complicated.<sup>27</sup>

The maritime elements of the NSTC feed into the recent SAGAR initiative launched by Modi during his Indian Ocean island nation tour in March 2015. During his visits to the Seychelles, Mauritius, and Sri Lanka, Modi promoted SAGAR, meaning “ocean” in Hindi, as a way to strengthen ties and better integrate the blue economy for all the nations relying heavily on the Indian Ocean for their livelihood and survival. Some of the initiative's additional objectives were promoting “a climate of trust and transparency; respect for international maritime rules and norms by all countries; sensitivity to each other's interests; peaceful resolution of maritime security issues; and increase in maritime cooperation.” Promoting SAGAR also helps to further safeguard the region's SLOCs, which are becoming increasingly critical to India's future economic growth and power projection. Admiral Sunil Lanba, the recently retired chief of Naval Staff of the Indian Navy, shared similar comments while in office on the positive spillover potential from SAGAR for the region's larger development and security: “In several ways, this approach signifies a secure, safe and sustainable model of development, with positive ramifications for the entire region.” SAGAR also aims to protect the maritime sovereignty and territorial integrity of other partner nations, in addition to supporting critical maritime-based activities such as the sponsorship of antipiracy escort missions and funding capacity-building programs for some of the region's smaller navies and coast guards.<sup>28</sup>

In concert with SAGAR, the Modi government is promoting Sagarmala (*mala* means garland or necklace in Hindi). It is not entirely dissimilar from how many have framed China's “string of pearls” in the Indian Ocean. In this case, however, Sagarmala is more domestically focused on India's shipping, shipbuilding, and port development and how India can better harness hinterland and coastal connections to streamline and strengthen India's ability to connect to the larger global political economy. The Modi government also hopes to infuse more private-sector participation to ensure better results.<sup>29</sup> If India is successful



in these massive infrastructure, connectivity, and maritime geoeconomic projects, it has the potential to unleash India's great power might.

Sagarmala currently proposes around three hundred large-scale projects in coastal states, with initial projected costs up to \$100 billion, where "port-led" development is the central touchstone of the overall initiative. Specifically, the four main pillars of the scheme are port modernization, port connectivity, port-led industrialization, and coastal community development. India has twelve major ports and more than two hundred middle-sized or minor ports. India's overall port cargo-handling ability is estimated at 1,400 million metric tons per annum. This number, however, is expected to almost double in the next decade or more, especially with the infusion of financial backing for these maritime geoeconomic projects. Additionally, it is believed that the projects under Sagarmala may create more than 10 million new jobs.<sup>30</sup>

Despite all the buzz and optimism from many, deep skepticism of Modi's ability to carry out his lofty aspirations still exists. As retired Indian chief of Naval Staff Admiral Arun Prakash forcefully remarked recently, "India's ports and infrastructure remain underdeveloped, our shipbuilding industry is sluggish and backward, merchant shipping grows at a snail's pace. . . . A lack of strategic vision and planning, coupled with bureaucratic inertia has resulted in the failure to develop these essential components of maritime power that undergird our trade-dependent economic progress."<sup>31</sup> This skepticism is arguably warranted, but even so, India is on a natural trajectory to develop and expand its regional geoeconomic position. Though it remains far behind China in areas of shipbuilding, port capacity, and coastal shipping, India will nevertheless be forced to compete at increasingly higher levels in the near future if it does not want China to completely surpass it economically and politically across the Indian Ocean littoral. This fact alone will hopefully be a significant mechanism forcing pressure on the government to keep Sagarmala and its other maritime initiatives front and center in India's larger Indian Ocean strategy.

### India and Its Quest for Great Power Status

From the budding maritime geoeconomic competition between India and China, we turn now to India's push for great power status and global prestige. Much debate still ensues about India's status in the world, especially for those outside of India, but there is nonetheless a growing sentiment that India is on

the cusp of achieving great power status. Many of India's current leaders would like to promote India as a "leading power" as opposed to a "balancing power." As Modi recently pronounced at a speech in Silicon Valley, "Until recently the world saw India at the margins, but is now seeing it at the center." In a 2015 speech in Kuala Lumpur, he struck a further note of confidence: "Now, it is India's turn. And we know that our time has come."<sup>32</sup>

This rhetoric contributes to the perception of a shifting world order where Eurasia and its emerging powers are rising to the fore. The dilemma, however, is that India's rising status bumps up against Chinese interests across the Indo-Pacific and beyond. The changing dynamics are represented further by the rise of navalism, or a buildup of naval assets, ports, and forces across the Indian Ocean. As recently noted by Admiral Sunil Lanba, "One of the key ingredients for India to attain great-power status is building requisite maritime infrastructure, including a navy that can ensure that no other nation operates in the Indian Ocean without India's acquiescence." But this also means more competition and tension along coastlines and at sea. The rising navalism is a potentially dangerous trajectory that could result in a classic security dilemma scenario where it is hard for either China, India or another regional power to distinguish between offensive versus defensive actions or capabilities, resulting in the inadvertent outbreak of conflict. In recent years, the Modi government has advocated for a more concerted maritime strategy and is beginning to dedicate more resources to, and focus on, its naval buildup. That said, its naval programs still come up short behind China's efforts despite some shipbuilding and technology acquisition gains; by some estimates, China's defense spending is four times larger than India's. Fortunately for India, geography remains on its side, and for the time being, India's geographic proximity enables it to maintain a strategic advantage over China.<sup>33</sup> Even so, China continues to succeed in gaining a greater presence through the buildup of the MSR.

Though the United States is still the dominant naval power in the region, some in India and elsewhere perceive that India must take more matters into its own hands as a result of an increasingly unreliable U.S. foreign policy. Under the Trump administration, U.S.-India ties have not been as smooth as under the last two administrations. According to Suhasini Haidar, foreign affairs editor of the *Hindu*, "India is just now coming to terms with the idea that Trump will not treat India with the same kind of benevolence that previous presidents have."<sup>34</sup> India has grown frustrated over the 2017 U.S. passage of a new sanctions law

targeting Russia, otherwise known as the Countering America's Adversaries Through Sanctions Act (CAATSA). CAATSA penalizes states with significant business dealings with Russia. In this particular case, after many years of negotiations, India will purchase \$6 billion worth of Russian-made S-400 surface-to-air missiles. Despite the threat of grave penalties, India is going forward with the S-400 agreement, and Russia expects to deliver the first shipment of five by late 2020 and to complete the final order by 2023.<sup>35</sup>

### *A More Assertive India*

India has long prided itself in upholding the ideals of *swaraj* (self-rule) and *swadeshi* (self-reliance), whether domestically or globally. These ideals were also a strong motivation for India's adoption of a nonaligned foreign policy, including its later successor "strategic autonomy." These Nehruvian-inspired concepts still resonate today in many of India's ongoing political or foreign policy debates, but under the Modi government, India began adopting a foreign policy that is more "multialigned" to address and protect India's strategic national interests and growing stature, shunning policies such as nonalignment. The balance-of-power system that supported alliances was not compatible with the Non-Aligned Movement, but today such a system is a budding necessity.<sup>36</sup>

Despite these internal foreign policy debates, many in India see it as the natural arbiter and regional leader of the Indian Ocean today. The Indian Ocean, after all, is the only ocean named after a country; some today argue that it should be called "India's Ocean." For many in India, a sense of inevitability prevails that the time is ripe for India to finally be recognized as a great power. As Alyssa Ayres eloquently articulates in her recent book *Our Time Has Come*, "That sense of destiny . . . appears focused first and foremost on attaining recognition for India as one among the world's powers. . . . While India is not a revisionist power seeking to overturn the global liberal order, New Delhi does seek for the institutions of global governance to accommodate it with greater voice and the heightened status many feel has been unfairly denied."<sup>37</sup>

To achieve such a status, India must shed many elements of its foreign policy baggage that date back to the period of the Non-Aligned Movement—though it must not lose its critical role as a representative and voice of the global South. India does not necessarily need to dissociate itself from prior partnerships, but it must work to build new relationships with like-minded partners such as Japan, Australia, France, and the United States. This will in turn help raise India

farther into the international spotlight as a global leader and help India protect its strategic interests against competitors like China, which directly threatens India's regional and global interests.<sup>38</sup>

As India's prominence grows globally, it will only create more tension with China. As the scholar Harsh V. Pant argued, "The distrust between China and India is actually growing at an alarming rate. True, economic cooperation and bilateral political as well as socio-cultural exchanges are at an all-time high. . . . Yet this cooperation has done little to assuage each country's concerns about the other's intentions. The two sides are locked in a classic security dilemma." Some analysts are optimistic about a possible "reset" in bilateral relations after a major summit in 2018, but many still believe it is more of a "thaw" brought forth by the complexity of the current relationship in the context of a shifting global order where India and China are increasingly pitted against each other on the world stage.<sup>39</sup>

### *Embracing a New Maritime Strategy*

With its growing economy and push to achieve great power status, India has had to think more broadly about its position and interests beyond the South Asian subcontinent. Since independence, India's national security orientation has largely been northward and westward toward China and Pakistan. The first Sino-Indian War broke out in 1962 over Aksai Chin, with an additional skirmish in 1967 along the Himalayan border in Sikkim. India also fought wars with Pakistan in 1965, 1971, and again in 1999. These wars, in addition to numerous other standoffs and skirmishes between India and either China or Pakistan over several decades, helped shape India's worldview and regional security outlook, which has been dominated largely by India's army.

India's frontier disputes with China had been at a low simmer until the mid-2000s, when China began to reemerge in a more aggressive manner with its military modernization efforts and the buildup of a more sophisticated supply chain and logistics network to help support and defend the Line of Actual Control that was established after the 1962 war. As India witnessed China's military buildup along its northern frontier, it began to respond in kind by adding more military and air force reinforcements, in addition to other military modernization and border defense efforts. The mounting border tension resulted in several tense standoffs in 2013, 2014, and most recently in June 2017 at the Doklam plateau. During the 2017 summer clash, which was deescalated toward the end

of August, a PLAN *Yuan*-class conventional submarine and support vessel reportedly visited Pakistan. A similar submarine had visited Karachi two years prior in May 2015. With the Doklam dispute of 2017, India's dreaded scenario of confronting a possible two-front conflict with China (along its border and at sea) was morphing into a real possibility.

Beginning in the 2010s, a growing number of Indian strategists perceived that they had a rising threat in China, which had begun to encircle India from the Indian Ocean to the Himalayas. The concern was that China's economic might would transform into greater military dominance. Indeed, Pakistan was still a significant threat, in addition to being closely aligned with China, but domestically a burgeoning chorus of Indian analysts and experts began to make the case for India to reframe its national strategic priorities to include the possibility of a simultaneous land and sea battle with China. In 2011 the Indian government convened a high-level task force, called the Naresh Chandra Committee, which concluded that "China's development of military infrastructure in Tibet and the Indian Ocean region coupled with the PLA's modernization changes its military capabilities meaningfully. . . . India will have to be prepared militarily to deal with an assertive China even as it seeks to build bridges of cooperation with it." As several scholars argue, India's security dilemma with China and unresolved border dispute has now spilled into the Indian Ocean, where it will contribute further to the growing competition and broader regional rivalry. Though China's threat to India from the sea is less clear-cut compared to their territorial dispute, China has further stoked Indian maritime concerns through its supportive buildup of Pakistan's naval program, among its other regional maritime geo-economic investments and naval activities. The Pakistani navy, for example, is undergoing what some have deemed a "Sinicization," where it has started to phase out a growing amount of its Western equipment and technology. By 2025, eight of Pakistan's twelve operational frigates will reportedly be Chinese built. The bulk of Pakistan's submarine fleet is also expected to be Chinese engineered in the near future.<sup>40</sup>

While a continental versus maritime approach will continue at the core of India's national strategic debate, India has started to realign and broaden its interests to encompass Eurasia's maritime regions from the Suez Canal to Southeast Asia. Some have also argued that in the event of another war, India might be able to score greater points against China at sea owing to its vulnerability compared to fighting China along the northern frontier, though this is still an

untested assumption. With this as a complex backdrop, many analysts have advocated that India's government open the aperture in which the navy can operate, including more SLOC protection, naval diplomacy, humanitarian assistance, noncombatant evacuations, and multilateral engagement. This, in turn, has led to India's growing focus on the saltwater domain and a new maritime era of sorts. India recognizes at some level that it cannot rely solely on the United States. As Indian retired rear admiral Rakesh Chopra recently stated, "The strategic aim now is to be 'a net provider of security,' to assume responsibilities of the United States Navy, hitherto the prima donna in the Indian Ocean, to augment efforts to maintain good naval order and discipline."<sup>41</sup>

As India enters the twenty-first century, many more pundits and officials have grown to appreciate that the natural expansion of India's economy is forcing a paradigmatic shift away from a more continental strategic outlook. India's inward focus will certainly not vanish anytime soon, but the idea of the navy as more of a national priority is beginning to take hold within the Indian government. As the former Indian minister of external affairs, who later became president, Pranab Mukherjee, once asserted, "We are once again turning our gaze outwards and seawards, which is the natural direction of view for a nation seeking to re-establish itself, not simply as a continental power, but even more so as a maritime power, and consequentially as one that is of significance on the world stage."<sup>42</sup>

As India turns increasingly toward the sea geoeconomically, politically, and militarily, the strategist community, navy, and government have evoked the historical works of two prominent Indian strategists from the 1940s and their thinking on the maritime domain specifically: K. M. Panikkar and Keshav Vaidya. Many have also conjured up the influence that Alfred Thayer Mahan and Sir Julian Corbett have on the maritime strategic thinking of many strategists today. Moreover, the notion that the navy can support India's endeavor as a "net security provider" has become more prevalent in the government's rhetoric.<sup>43</sup>

Panikkar and Vaidya wrote in a complementary fashion on topics related to the criticality of leveraging the Indian Navy and a forward presence to protect India's strategic interests across the Indian Ocean region. In 1945, Panikkar wrote that "the future of India will undoubtedly be decided on the sea." He also asserted the importance of building up an ironclad "steel ring" of bases as an "archipelagic defense" to protect the Indian Ocean's SLOCs, in addition to its coastal defense. This forward presence was one essential way to protect against

China's rise at the time, and it included a forward presence from Socotra to Singapore, with Mauritius, Ceylon (today's Sri Lanka), and the Bay of Bengal islands in between. For his part, Vaidya advocated for a forward basing presence while focusing more on advocating the establishment of an invincible blue-water navy to protect both India's coastline and larger maritime interests along the Indian Ocean's frontiers. As he argued in 1949, "Even if we do not rule the waves of all the five oceans of the world, we must at least rule the waves of the Indian Ocean."<sup>44</sup>

Vaidya acknowledged that Mahan influenced much of his thinking, arguing that India needed to be the hegemon of the Indian Ocean. Mahan, as well as Corbett, continues to factor strongly into India's current-day maritime strategic thinking, and he is quoted frequently. The maritime doctrines published over the past decade make consistent Mahanian references related to the Indian Navy's need to project power and control the SLOCs, strategic islands, and maritime choke points. Furthermore, a growing desire exists to see the navy maintain a more proactive presence throughout the littoral, defending India's geostrategic and geoeconomic interests.<sup>45</sup>

By comparison, Corbett has also influenced India's maritime strategic thinking through his writings on sea denial, sea control, and SLOC security. Many Indian maritime strategists value Corbett's writings on the critical relationship between the "national exchequer and the national quiver." As Corbett writes, "When other things are equal, it is the longer purse that wins. . . . Anything, therefore, which we are able to achieve towards crippling our enemy's finance is a direct step to his overthrow, and the most effective means we can employ to this end against a maritime State is to deny him the resources of seaborne trade." Retired Indian chief of Naval Staff Admiral Arun Prakash saw merit in the work of Corbett's maritime strategy and advocated specifically for more focus on sea denial, sea control, and SLOC security. He has also argued that India must continue maintaining an advantage over China, which still lacks an adequate supply, replenishment, and logistics network to sustain Chinese naval operations far from its home ports.<sup>46</sup> This may be the case today, where India holds a geographic advantage, but this is quickly changing as China constructs an alternative maritime supply and logistics network, complete with its own undersea cable system.

The influence of these historical maritime strategists on India's maritime strategic thinking is readily apparent in its 2015 maritime strategy, *Ensuring*

*Secure Seas*. Though some have argued previously that India lacked a broader strategic culture, the government and navy challenge this perception through their 2015 strategy.<sup>47</sup> Some I spoke with believe the strategy was more aspirational than anything else, but a burgeoning strategic effort still persists within India to buoy and secure India's maritime geoeconomic and national security interests—its future necessitates it. In the foreword, the then Indian chief of Naval Staff Admiral R. K. Dhowan wrote, "There seems little doubt today that the 21st century will be the '*Century of the Seas*' for India and that the seas will remain a key enabler in her global resurgence." In addition to the navy, other high officials have also referenced the fact that maritime power is of critical importance if India seeks to achieve great power status.<sup>48</sup>

Of further note in the strategy is the widening of India's primary and secondary maritime areas of interest, which stretch on a map from western Africa and the Mediterranean southward to Antarctica and eastward beyond New Zealand and Pacific Oceania. Though the map is aspirational, it still gestures toward the shifting world order, directly linked to the expansion and rise of the Eurasian powers as they increasingly reassert themselves on the global scene. It also helps explain the rising navalism we are witnessing. Additionally, the 2015 strategy explicitly recognizes India's maritime interests and the importance of protecting its maritime geoeconomic interests, including the protection of India's sovereignty and territorial integrity, the security and safety of Indian citizens, shipping, fishing, trade, energy supply, assets and resources, and the preservation of peace and stability across the global maritime commons. Other analysts noticed an additional shift in the language used in the strategy. More emphasis is placed on "securing" the seas today compared to "using" the seas in prior strategy documents. The document also has discussions about subordinate strategies related to deterrence, conflict, shaping a favorable and positive maritime environment, coastal and offshore security, and maritime force and capability development. This aside, it is important to remark on what is noticeably absent. In the current strategy, no explicit references to China are present, since India still hopes for future and productive engagement with China.<sup>49</sup> Even so, what is apparent in the 2015 strategy is India's realization that the upcoming period is very much the "century of the seas," and the Indian Navy will be at the epicenter of India's future trajectory.

Shortly after the 2015 strategy was published in October, Prime Minister Modi made a similar splash when he attended the Combined Commanders Con-



ference held off Kochi on the Indian Navy's aircraft carrier INS *Vikramaditya*. During the event, he delivered a poignant speech further iterating the grand maritime future of India: "India's history has been influenced by the seas. And the passage to our future prosperity and security also lies on this Ocean. . . . This aircraft carrier is the instrument of our maritime power and a symbol of our maritime responsibility."<sup>50</sup> Though India's maritime ambitions are clearer compared to those of prior administrations, concerns still exist that India will revert to a more continental defense strategy. If India's maritime strategy is to be realized, the Modi government must continue India's seaward embrace, along with the requisite resource allocation to support it.

### *Growing Navalism*

India's maritime ambitions, geoeconomic interests, and desire to project power farther afield are beginning to emerge through new and expanding naval shipbuilding and technology acquisition efforts. The increased navalism also fits into larger calculations regarding concerns of a partial U.S. retreat that could become more permanent in the near future. In a sign of its ever-expanding naval diplomatic efforts and wider perspective on its broader responsibility, the Indian Navy increased its ports of call over the past decade from fourteen visits in 2002 and 2003 to forty-one in 2015 and 2016. It is also pushing for visits and naval exercises farther from Vladivostok in the far east to the shores of the United Kingdom in the west.<sup>51</sup> Though India's naval expansion efforts still face significant obstacles, such as being thwarted or delayed by its crippling bureaucracy and budget shortfalls, India's naval spending and shipbuilding programs are arguably making certain forward progress, albeit at a much slower pace than most would desire. Over the next decade, more ships will come online to replace India's antiquated fleet. This, in turn, will enable India to better protect its maritime geoeconomic and geostrategic interests, including its desire to manage and defend against China's naval rise. In addition to its naval fleet expansion and upgrades, India is making a concerted effort to build up the Andaman and Nicobar Islands in the east and the Lakshadweep Islands off its southwestern coast. These islands will become increasingly critical to monitoring foreign naval activities, projecting power into more remote areas, and defending the region's SLOCs.

Throughout the Cold War, India's naval development was a low priority due mainly to the continued threats posed by Pakistan and China along its northern

borders. Though these threats still remain and continue to periodically flare up, there is a growing consensus in Delhi about the maritime threats emerging from the Indian Ocean littoral and the need for India to build up a robust maritime power. Many more Indians appreciate that India's naval fleet must be updated from a readiness perspective owing to its aging platforms and a growing number of accidents in recent years. Between June 2013 and April 2014, for example, fourteen accidents were reported linked to surface ships or submarines. According to another report, 60 percent of India's naval fleet is set for impending desuetude.<sup>52</sup>

Since the Cold War, the Indian Navy has traditionally received the smallest portion of the overall defense budget compared to the other services. From 1963 to 1964, in a sign of the navy as a low-ranking national priority, the navy only received a record low 3.4 percent of the defense budget after India's border war with China in 1962. This number has slowly increased over time, and over the past decade, the Indian Navy received between 13 and 17 percent of the overall defense budget. According to the most recent budget projections, this trend still exists, with the army receiving 57 percent, the air force 22 percent, and the navy 14 percent of the annual defense budget. Nevertheless, this does not account for India's ever-expanding defense budget, which has benefited from a rising GDP over the past decade. A growing GDP has thus enabled the Ministry of Defence to support the Indian Navy's blue-water naval aspirations and the proposed expansion of its naval platforms and technology programs. From 2008 to 2017, the Indian defense budget grew an estimated 45 percent. In the last year or so, the defense budget expanded around 6 percent, but in the process, it overtook that of France, moving India up to fifth in the global military expenditure rankings with an annual budget of about \$66.5 billion.<sup>53</sup>

India is currently ranked as the world's third-largest military, with 1.4 million active personnel and 1.15 million reservists, but its maritime forces only have an estimated 67,800, including a 5,000-person naval air arm. India also has a marine commando force of 2,000 and a coast guard of 10,000. This still places India's navy as the seventh largest in the world based on personnel and naval assets. India's future ship requirements have fluctuated depending on various official sources. India's current navy operates 137 ships, including 238 aircraft. This number includes one aircraft carrier, eleven destroyers, fourteen frigates, and sixteen submarines (including one nuclear-powered submarine). Over the next decade or by 2027, the hope is to expand India's navy to between 160

and 212 modern warships, depending on the source. As for naval aircraft requirements, the hope is to expand the fleet to between 300 and 500, which would be organized around three aircraft carriers (two of which would be built in India).<sup>54</sup>

The problem for India's naval modernization and expansion efforts is that they hit many snags along the way, from budget shortfalls and procurement woes to bureaucratic inefficiency and aging infrastructure. On the procurement front, India is highly dependent on foreign technology imports and other spare parts. The larger problem, according to some analysts, is that the procurement regulations frequently change, sowing discord and confusion throughout the system. This in turn delays many of India's ambitious naval expansion efforts. The good news is that India's government has made some progress toward growing India's capacity to produce more ships domestically. Today, forty ships and submarines are being built in public and private Indian shipyards, with an impending approval of an additional sixty ships and submarines.<sup>55</sup>

The two main programs currently experiencing issues are India's submarine and aircraft carrier programs. In the future, India hopes to have eighteen attack submarines (SSNs) and four to seven ballistic missile submarines (SSBNs)—joining its fleet of at least thirteen conventionally powered submarines (SSKs)—but the main problem in the interim is that its fleet expansion has faced numerous delays, in addition to relying heavily on foreign technology and platforms. In 2005, India signed a historic agreement with France for six *Scorpène*-class SSKs, but by 2018 only three had been delivered. Despite this perpetually slow movement, there is certain optimism, albeit guarded, for India's SSN and SSBN programs. Though the program had been under discussion since the late 1990s, India did not begin its construction of an Indian-built SSBN until 2009. By 2016, however, under deep secrecy, India finally commissioned the INS *Arihant*. During this same period, the Indian Navy inked a ten-year lease for a Russian-built *Akula*-class submarine in 2012, the INS *Chakra*. India is not yet a nuclear triad power such as Russia, China, or the United States, but as one analyst remarked, “The INS *Arihant* is primarily a technological demonstrator, based on the Russian Project 971 *Akula I*-class nuclear-powered attack submarines, rather than a fully operational SSBN.”<sup>56</sup> India plans to expand its *Arihant*-class fleet to four or five in the future, placing India in a new category of blue-water naval powers.

By comparison, China has four SSBNs, three different classes of SSNs or up

to nine boats, and fifty-two SSKs. It has produced about 2.5 SSKs per annum over the past decade, and by the early 2020s it is expected to have seventy-eight in its fleet. China's SSKs are reaching deeper into the Indian Ocean and pose greater threats to India if it is unable to keep pace. China is also developing both unmanned underwater and surface vessels (UUV and USV) that will further revolutionize the maritime security of the broader Indo-Pacific. Submarines and UUV/USVs will very much be at the vanguard of the Sino-Indian maritime rivalry in the future.<sup>57</sup>

India is making slow gains on its aircraft carrier program. Here again, it has had to manage its expectations early because of an inefficient bureaucracy, technical deficiencies, and financial challenges. Even so, India has still made progress, with some officials remaining optimistic about the establishment of three aircraft carrier groups that can operate across its three naval commands. The British-built INS *Viraat* sailed its last voyage in 2016, but in the interim, it has been replaced by the Russian-built INS *Vikramaditya* (formerly *Admiral Gorshkov*), which finally arrived in November 2013 after two decades of negotiations. The negotiations were frequently stalled by disagreements over costs such as retrofitting and a lack of capacity by Russia to oversee the general handoff of the vessel. In the interim, India made progress on the construction of the first-ever Indian-built aircraft carrier, the INS *Vikrant*. The *Vikrant* has experienced requisite delays and cost overruns to the tune of \$4 billion since the plans were first launched in 1999. The *Vikrant* is expected to begin basin trials in 2020, with hopeful commissioning by 2023, pushing it well beyond its prior construction timeline. India also launched another indigenous aircraft carrier construction project, but it is not expected to be completed for another fifteen years or more. According to a recent report, "The delay is due to steadily declining budgets, technological hurdles, and, above all, enduring delays by the Ministry of Defence (MoD) in approving the program."<sup>58</sup>

### *Fortifying India's Islands*

India is blessed with geography, especially when it comes to tackling the shifting maritime dynamics of the Indian Ocean. Many refer to India's Andaman and Nicobar Islands (ANI) as its "diamond necklace" at the opening of the Strait of Malacca along the eastern edges of the Bay of Bengal. The island chain possesses 572 islands (with just 37 inhabited) and is divided between the Andaman island groupings in the north and the Nicobar Islands in the south. North

to south, the islands span approximately 804 kilometers, with an EEZ of around 600,000 square kilometers, accounting for about 30 percent of India's overall EEZ. The Nicobar Islands are just 160 kilometers away from Indonesia's Aceh Province in the south and just 70 kilometers from Myanmar's Coco Islands to the north. Singapore is also about two hundred nautical miles away. India's other notable island chain sits off its southwestern coast, the Lakshadweep Islands, and is seen as India's "western maritime frontier." It is comparatively much smaller in scale, with just ten inhabited islands out of thirty-six. The Indian military, however, maintains one of its largest offshore basing facilities on Kavaratti island, INS Dweep prakshak (Island Protector), which possesses the capacity for enhanced maritime surveillance and intelligence gathering off the western flank of India. Since the arrival of Modi to office, India has taken a more proactive stance to develop all three sets of these islands chains—with a particular focus on the ANI—as part of India's larger maritime strategy. Until 2015, many of the attempts to further secure or equip the ANI with a greater capability to monitor or even station ships and personnel were tied up in bureaucratic red tape or lawsuits launched by environmental conservationists and tribal-rights groups strongly opposing any further development. Modi began pushing back against the conservationist movement because of the mounting urgency of monitoring China's growing maritime presence.<sup>59</sup>

The Modi government is correct to be concerned about China's maritime presence and vessels traversing one of the three main international shipping channels that cut through the ANI headed to or away from the Strait of Malacca: the six-degree channel in the south, the ten-degree channel in the middle, and the Coco/Preparis Channel in the north. Though these are international shipping lanes, traversed by an estimated sixty thousand ships every year, many analysts and Indian government officials have noted a tangible spike in Chinese vessels—from PLAN submarines to Chinese replenishment ships or dual-use fishing trawlers that also have an ability to gather intelligence. In 2017 the Indian Coast Guard "intercepted" two Chinese warships entering India's EEZ in the Andaman Islands, an issue that has grown in frequency as of late. Submarines are also a growing concern for the Indian government; as reported by its Integrated Defence Staff, "Increased submarine activity in the Indian Ocean constituted a 'grave danger' to India's interests." Officials are also concerned about the spike in replenishment ships traversing the Indian Ocean, because it

indicates China is taking measures to further expand and reinforce its forward military presence. In June 2015, China celebrated the construction of its fifth Type 903A replenishment ship; by 2018 it had ten ships and one more under construction. These 903A ships join an already robust state-owned commercial fleet of some 2,600 vessels that can also carry out long-distance missions to support the PLA. Moreover, China recently put out a new guidance document titled “Technical Standards for New Civilian Ships to Implement National Requirement” to ensure that these commercial vessels align with the navy’s mission requirements.<sup>60</sup>

One of the biggest challenges for the future development of the Andaman and Nicobar Islands is their physical distance from India’s mainland. Depending on the point of departure, it is about a fifty- to seventy-hour boat ride from the mainland to the islands, or about a two-hour flight from either Kolkatta or Chennai to Port Blair, the Andamans’ capital city. The other issue is that internal disagreement continues festering over how to allocate adequate resources for defending the island chains. India stood up its first-ever joint command, the Andaman and Nicobar Command (ANC) in 2001 but has struggled ever since to overcome the interservice rivalry over what to do with the joint command and how to resource it. The services have also been arguably slowed in their prior progress by successive environmental and tribal-rights lawsuits that tied up many of the island’s infrastructure and military development projects.<sup>61</sup>

Shortly after Modi arrived in office in 2015, he announced a \$1.5 billion development plan for the Andaman and Nicobar Islands, especially at Port Blair and Campbell Bay, which are critical to India’s future maritime power projection and eastern lines of defense. In December 2018, Modi also visited the Andaman and Nicobar Islands in his first-ever visit as prime minister, a sign of his continued dedication to the island chain’s development. And in early 2019, several outlets reported that the government had finalized a ten-year military infrastructure plan worth more than \$790 million to expand and upgrade the ANC. At Campbell Bay on Great Nicobar in the south, observers have also witnessed movement on highway, bridge, and airport upgrades. The Indian Air Force houses many of its combat matériel here but hopes for a more permanent presence in the near future. The proposed extension of Campbell Bay’s airport runway from 3,500 feet to 6,000 feet or more would enable the military to fly its naval Poseidon-8I surveillance airplanes with antisubmarine capabilities. The

P-8Is already fly from India's mainland to Port Blair. (Searcher-II unmanned aerial vehicles are also flown over the ANI to further track submarines and other vessels.)<sup>62</sup>

Modi similarly hopes to develop Port Blair into an important ship repair center, in addition to developing or upgrading more of the Andaman Islands' port facilities, airport, bridges, and highways. The Indian government wishes to enlarge the shipping transportation fleet that handles interisland transportation, as well as transportation to and from the mainland. Plans are likewise afoot to lay a new submarine cable from Chennai to Port Blair and eight of the other core islands for better connectivity. Modi spoke during his December 2018 visit about the government's plan for a "State Wide Area Network" to digitally connect the main islands. The hope for these infrastructure projects is that they will have a positive spillover effect on the development of the ANC and specifically its maritime infrastructure. By some earlier accounts, however, many of the initially earmarked infrastructure development funds have focused more on building up the railway and highway connectivity (some are still in disrepair after the 2004 tsunami), as well as an expansion of Port Blair airport's runway and the installation of lights for nighttime landings. With that in mind, Modi approved the construction of a radar station on Narcondam Island in the far northeast, despite years of environmentalist protests seeking to defend the local hornbill bird. Some analysts hope this move will lead to more movement on proposals such as upgrades to the Shibpur naval air station located at Diglipur in the far north. In January 2019, the Indian chief of Naval Staff Admiral Sunil Lanba presided over the commissioning of an old airbase, INS Kohassa, that had recently been upgraded on the north Andaman Island.<sup>63</sup>

Aside from infrastructure projects, the navy aspires to increase its ship presence at Port Blair to thirty-two ships by around 2022, up from the present twenty. Some of the ships currently stationed there are fast-attack craft, offshore patrol vessels, and corvettes. Furthermore, many officials want a buildup of India's A2/AD capability to hedge against growing tension with China.<sup>64</sup>

In addition to hardware and ships, India is using the ANI as a way to showcase its steadfast support for multilateral naval exercises, including the Milan and Malabar exercises. The exercises help strengthen India's capacity and showcase its expanding blue-water naval capabilities. Milan 2018 was hosted at Port Blair and included sixteen partner nations. India is also engaged in numerous bilateral naval exercises with Japan (JIMEX), Australia (AusIndex war-game),

Singapore (SIMBEX), and France (VARUNA). Furthermore, India has founded or buttressed numerous multilateral organizations dedicated to regional maritime affairs, such as the Indian Ocean Rim Association and the Indian Ocean Naval Symposium, to assist in asserting itself as the region's leading power.<sup>65</sup>

India also supported the resuscitation of the Quadrilateral Security Dialogue, or Quad, consisting of India, Australia, Japan, and the United States. The group formally stood up in 2007 but floundered for many years due to a general lack of interest until it was revived again in November 2017 during the sidelines of the East Asia Summit in Manila, the Philippines. Japanese prime minister Shinzō Abe referred to the group as a “security diamond of democracies” with a perceived aim of containing China despite many diplomatic assurances to the contrary. Some of the group's more maritime-related objectives are to uphold a rules-based order for Asia, ensure freedom of navigation and overflight rights in the maritime global commons, and promote maritime security. The follow-on dilemma is that China views many of India's multilateral engagements and exercises in the Andaman and Nicobar Islands or across the Indian Ocean region as either offensive in nature or actions meant to contain China.<sup>66</sup> This sentiment will only contribute further to the rising security dilemma, enhanced navalism, and thus the greater threat of an unexpected outbreak of conflict.

India's burgeoning focus on the ANI is indeed one of necessity as China expands its activities farther into the Bay of Bengal and Andaman Sea—and this is only the beginning. According to some reports, China has been leasing one of Myanmar's Coco Islands since 1994 (just north of Landfall Island in the Andaman Islands). Several reports additionally asserted that China operates signals intelligence and radar installations to monitor Indian movements and has recently constructed an 8,000-foot runway. In 2017, in an apparent escalation of tensions, China conducted live-fire exercises in the eastern and then western portions of the Indian Ocean. “The fleet carried out strikes against ‘enemy’ surface ships and completed transverse replenishment of fuel and drinking water during an exercise lasting several days.”<sup>67</sup>

### A Race for Ports and Islands of Access

Having examined India's growing geoeconomic ties to the sea, along with its great power aspirations and the rising navalism that subsequently emerged, it is important to examine this maritime competition across the Indian Ocean's vast



expanse and SLOCs. As noted by Alfred Thayer Mahan, access to islands and the establishment of naval stations abroad are key elements of sea power and thus great power status. The results of this maritime competition across the Indian Ocean are still emerging and will continue to do so for the next decade or more as India and China grow their maritime geoeconomic and naval presence. Despite India's geographic proximity to the Indian Ocean, China has made significant headway toward gaining a greater share of port and island access compared to India. Part of the issue is that India has been slower to react to China's maritime rise, while in the interim, China has been pushing ahead with the BRI and MSR to establish more permanent maritime geoeconomic and naval footholds. As remarked on recently by retired Indian flag officer commanding the Western Fleet, Vice Admiral Shekhwar Sinha, "India is late in the access game because the Indian government was too inwardly focused previously. But Modi is now giving primacy to the maritime dimension."<sup>68</sup> China has been more efficient than India when it comes to providing loans or carrying out massive infrastructure projects. As a one-party system, China is able to act more nimbly to approve projects and dispatch state-owned corporations to carry out work in short order.

Though both India and China are seeking to gain more access in similar locations, I focus more here on the cases where either India or China is trying to establish a more permanent military outpost or control over a major island or islands: Sri Lanka, Maldives, Seychelles, and Mauritius. Each of these small Indian Ocean nations has been swept into India's and China's larger geoeconomic and geostrategic competition. India may have history, culture, and geography on its side, but China has been flush with cash from its economy and investments. In many instances, these small island nations are also falling prey to what some have called China's "checkbook diplomacy"; one high official also called it "bribery diplomacy." Though India is making certain gains to slow or counter China's efforts, China's ninety-nine-year lease and virtual takeover of Hambantota are a bad omen of more change to come. Managing the region's SLOCs will be the key to any future great power aspirations.

### *Sri Lanka and the Battle for the Heart of the Indian Ocean*

In downtown Colombo, if you walk north along the Galle Face Beach, which is lined with small green stalls selling street food and cheap Chinese-made toys, you will see the massive sand island emerging in the distance called Colombo

Port City. The Kingsbury Hotel, once perched over the majestic views of the Indian Ocean, now looks onto lots of dump trucks, dredging vessels, and other construction material and workers buzzing about across the new Port City. As you approach the start of the massive 340-hectare (about 3.4 square kilometers) reclaimed area, large blue billboards are lined up advertising the future of the island: “Creating 83,000 jobs,” “US \$15 billion worth of investment,” “International Medical Centre,” and “International Financial Centre: The Economic Focal Point of Asia.” When visiting the Port City’s website, one sees more sleek depictions of and updates about the island reclamation’s completion in 2019. Creating the artificial island is a massive accomplishment considering that the China Harbour Engineering Company (CHEC), a subsidiary of the China Communications Construction Company (CCCC), and the Sri Lankan government only just solidified a new deal for the project on August 12, 2016. The deal is worth an estimated \$1.4 billion and includes a ninety-nine-year lease, discounting any future real estate development and construction on the island.<sup>69</sup>

When President Maithripala Sirisena came to office in 2015, he asked to halt all Chinese-backed projects such as the Colombo Port City in an attempt to rebalance Sri Lanka’s foreign policy away from any one preferential power, orienting it more toward India and the West. He also sought to investigate and put an end to the alleged prior excesses of Rajapaksa and his family, who were accused of siphoning off \$18 billion during the decade he was in office. However, stopping the massive infrastructure projects only contributed to Sri Lanka’s crushing debt woes, because all the prior loan agreements included a sliding fines scale for each day or week a project was delayed by the Sri Lankan government. After more than six months of placing a stop order on most of China’s infrastructure projects, Sirisena learned the hard way that the Sri Lankan government was too beholden to China and would be unable to terminate or scale back most of the ongoing infrastructure projects. The move placed the Sri Lankan government in a significant position of weakness with very little leverage over China. China forced the president to publicly acknowledge that China was a great country and that he supported the BRI. China also appreciated Sri Lanka’s position of weakness by the updated loan terms Sri Lanka proposed, including the government’s suggested debt-for-equity swaps in Hambantota and the now infamous ninety-nine-year lease. As one official observer pointed out, the Sri Lankan government willingly presented an 80/20 shared split on Hambantota before protests erupted over the terms of the deal, thus forcing the gov-

ernment to scale back to a 70/30 split in the renegotiated terms of the deal. In other words, Sri Lanka demonstrated certain agency in the process as well. Though it is hard to track down the exact details of the loans, most of the updated loans had a base lending rate of around 2 percent before adding the Libor rates, which then bumps up most loans closer to 6.3 percent APR.<sup>70</sup>

Since mid-2016, most of the large infrastructure projects have been turned back on by the Sirisena government, and business has resumed as usual, albeit with a much more indebted and weaker Sri Lanka. The size of the Port City projects demonstrates China's rapid ability to undertake such enormous maritime infrastructure projects. It also symbolizes the scope and scale of China's large footprint across Sri Lanka, especially in Colombo. As pointed out to me numerous times, the size of the offshore island is so significant that it will change Colombo's shoreline and potentially its EEZ. The problem, however, is that all these types of projects cost significant amounts of money for such a small nation, and the mounting debt makes Sri Lanka unlikely to dig its way out. According to varying estimates, Sri Lanka's external debt-to-GDP ratio is anywhere between 79.3 and 95 percent in recent years, up from 36 percent in 2010. Over the past decade or more, Chinese investments in Sri Lanka hovered around \$8.5 billion or more, with many of the loan grace periods ending by 2019 or shortly thereafter. This is about 10 percent of China's overall global investments and contracts from 2005 to 2014, or about \$870.4 billion. This also makes China Sri Lanka's largest development-assistance donor, including concessional loans and grants, ahead of Japan and India at number two and three respectively. In comparison, the International Finance Corporation (IFC) only invested \$596 million in Sri Lanka, while for India it was even less, at \$350 million in loans, during a similar time frame.<sup>71</sup>

Port City is just one of numerous ongoing major maritime infrastructure or development projects in Colombo. CMPH, for example, won a 2010 tender at the time worth an estimated \$500 million to expand and operate Colombo's International Container Terminal (CICT) as part of its thirty-five-year build-operate-transfer deal for the South Harbor expansion project. CMPH is the largest foreign investor in Colombo port and has an 85 percent stake in the CICT, while the Sri Lankan Port Authority maintains a 15 percent share.<sup>72</sup> Singapore was originally the highest bidder for the CICT expansion project, but CMPH was selected instead because the port's board of advisers was told that the Chi-

nese bid needed to be accepted for strategic reasons based on its past relationship during the civil war. Presently, Colombo port has three main terminals: the state-owned Jaya Container Terminal, the internationally and privately owned South Asia Gateway Terminal (SAGT), and CICT. Colombo was recently ranked as the twenty-fifth-largest port in the world and positioned thirteenth worldwide in terms of best connectivity. This amounts to handling about 7 million containers in 2018, up about 12.9 percent since the previous year, or 6.2 million TEUs. Colombo's cargo terminal is even more important because it handles an estimated 75 percent of India's transshipment trade.<sup>73</sup> This is significant and should concern India that China has a majority share of the terminals in both Colombo and Hambantota. When I visited Hambantota, one of the points of discussion that came up was China's ability to shut down most of Colombo's traffic in the future by opening Hambantota up for more business or container throughput. In the shipping industry, time is money, and with Hambantota's strategic location about ten nautical miles from the main Indian Ocean SLOCs, this could save time and money for ships that previously sailed in and out of Colombo.

Though not explicitly maritime related, China has also grown its investment in Sri Lanka's telecommunications industry. The most symbolic investment is in Colombo's new radio and television transmission housed in the 350-meter-tall Lotus flower tower with thirty-two pink petals that now overwhelms Colombo's skyline. The \$104 million construction project was commissioned in 2013 and completed in 2018. The construction was overseen by the China National Electronics Import and Export Corporation. One official noted that the PLA was involved in the installation of the tower's antenna. About 80 percent of Sri Lanka's telecommunications infrastructure is allegedly owned by either the Chinese firm Huawei or ZTE. (China has similarly invested heavily in Sri Lanka's national power grid.) China has a consistent track record with this kind of investment strategy, starting with maritime infrastructure projects that tie into larger infrastructure projects. In turn, these projects enable China to gain greater control over a country's communications systems and information flows, tying into its emergent Indo-Pacific telecommunications network.<sup>74</sup>

By comparison, India generally struggles with its maritime investments and trade development. China recently surpassed India as Sri Lanka's largest trade partner, with bilateral trade topping \$4.4 billion in 2017, but then India moved back to the top trading position in 2018 with \$4.93 billion in bilateral trade. Sri

Lankans like to frequently cite the fact that President Rajapaksa first offered up the Hambantota port project in 2007 to the Indians, who declined the offer before Rajapaksa then offered it to China. As Rajapaksa noted in one interview from 2010, “Several large China-funded infrastructure projects in South Asia are high-risk ventures in which no other multilateral organization or Western donor country wants to be involved in.” Sri Lanka also became frustrated with India recently because Sri Lanka has consistently pushed for some sort of defense cooperation only to see the Indians deflect its request. India has made some good moves in bolstering its ties with Sri Lanka, though. In February 2015, Modi made an official state visit to Sri Lanka, the first time an Indian prime minister had visited the island in twenty-eight years. In addition, the two nations are in the process of implementing a recently updated and expanded bilateral free trade agreement (though China is negotiating one, too). As previously mentioned, India leased Hambantota’s airport while also recently establishing a consulate in Hambantota to better observe more of China’s activities. Moreover, the Indian government joined forces with Japan to explore the possible development of Sri Lanka’s eastern deepwater port, Trincomalee, as a counterweight to Hambantota. The British Royal Navy used Trincomalee during World War II for its deep and secure harbor. But that discussion does not appear to be moving anywhere quickly.<sup>75</sup>

China, in contrast, has consistently supported the Sri Lankan government with military aid and other business development assistance since before the end of its civil war. Between 2005 and 2008, Chinese military aid went from just several million a year to \$1 billion, thus enabling the government to make one final, bloody push to defeat the Tamil Tigers in Sri Lanka’s civil war. China is also growing its business presence and currently has twenty-six state-owned enterprises that call Colombo their regional headquarters, compared to around seventy-six state-owned enterprises operating across South Asia. Though it is hard to pin down the exact number of Chinese laborers working in Sri Lanka, the unofficial numbers ranged between 17,000 and 40,000. One observer also remarked that a “Chinese ghetto” was growing just a short walk from the U.S. embassy in Colombo. During my visit to Colombo, I decided to explore this claim for myself. After a five-minute stroll from the U.S. embassy, including a quick jaunt around the Sri Lankan prime minister’s official residence past a sewage pumping station, I came to Muhandiram Road. It was here that I did indeed see around five to seven three- to four-story apartment buildings with

Chinese hangings on the doors and various other signage. But by my unofficial count, no more than two hundred people inhabited these several small apartment buildings on this particular street. Nonetheless, many new Chinese restaurants and other Chinese dry goods stores had recently started popping up in the neighborhood, as well as across Colombo. As for the makeup of the Chinese construction workers, I heard allegations again that many were likely prisoners who were shipped over to carry out the construction tasks of the large and ongoing infrastructure projects—though I could not independently verify this. Another person also pointed out that these Chinese laborers were probably shuttled back and forth between Hambantota and Colombo depending on the demand.<sup>76</sup>

One of the critiques of China's BRI is that many of the projects are not taking hold the way they were intended to. Let me add that the global slowdown caused by covid-19 will likely hit some projects harder than others. Still, China constantly thinks longer term than most nations, since it is not constrained by a traditional democratic system with regular turnover. Take the case of Hambantota. It is not yet a moneymaking endeavor, but as one high official pointed out to me, we are currently on year twenty of a fifty-year shot clock where China is trying to influence and shape the playing field, in addition to its attempts to undermine the United States in any way it can. The ninety-nine-year lease also gives China tremendous space over a long period of time. The companies operating out of the port, HIPG and HIPS, have also been granted a twenty-five-year corporate tax break under the larger agreement between the Sri Lankan government and CMPH. Moreover, CMPH has the capacity to quickly ramp up any of these types of projects with such a sizable labor workforce in place, and at a relatively small cost. Once it installs more cranes and other requisite on/off loading equipment, it will have eleven cargo berths—and this number could rise to twenty-three during phases 3 and 4 of construction—compared to the thirteen container berths operating in Colombo, thus contributing to fears about Colombo's future status as Sri Lanka's primary port.<sup>77</sup> China can incur a certain loss at Hambantota in the short term because it knows that it has both a physical footprint and the ability to make money in the long haul, especially if other small island nations continue to concede more land and assets to China.

By many accounts, it is believed that China will likely establish Hambantota as a future military outpost or base despite the reassurances to the contrary that its renegotiated deal with China for Hambantota cannot be used for any military

means.<sup>78</sup> This idea was hit home to many Western and Indian analysts in 2014 when the PLAN made two separate visits with one of its *Song*-class conventional submarines and submarine support ships. The first visit came in September during Japanese prime minister Shinzō Abe's visit, a couple days before President Xi Jinping's official visit. It also marked the first time a Chinese conventional submarine traveled into the Indian Ocean. The second incident came months later in November. Though no publicized docking incidents have occurred since 2014—one Chinese submarine request to dock was rejected in 2017—it still has many concerned about the lack of transparency in China's actions, in addition to Sri Lanka's declining ability to hold back China from adopting a heavier naval footprint despite government reassurances to oppose it. For the time being, however, the Sri Lankan navy recently announced that it would move its southern naval headquarters from Galle to just outside of Hambantota port, where three hundred personnel will be stationed purportedly to monitor the port and southern regions of the country (CMPH still oversees the port's internal security).<sup>79</sup> Whether or not the move takes place remains an open question, but in the interim, the Sri Lankan government is trying to secure \$50 million to construct a pier that will assist with any future naval operations in the area. The current seventy-meter berth in the small cove just outside Hambantota port is too narrow for larger ships to maneuver. These efforts aside, it appears that China has an upper hand despite recent Sri Lankan and Indian efforts to monitor and contain China's maritime rise.

### *The Maldives Leans Toward China*

About 750 kilometers southwest of Sri Lanka and 610 kilometers southwest of India lies the Maldives and its 1,190 islands. Only two hundred of these islands are inhabited, with an estimated population of 392,000 spread across twenty-six atolls and ninety thousand square kilometers of ocean. The Maldives is geopolitically important because most of the international shipping traffic traversing east or west across the Indian Ocean must sail over the Maldives in the north through the eight-degree channel or Minicoy Channel shared with India or through the southern SLOC called the Huvadhu Kandu or the one and a half degree Channel. The southern portions of the Maldives are also about 640 kilometers north of Diego Garcia, where the U.S. Navy has a base.<sup>80</sup>

For several decades, India held strong sway over the regime headed by Mau-

moon Abdul Gayoom, who ruled from 1978 to 2008. In fact, the Indian Army intervened under Operation Cactus in 1988 to save Gayoom from a coup attempt. Under mounting international pressure and the rise of a pro-democracy movement in the early 2000s, Gayoom consented to more open elections that ultimately brought his downfall in 2008, when he was replaced by the reformer Mohamed Nasheed. Nasheed, however, only lasted four years, facing constant pressure and mounting conspiracies against his government from Gayoom loyalists and other members of the opposition. Abdulla Yameen replaced Nasheed as president in 2013, and following his inauguration, he turned increasingly away from India toward China.<sup>81</sup>

Both China and Pakistan have been trying to gain a greater foothold in the Maldives since the 1990s as a way to undermine India's regional standing. This culminated with the first official state visit to Malé in 2001 by Chinese prime minister Zhu Rongji, including the subsequent rampant speculation about Chinese plans to construct a naval or submarine base in the Marao Atoll, along with listening stations. The plans, though, do not appear to have materialized.<sup>82</sup>

Fast-forward to today, and a fever pitch has emerged again regarding China's aspirations across the island chain, and perhaps it is not as far-fetched of an idea that China is on the cusp of establishing a more permanent military facility somewhere in the Maldives. Basing speculation aside, China has become more entrenched in the nation's politics and economy. It first established an embassy in the capital of Malé in 2011 (Japan opened one in 2016), and during the past seven years, especially since the arrival of Yameen, China has upped its promises of large-scale development projects and loans, quickly winning over Yameen and his government. Near the capital, for example, China has invested in a \$1.6 billion airport and runway modernization project (pushing out an Indian firm previously contracted to handle the job), in addition to the \$210 million China-Maldives Friendship Bridge, which opened in September 2018, running 2.1 kilometers from the airport to Malé. China also committed to constructing thousands of apartment units and other buildings worth more than \$430 million on the reclaimed Hulhumale Island project (a.k.a. "Youth City") slated to relocate Maldivians affected by climate change and rising sea levels in Malé (where 30 percent of the population lives) and elsewhere. Hulhumale currently has around 30,000 to 40,000 residents who have already been relocated. Similar to other small island nations, Chinese development already accounts for approxi-



mately 70 percent of the government's debt, amounting to around \$92 million in yearly payments, or 10 percent of its overall budget.<sup>83</sup>

As for maritime geoeconomic development, China now leases seventeen Maldivian islands on long-term leases, some of which span fifty years with a possibility to renew up to ninety-nine years. Chinese tourists visiting the Maldives grew substantially from 60,000 in 2009 to around 306,000 in 2017, accounting for an estimated 25 percent of all tourists. They also do not need tourist visas to travel to the Maldives. By comparison, Indians only make up around 6 percent of annual visitors. And now many Chinese developers are hoping to cash in on the growing Chinese tourism. Beginning in 2015, the Maldives started relaxing its foreign ownership laws by amending article 251 of its constitution with the Maldivian Land Act (article 302). The amended article now allows the government to grant land control to foreign actors if the following criteria are met: the project received approval from the People's Majlis; there is a minimum investment of \$1 billion dollars on Maldivian territory; and after completion of a project, at least 70 percent of the land must have been reclaimed from the ocean and visible at medium tide. The parliament also stated that military activities would not be permitted. In June 2016, the parliament also approved changes to Maldivian tourism laws, making it easier for foreign entities to lease property or islands. Under the newly amended law, the government can approve the leasing of islands for resort development without an open and competitive bidding process. As pointed out to me by one official observer, the Maldives will release anything, including islands, for the right price.<sup>84</sup>

Much of the current island leasing by China is for tourism development, where tourism in general accounts for about 40 percent of the Maldives' GDP. But the larger concern for many outside observers is that some of the Chinese development could become dual-use acquisitions. Since the Maldives has two or three critical international shipping channels that touch the main east–west or west–east shipping routes, it could transform into a maritime choke point in the middle of the Indian Ocean. In December 2017, Feydhoo Finolhu Island (67.3 hectares) near the capital island was leased for fifty years to a Chinese joint venture for \$4 million for resort development, well under its estimated value of \$15 million. The joint venture is between China's Shenzhen Sunpen Investment, Hong Kong's Mirich Investments, Pearl Atoll Private Limited, and a local businessman, Ahmed Latheef. The development of the island will be

carried out by Pearl Atoll Private Limited, with operations beginning in 2019. Other islands frequently being slated for Chinese development are the far northerly islands of Kelaa (201.7 hectares); Ihavandhoo (86 hectares), and Maarandhoo (56 hectares). China also reportedly developed a port in Addu City, along the southern tip of the Maldives. Part of the Addu development project includes a Chinese-built housing complex with 260 units. Last, some Indian officials speculate that China is slated to construct a naval base on Gadu Island. Gadu Island is located next to Gan Island, which has an international airport. According to Manoj Joshi, a distinguished fellow at New Delhi's Indian Observer Research Foundation, "There is a possibility that [China] may set up a naval base there in Gadu island. . . . Gadu is next to the island of Gan—where the British navy had a base during World War II—and that the deep water is well-suited for a submarine base." The larger plan, according to one retired Indian official, is to link these islands into China's submarine PEACE cable that would run from Pakistan to the Maldives and over to Sri Lanka (connecting to cables run from East Asia): "China might still not have the military capability to wage war in its far seas but it will have an information and communications structure that will serve it well in the interim. If you control information flows, you can control the space."<sup>85</sup>

Yameen's drift into China's orbit took a dramatic turn in late November and early December 2017 after he reportedly forced a one-thousand-page free trade agreement with China through parliament in about thirty minutes or less when the opposition was not present. Overnight, 70 percent of Chinese goods became duty-free, and this number is expected to rise to 96 percent of Chinese goods over the next eight years. But this event led to the outbreak of protests from the opposition, accusing Yameen of enabling a Chinese land grab of numerous islands, in addition to taking personal gain from the FTA. On February 6, 2018, Yameen called for the arrest of two Supreme Court justices, the former President Gayoom (Nasheed was already in exile in the United Kingdom), and other opposition leaders, before then declaring a state of emergency lasting forty-five days.<sup>86</sup>

Though the domestic turmoil was significant, the reactions of India and China were also important. In January 2018, before the official start of the state of emergency, a Chinese naval flotilla of eleven ships was already steaming through the Sunda Strait in Indonesia en route to conduct rescue training exercises in the Indian Ocean. It was the first time such a flotilla had entered the

Indian Ocean in four years. Abjihit Singh, a former Indian naval commander who is now at the Observer Research Foundation, commented at the time, “These are ‘grey zone’ tactics, you don’t raise the level of provocation to a level that the adversary finds a reason to react or retaliate, but you send the message home. . . . The message to India was: ‘if you come too close to the Maldives, we are not too far away.’” But China’s ministry of defense refuted such claims and stated that the PLAN ships in the Indian Ocean were part of regular exercises: “These drills were normal exercises for this year and not aimed at any third party.”<sup>87</sup>

Despite calls by Maldivian opposition members to have India intervene in the Maldives during the state of emergency, Modi decided to restrain India and waved off on any military action due to the reported concerns over escalating the situation with China. The event symbolized the deteriorating bilateral relations between India and the Maldives. In the summer of 2018, the Maldives government announced that it was ending a defense contract for the use of two Indian helicopters, including a maintenance and flight crew of around fifty Indian personnel. The helicopters were used to help patrol and monitor the Maldives EEZs, as well as supporting search-and-rescue missions. One of the helicopter teams is based in Addu City, where the Chinese are building a port, and the other is in Laamu Atoll near the central Maldives. With the end of the program, India lost a valuable monitoring capability, including an ability to watch over Chinese maritime and naval activities.<sup>88</sup>

On September 23, 2018, much to India’s pleasant surprise, the Maldives voted President Yameen out of office. Ibrahim Mohamed Solih, the leader of the Maldivian Democratic Party, was elected as president; but at the start of the transition process, Solih learned that during Yameen’s tenure he had racked up nearly \$3 billion in Chinese loans, a staggering amount for such a small island nation—Chinese sources claim that the number is closer to \$1.5 billion. One of Solih’s first initiatives in office was to pull out of the FTA agreement with China that Yameen had rammed through Parliament in late 2017. India subsequently offered to step in with \$1.4 billion in financial assistance to help the Maldives pay off its rising Chinese debt and interest payments. The stipulation, however, is that the Maldives must distance itself from Beijing. Modi followed up the proposal with a visit in June 2019. In a symbolic gesture, it was Modi’s first visit outside of India after his second-term victory in the spring of 2019. It was another sign of the importance Modi places on his “neighborhood-first”

policy and SAGAR initiative. Even if a final loan deal is successfully struck, and the Maldives ultimately leans closer to India under mounting diplomatic pressure, it is hard to undo China's physical geoeconomic footprint, which includes the lease of whole islands and other geostrategic assets.<sup>89</sup>

### *Indian Outposts? Mauritius and the Seychelles*

Located farther west and south of the Maldives lie Mauritius and the Seychelles. India does not appear to be in jeopardy of having its status downgraded, but it should not rest on its laurels and must continue to remain proactive. India has a much stronger toehold in Mauritius and access to a potential basing facility or outpost at Agaléga, while in the Seychelles India's future and desire to establish a basing outpost are less apparent. Many in India, however, remain optimistic that India will soon gain a greater foothold on Assumption Island in the Seychelles, regardless of recent negotiation setbacks. Combined, these two small island nations will be critical in the future to supporting India's efforts of maintaining certain control and safety of the regional SLOCs that feed into and out of India's territorial seas.

Mauritius continues to uphold its deep historical and cultural ties to India, even if by necessity. For starters, the vast majority of the 1.3 million population (an estimated 70 percent) are of Indian descent. India has also maintained a significant sway over successive national governments. Since the 1980s, the national security adviser and head of the Mauritius Navy/Coast Guard are always current or retired Indian officials and officers. This in its own right will ensure that India does not lose much footing to China in the future. Mauritius is spread across 2,040 square kilometers and has an EEZ of around 2.3 million square kilometers (400,000 square kilometers of this are shared with the Seychelles). Mauritius has several outer islands, in addition to asserting sovereignty over the island groupings of Chagos and Tromeline. (The British took over the Chagos archipelago and relocated the indigenous population to create Diego Garcia, which it now leases to the U.S. Navy.) What is specifically significant to India are the two islands that lie about 1,100 kilometers north of Mauritius (and 1,000 kilometers northeast of Madagascar) called Agaléga. Agaléga is divided by a one-kilometer-wide channel between the north and south islands, with an estimated three hundred inhabitants spread across the 2,600 hectares of land. Agaléga currently possesses a small jetty (Saint James Anchorage) and airstrip, albeit with a need for vast upgrades and expansion, that is of significant impor-

tance for India as it monitors the western portions of the Indian Ocean and the shipping traffic departing from East Africa. Since no harbor exists, most ships currently dock about five hundred meters from the Saint James Anchorage.<sup>90</sup>

During his Indian Ocean island tour in 2015, Modi announced \$500 million in loans for Mauritius to tackle major infrastructure projects, including upgrades to the air and sea facilities at Agaléga. The Indian loan is for a twenty-year period with an annual interest rate of 1.8 percent. As to the upgrade of the Agaléga facilities, India allocated money to construct a jetty for ship berthing and for upgrades and a runway expansion of up to 1,220 meters. India's military hopes to increase its presence on the island in the near future to combat the region's changing maritime dynamics. India's project agreements also included language for joint cooperation in the development of the Indian Ocean and Mauritius's blue economy, tying directly into Modi's SAGAR initiative. During the same 2015 visit, the Mauritius Coast Guard also commissioned the Indian-built offshore patrol vessel CGS *Barracuda* into its fleet, most of which is Indian built. Last, Modi announced the launch of a regional maritime monitoring system for Mauritius. The hope is to construct a network of coastal surveillance radars linking together to provide information and maritime domain awareness across the littoral. India desires to then integrate the network into a centralized monitoring system in New Delhi.<sup>91</sup>

Similar to Mauritius, the Seychelles has been considered an Indian-friendly nation, but India's aspirations to establish a more permanent military installation on Assumption Island hit a massive roadblock in March 2018 when the National Assembly did not ratify a signed deal from January 27, 2018, between the Indian and Seychellois governments establishing a joint naval base and an accompanying 2,700-meter airstrip, among other projects. According to leaked official documents, "The facilities [on Assumption Island] will comprise aviation, maritime, communication and surveillance and miscellaneous infrastructure and facilities, says clause 3.1 of the pact. While India will build, maintain, and operate the base, its ownership rights will vest with the Seychelles."<sup>92</sup> Negotiations over the \$550 million, twenty-year agreement (with a renewal up to ten years) had been ongoing since 2015 but were quashed at the last moment in the National Assembly. The National Assembly is controlled by the opposition party, Linyon Demokratik Seselwa, which was unwilling to approve the agreement, in part for environmental reasons. Some subsequently noted that the

agreement was rejected because many Seychellois did not want to be swept into the larger geoeconomic and geopolitical competition between India and China. Others have similarly noted that they viewed the deal as an infringement on the Seychelles' national sovereignty.<sup>93</sup>

Like Mauritius, the Seychelles, with its 115 small islands and islets, sits strategically along the western Indian Ocean's main SLOCs heading east to west or north to south near the Mozambique Channel. The Seychelles lies around 1,600 kilometers east of Kenya, while Assumption Island lies 1,135 kilometers southwest of the Seychelles capital, Victoria. India has maintained a military cooperation agreement with the Seychelles since 2003 and also set up a coastal radar surveillance system in 2016, but it was hoping to take a next-level strategic step by establishing a joint naval base. With the establishment of a base, India would be well situated to both train Seychellois military personnel and assist in patrolling the Seychelles' vast EEZs, which are prone to drug trafficking, piracy, and illegal fishing. It can also help manage the growing securitization of the Indian Ocean littoral.<sup>94</sup>

Part of the growing concern for India is that China is making certain inroads into the Seychelles. Though Chinese tourism is not on the same scale as in the Maldives, the Chinese began supporting modest aid and development projects in the past several years. In July 2016, China and the Seychelles signed an Economic and Technical Cooperation Agreement, amounting to a \$15 million grant to support the equipment and building upgrade of the Seychelles Broadcasting Corporation. In October 2017, they signed another Economic and Technical Cooperation grant worth \$7.3 million for a new postsecondary school for commerce and visual arts. From 2017 to 2018, China also funded multi-million-dollar housing redevelopment projects. For now, it appears the Seychelles has not been completely consumed by China's recent development and aid offerings, with its current and manageable debt-to-GDP ratio around 22 percent, far smaller than most developing nations.<sup>95</sup> But as seen elsewhere, this could easily change if it is not careful.

China's growing footprint in the Seychelles is not lost on India, and as a result, India is trying to counteract with similar types of aid and development initiatives in health care, transportation, and rule-of-law projects. It appears that their historic and cultural ties continue to keep the relationship on steady ground. Despite the recent setbacks in the National Assembly from 2018, opti-

mism still prevails that ongoing backroom negotiations will resurrect the military basing deal.<sup>96</sup> Even so, India must remain vigilant and proactive if it does not want to see its position erode.

### More Competition for Access and Port Development Ahead

The maritime competition over the Indian Ocean islands examined here is just the beginning. Over the next decade and beyond, the Indian Ocean will witness increased maritime geoeconomic development and rising navalism and tension across the SLOCs as India and China seek to expand and secure their strategic national interests. Competition over port development, maritime infrastructure projects, and naval access agreements is already under way in countries such as Madagascar, Kenya, Tanzania, Mozambique, Oman, the United Arab Emirates, Qatar, Myanmar, and Bangladesh. Every day, updates are published about project negotiations or striking new ground on port construction and other multimodal transportation routes. India has recently been successful in signing a naval access agreement with France and a logistics exchange memorandum of agreement with the United States for their collective facilities and outposts across the Indian Ocean, as well as globally. India will now have access to the French base on Réunion Island near Madagascar and the U.S. Naval base at Diego Garcia, among other facilities.<sup>97</sup>

The dilemma for India, however, is that it is cash strapped compared to China. China is able to dispense or loan out significant amounts of money to these small and developing Indian Ocean nations, gaining critical admittance. But in the process, China's checkbook diplomacy is creating a growing debt dilemma for many of the nations that sign up for the Chinese-led maritime geoeconomic projects. Sri Lanka's case should be alarming to other small nations seeking Chinese funding to carry out large infrastructure projects. India has tried to counter China's maritime rise, but it still lags behind in part due to its bureaucracy and inadequate funding. The Indian Navy's development and expansion also need to become more of a national priority compared to the other services. India is well aware of the problem emerging in its neighborhood and has begun making up for lost time through its greater embrace of the maritime domain. Modi's election has been particularly consequential toward this maritime push to secure India's regional interests and standing as a great power.

If India is to succeed, it will also need to rely on extraregional powers,

namely, the United States, Australia, and Japan. Japan's regional engagement is beginning to blossom as it commences taking more concerted steps, in coordination with India, to counter and manage China's maritime rise. For its part, the United States must similarly ensure that it remains engaged and supportive of India's efforts to balance the larger region. Unfortunately, the growing perception for India and many others is that the United States is regionally less engaged and unreliable. This is a dangerous dynamic and will only contribute to the augmented maritime competition and rising navalism between China and India, with unknown outcomes.



## China's Maritime Silk Road and the South China Sea

ACCORDING TO A RECENT Chinese Academy of Military Sciences document, “Today and for a long time to come, [China’s] national interests are expanding mainly in the sea, national security is threatened mainly from the sea, the focal point of military struggle is mainly in the sea.”<sup>1</sup> For China, much of the threat emanating from the sea originates from the South China Sea, where it has grown concerned about rising naval tensions with the United States, Japan, Taiwan, and others, especially where it has built up a range of contested artificial islands. For China to succeed in its seaward embrace, it must figure out how to assuage such threats to push beyond its near seas. Though it has expanded significantly across the broader Indo-Pacific, China is still concerned about its management and control of the South China Sea region and what is frequently referred to as the first island chain, including the islands extending from Japan’s southern islands to Indonesia’s archipelago.

The shipping lanes that traverse this region are the lifelines of China’s future and will shape and influence its trajectory as a great power. The South China Sea region is active, with more than forty thousand ships transiting the area each year, representing nearly one-third of global maritime trade. During the eighteenth Chinese Communist Party Congress in 2012, President Xi’s predecessor, Hu Jintao, called for “building China into a Great Maritime Power,” defining it as a country with a “powerful and comprehensive ability to develop, use, protect, and control the ocean.” He further stated, “We should enhance our capacity for exploiting marine resources, develop the marine economy, protect the marine ecological environment, resolutely safeguard China’s maritime rights

and interests, and build China into a maritime power.” The official party report that year likewise commented that a primary national strategic objective for China was to construct “a powerful maritime state.” Five years later, President Xi Jinping incorporated similar language during his remarks at the nineteenth Chinese Communist Party Congress.<sup>2</sup>

If China can maintain and control the regional sea lanes of communication and the trade and maritime logistics hubs across the region, consisting of the vital strategic maritime choke points such as the Strait of Malacca and Sunda Straits, it can expand and project power well beyond the region, fulfilling Xi’s “Chinese Dream” that seeks “the great rejuvenation of China.” China also needs to ensure that the strategic maritime choke points stay open for the free flow of maritime traffic heading to and from China, otherwise referred to as the “Malacca Dilemma.” Though it takes a combination of maritime might and geoeconomic power to control and defend these core regional interests, China’s maritime geoeconomic footprint will be a key component of its future success. By most accounts, China’s maritime economy, including maritime-oriented state-owned enterprises in the shipping and shipbuilding industry, industrial fishing, and port operations, is quite significant and will continue growing across the more than three million square kilometers of the South China Sea, spanning from the Taiwan Strait to Singapore and the Strait of Malacca. China’s recent economic boom, moreover, has largely depended on an enormous merchant fleet of approximately 5,500 commercial vessels of 1,000 gross tons and above, many of which travel in and out of the South China Sea to more than 600 ports of call in 150 countries. An estimated 40 percent of China’s economy depends on trade. China has met the rapidly rising trade volume demand by investing in the expansion of its port facilities and its maritime economy.<sup>3</sup>

Aside from expanding maritime commerce, China depends on access to global energy supplies, mainly oil, gas, and coal, to fuel its economy. According to some recent estimates, nearly 36 percent of China’s overseas direct investment included the energy sector, while an additional 9 percent represented precious metals and other minerals. In 1993, China became a net importer of oil, and by the end of 2018, it imported on average 9.24 million barrels of oil per day, making it one of the world’s top oil importers.<sup>4</sup> Most of China’s oil imports arrive via the sea, with more than 80 percent traveling through the South China Sea from the Middle East or Africa. The South China Sea only produces around 1.3 million barrels per day, and most of it was extracted from its uncon-

tested northern region. Speculation on the petroleum reserves in the South China Sea ranges from China's extremely optimistic 213 billion barrels to a U.S. approximation of 28 billion barrels. A similar difference in estimates exists for regional natural gas reserves. China predicts more than 2,000 trillion cubic feet of reserves, while U.S. estimates project 266 trillion cubic feet.<sup>5</sup> Nonetheless, by 2030, as China pivots toward cleaner and more environmentally friendly alternatives to coal, more than 60 percent of China's natural gas demand must be realized through imports, either via pipeline or tanker. Since such heavy reliance on foreign energy markets offers some risks, China also began investing in offshore drilling, including eighty-two offshore oil and gas fields and 5,156 producing wells, to further guarantee energy flows and supplies. Full control over the region's SLOCs and energy resources will, therefore, grow in prominence while contributing to already simmering geoeconomic and geostrategic tensions, and competition between China and regional nations, including Japan, Taiwan, Indonesia, Vietnam, and the Philippines.<sup>6</sup> India and Russia will also factor more into the equation as each nation increasingly seeks to protect or project its regional maritime interests.

The aggregate is that China has much riding on the future development, success, and prosperity of its Maritime Silk Road and maritime economy. If China's maritime economic forces continue broadening as expected, they will only enhance and fortify China's other maritime geostrategic and power projection efforts. In some cases, China intends to leverage its investment in the region's ports to align the region more with its geostrategic and geoeconomic interests.<sup>7</sup> China's growing maritime investments will also mean a need to secure and protect its assets, leading to rising regional securitization, especially as China expands its maritime militia to help secure industrial fishing interests. Broadening militarization, unfortunately, means escalating tensions and the increased chance of an unintended dispute between China and another regional actor. This chapter examines China's growing dominance in shipping, shipbuilding, logistics and supply chains, fisheries and aquaculture (also known as aquafarming), and regional port acquisitions and development from Taiwan to Australia. Furthermore, China's growing maritime geoeconomic entrenchment in Cambodia, Brunei, and Malaysia will make it increasingly harder for other regional and global powers—particularly the United States, India, Japan, Taiwan, and others—to compete economically in the maritime space. It also makes it more challenging

to box China in regionally owing to its increasingly independent and reinforced maritime networks.

### The Historical and Strategic Importance of Pacific Asia

Before examining China's maritime geoeconomic presence regionally across the South China Sea and how this affects Eurasia's larger maritime competition, it is first important to place the South China Sea and East Asia writ large into a larger historical context of the Pacific Ocean. For centuries, Europe dominated much of East Asia's maritime space, but today China has started to erode the West's regional and maritime dominance by turning more concertedly seaward. Like other great powers of the past, to solidify its great power status, China will need to secure its regional position and influence, ensuring a more fluid path toward power projection beyond Pacific Asia.

The Pacific Ocean forms the largest body of water on the planet, spanning more than 155 million square kilometers and reaching depths around 3,900 meters. Its name was given in 1521 by the explorer Ferdinand Magellan, who wanted to cheer up his crew after traversing the stormy straits of Tierra del Fuego. After successful transit through the straits, he said he would name the new body of water the *Mar Pacifico* for its "calm and benevolent" waters. For Magellan and the rest of the Atlantic world, the Pacific represented a great unknown frontier with the possibility for magnificent riches. The three main seas that encompass the western edges of the Pacific Ocean—the South China Sea, the Yellow Sea, and the East China Sea—are particularly critical because they border the eastern edges of the Eurasian continent and provide a firsthand glimpse into the important maritime politics and challenges shared among the region's main powers, especially between China and its littoral neighbors. Each regional sea possesses historically contested islands, valuable fisheries and other marine life, and untapped natural resources, helping to fuel the growing economies of the Pacific Asian rim. If one adds the Kuril Islands from Russia in the north, an estimated twenty-seven thousand small islands encompass the entire arc from north to south.<sup>8</sup> This will be of further interest in the next chapter, which further examines the geostrategic and naval competition between China, India, Russia, Japan, the United States, and others.

Historically, most of the trade and maritime traffic traveled along a north–

south axis as opposed to a west–east direction. The South China Sea and western Pacific just south of Japan and east of Taiwan are subtropical, with the equator situated just south of Singapore. The monsoons dominate the weather patterns, blowing from the north in the fall and winter, and from the south in late spring and early summer. These regular patterns gave much comfort to navigators and seafarers during the age of sail. The sea currents also flow along longitudinal lines north into the Taiwan Strait. The combination of winds and currents has frequently made for historically treacherous shorelines. Additionally, typhoons consistently strike in both the summer and fall, with city-states such as Hong Kong vulnerably exposed to these storms, while Singapore has boasted a certain immunity because of its geography and safe harbor.<sup>9</sup>

East Asian nations have a varied historical past when it comes to embracing their saltwater surroundings. After the last of Zheng He's famous voyages in 1433, the Chinese Ming dynasty turned away from the sea to focus on its interior and the rise of the Mongols. The government was preoccupied with its western land frontier and the problem of nomadic incursions. The sea was regarded as a liability, not an asset. It was a frontier of disorder, but not a real menace to the imperial order. It had been an arena or avenue for pirates, but not invaders from another state threatening regime change. Despite turning inward, a maritime flow of traders and people continued, and ties with Southeast Asia grew. The Chinese even coined a term for the region of Southeast Asia called the Nanyang, the South Sea, in a Sino-centric reference to how they viewed the region. Internationally and commercially, the maritime space remained active, albeit for private Chinese interests and despite the Ming dynasty's increased internal focus. By comparison, even as an island nation, Japan's government never greatly embraced the sea until the early modern period. Piracy always existed, and Japan's pirates used the southern islands near Kyushu for safe harbor, but they never feared government retribution during the earlier periods of the fourteenth and fifteenth centuries. Japanese fisherman unquestionably saw the sea as a vast source of protein for the Japanese diet, but the government was not interested in oceanic adventure until the early modern period. The government also tried to restrict the interaction between the Japanese and the growing presence of the Europeans. As a matter of national security, the Tokugawa shogunate limited outside interactions with Europeans. They forbade the construction of large oceangoing vessels and the overseas travel of ordinary Japanese, fearing contamination from Western ideologies.<sup>10</sup>

Whether desired or not, the Atlantic world began arriving en masse beginning with the Spanish and Vasco Núñez de Balboa during the sixteenth century. The Spanish even boasted that the Pacific was a “Spanish Lake,” especially with the colonization and establishment of Manila in 1571 as a vital transit point between America and China. Spain, however, was quickly followed by Portugal, the Netherlands, and Great Britain. The Europeans had improved their abilities to sail long distances under punishing oceanic conditions. The Far East became a land of great allure and riches, with its lavish trade in copper, silver, spices, medicinal drugs, and timber, to name a few. Foreigners came by sea not just to conquer or colonize but to trade. Saltwater dominated the region and its culture. This rich exchange of peoples and goods gave rise to new maritime cities such as Singapore and Macau. To appreciate the size and scale of international trade transiting Pacific Asia beginning in the sixteenth and seventeenth centuries, one linguistically adept traveler from Portugal wrote that he could hear eighty-four different languages being spoken in Malacca.<sup>11</sup>

By the end of the seventeenth century, Russia also attempted to enter the fray by pushing beyond its Siberian heartland. In 1648 Semen Ivanovich Dezhnev, a Cossack, headed a sailing expedition from the Arctic that reached the Anadyr River, which drains into the Bering Sea of the North Pacific. When Peter the Great rose to power toward the end of the century, he attempted to tear Russia out of the forest and away from Moscow toward the peripheries of Eurasia. He was inspired by the Dutch and had a grand strategic vision for a stronger Russian influence in Europe and Asia. Along its eastern edge, he viewed the Amur River, or the Heilong Jiang, meaning Black Dragon River in Chinese, as Russia's gateway to the Pacific. Over time, he built up the Russian Imperial Navy and even hired the famous Scottish American John Paul Jones, who fought initially against the British during the Revolutionary War but later rose to the rank of rear admiral in the Russian Imperial Navy. Peter's philosophy was that to be a world empire required the force and projection of a powerful navy. The Russian government also desired the establishment of a warm-water port, which was seen as a source of wealth and modernization. For Peter and his successors, the dream of having an internationally dominant navy was never realized owing in large part to geography, massive and remote distances from east to west, and domestic politics. During Peter's reign, most of his successes were on land, but for many, the romantic embrace of nautical culture and a push to the ocean as a symbol of freedom survived in the minds of the people and intelligentsia. Today,

like his imperial predecessors, Russian president Vladimir Putin has begun to exert himself again across Eurasia's saltwater domain in a reembrace of Russia's historically driven "urge to the sea."<sup>12</sup>

Despite Russia's largely failed historical attempts to descend into the Pacific from the north, the Atlantic world, and Great Britain in particular, continued to dominate the maritime avenues and arenas of East Asia for several centuries. With the revolutionary change from sail to steam, Great Britain dominated the new technological age by constructing its "lifeline of empire," or British coaling stations from Cadiz in the western Mediterranean to Borneo and Canton in East Asia. Britain's control of colonies, coaling stations, and raw materials enabled it to rule the world's oceans. But by the end of the nineteenth century, Great Britain had growing concerns back in Europe with the rise of Germany, and thus its power and influence began to wane in East Asia. China, Japan, and Russia vied for greater control and influence of the region. The First Sino-Japanese War took place from 1894 to 1895, where the Empire of Japan and Qing dynasty fought primarily for regional control. After a string of losses, China called for peace in the Treaty of Shimonoseki. After the war, Japan remained restless and still desired a more permanent foothold on the mainland. From 1895 to 1904, Japanese power grew substantially. It enhanced its ability to produce iron, steel, and coal. Japan's naval and merchant marine tonnage swelled to three to four times its prior size as it began building its own warships. Moreover, Japan developed its own highly effective gunpowder, fuses, and shells for naval use. Japan was a microcosm of the entire modernization effort.<sup>13</sup>

As Japan grew in maritime and military might, it was headed on a collision course with Russia, which subsequently banded together with Germany and France to force Japan out of Liaodong Peninsula, including Port Arthur, in a retraction of the Treaty of Shimonoseki. Port Arthur was a valuable access point because it opened into the Yellow Sea and was ice-free compared to Vladivostok. War broke out between Japan and Russia in 1904 and ended the following year with a decisive Japanese victory by its Imperial Navy. The significance of these wars is to show both the importance of the maritime space and the historical clashes between some of the region's most important actors: Russia, Japan, and China. Though today's world is very different from that of the past, geography and ambitions remain the same today, especially Russia's continued desire for a warm-water port. The melting of the Arctic and changing regional climates

are a game changer for Russia, while tensions between China and Japan are still palpable, based on prior historical grievances.<sup>14</sup>

Aside from Russia and Japan, the United States also has historical roots across East Asia that have a direct bearing on today's politics. Though America's maritime ties to Pacific Asia date back to the eighteenth century and the vibrant fur trade between its west coast inhabitants and China, the U.S. military's postwar reconstruction efforts and continued basing presence after its victory in World War II remain a point of significant debate today. During the postwar period, the United States established a significant military basing presence throughout the first island chain that currently remains, posing a significant and ongoing challenge to China as it seeks expansion beyond its regional or near seas. The United States has signed several important collective defense agreements with South Korea, Japan, and the Philippines, in addition to a similar agreement with Taiwan, as laid out in the Taiwan Relations Act of 1979. Today, the U.S. Indo-Pacific Command has an estimated 375,000 military and civilian personnel, including five of eleven U.S. carrier strike groups and about two hundred ships (about 45 percent of the entire U.S. naval fleet). Additionally, the United States continues to maintain strategic bases, logistic centers, and other small military installations in South Korea (83), Japan (121), Australia (6), Singapore, the Philippines, and Thailand, among many other locations.<sup>15</sup> The issue at play now, however, is China's emergence as a near-peer military rival to the United States across the South China Sea. China is aided both by its growing geoeconomic footprint and by its rising naval capabilities.

### China's Expanding Maritime Economy

China's maritime economy emerged as a critical element in China's rise toward great power status. Many in China also began seeing how its maritime geoeconomic investments and projects have helped shape or influence the region in favor of its core national interests. Starting in 2006, China's maritime economy and shipping industry reportedly accounted for 10 percent of China's GDP. Between 2006 and 2010, China's maritime economy witnessed an average of 13.5 percent annual growth, and total output amounted to \$720 billion in 2011, more than double the estimates from 2006. Though the maritime economic sector has only seen around 7.5 percent annual growth in recent years, according to some estimates, it generated \$1.22 trillion in 2017. This growing



importance of China's maritime economy has been an important motivation and driving factor behind the MSR. Some argue that China's BRI has hit road-blocks in certain developing nations or failed to carry out clearer national strategic objectives across Eurasia's heartland, but in the maritime realm, it appears that China's maritime economy and the MSR have demonstrated noteworthy growth and successes, including regional port acquisitions, international shipping expansion, and rising supply chain dominance, which will likely continue in the near future.<sup>16</sup> This also aligns with the late paramount leader Deng Xiaoping's dictum that China should "set aside conflict [and] pursue joint development," a core Chinese foreign policy principle for several decades.<sup>17</sup>

This section takes a deeper look at these critical maritime geoeconomic forces in the shipping and shipbuilding industry, logistics capabilities and supply chain control, and fisheries and aquaculture sectors to illustrate China's rising maritime geoeconomic might and how it is both fueling China's economy and transforming China's regional influence and power. China's overall growth of its maritime economy and checkbook diplomacy across the Association of Southeast Asian Nations (ASEAN) has translated into more regional dominance over the South China Sea region, but it also comes with new trends in escalating regional securitization. China already started relying more heavily on the deployment of its paranaul maritime militia to protect and defend its maritime interests, including its growing industrial fishing base. Since its maritime militia operates in a nontraditional space, it is harder for traditional powers, such as the United States or Japan, to adequately or successfully deter the growing Chinese aggression.

#### *China's Growing Geoeconomic Embrace of the Sea*

China's coastline measures thirty-two thousand kilometers and is one of the largest in the world, with an estimated 172 ports along its eastern and southern coasts. Of these ports, seven were ranked in the top ten list of the largest container ports in the world, while thirteen were in the top fifty. Shanghai is the largest in the world, followed by Singapore and Shenzhen. Shenzhen, along with fifth-ranked Guangzhou Harbor and seventh-ranked Hong Kong, are part of the larger Pearl River Delta region, which is one of China's largest economic engines. In 2016 the Pearl River Delta was responsible for an estimated 14 percent of China's GDP. This has also translated into the region handling 26.2 percent of all Chinese exports, which are valued at an estimated \$1.8 trillion, making it

the equivalent to the fourth-largest trading economy worldwide. Across China, its top twenty container ports moved more than 210 million TEUs in 2017, amounting to a 7 percent increase from the previous year. In terms of employment numbers, around 21 million people worked in ocean-related sectors in the early 2000s, accounting for 8.1 percent of the coastal population, but this number grew to 33 million, or approximately 10 percent of the coastal population, by the 2010s. Both sets of trade and employment numbers are expected to rise over time, symbolizing the budding significance of China's maritime-based economy. Containerized trade, for example, is projected to increase by an average of 4.8 percent per year through 2025, according to some estimates.<sup>18</sup>

China's 2013 launch of the MSR aligns with its larger strategic objectives, but some in China expressed ambivalence about how to achieve this vision. Part of the debate is that some scholars are split over how to overcome the security obstacles across the BRI and MSR. On one side, some Chinese scholars believe economic development and connectivity will secure Chinese interests and enable it to expand its strategic posture. The opposing view believes China must move cautiously and diplomatically to overcome threats ranging from fragile states or unstable governments to growing competition with India, Japan, and the United States. These differences aside, the official aim of the BRI and MSR is to "promote policy coordination, facilities connectivity, unimpeded trade, financial integration and people-to-people bonds." In 2015 the Chinese government asserted that Southeast Asia, or ASEAN specifically, would be a top priority region for the BRI and MSR to promote economic development, trade, greater connectivity, and infrastructure projects in what was frequently referred to as the China-Indochina Peninsula Economic Corridor. The ASEAN bloc and its population of 637 million are expected to become the fourth-largest economy by 2050. Sino-ASEAN trade is speculated to grow from \$366.5 billion in 2014 to a lofty goal of \$1 trillion over the next several years. According to Asian Development Bank estimates, "Southeast Asia will need to spend \$2.76 trillion on infrastructure through 2030 to sustain economic growth. Given the region's massive funding requirements, and the estimated \$92 billion annual shortfalls in its spending, China's offer of investment and loans could be a considerable boon for Southeast Asia." Furthermore, some in China see shipping and maritime trade and commerce as critical components of its larger development strategy.<sup>19</sup> This all makes sense when you put a price tag on the value of goods that traverse the South China Sea annually, including maritime

traffic headed to China. Though the total number is highly debated, one estimate places the value of goods transiting the South China Sea on an annual basis around \$3.4 trillion, accounting for around 21 percent of all global trade (other estimates go as high as \$5.3 trillion). Based on other recent data, around 64 percent of China's trade traverses the South China Sea, while close to 42 percent of Japan's trade transits the region. This is all to say that China remains vulnerable to any sort of trade disruption that might occur and is therefore motivated to ensure that both its maritime geoeconomic investments and the sea lanes of communication are safe and secure.<sup>20</sup>

### *Shipping, Shipbuilding, and Logistics*

In 2014, China's State Council published an official document mapping out the shipping industry's future development. It laid out national objectives such as "structure reforms in depth, upgrading enterprises, pushing for a modern shipping service sector, enhanced reforms of state-owned carriers, improving competitiveness in international markets, and environmental development." This document reinforced the position articulated at the 2014 World Shipping Summit hosted by the Chinese shipping giant COSCO where the "Seaborne Silk Road" was discussed as a top priority in helping China become a great maritime power. Some also asserted that China is anxious about protecting its supply chains. One way to mitigate this concern is to establish a monopoly or near monopoly over a significant proportion of the global shipping container lines, which is one motivating factor behind many of China's recent shipping mergers and acquisitions. One report speculated that China hopes to transform COSCO into the world's largest shipping firm for this exact reason. Others pointed out that despite such grand aspirations, China's shipping strategy is still a work in progress, lacking clearer policies. Even so, China's shipping and shipbuilding industry numbers are significant. According to the United Nations Conference on Trade and Development (UNCTAD), China possesses the largest number of maritime vessels in the world at more than 5,510 (its merchant fleet is the world's third largest in terms of deadweight tonnage [dwt]), which amounts to transporting an estimated 12 percent of the world's dwt. By 2030, China aspires to possess 24 percent of the world's shipping fleet.<sup>21</sup>

China may or may not be on track to accomplish this outcome, but it certainly remains as the top shipbuilder in the world. China remained above the

Republic of Korea and Japan since 2011 as the world's largest shipbuilder. In 2017, China's completion rate was 41 percent of the global market, one of the main indicators used to determine its shipbuilding ranking. It possessed 42.4 percent of new global orders, which had grown 30 percent in 2017 compared to the year prior, but this only balanced against an estimated 33 percent drop for new orders in 2016 and a 74 percent drop in 2015. In early 2018, however, Chinese shipyards experienced a 450 percent surge in orders, primarily for dry bulk vessels. Though the shipbuilding sector is sensitive to global economic trends, China's vast market capture will likely ensure its continued dominance over East Asian rivals. Before 2020, many Chinese shipbuilding firms hoped to turn a profit after years of stagnation following the great recession of 2008. Moreover, the Chinese government made significant motions to merge China's two largest shipbuilding companies, China State Shipbuilding Corp. and China Shipbuilding Industry Corp., streamlining both the sector's efficiency and its future profitability. The move would help China weather the current global economic downturn. The two firms have a combined revenue of more than \$81 billion, and if the move comes to fruition, they would dwarf South Korea as the closest shipbuilding rival, further solidifying China's top shipbuilding position. The two firms are collectively responsible for constructing ships such as naval vessels, including aircraft carriers, and oil and gas tankers, among other cargo carriers.<sup>22</sup>

As China's shipbuilding industry has expanded, it has transformed the sector through new technological advances and innovations. The China State Shipbuilding Corporation recently launched the first smart ship, *Great Intelligence*, that can handle 38,800 tons. According to one report, "[*Great Intelligence*] is installed with SOMS, a China-developed marine system with autonomous learning ability and intelligent operation system. It can analyze real-time navigation and meteorological data, pick the best routes and alert the crew to hidden dangers in advance. . . . [It] will be used by Sinotrans Shipping to transport coal and salt between China, Australia and Southeast Asia."<sup>23</sup> Another firm, Oceanalpha Co., has also recently launched a line of unmanned submersibles that can assist the shipping industry with its ability to explore the depths of the ocean or cruise on the surface; they have already started carrying out support missions across the South China Sea and Arctic. The bigger hope for this technology is that it can then be applied to rolling out the first-ever unmanned cargo ship, which could emerge in the next several years, according to some experts. Such a feat

would revolutionize the entire industry. Aside from smart ships and submersible drones, Chinese firms are adopting new environmentally friendly solutions to cut down on ship emissions, including the integration of water-lubricated propeller shaft bearing systems into newly built ships. The propeller shaft bearing system can use seawater as a lubricant as opposed to oil, which produces polluting emissions.<sup>24</sup>

In the shipping sector, China maintains a significant and growing role around the globe. Beginning in 2016, a certain optimism returned to the shipping industry as many Chinese shipping firms began turning a profit again after several years of stagnation, including a trade value increase of 14.2 percent in 2017, according to the Baltic Dry Index, an index that calculates the transportation cost of raw materials. Many in China also cited a desire to have a larger percentage of China's enormous maritime trade shipped on vessels owned by Chinese firms. According to one recent report on China's energy trade, the government hoped to see as much as 85 percent of foreign seaborne crude oil purchases carried by Chinese-controlled ships. In the past several years, the merchant fleet has expanded between 7 and 8 percent.<sup>25</sup>

To support the government's emerging strategy to expand and enhance the Chinese shipping industry, China's state-owned Assets Supervision and Administration Commission (SASAC) approved the merger of two enormous state-owned firms in 2016, China Ocean Shipping Company and China Shipping Company, to create COSCO, which is currently the world's third-largest container shipping line, with close to a three-million-TEU capacity in 2018. COSCO's total fleet size and dry bulk carrying division are currently the largest in the world. The motivation in part was to help clinch China's ability to compete more effectively in shipping, supply chains, logistics, and port operations. With COSCO's newfound stature and prominence, it has continued to make moves that further advance its global position. In the summer of 2017, COSCO began the acquisition process for Hong Kong's Orient Overseas International Ltd. (OOIL), finalizing ownership over OOIL's main subsidiary, the Orient Overseas Container Line (OOCL), by the summer of 2018. The \$6.3 billion largest shipping company, behind Maersk and Mediterranean Shipping Company (MSC). COSCO also seeks to shift more of the shipping industry away from Europe and toward Asia. In a statement about the merger, COSCO said that it expects to "enhance its international competitiveness, achieve synergies between container shipping and terminal businesses in the aspects of invest-

ment and operation, and ultimately improve the profitability of the company and create returns for shareholders.”<sup>26</sup> The returns already began arriving, and in 2017 COSCO announced a \$429.42 million profit, recouping some of its losses from the prior global trading slump. According to one shipping analyst, “Shipping companies based in China seem likely to be the operators of additional tonnage joining the nationally-owned fleet. Although some uncertainty surrounds the exact pace, a solid upwards fleet trend can be predicted.”<sup>27</sup>

In early 2018, COSCO announced the establishment of the state-operated China Cinda Asset Management Co. to help with ship financing. The larger goal of this move is to dominate and control more significant portions of the global maritime sector that oversees ship financing, as well as the international supply chains and logistics networks. A decade ago, Chinese ship-financing firms focused mainly on domestic companies, with minimal engagement in international financing. Today the China Development Bank and China Exim Bank are the second and third globally ranked ship-lending financiers. The growth of China's ship-financing arm will enable China to have greater sway and influence over the global shipping industry, where traditional funding streams have dried up in recent years. The growth in Chinese ship financing has another added benefit of being able to provide subsidies and other favorable financing terms for domestic firms to assist them in staying competitive or in buoying them during another economic downturn. More Chinese ship-financing capabilities similarly permit the government to expand its merchant fleet through various lend-lease models, in addition to taking advantage of the economies of scale. As one analyst noted, “It seems evident that in the near future more of the global seaborne trade will traverse via Chinese-funded ports, on Chinese-funded, Chinese-owned or Chinese-built vessels, providing China with a strong oversight over the global supply chains and a strong leverage to direct those according to its interests.”<sup>28</sup> Despite this perceived trajectory, China has engaged in certain lending risk. According to some economists, China's total debt could hit 327 percent of its GDP by 2022 (double the amount from 2008). The calculated risk could still pay off owing to a continuation of favorable lending terms, but it could also have repercussions for the international shipping industry if China is unable to withstand a severe economic downturn, such as may be presented by the covid-19 outbreak. A sustained trade war between the United States and China under the Trump administration could also have spillover effects. Sino-U.S. trade currently accounts for around 15 percent of COSCO's cargo volume.<sup>29</sup>

Similar to COSCO, China Merchants Group (CMG) is another maritime powerhouse and global maritime competitor that recently emerged after a two-year-long merger with the shipping and logistics firm Sinotrans & CSC. The government's intent was to benefit from the economy of scale to make China all the more competitive in shipping logistics and end-to-end supply chain management. Before the merger successfully went through in 2017 after a two-year process, the Hong Kong-listed CMG was already a formidable entity as one of China's largest state-owned enterprises. According to its website, CMG currently has 1,193 subsidiaries, including China Merchants Port Holdings, in 32 Chinese provinces and municipalities, and 79 logistics institutions in 32 countries. CMG also set up China's first merchant fleet, the first Chinese bank, and the first Chinese insurance company within its 146-year history. At the end of 2017, CMG announced an 18 percent increase in year-on-year revenue, worth nearly \$90 billion (584.4 billion RMB), while its profits increased 14 percent in the same period, or approximately \$19.5 billion (127.7 billion RMB). It published high revenues and profits in 2018 as well. Additionally, one of its core businesses, port handling, documented a 9.6 percent augmentation in revenue and a 10 percent rise in earnings during the same period. After the merger, China Merchants became the largest comprehensive logistics services provider in China. Sinotrans & CSC is responsible for handling shipping activities such as dry bulk transport, tanker service, container transport, roll-on/roll-off transport, and fuel trade. Across its entire fleet, it has over 18 million deadweight tons in capacity, making it the third-largest shipping firm in China and the largest inland shipping enterprise. Combined with Sinotrans & CSC, CMG now has the ability to handle vast supply chain networks and global trade.<sup>30</sup>

Aside from its shipping activities, CMG prides itself for being involved in the BRI, in addition to the critical oversight it provides to numerous Chinese domestic ports and maritime supply and logistics operations. CMG runs fifty-three ports in twenty countries and districts, fashioning an overseas network of ports, logistics, finance, and industrial parks. In 2018 the company documented a record 109 million TEUs of container throughput, making it a global leader in terminal development, investment, and operations.<sup>31</sup>

### *Fishing, Fisheries, and Aquaculture*

Fish and seafood have long been a critical food staple for Asian nations. In the future, some project that approximately 71 percent of global fish consump-

tion (184 million tons) will occur in Asian nations, and China takes up a good portion of this consumption at 38 percent of the global total. As a further indicator of the growing economic importance of the fishing industry, the South China Sea region is home to some 1.72 million fishing boats, which employ an estimated 5.4 million people. China has the largest fishing fleet with 695,000 fishing vessels, employing nearly 1.17 million fishermen. (By comparison, China had only 52,225 fishing boats in 1979.) Not only does China have the largest fleet, but its fishermen clocked in the most time fishing annually, either along China's coastlines or as far away as Latin America and Africa. In 2016, according to Global Fishing Watch, Chinese fishermen recorded 17 million hours of fishing; the next closest nations were Taiwan, Spain, and Italy, hovering each around 2 million fishing man-hours per year.<sup>32</sup>

In recent years, Asia, and particularly East Asia, has witnessed growing demographics, expanding economies, and thus the emergence of a new middle class. With this growing middle class, demand has increased for healthier food options such as fish or sushi. China's emergent middle class is expected to reach 550 million by 2022, consuming a projected 42.7 kilograms of fish per capita. In addition to growing domestic consumption, Chinese companies began seeing the profitable merits of investing in domestic fisheries and aquaculture, which they can export to a lucrative global market. The Chinese state-owned fisheries and aquaculture sectors are becoming big business and thus are beginning to crowd out other competitors from the market. China exported around 12.5 percent of all international seafood exports in recent years (up from 7 percent in 2007), while Asia accounted for around 30 percent of worldwide trade. Fish have now become China's number one agricultural export, with its fishing industry recently valued at \$289 billion. According to additional recent estimates, China's fishing industry employs between fourteen and fifteen million people, with an additional thirty million working in fisheries, aquaculture, or other fish-related industries, including some ten thousand fish-processing companies. Fisheries and aquaculture production is expected to grow approximately 18.4 percent between 2016 and 2030.<sup>33</sup>

But the fact that China is growing by leaps and bounds above other competitors creates greater tension with regional actors that also fish in the same waters as the Chinese across the South China Sea region. Some are concerned that China is overfishing in some areas, especially along its coastline, which is, in turn, pushing industrial fishing firms farther afield, where they are operating



largely unregulated or illegally. According to a recent United Nations Food and Agricultural Report on the state of the world fisheries, “83 percent of the assessed fish stocks [in the South China Sea] were fished at biologically sustainable levels in 2015.” Many have complained that Chinese fishing or fisheries companies have been given a strategic advantage with substantive annual government subsidies relative to other nations that also subsidize their local fishing industries. Between 2011 and 2015, the Chinese government paid out an estimated \$22 billion to the fishing industry, excluding other subsidies that support local fishing companies. The Chinese government seems intent, however, on expanding its dominance across the fishing, fisheries, and aquaculture industries. According to one report, “China’s 2015 agriculture report contains calls for even more overall fish production, with goals of 73 million tons annually by 2020 and 77 million tons by 2024, and a call to increase exports to 5.4 million tons by 2024.” The Thirteenth Five-Year Plan for Economic and Social Development of the People’s Republic of China (2016–2020) also included strategic plans for “transforming and upgrading the fisheries and aquaculture sector . . . making the sector more sustainable and market oriented.”<sup>34</sup>

Another dilemma is that the Chinese fishing and fisheries expansion contributes to simmering tensions between China and its neighbors over disputed and unresolved South China Sea territorial claims and fishing rights as Chinese fishing companies become more aggressive in their strategies. Chinese fishing vessels have also been caught fishing illegally in the EEZs of faraway nations such as Guinea, Senegal, and Sierra Leone. (One Chinese fishing trawler is able to catch more fish in one week than Senegalese boats catch in a year.) The more pressing regional challenge is that China’s competitive fishing industry expansion is being aided in large part by an emerging maritime militia that contributes further to the region’s securitization. According to Andrew Erickson of the China Maritime Studies Institute at the U.S. Naval War College, “This is a third sea force after its navy and its coast guard, composed of maritime industry professionals. It is militarily controlled and state-sponsored, an irregular paramilitary organization that can be tasked to engage in specific operations in support of Chinese state objectives. The maritime militia is used in a manner designed to be covert and confusing.” The rise of China’s maritime militia makes it harder for others to deter China’s illegal fishing in some areas because most littoral nations are unable to match the growing force of this paranaival entity. Indeed, China’s maritime militia has become a critical weapon for China’s mar-

itime geoeconomic expansion by operating successfully in nontraditional spaces, or what is frequently referred to as the “gray zone.” Since they do operate on the periphery of traditional military operations, it makes it harder for the United States, Japan, and others to respond adequately. As noted in a Center for Naval Analyses report, “Maritime Militia organizations are explicitly meant to boost the marine economies of local areas. . . . Maritime Militia vanguard units demonstrate a willingness to enter disputed waters at the risk of being intercepted by foreign maritime forces; this boosts morale in local fishing communities and encourages them to venture further from shore.”<sup>35</sup>

The exact size of China’s maritime militia is unknown, but it could run into the hundreds of thousands, based on how many Chinese are employed in the overall fishing industry. China’s maritime militia mainly originates from Hainan Island off the coast of southern China. The Chinese maritime militia is aggressive, deploying scare tactics and assertive maneuvers that keep foreign fisherman out of Chinese-controlled waters or other disputed maritime territories. Chinese fishermen, including its maritime militia, sail frequently into non-Chinese waters, much to the chagrin and consternation of other South China Sea littoral nations. In 2012, the Philippines caught eight Chinese fishing vessels that were hauling off illegal seafood catches near the contested Scarborough Shoal. But the Philippines coast guard was limited in its recourse once it saw that the Chinese fishing vessels were backed by several Chinese maritime militia boats. The Philippines coast guard called in assistance from the BRP *Gregorio del Pilar*, the Philippines’ biggest ship, but it was just an old U.S. Coast Guard cutter and thus no match for the Chinese ships. At the time, the Philippines decided to stand down owing in part to an incoming typhoon, enabling China to wrest control of the Scarborough Shoal from the Philippines, along with its bountiful fish and seafood.<sup>36</sup>

Vietnam has also experienced similar aggressive actions by China’s maritime militia in the contested, albeit Chinese-controlled, Paracel Islands of the South China Sea. The Paracels are a grouping of around 130 small islands and reefs falling approximately halfway between China’s and Vietnam’s coastlines and covering an area of about 160 kilometers. China took control of the Paracels more than forty years ago. Relations between Vietnam and China have been particularly tense since 2014, when China began setting up an oil rig worth \$1 billion near the Paracels and within the two-hundred-nautical-mile perimeter of Vietnam’s EEZ. During the incident, Chinese vessels rammed and water

cannoned Vietnamese patrol boats trying to stop the placement of the rig. Since this impasse, the Vietnamese fisherman have been subject to aggressive tactics by China's maritime militia, some of which are based in the Paracels.<sup>37</sup> As China's regional geoeconomic interests expand, so too will its maritime militia, tilting the regional balance in a more securitized and dangerous direction.

### Regional Port Investments

In the past five years, COSCO, Shanghai International Port Group, and China Merchants Port Holdings have amassed almost forty international port locations, up from just ten overseas ports in 2012. This is significant because it shows China's continued and successful efforts to build up the MSR and an independent logistics and supply chain network.<sup>38</sup> Certainly, much work is needed to solidify this emerging maritime network, but it still highlights the growing resilience of China's larger maritime ambitions and how it is using maritime geoeconomic investments to shape its regional interests. Though many ongoing and currently unfinished maritime infrastructure projects or deals have yet to be solidified, I focus here on some of the more significant or largely completed port construction projects or investments that demonstrate China's growing port development, investment, and operations success, including ports in Taiwan, Australia, Cambodia, Brunei, and Malaysia. Many other project proposals or beginning investments exist in Indonesia, Vietnam, and South Korea, among others, but they are less significant because many of these proposals are either at a developmental phase or have met greater resistance recently due to domestic politics and some growing concerns over China's rising geoeconomic footprint across the region—more time is also still needed to assess their importance or impact along the MSR. Despite a certain slowdown of the maritime project development in some countries, China has still witnessed certain successes in the maritime infrastructure and port development or acquisitions. Similar to other areas across maritime Eurasia, two main Chinese investment models exist that have enabled China to establish a critical maritime foothold around the region: (1) buying a majority stake in a preexisting or well-functioning port as a means to taking outright port control in some instances; or (2) successful bidding on a port development or expansion project that enables China to strike longer-term leases, in many cases for ninety-nine years. In the process, as in other cases seen in the Indian Ocean, host nations are falling prey to China's

checkbook diplomacy. Many are either unable or in jeopardy of being unable to pay back mounting loans and debts. Nonetheless, China is slowly but surely establishing a foundational maritime network of favorable transportation, transshipment, and trading port hubs that will serve China's larger ambitions of moving deeper into the Indo-Pacific and maritime Eurasia.

### *Port Equity Stakes*

Chinese state-owned enterprises have invested in a variety of regional ports. In Brunei, for example, the Muara Port Company, a joint venture between Brunei's Darussalam Assets and China's Guangxi Beibu Gulf Holding, purchased a 51 percent stake in its largest port, Muara Port, in 2017, beginning oversight of the port's operations in what was the start of a sixty-year cooperation agreement. The Sultan of Brunei is under increasing pressure to diversify Brunei's economy away from its overreliance on oil and gas, which currently provides 75 percent of the government's annual revenue, since its production levels are expected to dry up over the next two decades. China appears to have willingly stepped in to support Brunei with this endeavor and is now Brunei's largest foreign investor, but it might come at a significant cost over the long term as China digs its geoeconomic claws deeper into Brunei. But two recent port investments in Taiwan and Australia stand out even more than the case of Brunei because they are located in developed nations with presumably more robust economies. Taiwan and Australia have complex economic and political relationships with China, but what has been interesting to see in recent years is that their economies have become increasingly intertwined or even dominated by astute Chinese economic statecraft, especially in the maritime realm. China recently obtained strategic maritime ports in each nation that will enable a long-term Chinese presence, in addition to the fortification of a Chinese owned, run, and operated maritime supply chain and logistics network. China also sees Australia as a critical jumping-off point into the microstates of Oceania, where it has already started critical investment in countries including Tonga, Vanuatu, Papua New Guinea, and the Compact of Free Association States (Micronesia, Marshall Islands, and Palau).<sup>39</sup>

Taiwan and China have a long and fraught history, including rival claims to islands in the South China Sea, that dates back to Mao's 1949 revolution and the overthrow of the Kuomintang (KMT), who fled to the island of Taiwan. Since then, the People's Republic of China (PRC) has made concerted efforts

to take back Taiwan (the Republic of China, ROC) using all instruments of national power, from the threat of military force to political, diplomatic, and economic maneuvers. But most recently it appears that the PRC has embarked on a concerted effort to use a more sophisticated form of economic statecraft to bring Taiwan more tightly into its orbit. The ultimate goal is for the PRC to achieve its “One China” policy. As the scholar William J. Norris argues, “With the consolidation of Hu Jintao’s leadership [after 2004], a strategy emerged that seeks interest transformation that results from ever-deepening economic interaction across the strait. Mainland China’s economic statecraft has gotten more sophisticated and now seems capable of generating fifth-column effects that can shape Taiwan’s definition of its interests.” In recent years, the trading and economic relationship thrived in an age of open and free trade. In 2017, bilateral trade between mainland China (including Macau and Hong Kong) hit nearly \$182 billion, compared to just \$35 billion in 1999. China is also Taiwan’s biggest trading partner, where more than 40 percent of Taiwan’s annual trade comes from the mainland and around 20 percent of its GDP. Between 2008 and 2016, Taiwan and China also signed more than twenty agreements, such as the 2010 Economic Cooperation Framework Agreement that lifted bilateral trade obstacles. The bolstered bilateral economic ties have not necessarily been popular in Taiwan domestically, but they have nonetheless enabled China to become more integrated into Taiwan’s economy despite Taipei’s recent attempts to diversify its trading relationships with other Southeast Asian nations. But since Taiwan’s economy has grown increasingly reliant on the PRC’s economy, in combination with China’s campaign to carry out more of a coercive geoeconomic leverage campaign, it will become harder for Taiwan to distance itself in the future, both economically and politically.<sup>40</sup>

Taiwan’s current geoeconomic dilemma is symbolized by China’s recent takeover of Taiwan’s largest container port, Kaohsiung Port, located at the southwestern tip of the island. It typically handles around 10.25 million TEUs per annum. Beginning in 2012, a Chinese consortium of China Merchants Holding International, COSCO Pacific Ltd. (today’s COSCO Shipping Ports Ltd.), and China Shipping Group agreed to purchase a collective 30 percent stake in Kaohsiung Port worth more than \$135 million. The move was not seen as controversial at the time but grew much more contentious in 2018 when COSCO moved onto the scene and finalized its purchase of the Hong Kong-based Orient Overseas Container Line (OOCL), which outright owned a terminal at Kao-

hsiang Port (not to mention a terminal in Long Beach, California, near Los Angeles). For many, the news about COSCO quickly escalated into a national security concern for Taiwan because China now has a permanent foothold and a shipping firm that could easily use Kaohsiung in a nontransparent manner.<sup>41</sup> That said, some ambiguity still persists about how COSCO and OOCL resolved the sale and restructuring of OOCL's subsidiary, OOCL Taiwan, which was sold to an independent Bermuda-registered firm owned by a Taiwanese businessman. The detailed specifics are fuzzy, but as one observer noted, it could be that by having OOCL Taiwan owned via a Bermuda-registered firm, "the existing regulations create a loophole for Chinese companies to infiltrate into businesses that they cannot invest in Taiwan."<sup>42</sup> Despite this ambiguity and other rhetoric that exerts OOCL Taiwan's independence, OOCL Taiwan's ties to COSCO, at least at the board of advisers level, still appears to be noteworthy.

COSCO's latest move only solidifies China's dominance over Kaohsiung Port while adding another port into its larger maritime supply chain and logistics network. According to some estimates, some 60 to 70 percent of all foreign ships that arrive at the port originate from the PRC. As a result, Taiwan's Kaohsiung Port has grown dependent on China's trade and is therefore vulnerable to China's future geoeconomic whims.<sup>43</sup>

Similar to Taiwan, Australia has an equally robust, albeit complicated, economic and trading relationship with the PRC. During much of the early and mid-2000s, the Australian government, at both the state and federal levels, welcomed Chinese investment as it embarked on a more than \$71 billion (AUD 100 billion) privatization program that sought to sell well-established infrastructure as a means to decreasing debt while also creating more capital. According to recent Australian government estimates, 28.8 percent of Australia's exports head to China, making China Australia's number one trading partner. The trade value number has grown from around \$4.18 billion (AUD 7 billion) in 2000 to more than \$134 billion (AUD 192.1 billion) in 2018. Since 2005, Australia has been the world's second-biggest beneficiary of Chinese investment, worth more than \$111 billion (AUD 160.3 billion), of which approximately 28 percent was dedicated to infrastructure, including ports and other maritime-related projects. From 2015 to 2016, Australia and China signed a record 103 deals related to Chinese investment and other ongoing projects. But Chinese foreign investment dipped around 11 percent in 2017 from 2016 owing to larger trends of a Chinese foreign investment slowdown. This has in part been

caused by various domestic political and economic obstacles, where some nations such as Australia have started to push back against a completely open trading and investment arrangement with the Chinese. Canberra, Australia's capital, also recently asserted that it was unwilling to formally align with the BRI because of increased concerns about China's rising geoeconomic might and other national strategic imperatives.<sup>44</sup>

Despite a recent slowdown in investment flows, China has astutely succeeded in procuring Australian ports as part of its larger regional maritime trading network. Access to Australia's ports means that China has opened a new and significant waypoint into Oceania for further trade, development, and investment. Currently, Australia's ports and trading base account for 20 percent of Australia's GDP. Australia's port industry produces around \$2.14 billion (AUD 3 billion) worth of business in a given year, with projections to grow around 8.5 percent per year in the near future. Annually, Australia exports around 1.2 billion tons, while it imports approximately 135 million tons. China has recognized Australia as a vital regional trading outpost and has therefore focused greater amounts of maritime geoeconomic investment on the country in recent years.<sup>45</sup>

Beginning in 2015, Shandong Landbridge Group, a company owned by the Chinese billionaire Ye Cheng that focuses primarily on port logistics, petrochemicals, and timber trading, scooped up Darwin Port in northern Australia for an estimated \$360 million (AUD 506 million) and an 80 percent stake in a ninety-nine-year lease. Darwin is a small port that only handled around 1.7 million cargo tons in 2017, but Landbridge hopes to invest \$1 billion over the next fifteen years to improve and expand the facilities. The port's geostrategic location, however, is most significant. First, Darwin is located near a U.S. Marines base housing around 1,250 U.S. military personnel since 2011 as part of President Barack Obama's Pivot to Asia strategy (and this number is speculated to grow beyond two thousand marines in the future). Second, from a Chinese perspective, Darwin is closer to Indonesia's capital, Jakarta, than to Canberra, Australia's capital. Darwin will act as another strategic maritime node in China's larger supply chain and logistics network for the MSR. On this premise, some have grown concerned recently that Landbridge is looking to refinance or seek new loans to help pay for its Darwin Port loan interest and port lease payments. Landbridge currently desires a sizable portion of financial assistance from Chinese state-owned banks such as the Exim Bank. The hotly debated concern in

Australia is that if Landbridge defaults on any of its Chinese-backed loans, it would then mean that the Chinese government would potentially own the port.<sup>46</sup>

After the success at Darwin, the Chinese made additional moves to procure or invest in other Australian ports. In 2016, as part of a larger consortium that was only 40 percent Australian owned, the Chinese sovereign wealth fund China Investment Corp Capital purchased a 20 percent stake in a fifty-year lease of the Port of Melbourne, Australia's largest container port. This is a frequently typical starting point as a Chinese investment strategy. They start with a noncontroversial stake in a given port, but then over time they aim to carve out more of a majority share in a given port or infrastructure project. In 2018, China Merchants Port Holding made a similarly strategic investment by purchasing a 50 percent stake in the Port of Newcastle valued at \$478 million. Newcastle Port is Australia's largest east coast port and the number one coal exporting port in the world. The port also sits near an air force base at Williamstown.<sup>47</sup>

Domestically, the recent Chinese investments in some of Australia's most significant ports, among other investments, have caused a dynamic political debate about China's future investment strategy in the country and what role it might play in the future in Australia's economy and political structures. Australia has indeed tried to push back and even stalled some other projects in non-maritime sectors such as electricity. But mounting concerns still prevail, as exhibited by one recently uncorroborated report alleging China's interest, and Landbridge's specifically, in a share of South Australia's Flinders Ports, which also oversees Port Adelaide. Port Adelaide is significant and of concern domestically because it is the home of Australia's \$50 billion Future Submarine Project. Landbridge and the Australian government have both denied the allegations. Speculations aside, China has already established a significant foothold at Darwin, and it is likely that its other port investments will grow over time as well. China's maritime investment strategy is slowly beginning to pay dividends, making it harder for Australia and other regional states to roll back China's geoeconomic might across the South China Sea region and beyond.<sup>48</sup>

### *Regional Port Development*

Aside from investing in regional ports, China has also focused its attention on building and expanding several regional ports and accompanying free trade and industrial zones. China has offered favorable terms and agreements to entice many of the region's developing countries that lack financial backing. Though



many current maritime geoeconomic proposals are on the table, the focus here is on some of the larger maritime port and development projects that are either close to completion or completed to demonstrate again the size and scope of China's maritime investment strategy and emerging maritime supply chain and logistics network. The broader concern is that many Southeast Asian nations are becoming more indebted to China over these new infrastructure project loans. The focus will be on several cases, including Cambodia and Malaysia. Despite a certain slowdown in some instances, it appears that China has geoeconomic momentum, including the possession of physical land, to carry forward most of its strategic maritime development projects.

Cambodia is not a regional economic powerhouse compared to Taiwan or Australia, but it has huge potential, with more than 50 percent of the population under the age of twenty-five. Its economy has also grown steadily over the past twenty years or more, averaging between 7 and 8 percent of growth per annum. Nevertheless, it still faces significant structural problems and continues to be one of the poorest nations in Asia, with a per capita GDP of around \$4,000. It is not hard to recognize Cambodia's economic vulnerability faced with a neighboring economic powerhouse such as China. Moreover, China appears to have recognized Cambodia's geostrategic value as another valuable link in its regional maritime trade and logistics network. In the fall of 2017, China named Cambodia as "an integral constituent of President Xi Jinping's Belt and Road Initiative," and Cambodia has also welcomed China's arrival. Regionally, Cambodia fits into the China-Indochina Peninsula Economic Corridor (CICPEC). Beginning in 2014, China surpassed the United States as Cambodia's largest trading partner, and China also recently became Cambodia's largest foreign investor. It invested \$1.23 billion in 2017 and \$3.57 billion in 2018, bringing total investments since 2005 to around \$13.65 billion. This is noteworthy, considering that Cambodia's nominal GDP hovers around \$20 billion. Cambodia's external debt has ballooned more than 142 percent in the last five years or more, and China now possesses approximately 50 percent of Cambodia's external debt. According to recent estimates, more than one thousand Chinese firms operate out of Cambodia; the next biggest numbers are South Korea with 278 firms and Japan in third place with 250 companies.<sup>49</sup>

Though China has many other ongoing investment projects in Cambodia in the maritime space, China has forward momentum on the development of Koh Kong Port as part of a larger coastal development project that originally began

in 2008 as a tourist zone development. The project was later rebranded as the Cambodia-China Comprehensive Investment and Development Pilot Zone as part of the BRI. The Union Development Group, which was listed at the time of the agreement as “Cambodian-owned” as a public relations strategy, struck the reportedly secretive deal for a ninety-nine-year lease. It soon became apparent, however, that the Chinese-backed Tianjin Union Development Group was the real owner of the lease when it was later reported that its Chinese chairman, Li Zhixuan, had signed the original 2008 lease. The detailed terms of the lease were that the Union Development Group had a ten-year grace period on its lease payments, but even beginning in 2018, it only had to pay \$1 million per year to lease the massive terrain (equivalent to \$30 per hectare). And the lease amount only increases \$200,000 every five years thereafter. If the \$12 billion Pilot Zone project, as it is frequently referred to, is fully realized, it could encompass around 20 percent of Cambodia’s coastline, including a 45,000-hectare concession granted to the Tianjin Union Development Company. The deepwater port could also be used as a stopover in the future for PLAN ships, as some speculate. The Pilot Zone and port would rival Japan’s recent investment in nearby Sihanoukville’s (or Kompong Som) deepwater port, which lies around 220 kilometers southwest of the capital, Phnom Penh. Sihanoukville currently sees around 70 percent of Cambodia’s main surface cargo. The larger Koh Kong development project is also important because it is conveniently located across from Thai Kra Canal, a pipe dream that would act as an alternative to the Strait of Malacca, cutting ship transit times by up to three days, if the canal ever comes to fruition.<sup>50</sup>

Beginning in 2016, the Pilot Zone project began to gain more momentum once it was seen as an official BRI project. That same year, Tianjin Union Development Company guaranteed a \$3.8 billion investment of the larger Pilot Zone, including construction rights over Koh Kong’s deepwater port, a neighboring airport, and a large resort area. The initial phases of the airport are expected to be completed soon, and in the future it hopes to handle 10 million passengers annually. According to the U.S.-based think tank C4ADS, phase 1 of the 10,000-ton Koh Kong deepwater port is under way but may have stalled in 2017. According to Tianjin’s Union Development Group website and another report, however, “construction of a multipurpose harbor is basically completed, and it will come into use in the near future.” Despite speculation over Koh Kong’s construction, since 2009 Chinese companies have already finished proj-

ects such as “a four-lane highway that connects rural Koh Kong and the coast with National Highway 48, at least one of four planned 30 kw thermal power plants, two large manmade lakes serving as water reservoirs.”<sup>51</sup>

In addition to Koh Kong Port, some reports speculate about the development of another port at Kampot per an agreement signed in the spring of 2018 with Guangxi Beibu Gulf International Port Group. Kampot is adjacent to the well-established Sihanoukville and just ten kilometers from the Vietnamese island Phu Quoc. It may one day be able to handle vessels up to thirty thousand tons. Regardless, if a Chinese firm moves in to develop and build up this port, it is likely to add further tension between China and Vietnam.<sup>52</sup>

As Cambodia gravitates closer to China, it has increasingly aligned with China's other political policies and regional interests, including support for China's position in the South China Sea, driving a wedge between Cambodia and other ASEAN nations that are opposed to China's claims. In another sign of Cambodia's growing proximity to China, Cambodia recently canceled joint naval exercises with the U.S. Navy in 2017, conducting them with China instead. In the summer of 2019, the Cambodian and Chinese governments reportedly signed a secret deal granting China exclusive access to and control over an estimated 30 percent of Cambodia's 190-acre Ream Naval Base, situated just southeast of Sihanoukville on the Gulf of Thailand. China and Cambodia deny the basing agreement and its details, but U.S. officials claim that Cambodia will grant China a thirty-year lease, with ten-year automatic renewals, to house Chinese military personnel, store weapons, and moor warships. According to an early draft, the deal also allows China to construct two new piers, one for Cambodia and one for Chinese warships.<sup>53</sup> As expected, geoeconomic ties can easily morph into a larger geostrategic and security imperative where China hopes to shift the regional balance of power in its favor. Cambodia is currently at risk over becoming further indebted to China with the Pilot Zone and other projects, thus jeopardizing its sovereignty if it is unable to manage and pay back China's mounting loans.

Resting at the pivot point between the Indian and Pacific Oceans, Malaysia is similarly a geostrategic and geoeconomic gem with abundant potential sitting at the opening of the Strait of Malacca and along the South China Sea. China has set its sights on Malaysia in recent years as a strategic investment and hub for the MSR. Domestically, however, Malaysia is internally divided over Chinese investment and development; some view it as a necessity for economic

advancement, while others are more concerned that Malaysia will fall prey to China's easy loans that typically produces crushing debt, creating a neocolonial-like relationship between Malaysia and China. The concerned camp should indeed be worried, because China's foreign direct investment in Malaysia has surged from twentieth place among other foreign state investors in 2015 to fourth place in 2017. At the end of 2017, Chinese FDI reportedly rose to \$11.61 billion (RM 46.44 billion), including investment in an array of geoeconomic projects, from ports, railways, and airports to infrastructure and industrial zones. Malaysian debt owed to China is part of a larger foreign indebtedness that amounts to around \$250 billion, according to some estimates. When elected in 2018, Malaysia's prime minister Mahathir Mohamad vowed to tackle Malaysia's mounting debt crisis by ending the rampant corruption and by scaling back or canceling some of the proposed Chinese projects such as the East Coast Rail Link or gas pipelines.<sup>54</sup>

After Mahathir's election, the Malaysian government began questioning and scrutinizing Chinese foreign investment, but many of the projects still appear to be moving forward, such as the proposed \$2.9 billion Kuala Linggi International Port, which hopes to divert business away from Singapore's oil bunkering facilities and other ship repair, refueling, and storage services. Samalju Industrial Port along the southern side of the South China Sea is another port that received significant Chinese investment recently.<sup>55</sup> These two projects might be more in their nascent stages, but several others are already well on their way toward full development.

Kuantan Port is one of these projects. Kuantan, the eastern-facing city looking out at the South China Sea along Malaysia's main peninsula, has become a more critical focal point in recent years as China's claims in the South China Sea region grow in intensity and clash with Malaysia's own regional interests. Kuantan is located in Pahang, the home state of the former Malaysian prime minister Najib Razak. Beginning in 2013, China's Guangxi Beibu Gulf International Port Group sealed a \$900 million deal to develop and expand a deepwater terminal and industrial park at Kuantan. The Beibu Group purchased a 40 percent stake in the port while also acquiring a thirty-year concession to run the port. Phase 1A of the project, including a new four-hundred-meter berth, is complete, and Phase 1B was finished in 2019, according to the port's website. The Beibu Group also acquired a 49 percent stake in the Kuantan industrial park. The hope was that the port and industrial zone would tie into other regional Chinese-backed infrastructure and transportation projects.<sup>56</sup>

In addition to Kuantan, the Chinese have focused on the revival of Malaysia's Port of Melaka, stemming from the Arabic word "meeting place" or "rendezvous." Historically Melaka was a major hub that handled the hustle and bustle of regional and global trade, but it now sits still compared its southern neighbor, Singapore, which is the largest transshipment hub in the world, located 204 kilometers to the south. Debate persists in Malaysia as to whether or not it needs another deepwater port, since its main port, Port Klang, is not expected to reach its full capacity anytime soon, according some studies. Port Klang has also documented low performance numbers in the past several years, including a recent decline in throughput. Some speculate that this decline has been caused in part by recent shipping line mergers such as COSCO Container Lines and China Shipping Container Lines or global shipping alliance shifts such as the Ocean Alliance that rely more heavily on Singapore as a transshipment hub compared to Port Klang.<sup>57</sup>

Aside from Port Klang, several reports speculate that the proposed Melaka Gateway Port will move forward because it may one day be able to support the visit of an aircraft carrier, which would benefit the Chinese. According to one observer, "Because there seems to be no logic to the Melaka deal, many are questioning if this has more to do with military rather than commercial interests."<sup>58</sup> PowerChina International Group and two other Chinese port developers, Shenzhen Yantian Port Group and Rizhao Port Group, recently promised \$10 billion as part of the larger Melaka Gateway project and deal to develop the deepwater port and other related investments. PowerChina has also partnered with the local firm KAJ Development to carry out the project. Breaking ground on Melaka Gateway began in 2014, and the project is expected to be completed by 2025. The Melaka Gateway deal contained a ninety-nine-year lease and will include three reclaimed islands, one expanded natural island, an international cruise terminal, a marina, a maritime industrial park, and a free trade economic zone, among other features.<sup>59</sup> The end result could be significant because it will offset some of China's reliance on Singapore, where India, Japan, and others are also competing increasingly for geostrategic and geoeconomic access.

After the 2018 election of Malaysia's prime minister, it was unclear how Melaka Gateway, and other similar projects, would be affected by the new government's policies tied to Chinese investment. For the time being, anyway, according to the Malaysian developer, the 1,500-acre Melaka Gateway is already 60 percent completed, and it is likely to continue moving forward toward final

completion. Malaysian officials have similarly confirmed that the project is making progress and that the first reclaimed island will be completed in the next year or so. The new cruise terminal is slated to open at the end of 2020 or early 2021.<sup>60</sup>

Another proposed maritime development of note is Forest City, located at the bottom of the Malaysian peninsula in the Straits of Johor. The project, overseen by the Chinese developer Country Garden Pacificview, has faced mounting domestic opposition, but the details of the projects are noteworthy because some fear that the end result of the project would erode Malaysia's sovereignty further. The project specifically proposes the creation of four artificial islands across thirty square kilometers that could house an estimated 700,000 people, many of whom would be Chinese. Despite the current government's recent attempts to end the sale of domestic properties to foreigners, mainland Chinese have already reportedly bought up two-thirds of the units advertised on the artificial islands. If this proves true, it will make it harder for the Malaysian government to push back against China on the trajectory of the project.<sup>61</sup>

Last, the Chinese invested in a land reclamation project off of Penang Island, located along the Malaysian peninsula's northwestern edge. China Communications Construction Company (CCCC) signed a deal in 2015 worth \$540 million to reclaim Penang Island's prime Seri Tanjung Pinang waterfront zone. The aim of the project is to become a seafront retail marina, tourism destination, and luxurious living option. According to the Penang state website, the CCCC project is part of a larger project to create three artificial islands off of Penang Island. They will contribute directly to the Penang Transport Master Plan, "where the state plans to auction the reclaimed land to fund the master plan." Phase 1 of the larger project began in 2006, and the state government has already started phase 2 reclamation work.<sup>62</sup>

As mentioned, upon taking office in 2018, Prime Minister Mahathir vowed to reexamine the main national projects that impact Malaysia's debt the most. In one of his first press conferences after taking office, he vowed that this was a top priority. He added that "the government will seek to renegotiate the terms and amount of debt, including the terms of payment and interest rate."<sup>63</sup> This sounds eerily similar to what took place in Sri Lanka. Based on Sri Lanka's experience, we know that many of the legal agreements were already established, making it harder for the Sri Lankans to alter the terms of the agreement. More to the point is that Sri Lanka quickly realized that any work stoppage or

contract change would cause significant amounts of further debt because of contingency clauses in the contracts. A local Malaysia paper recently published an op-ed highlighting some of the growing alarm over Chinese investments: “One thing we can be sure of, though, if history is anything to go by: the more China invests in Malaysia, the more China will be tempted to intervene and meddle in our affairs to protect its investments and ensure its strategic position is not jeopardized.”<sup>64</sup> For the moment, it looks as if China has already sunk its geoeconomic teeth into Malaysia, and it will be harder moving forward for the government to undo many of the current ongoing projects. But in Mahathir’s defense, it does appear that he has been able to stop several of China’s BRI projects or at least renegotiate the scope, price, and loan terms down on some of them. How the reclaimed islands are used and who ultimately controls them, however, will remain important questions, among many others, that must be addressed in locations such as Melaka Gateway.

### Further Chinese Maritime Investment and Securitization Ahead

China’s geoeconomic maritime investments are only just beginning to take shape. Certainly, it has not been purely smooth sailing for China across the South China Sea region as more countries grow increasingly leery about China’s larger geostrategic and geoeconomic aims. Even so, China’s maritime investments will rise in prominence over time, especially as it sets its sights on other critical regional powers such as Vietnam, South Korea, and Indonesia.

Maritime geoeconomic investment in Indonesia is probably the most noticeably absent in the analysis here, and that is because China’s investments have not been as focused on the maritime sector until recently. Indonesia’s growing population of 260 million makes it one of the region’s most vital emerging economies, if not the world’s. As a nation of approximately 18,000 islands and an estimated 1,200 ports in varying condition, Indonesia represents a huge untapped potential, and China is well situated to take advantage. According to recent census data, only 3 percent of Indonesians are considered ethnically Chinese, but according to some studies, which are highly debated, the Chinese are believed to oversee an estimated 70 percent of Indonesia’s economy. Whether true or not, even if this number is ratcheted down significantly, it still symbolizes a significant role that China likely plays in Indonesia’s economy. China, for example, has invested more heavily recently in Indonesia’s land-based infra-

structure, transportation, and development projects. Though China has not focused on development in Indonesia's maritime sector, that is changing. In 2013, the Guanxi State Farms Group embarked on the construction of the China-Indonesia Economic and Trade Cooperation Zone near Jakarta, the capital. Ningbo Zhoushan Port has also announced recently of its intentions to invest \$590 million into the Kalibaru project, an expansion of Tanjung Priok, Indonesia's largest port. China Communications Construction Engineering has similarly signaled its desire to invest in Indonesia's Kendal International Port, but no money has been deposited just yet. Another ambitious maritime project on the books is the Java Integrated Industrial and Ports Estate, which will have a deepwater port constructed on Madura Strait. As Indonesia's government places greater emphasis on its maritime economy, China is well primed to seek Indonesia's inclusion as another critical node along the MSR. Some in Indonesia have even stated that with the aid of the MSR, Indonesia could become a serious competitor as a transshipment hub against Singapore. Over the next five to ten years, some speculate that Indonesia will have \$55 billion worth of maritime and logistics infrastructure needs, including the development of twenty-four ports and one thousand freight handling centers. This is just a portion of Indonesia's estimated \$600 billion in larger infrastructure needs.<sup>65</sup>

Even though Indonesia does not have direct claims to the South China Sea, it will still have to confront the rising securitization of the region. Indonesia is a vibrant fishing nation, and its fisherman have had numerous run-ins with China's maritime militia. And vice versa, Indonesia's navy has had to fire warning shots against Chinese fishermen caught illegally entering or fishing in Indonesian waters. As China's maritime geoeconomic interests grow, so too does its focus on securing those interests. As China ratchets up the protection of its fisherman and other maritime assets, other countries are put in a less secure position and thus have to respond accordingly. For an already tense and congested South China Sea, this does not bode well for the region's future security.

For now, China will continue apace with its regionally centered geoeconomic investments. China began by domestically strengthening the Chinese-owned shipping companies so that they can be more competitive globally, but it also started reinforcing or expanding the larger supply chain and maritime logistics hubs across the South China Sea that will contribute to making regional trade more efficient and profitable. This means China is quickly growing a maritime network that will make it harder for regional rivals to leverage or contain in the



future. Through its maritime investments, China is fast becoming geoeconomically entrenched in many of the countries examined here. For developing countries such as Malaysia, Cambodia, and Brunei that are more financially vulnerable, China has the potential to succeed in its BRI and MSR efforts. Moreover, it will be difficult for developed countries such as Australia and Taiwan to keep a stable distance from China's geoeconomic forces as they grow in influence and strength. As China shapes the region geoeconomically, it will assist China in its larger geostrategic objectives to push deeper into maritime Eurasia, boxing out other competitors along the way.

## Rising Competition and Navalism in East Asia

THE YEAR 2014 WAS PIVOTAL FOR East Asia and the larger maritime competition that emerged between China, India, and Russia, with the United States always looming in the background. Indian prime minister Narendra Modi was elected to office and began reformulating India's Look East policy into Act East in a sign of a more proactive Indian foreign policy in East Asia with the rise of China. This same year in western Eurasia, Russia began its invasion and take-over of Crimea and other portions of eastern Ukraine. The international fallout from the invasion was significant and resulted in sanctions targeting Putin and his government. The secondary effect of the sanctions and the general Western backlash was a budding Russian outreach to East Asia. Without access to financial markets and amid other rising geopolitical tensions along Russia's western borders, Russia made a concerted effort to focus on East Asia and its commercial markets. Additionally, Russia began to seek ways to bolster ties with China—economically, militarily, and politically—to both counter the United States and become a stronger force and influence in the maritime politics and economies of East Asia.

Since 2014, the dilemma in East Asia is that growing maritime geoeconomic interests are steadily morphing into a more antagonistic contest for regional dominance and great power status. As each Eurasian power asserts more dominance, we witness a stronger emphasis placed on growing navalism and investments in power projection capabilities. Increased regional wealth and expanding economies have similarly enabled regional powers to invest in more military or naval power. Having a blue-water navy ensures that Eurasia's powers can

protect and secure geoeconomic interests and investments. China's 2015 Military Strategy articulated that "it is necessary for China to develop a modern maritime military force structure commensurate with its national security and development interests, safeguard its national sovereignty and maritime rights and interests, protect the security of strategic SLOCs and overseas interests, and participate in international maritime cooperation, so as to provide strategic support for building itself into a maritime power." China's 2019 defense white paper reinforced this message but also explicitly acknowledged that "international strategic competition is on the rise" and "the [Asia-Pacific] region has become a focus of major country competition." Some experts believe that China has increasingly aligned its naval development under the influence of Alfred Thayer Mahan's work. Mahan believed that overseas markets and bases, shipping or a robust merchant marine, and resource production were the key elements of maritime power and global dominance. The concern for many is that China is adopting a zero-sum approach to security that could have dangerous spillover effects for regional security, but the hope is that China can still be deterred from more profound regional aggression while fully supporting a greater good for global order and stability. That said, many analysts still fear that Chinese navalism is beginning to spur on an arms or ship construction race that will result in more aggressive EEZ protection and defense of territorial waters.<sup>1</sup>

The United States remains the primary regional maritime force, but this is changing as China develops more capabilities and partnerships that test U.S. regional dominance and power. For its part, India has begun to carry out its Act East policy, which extends a maritime geoeconomic and geostrategic arm to partner and expand relations across Southeast Asia and with other democratic states such as Japan. Singapore has similarly arisen as a critical partner for India, but their growing bilateral relationship places further geoeconomic and geostrategic stress on the powerful maritime city-state because of China's interest and investments in Singapore. China is further concerned about maintaining its dominance and control over the South China Sea, a region demarcated by the nine-dash line, where China claims more than 80 percent of it. This has translated into a Chinese buildup of artificial islands, new military outposts, an expanded submarine force, and bigger naval presence. Additionally, China has started to partner increasingly with Russia, whether via trade and investments or in the maritime space. Through joint naval exercises, for example, the two

nations can share technological platforms and promote better interoperability for future scenarios. Though points of friction exist between Russia and China—in countries such as Vietnam, for instance—both seem more aligned regionally and on the world stage today in their collective desire to overturn or defy a U.S.-led world order. Russia also appears to be seeking ways to bolster its regional geoeconomic and maritime presence, though it still has a way to go in developing the Russian Far East (RFE), which is a critical jumping-off point into East Asia. For the moment, however, many analysts believe that “Russia has appeared to need China more than China needs Russia.”<sup>2</sup>

The result of this overall dynamic in East Asia is that the region is becoming more congested with regional and external actors pursuing a spectrum of competing geoeconomic and geostrategic aims. The rise of actors contributes to an environment of expanding navalism and thus greater regional securitization. Peter Swartz, a researcher at the U.S. Center for Naval Analyses, argues that an inherent danger exists in this situation: “When a rising power builds a strong navy, other strong powers strengthen their own navies. Rising powers and their navies may incur the enmity of other powers, and arms races may ensue.”<sup>3</sup> Growing maritime competition more broadly could spell trouble for China’s BRI and MSR aspirations as a result of its heavy reliance on the sea lanes that course the region. China and the United States have historically experienced tense moments at sea, where close encounters are not unprecedented, but the fear is that these types of proximate naval encounters could become more frequent in the future, especially as China becomes more aggressive through the development of an anti-access / area denial (A2/AD) strategy in disputed maritime areas. According to a recent congressionally mandated U.S. National Strategic Defense Commission report, “The United States has lost its military edge to a dangerous degree and could potentially lose a war against China or Russia.”<sup>4</sup>

In partial response to the mounting concerns in East Asia specifically, the United States, India, and Japan have pushed for a broader embrace of freedom-of-navigation operations to counter China’s militarization of the South China Sea. But this means a ratcheting up of tensions and choppier waters ahead. In October 2018, for example, a Chinese warship came within forty-one meters of a U.S. destroyer conducting a freedom-of-navigation routine near the contested Spratly Islands in the South China Sea. In June 2019, the Russian destroyer *Admiral Vinogradov* and the U.S. guided-missile cruiser *Chancellorsville* also came within fifteen to thirty meters of each other in a dangerously close and

highly contested incident in the Philippine Sea in what some speculated was a Russian gesture of support for China.<sup>5</sup> As India, Russia, China, and other East Asian nations push from a more defensive to an offensive naval posture, this will lead to both greater interactions and the increased likelihood of accidental encounters, which would have significant repercussions for East Asia's economy, regional stability, and future world order.

### India's Act East Policy

India's Look East policy emerged in 1992 in part as a response to the end of the Cold War and India's push to liberalize its economy in a new age of globalization. In the beginning, the policy focused more on trade and investments but has evolved into more strategic and security relationships that help to counter China. The policy intended to assert India as a regional and global power. As noted by the scholar Frédéric Grare, "From 2003 until the present, [Look East] was characterized by an enlargement of the geographic and thematic scope: an expansion of 'East' from Southeast Asia to East Asia and Australia and a shift to wider economic and security issues, including joint efforts to protect the sea-lanes and coordinate counter-terrorism activities." India also desires to bolster regional infrastructure connectivity to counter China's MSR. Having greater connectivity and control over the sea lanes of communication that transit the Strait of Malacca and the Indo-Pacific would support India's larger foreign policy objectives. Trade remains a vital part of the maritime geoeconomic relationship between India and East Asia, but since 2014 and Modi's reformulation of Look East to Act East, India has embarked on a more proactive stance in the buildup of its naval ties with nations like Japan and others to protect its burgeoning economic interests and as a way to check China's maritime rise. China, for example, began deploying ships and its nuclear-powered submarine force more regularly and farther afield from its naval outpost on Hainan Island, which can hold an estimated twenty submarines, including a possible future Chinese aircraft carrier battle fleet. During the 2017 Raisina Dialogue in New Delhi, Modi affirmed his desire to see India take a more proactive maritime stance to protect its interests and power: "India's emergence as a stronger maritime power is one of the main defining features of the Indo-Pacific construct. . . . New Delhi's current approach is based on the 'engagement plus enlargement' strategy." But India's emergent concern over the sea lanes of com-

munication and freedom-of-navigation issues only represents further the ongoing maritime geopolitical shifts, to which China and Russia have also started to respond.<sup>6</sup>

### *Growing Geoeconomic Considerations*

Many of India's interests in East Asia or Southeast Asia are tied to trade and commerce that traverse the region's sea lanes of communication. Harsh V. Pant, a professor at King's College London, has argued that "commerce, connectivity, and culture have been highlighted, but a more granular perspective is needed in terms of forging a forward-looking approach . . . between India and ASEAN." Though China still dominates the larger regional economy, East Asian nations, especially those of ASEAN, have actively sought out a more robust geoeconomic relationship with India as they try to diversify away from China. India has also made a concerted economic outreach across East Asia as it seeks to expand and strengthen its economic and strategic interests, in addition to serving as a counterweight to China regionally.<sup>7</sup> As laid out previously, many ASEAN nations are dependent on Chinese economic investments and trade, but some nations, such as Indonesia, Vietnam, and Japan, began seeing India as part of a hedging strategy against China. The challenge, however, is that geoeconomic ties between India and East Asian nations are morphing more into maritime geostrategic considerations with an increased focus on the region's security and stability.

Trade relations between India and ASEAN nations have grown steadily over the past several decades. The same is also true with South Korea and Japan.<sup>8</sup> Between 1995 and 2016, overarching regional trade between India and ASEAN expanded on average annually around 11.9 percent. India was particularly reliant on ASEAN imports, which amounted to an estimated 59 percent of its overall imports in 2016, where most trade traversed the Strait of Malacca. Total trade between India and ASEAN nations took another significant jump between 2016 and 2017, growing to more than \$71.6 billion, with Singapore, Thailand, and Malaysia acting as some of India's largest export locations. Singapore and Malaysia also happen to have a sizable Indian diaspora population, estimated at 9 percent and 7 percent of each population. By comparison, Sino-ASEAN trade amounted to more than \$500 billion during a similar time frame, which translated into a trading bloc deficit of around \$81 billion, almost eight times greater than in the prior decade.<sup>9</sup>

Though trade between India and ASEAN has consistently developed over time, it is still open to risk and financial shocks. The East Asian crisis of 1997–1998 and the global financial crisis of 2008–2009 hurt trade and commercial relations during each period. The covid-19 outbreak will likely have a similar effect. China is also a growing geoeconomic powerhouse that has become harder to compete against regionally—though India is well placed to solicit more oversight or control over the SLOCs entering or exiting the Strait of Malacca from its perch in the Andaman and Nicobar Islands. To address some of these larger regional dynamics, ASEAN and India signed a 2009 free trade in goods agreement to mitigate against possible future economic risks. In the agreement, India and ASEAN sought to strengthen trading ties and the regional supply chain. Despite such efforts, however, certain structural barriers need to be overcome if trade is to continue along an expansive trajectory. Some of the ongoing challenges are weak regional connectivity, insufficient maritime or transportation infrastructure, inconsistent customs cooperation, and other non-tariff obstacles. Improving multimodal transportation hubs, especially the port and maritime infrastructure, will be particularly valuable if India-ASEAN trade and commerce designs desire to maintain any semblance of a counterweight to China's MSR. But as demonstrated in the previous chapter, China is already well on its way to solidifying its regional and maritime trading network. The one important check could be for India, the United States, and Japan to support major infrastructure projects in countries such as Vietnam, Indonesia, and Malaysia, where each government is trying to diversify FDI away from China. The United States recently proposed the creation of the International Development Finance Corporation to counter Chinese economic warfare in developing countries, but many analysts remain skeptical it will succeed, because China already has a large structural advantage.<sup>10</sup>

### *India's East Asian Geostrategic Engagements*

In a logical progression, India's maritime geoeconomic ties to East Asia have increasingly taken on a geostrategic component as well. In recent years, India has established a legitimate regional security presence, even though some still question whether it is prepared to play a more balancing, and possibly antagonistic, role against China. Nevertheless, India's regional naval presence specifically is likely to expand over the next decade as India forges new naval ties across East Asia, in addition to investing more heavily in its overall navy. India's

increased emphasis on maritime might also aligns with its larger great power designs to compete directly with China. Frédéric Grare argues that “two additional drivers are also central to understanding India’s Look East policy beyond its economic dimension: first, the determination to recover its status as a leading Asian nation; and second, the desire to preserve its strategic autonomy as much as possible.”<sup>11</sup>

India’s augmented outreach to East Asian nations places it directly in the crosshairs of China’s regional aspirations. The maritime geopolitical tension will only come more into focus over time as India, China, and regional actors begin to align with one side over the other. China still appears as a regional naval hegemon behind the U.S. Navy, but India has begun in earnest to bolster naval and maritime security ties with certain ASEAN nations within the bloc such as Indonesia and Vietnam, as well as other key East Asian allies such as Japan, Australia, and South Korea. These ties are mainly confined to security dialogues or other defense agreements that are limited in scope and mission, but India’s naval diplomacy has been on the rise in recent years, with increased port calls and other accompanying bilateral and multilateral naval exercises, adding to the growing Eurasian navalism and maritime competition. From a Southeast Asian perspective, there is growing concern regarding China’s emergent shadow and maritime influence over the region, especially in contested areas between China and Taiwan, Brunei, Malaysia, the Philippines, and Vietnam. In this context, India has partnered with the United States, Japan, and other like-minded nations to proactively promote a “common, rules-based order” in a rebuff against China’s regional maritime actions such as its artificial-island buildup and other maritime gray-zone activities.<sup>12</sup>

India and Southeast Asia have a deep shared history that has been linked via maritime trade and the spread of Buddhist and Hindu traditions that trace back thousands of years. More recently, India commemorated the civilizational relationship by deploying a training ship, INS *Sudarshini*, across Southeast Asia. India’s national security elite increasingly recognize that Southeast Asia is critical to India’s Indo-Pacific strategy. At the June 2018 Shangri-La Dialogue in Singapore, Prime Minister Modi underscored that “Southeast Asia is at its center. . . . That is the vision that will always guide India, as we seek to cooperate for an architecture for peace and security.” In a similar vein, the former Indian Navy chief Admiral Arun Prakash recently remarked that “while the PLA Navy makes forays into the Indian Ocean, the Indian Navy has newfound commit-



ments in the South China Sea.”<sup>13</sup> With Modi at the helm, India’s foreign policy rhetoric is turning into concrete action that is resulting in the Indian Navy’s growing involvement across Southeast Asia.

Since Modi’s election, the Indian Navy has made diplomatic deployments to its Southeast Asian counterparts. In 2015, for example, Admiral R. K. Dhowan, chief of the Indian Navy, traveled to Thailand and Singapore to promote strengthened naval cooperation in alignment with India’s Act East policy. In Thailand, the goal of Dhowan’s visit was to extend naval cooperation in areas such as “hydrography, developing comprehensive maritime domain awareness through the exchange of white shipping information, and increasing the scope of coordinated patrols.” His visit also came on the heels of a forty-five-day deployment that spanned from the southern Indian Ocean to Southeast Asia, including numerous port visits and a bilateral naval exercise (SIMBEX) with the Royal Singapore Navy. India and Singapore have been running SIMBEX since 1994, but in recent years it has become a more comprehensive exercise, addressing larger naval concerns affiliated with the region’s growing navalism. (India also recently announced a trilateral naval exercise with Singapore and Thailand, pointing to India’s blossoming regional maritime engagement.)<sup>14</sup> As discussed in greater depth in the next section, Singapore is becoming a point of friction between India and China as each nation tries to establish a more robust presence.

When it comes to ASEAN, India is increasingly involved in the East Asia Summit, the ASEAN Regional Forum (ARF), and ASEAN Defense Ministers’ Meeting Plus (ADMM Plus). The ADMM Plus was launched in 2010 and is particularly noteworthy because it is an attempt to bring the region’s militaries into closer alignment, albeit to confront mainly nonmilitary transnational threats: “[It] aims to facilitate and enhance regional defense cooperation between the militaries of its member countries in humanitarian assistance and disaster relief, maritime cooperation, counterterrorism, military medicine, and peacekeeping.” ASEAN’s various forums, summits, and security dialogues are valuable, but there are still significant limitations in ASEAN’s implementation oversight and frequently nonbinding agreements. In 2002, ASEAN did issue a “Declaration on the Conduct of Parties in the South China Sea,” but since then, China has been effective in promoting more bilateral negotiations over multilateral engagements as a means to weaken or wedge apart ASEAN on such issues tied to maritime disputes. This was demonstrated most recently when Philippine pres-

ident Rodrigo Duterte rejected a favorable international tribunal ruling from the Hague in 2016 regarding legal protests by the Philippines against China's buildup of artificial islands and reefs in the Philippine EEZs, including its continental shelf. The end result is that ASEAN nations have been unable to achieve consensus on how to respond to China's actions in the South China Sea. At the same time, ASEAN has leaned increasingly toward India in recent years as a potential hedge against China. Arvind Gupta, former Indian deputy national security adviser and current director of the Vivekananda International Foundation in New Delhi, observed a similar shift, stating that "China's distinctly hegemonic moves in the last few years in the South China Sea and its growing assertiveness have made ASEAN look towards India as a partner for equilibrium."<sup>15</sup>

ASEAN first established a dialogue partnership with India in 1992, and then in the 2000s various members signed a series of economic agreements with India to bolster further trade and commercial ties. In 2012, ASEAN elevated its relationship with India to the level of "strategic partnership." In 2018, Modi officially hosted all ten of ASEAN's leaders during India's sixty-ninth Republic Day festivities in another sign of India's increased engagement and outreach efforts to Southeast Asia. Together, India's and ASEAN's growing geoeconomic and geostrategic ties signaled their collective discomfort with a rising and more influential China. Even so, some ASEAN nations would like to see India step up its diplomatic efforts and naval presence even more. For the time being, however, it appears that India does not want to provoke any unwanted antagonism and will likely continue with a more measured approach to its regional geoeconomic and geostrategic buildup. India has not, for example, aggressively criticized China for its actions in the South China Sea. As discussed previously, India also faces certain bureaucratic barriers at home that will slow its push eastward to some extent. C. Raja Mohan previously asserted that "implementation has always been a major challenge for India. [Modi is] struggling to improve the capacity of Delhi to do things outside borders. There has been some advance, but that is a structural challenge that will remain."<sup>16</sup> India's regional geoeconomic interests will not abate soon, thus necessitating its continued need to push into maritime East Asia.

Aside from institutional engagement with ASEAN, India has sought ways to enhance its geostrategic maritime ties with Indonesia and Vietnam specifically. During a May 2018 visit to Indonesia, Modi and his counterpart, President Joko Widodo, announced the upgrade of bilateral relations to a "comprehensive stra-

tegic partnership,” including a Defense Cooperation Agreement. India and Indonesia already hold bilateral naval exercises, including one that recently took place in the Java Sea for the first time. This is on top of a biannual exercise called the India-Indonesia Coordinated Patrol (CORPAT), which has been ongoing since 2002. The 2018 exercise was further significant because the two leaders announced an agreement to establish a task force that would oversee the development of Sabang Port and its surroundings. The port is located in Banda Aceh Province on a small island along the far western edges of Indonesia near the opening of the Strait of Malacca, about five hundred nautical miles from India’s Andaman and Nicobar Islands. It could give India further insight and oversight regarding who or what enters and exits the straits. In one visit to New Delhi during the final negotiations, Luhut Pandjaitan, Indonesia’s minister for maritime affairs, remarked that the proposal was for a port that was able to accommodate civilian and military vessels, including submarines. In response to the announcement, an editorial in the *Global Times*, a Chinese state-run paper, warned that “if India really seeks military access to the strategic island of Sabang, it might wrongfully entrap itself into a strategic competition with China and eventually burn its own fingers.”<sup>17</sup> Such a response highlights the increasingly dangerous dynamics that are emerging between China and India in the Indo-Pacific, even though Sabang’s development might still be some time away.

Like Indonesia, Vietnam has emerged as another critical maritime partner, especially as it tries to balance relations between India, Russia, and China. Some conjecture that the India-Vietnam relationship could one day serve India’s geostrategic considerations similar to that of the China-Pakistan partnership. As examined later, Russia has also become more entrenched in Vietnam’s economic and defense structures. Nevertheless, Modi has been proactive in his foreign policy toward Vietnam owing to its geostrategic location and shared concern over a rising China. Indian companies have begun to invest in Vietnam’s offshore oil and gas exploration in the South China Sea, bringing India closer to China’s direct maritime geoeconomic orbit. In 2017, Vietnam approved a two-year extension to an Indian oil company exploring the nearly seven-thousand-square-kilometer Block 128 in the Phu Khanh Basin near Ly Son island. During a visit by Modi to Vietnam in 2016, India and Vietnam raised the level of their relationship to a “comprehensive strategic partnership.” Modi also delivered promises of a \$500 million credit for defense acquisitions and weapons produced by the Indians, in addition to \$100 million offered pre-

viously for patrol boats. An Indian company is located in Vietnam to assist in this effort. Moreover, India agreed to train submariners on Russian Kilo-class submarines while supporting other needs tied to repair, maintenance, and logistics operations.<sup>18</sup>

In May 2018, three Indian naval ships carrying more than nine hundred personnel stopped over in the Vietnamese port of Tien Sa in Danang for five days before heading to Guam and Hawaii as part of the annual Malabar and Rim of the Pacific (RIMPAC) exercises. It was the fifth time Indian naval vessels had visited Vietnam since 2013, including separate visits to Cam Ranh Bay, Haiphong, and Ho Chi Minh City. The 2018 Indian naval visit was particularly noteworthy because it was the first time the two countries had ever conducted a joint naval exercise. The intent of the exercise was “to boost military and maritime cooperation, increase mutual understanding between the two navies, to maintain security and stability in the region. The exercise also developed interoperability in communication as well as search and rescue procedures.” The India-Vietnam joint exercise also took place at the same time that the PLAN reportedly conducted its own exercise, including coast guard vessels, near the contested Paracel Islands. If so, it was meant to send a message of caution to Vietnam and others regarding China’s growing presence and power. It is unlikely that India is in a position to establish anything more than a symbolic presence for now, and despite some speculation, no concrete discussion has occurred on the development of a naval base at Cam Ranh Bay.<sup>19</sup>

In addition to ASEAN, India has bolstered ties increasingly with Japan. As a “concert of democracies,” India-Japan ties are quickly becoming more significant in terms of how their budding relationship is transforming East Asia’s maritime regional security. Japan is also geographically critical as part of the first island chain strategy, which endeavors to contain China by forming a “Great Wall in reverse” with its estimated 6,800 islands that extend approximately 1,650 nautical miles from north to south. If one broadens this farther to the Indo-Pacific, India and Japan are seen as essential anchors along China’s far western and eastern flanks. Strengthened bilateral ties between India and Japan pose a direct threat to China and will only contribute to broader unease and concern across East Asia in the coming years as the two nations solidify their maritime ties in the Indo-Pacific. As the world’s largest naval power, the United States remains a critical and leading partner in the bigger partnership—and Japan and India certainly recognize this—but many also have a growing perception of

“the apparent diminution of American commitment to and presence in the region.”<sup>20</sup> Though debatable, many in East Asia maintain this impression of declining U.S. engagement or willingness to intervene during an outbreak of regional conflict, and it is spilling over into emerging relationships such as that of India and Japan, which are transforming their bilateral partnership into something more robust and as a possible competitor against a rising China. Such a partnership is unlikely to replace the United States, but it could act in a more complementary or independent manner. Until recently, Japan’s Maritime Self-Defense Force (MSDF) has been seen as being more defensive in nature and confined to the region, but even that is beginning to change as China becomes more aggressive and Japan sees a need to more proactively defend its interests. Japan will always maintain a certain geographic advantage over China, but Japan is also quickly developing technology, missiles, and ships that could challenge China, especially with its development of A2/AD capabilities spread throughout its southern islands. Japan’s MSDF and defense planners also increasingly view Japan’s security interests as being tied directly to the security and defense of the “maritime global commons.” This framing aligns with Prime Minister Abe’s pronouncement of the 2016 “Free and Open Indo-Pacific Strategy.”<sup>21</sup>

Beginning in 2006, India’s and Japan’s then leaders began to lay an explicit foundation for how they envisioned the future of their relationship. At the time, Indian prime minister Manmohan Singh delivered official remarks to Japan’s Diet about the importance of India-Japan relations: “India and Japan must play their rightful and commensurate role in the emerging international order. . . . [India-Japan ties] contribute to a more balanced regional architecture.”<sup>22</sup> The following year, Abe, shortly before he stepped down for health concerns (only to return in 2012), delivered a speech to India’s Parliament titled “Confluence of Two Seas,” in which he articulated the Japan-India Strategic Global Partnership as “an association in which we share fundamental values, such as freedom, democracy, and the respect for basic human rights as well as strategic interests.” Abe asserted further, “As maritime states, both India and Japan have vital interests in the security of the sea lanes.” Japan later identified India, along with China, in its first national security strategy published in 2013 as the “primary drivers of change in the international balance of power.”<sup>23</sup>

As Modi entered office in 2014, he found an equally engaged and empowered partner in the reemergent Prime Minister Abe. Modi’s Act East policy was an ideal match for Abe’s Free and Open Indo-Pacific. Abe also initiated the

Partnership for Quality Infrastructure (PQI) in May 2015 during an international conference in Tokyo on “The Future of Asia,” which aimed to “develop and strengthen reliable, sustainable and resilient infrastructures that augment connectivity within India and between India and other countries in the region,” and to “advance industrial networks and regional value chains with open, fair and transparent business environment in the region.”<sup>24</sup> Japan has promised to allocate over \$110 billion in collaboration with the Asian Development Bank over the next five years. PQI is essentially a rebuff against the BRI and MSR, which are often criticized as being nontransparent and employing predatory lending practices. During a December 2015 visit to Delhi, Abe and Modi announced the “Japan and India Vision 2025,” a forty-four-chapter document laying out the bilateral special strategic and global partnership. The two nations saw themselves “as partners that are responsible for and are capable of responding to global and regional challenges . . . to realize a peaceful, open, equitable, stable, and rules-based order in the Indo-Pacific and beyond and to uphold the principles of sovereignty and territorial integrity, peaceful settlement of disputes, democracy, human rights and the rule of law, open global trade regime, and freedom of navigation and overflight.” The vision also inserted language referring to the South China Sea that “called upon all states to avoid unilateral actions that could lead to tensions in the region.”<sup>25</sup> India and Japan’s emerging relationship poses a direct threat to China’s interests and ambitions, and they have signaled a willingness to work together to increasingly box China in to protect their respective geoeconomic and geostrategic interests.

Joining forces at the strategic level has spilled into greater cooperation on economic development, defense issues, and technology sharing. In 2015, Japan was listed as India’s fourth-largest country involved in Indian FDI. But from a maritime perspective, they have become more unified in promoting a free and open Indo-Pacific. Each nation relies heavily on the free flow of energy trade and other maritime commerce. Japan, the world’s third-largest economy, is the biggest importer of LNG and the third-ranked importer of oil. Its trade depends almost exclusively on the sea. It is also important to note that Japan has ongoing maritime territorial disputes with China and Taiwan over what in Chinese are called the Diaoyu Islands and in Japanese the Senkaku Islands, meaning “sharp pavilions.” The growing rapprochement between Japan and India has first translated into greater defense cooperation, including the establishment in 2010 of a “2 + 2” dialogue that includes the defense and foreign ministers. This

dialogue marked the first time India had embarked on such a bilateral construct with a partner nation. A secondary implication and sign of the enhanced relationship is the growing number of joint naval exercises and naval leadership exchanges between Japan's MSDF and the Indian Navy, as well as between their respective coast guards. Starting in 2010, India and Japan began more regular naval leadership staff discussions, in addition to an already regular dialogue on maritime security. In 2011, Abe elucidated his aspiration that "sooner rather than later, Japan's navy and the Indian navy are seamlessly interconnected." Then, in 2012, the two nations began a Japan-India Maritime Exercise called JIMEX 12, first held in Japan. In 2015, the United States agreed to an Indian proposal to include Japan as a permanent member of the Malabar Exercises. The following year, Japan hosted Malabar near Okinawa in Japan; before this, Japan had participated by invitation only. That same year, Japan and India also agreed to a bilateral framework through which to discuss maritime security concerns. Additionally, Japan and India signaled the importance of their maritime defense relationship by stationing permanent naval attachés at their embassies in New Delhi and Tokyo. In 2018 the Malabar exercises were held off Guam's coast in the Philippine Sea.<sup>26</sup>

Aside from maritime security dialogues, talks, and exercises, India and Japan also began to ramp up promises for military or naval sales. In fall 2015, Abe's government passed legislation to reinterpret the constitution to permit collective self-defense. First, this meant "relaxing restrictions on its ability to play a security role in overseas operations." Second, Japan began to reconfigure its Self-Defense Forces to create a three-thousand-person marine brigade for amphibious operations that could be used to protect remote islands or to assist in countering China's A2/AD platforms. But most importantly for India, Japan's Diet loosened prior arms sales restrictions that had previously been in place, making it a more "normal" military power. Even with some of the rules lifted, India and Japan had already begun to enhance military sales when New Delhi put in a request to purchase between twelve and fifteen ShinMaywa US-2 amphibious aircraft from Tokyo that it saw during JIMEX 12. US-2 aircraft are capable of flying over 2,400 nautical miles and are therefore well suited for search and rescue, logistics support, or surveillance missions. The deal is significant because it is Japan's first foreign military sale in close to fifty years.<sup>27</sup>

Though the bilateral relationship between Japan and India still has much to

develop and overcome, the two nations appear more united against a rising China. Dhruva Jaishankar, formerly of the Brookings Institution India, has argued that “the forces driving deeper security cooperation between India and Japan are definite, and the progress over the past decade has been remarkable. More sophisticated naval exercises and an intensification of current trends are to be expected, while cooperation on nontraditional security issues—such as humanitarian assistance and disaster relief—remains an easy way of surmounting various political and legal obstacles to closer defense ties.”<sup>28</sup> This bilateral relationship will only blossom more over time and contribute to further congestion in East Asian waters and tension with China.

### Vying for Singapore

Singapore has become ground zero of sorts for maritime competition, primarily between India and China, but Russia has similarly made smaller movements recently to seek out a stronger relationship with the maritime city-state, including Putin’s first-ever trip to Singapore in 2018 for the third ASEAN-Russia Summit and East Asian Summit. Singapore also has strong ties with Taiwan, Japan, and other regional states. For the moment, it appears that India has made geostrategic headway with Singapore, as symbolized by their growing defense ties and naval cooperation. The “founding father” of Singapore, Lee Kuan Yew, has written previously that “India is the proper choice to counterbalance the rise of China.”<sup>29</sup> But China’s geoeconomic might continues to dominate the city-state and will ensure that China maintains its strong presence and influence into the future. Singapore’s challenge will be to balance these seemingly opposing forces and dynamics.

Sitting on the perch that oversees all maritime traffic traversing the Strait of Malacca, Singapore is the linchpin between the Indian Ocean and Pacific Asia, occupying a territory that is four times smaller than the size of Washington, D.C. At its narrowest point, the Strait of Malacca is just 2.7 kilometers wide. As the maritime historian John Curtis Perry wrote, “An early European visitor would call the straits, a place of cultural and commercial convergence, Asia’s ‘gullet,’ and, mindful of its wide-ranging significance in the spice trade, declared ‘Whoever is lord of Malacca has his hand on the throat of Venice,’ the center for distributing spices to consumers throughout Europe. If Venice were



the 'hinge of Europe,' so Melaka might have been described as the hinge of Eurasia."<sup>30</sup> This sentiment exists today, but the difference is that it is not European powers that are vying for maritime power and influence.

Singapore declared independence from Malaysia in 1965 and has subsequently risen as a maritime geoeconomic powerhouse compared to its developing neighbors. Singapore has been aided by making its port area a mainly tariff-free zone, thus transforming it into the largest transshipment hub in the world, with more than seven thousand logistics firms. It is also a central node for around 200 shipping companies with ties to an estimated 600 ports in more than 120 countries. Certainly, it is not invincible to financial shocks, economic downturns, or rising regional port competition and has been affected by global financial crises to varying degrees over the years. That said, Singapore has still been able to maintain a regionally competitive advantage with continued investments and FDI focused on its maritime sector. Its population is just shy of 6 million, but this also includes 1.6 million guest workers and more than 2 million foreigners, gesturing toward its chronic shortage of workers at all levels owing to sustained economic growth and output.<sup>31</sup>

As India has slowly moved eastward, Singapore has been a critical actor in India's efforts. Contrary to historical trends where the two nations have not been closely aligned, Singapore has recently emerged as one of India's strongest regional defense partners, a position that will continue to serve it well as it becomes more engaged regionally. (Singapore is considered one of India's largest FDI contributors, far surpassing other regional states.) After the Cold War, Singapore and India reassessed their relationship and began more concerted diplomatic efforts to strengthen ties. From 1993 to 2003, for example, they inaugurated the Singapore-India Maritime Bilateral Exercise (SIMBEX), which marked the first phase in their relations. During this period, India invited the Royal Singapore Navy (RSN) to participate periodically in the Milan Exercises, in addition to granting it basing access to India's facilities at Port Blair in the Andamans and Cochin at the Indian Navy's southern command headquarters.<sup>32</sup>

Beginning in 2003, India and Singapore strengthened their bilateral defense ties by signing a defense cooperation agreement that sought to improve intelligence sharing and expand naval ties further, as well as other defense sector coordination and collaboration. Bolstering naval ties meant that, beginning in 2005, SIMBEX was held in the South China Sea for the first time, including critical elements such as maritime interdiction. The Indian Navy has also be-

come a more frequent visitor of Singapore's Changi naval base. This promising relationship was elevated to a "strategic partnership" in 2015 during an official visit by Modi to Singapore, which included the announcement of an expansion of the prior Defense Cooperation Agreement from 2003. The 2015 agreement marked the fiftieth anniversary of the establishment of diplomatic relations between the two nations.<sup>33</sup> This was followed by the first-ever Defense Ministers' Dialogue in 2016. In November 2017, India and Singapore reinforced the relationship further by laying out additional defense cooperation agreements that focused specifically on maritime security and naval cooperation. An official statement released by India's Ministry of Defence announced, "The conclusion of the India-Singapore Bilateral Agreement for Navy Cooperation . . . will lead to increased cooperation in maritime security, joint exercises, temporary deployments from each other's naval facilities and mutual logistics support." The mounting bilateral maritime ties will also support India's efforts to gain a greater foothold in ASEAN's security dialogues and other maritime security initiatives that promote a "free and open Indo-Pacific." With a sympathetic foothold such as Singapore, India can use it as a critical springboard into East and Southeast Asia.<sup>34</sup>

Though India may have made important inroads into Singapore, by comparison, China remains geoeconomically dominant, as more than 20 percent of Singapore's GDP is tied to China. In 2015, Singapore had cumulatively invested \$121 billion in China, making Singapore China's largest foreign investor. According to recent estimates, China was both the largest investor and trading partner with Singapore, reaching an estimated \$79.5 billion. This is likely to continue apace as China seeks to integrate Singapore into the BRI and MSR. Chinese companies have more than doubled to 7,500 in the past five years. (By contrast, officially registered Indian firms total 8,000.) Because of the historic nature of the relationship, many Chinese businessmen feel at greater ease when conducting business in Singapore compared to countries in Africa. As one Chinese businessman asserted, "Chinese companies believe Singapore companies are easier to deal with, and they know how to deal with different markets."<sup>35</sup> The fact that more than 75 percent of Singapore's population is ethnically Chinese only adds to the complexity of the relationship, stoking fears for some regarding Chinese government pressure tactics or "influence operations" that could push Singapore to more closely align with China. (Ethnic Indians in Singapore only make up around 9 percent of the population, excluding the foreign

workforce, which consists of around 21 percent of Indian foreign nationals.) The further concern for some observers is that China has begun to blur “the distinction between *huaqiao* (Chinese citizens overseas) and *huaren* (ethnic Chinese of all nationalities).” President Xi, for example, remarked recently that “the realization of the great rejuvenation of the Chinese nation requires the joint efforts of Chinese sons and daughters at home and abroad.”<sup>36</sup>

Similar to elsewhere in East Asia, China is using maritime geoeconomic investments to gain a more permanent and substantial toehold in Singapore, maintaining its competitive advantage over other states. In 2016, the Port of Singapore Authority Corporation (PSA), owned by the Singapore state investment firm Temasek Holdings, announced a 51/49 joint venture with the Marseille-based firm CMA CGM to run four mega container berths at Pasir Panjang Terminal (PPT). It is important to note that in 2013, China Merchants Holding International purchased a 49 percent stake in CMA CGM’s terminal operation subsidiary, Terminal Link. In addition to an announcement with CMA CGM, PSA announced a broadened agreement with COSCO Shipping to expand three new large berths at PPT.<sup>37</sup>

COSCO-Singapore has already been an active and dynamic force in Singapore for many years. Aside from focusing on port development and oversight, it has focused on buying up relevant local or transnational firms that might benefit the larger company. In 2017 it announced that it would pay an estimated \$261 million with financing from the Bank of China for the Singapore-based logistics firm Cogent Holdings. The firm will benefit China’s regional Maritime Silk Road efforts, focusing on automotive logistics, container depots, project cargo, warehousing, and real estate management. COSCO-Singapore also recently announced another deal to purchase a 40 percent stake in the Indonesia-based Ocean Global Shipping company. COSCO Shipping (Southeast Asia) already owned a 49 percent stake in the firm and would hold on to just 9 percent of its prior stake, while Global Putra Indonesia Maritime will maintain its current 51 percent ownership.<sup>38</sup> China is likely to continue similar types of maritime geoeconomic investments as it expands and strengthens its increasingly independent supply and logistics network.

When it comes to China’s maritime geopolitics, it has tried to persuade Singapore to take a stance on various contested maritime territorial disputes that are more aligned with China’s position, but Singapore has largely resisted. Sin-

gapore has desired to maintain a more neutral posture because of its significant geoeconomic and geostrategic ties with Vietnam, the Philippines, Indonesia, Taiwan, and Malaysia. Recently, Singapore held the rotating ASEAN chairmanship, and in partial retaliation against Singapore's unwillingness to side more firmly with China over the South China Sea disputes, China withheld its invitation to a 2017 Belt and Road Summit in Beijing.<sup>39</sup> Certainly, China may attempt to geoeconomically leverage Singapore and others like this in the future. For the time being, however, Singapore maintains important agency and has not fallen into the same debt trap as others. It has also used its growing defense and naval partnership with India as another critical avenue by which to properly balance against China.

### Growing Chinese Navalism

As India ramps up its East Asian maritime and naval efforts, China's focus on its naval and coastal defense capacity is already well under way as it seeks to defend its growing interests across 300 million square kilometers of "blue territory," especially the South China Sea. The PLAN is viewed increasingly by some as a protector of China's economy. In 2006, then CCP general secretary and president Hu Jintao emphasized the need for China to build up its navy as part of China's larger great power aspirations. In a speech to PLAN officers, Hu highlighted the necessity to "endeavor to build a powerful People's navy that can adapt to its historical mission during a new century and a new period."<sup>40</sup> Additionally, over the past decade or more, a growing consensus has appeared within the PLA that recognizes the critical role a blue-water navy can play as a tool of Chinese statecraft to protect or defend interests, achieve great power status, and help undermine or alter a U.S.-led world order. As a Chinese scholar associated with the Academy of Military Sciences argued, "The strength of rights and interests at sea and a country's rise and fall are correlated phenomena. . . . If the navy is a strong force, then it can create a positive effect, and create a virtuous cycle with promoting overall development. Naval power is directly proportional to the development of a country's maritime interests." In addition to constructing a stronger navy, China's leadership began to prepare for its growing need to confront a spectrum of maritime security threats or conflicts. These concerns included a conflict with Taiwan first and foremost but

also factored in missions such as energy security; deterrence against external naval forces such as the United States, India, and Japan; humanitarian assistance and disaster relief noncombatant evacuations; and peacekeeping.<sup>41</sup>

China's buildup of its naval power as part of its great power vision and Chinese Dream—as well as its desire to stave off another “Century of Humiliation”—has resulted in ascending regional securitization. China's naval capabilities and power projection capacity have improved so significantly that many in the United States have warned that the United States is losing its competitive edge and might lose in a potential one-on-one conflict against China in the South China Sea. This is due in part to its A2/AD platforms installed across various new artificial islands and other Chinese-controlled atolls and reefs. China has also built warships in rapid succession and developed weapons systems that match or surpass those of the U.S. Navy. According to a recent RAND report, “The Chinese navy during the past two decades caught up to the United States by modernizing extraordinarily quickly by any reasonable historical standard.”<sup>42</sup> Here I examine China's burgeoning navalism in three parts: (1) rising investments in ships and personnel; (2) the buildup of artificial islands that support new basing outposts and a strong A2/AD capacity; and (3) more maritime aggression and naval exercises, including those with Russia. The end result is that East Asia is headed on a trajectory that will become more delicately balanced and overcrowded as more naval powers—India, Japan, Russia, and others—swarm the region protecting their interests and as Eurasia's maritime competition heats up. It is a classic security dilemma and is already resulting in the spread of more navalism as regional navies seek to counter China. As Patrick Cronin, former senior director of the Asia-Pacific Security Program at the Center for a New American Security, observed, “Throughout the duration of President Barack Obama's administration, a prevailing narrative has framed much of the foreign policy debate in hard power terms: China challenges the international order, major-power competition is reemerging, and there is a security dilemma in Asia.”<sup>43</sup>

### *Rising Investments in Ships and Personnel*

Part of President Xi's Chinese Dream is to modernize and reform the military by 2035, en route to becoming a world-class military by 2050. This helps to contextualize China's surging push to expand and transform the navy, along with China's other military services. Many in China see the development of a

blue-water navy as being a critical component to achieve greater international prestige, in addition to realizing the “rejuvenation of the Chinese nation.” Moreover, many recognize that if China desires to successfully carry out the BRI and MSR, it will need to develop a naval force that can protect maritime access and the sea lanes that run across maritime Eurasia, especially those closest to home in East Asia, where China feels hemmed in by the U.S. naval presence. In other words, China must be able to successfully defend or counteract any outbreak of maritime conflict within the first island chain near Taiwan or the Senkaku/Diaoyu Islands, for example, as well as being able to push successfully beyond the second island chain in East Asia, which extends some 1,600 nautical miles from China’s coastline.<sup>44</sup>

By some accounts, China has already achieved certain success in expanding its navy to defend against a potential conflict within the first island chain. In 2018 the PLAN had 330 surface ships and 66 submarines, making it the largest navy quantitatively in the world. By comparison, the U.S. Navy had 211 surface ships and 72 submarines in 2018, and some estimates project that by 2030 the U.S. Navy will have 355 ships and submarines total. Since 2015 the PLA has decreased the size of the army by some 300,000 personnel while increasing the size of its navy, coast guard, maritime militia, and air force. In 2018 the PLAN had 235,000 personnel, but this number is expected to grow under President Xi’s military reforms, which aim to add a PLA Marine Corps of up to 100,000 soldiers who could carry out expeditious and amphibious operations across the Indo-Pacific.<sup>45</sup>

China’s naval buildup will no doubt reconfigure East Asia’s naval balance. China has succeeded in its naval modernization and expansion efforts in part by its purchase of advanced Russian destroyers, submarines, and antiship cruise missiles, which provide the PLAN with experience in operating sophisticated platforms. Since 2004, Russia has supplied the PLAN with eight Kilo-class SSKs. China’s first aircraft carrier was similarly a retrofitted Soviet-carrier called *Liaoning*, entering the PLAN formally in 2012. Assisted by using Russian platforms to gain greater experience and technological insights, China’s shipbuilding and defense sectors have honed and perfected its own engineering, development, and construction of highly technological platforms and ships as large as an aircraft carrier that can compete successfully against other near competitors.<sup>46</sup>

Over the past decade, China’s national psyche has been enthralled by the idea

of developing an indigenous aircraft carrier that symbolizes its great power status and ability to compete with other world navies such as those of the United States, Russia, and India. With sustained determination and significant resources, the PLA has been able to realize such a goal. In May 2018, the PLAN began sea trials for its first indigenous aircraft carrier, the *Shandong*. Over eighteenth months, China conducted nine sea trials before the *Shandong* was commissioned into the PLAN on December 17, 2019. It is a significant event for any nation, but China is unlikely to stop there. In fact, China started construction on its second indigenous aircraft carrier (designated Type 002) in 2018, bringing the PLAN's total to three aircraft carriers in the near future. According to Richard Fisher, a senior fellow on Asian military affairs at the International Assessment and Strategy Center, "By the early 2030s China could be deploying the world's first completely nuclear-powered aircraft carrier battle group: nuclear carrier; nuclear escort cruiser; escort nuclear attack submarine; and nuclear underway replenishment ship. Such a naval force will give the CCP leadership options for rapid deployment with far less reliance on a network of bases."<sup>47</sup> Though whether or not China will need access to additional forward operating bases to sustain its "far seas" operations is debatable, such potential development signals the growing maritime might of China and how it will be harder for the United States, India, Japan, Russia, and others to keep pace with China's current shipbuilding rates.

In the past decade or more, China has moved from importing naval vessels to producing six new classes of locally engineered and constructed warships, including destroyers, frigates, and corvettes. It has also started to invest more heavily in air power to support its navy and growing regional interests, together with improving its command-and-control structure to handle emerging threats and security challenges. China's most recent naval advancements, however, are significant. According to Toshi Yoshihara of the Center for Strategic and Budgetary Assessments and James Holmes of the U.S. Naval War College, "The Type 052D Loyang III destroyer, the Type 054A Jiangkai II frigate, and the Type 056 Jiangdao corvette have all entered serial production, adding mass and balance to the fleet," making the PLAN "the second most capable 'far seas' navy in the world" behind the United States. Such surface vessels could be an important wing of the PLAN's overall structure, since these destroyers can operate with lethality and independently on missions such as accompanying and protecting amphibious assault ships or defending its South China Sea artificial

islands. Most Southeast Asian nations are unlikely to be able to protect against China's new class of surface vessels, placing them in an increasingly vulnerable position. China might soon have sixteen or more types of surface ships in operation, compared to Japan, which only operates six equivalent Aegis ships, and Korea, which operates just three (with three more in production). The U.S. Navy's competitive edge is also on the wane because of recent budget woes. Additionally, it was recently reported that retired PLAN admiral Zhao Dengping implied during a university lecture that "along with its aircraft carrier battle groups it is likely that the PLAN will also deploy new medium and intermediate range ship-based missiles, for land-attack, anti-ship and even anti-satellite missions. . . . Admiral Zhao indicated that a ship-launched anti-ship ballistic missile (ASBM) with a hypersonic maneuvering warhead may be in development."<sup>48</sup>

Though China has made great advances in its surface vessel construction, it has not moved as rapidly with its submarine construction compared to Russia or the United States. China has still made certain headway and improvements that will likely enhance its capacity and undersea capabilities in the future, making it possible to confront U.S. submarines directly. Most of China's submarines fall under the Yuan-, Song-, Kilo-, and Ming-class patrol submarines. Its most noticeable advance, however, has emerged with the Type 094 Jin-class nuclear-powered missile submarine (SSBN) that was first commissioned in 2007. This was followed by three more Jin-class submarines, launched in 2010, 2012, and 2015. A fifth one may be on the way soon. China has also commissioned four Type 093 SSNs in the past decade, with additional ones coming. It is believed that a combination of its SSNs, SSBNs, and other diesel-powered submarines will be able to counter or intercept future U.S. Navy carrier task groups effectively. The development of such a versatile submarine fleet will enable the PLAN to have a legitimate sea-denial capacity against rival powers, especially with its growing number of ASBMs; enhanced seabed sensors; and intelligence, surveillance, and reconnaissance (ISR) abilities. China recently completed sea trials on submersible manned vehicles that could descend more than seven thousand meters, making China's research and exploration capacity one of the most sophisticated in the world. Aside from growing its submarine fleet, China is investing heavily in both short-range and long-range unmanned aerial or submersible vehicles that can deploy ISR and other communications components successfully in future PLA naval missions. Some analysts speculate that China has been developing a midget submarine since 2014. These sub-



mersible craft are believed to be around thirty-five meters long with a beam of four meters.<sup>49</sup> This type of submarine development could emulate a partial strategy, similar to the *Jeune École*, that deploys small, fast, and highly maneuverable vessels that can operate stealthily in a variety of congested spaces, especially an environment such as the South China Sea.

The PLAN has most certainly made significant advances across its fleet and various technological platforms, but many still wonder what this might mean during an economic slump. By some accounts, China can weather a GDP slowdown because it will likely be able to continue with ship maintenance, repairs, and general upkeep. Moreover, it has already produced a sufficient number of ships to rival the U.S. Navy and other near competitors in East Asia, along with becoming a more commanding force across the Indian Ocean. As a result, China will likely remain a formidable naval foe despite economic downturns.<sup>50</sup>

#### *Artificial Island Buildup*

Another key component of China's growing navalism is the construction of artificial islands that can serve as new basing outposts to assist its more aggressive naval power projection and defense of its maritime geoeconomic interests. The new military bases enable China to intimidate regional neighbors that desire to see the disputed maritime territories resolved legally through the application of the United Nations Convention on the Law of the Sea (UNCLOS). Resolving the territorial disputes legally, however, is becoming a greater challenge as China develops its forward operating presence and develops maritime gray-zone tactics that use its maritime militia, coast guard, or even navy to keep other rival actors out of certain contested areas. As demonstrated by the 2016 Permanent Court of Arbitration ruling in the dispute between the Philippines and China, no enforcement mechanism exists to uphold international legal decisions tied to UNCLOS; China has also been successful at flipping countries such as the Philippines through a variety of economic and political incentives to adopt official Chinese policies. China has generally refused to engage in multilateral negotiations with ASEAN over issues tied to the South China Sea, including thwarting attempts at establishing a "Code of Conduct."<sup>51</sup> The intent here is not to recount the legal and strategic history of the occupied features of the South China Sea or East China Sea but rather to highlight some of China's recent activities, especially in the Spratly and Paracel Islands, that contribute to

the region's overall securitization. This germinating securitization only feeds into East Asia's competitive maritime dynamics and regional security delicacy.

During a 2015 speech delivered in Canberra, Australia, U.S. Admiral Harry B. Harris Jr., then head of the Pacific Command, referred to China's artificial island buildup as "unprecedented land reclamation." When referring to China's maritime activities, he emphasized that "China is creating a Great Wall of sand, with dredges and bulldozers."<sup>52</sup> The South China Sea's islands, coral reefs, and shoals have long been a fascination and point of focus for the PRC. In the 1980s, for example, Admiral Liu Huaqing, then commander of the PLAN, noted that "whoever controls the Spratlys will reap huge economic and military benefits."<sup>53</sup> With China's emerging great power status and maritime might, it has been able to transform its efforts to secure its forward presence across the South China Sea and thus its further control over the sea lanes of communication. As China grows its presence across the Spratlys and Paracels, it makes it harder for the United States, India, Japan, South Korea, and others either to enforce the legal principles of UNCLOS or to conduct freedom-of-navigation operations. During his confirmation hearings to become the current U.S. commander of the Indo-Pacific Command, Admiral Philip Davidson stated, "China is now capable of controlling the South China Sea in all scenarios short of war with the United States."<sup>54</sup>

One of the difficulties in monitoring the various disputes of the South China Sea is its sheer size at 3.6 million square kilometers. The more relevant challenge within the South China Sea is that the several hundred small islands, reefs, rocks, and islets that occupy the space only amount to a total of 15.5 square kilometers. Though China has varying disputes in the South China Sea, most Chinese development and aggression have occurred within the unit groupings of either the Spratlys or Paracels. The British journalist Humphrey Hawksley asserts that "these rocky islets represent a battle for the soul of Asia that is already rippling across thousands of miles to challenge governments on every continent. It is a contest that comprises opposing visions and values, shifting power, competition for control, and structures of government." The Spratlys are contested between China, Taiwan, Vietnam, the Philippines, and Malaysia, and the Paracels are disputed between China, Taiwan, and Vietnam. The Spratlys have more than 230 territorial units, including twenty-five islets above the high-tide line, as well as rock outcroppings, reefs, and shoals; the Paracels possess twenty-three main features between the Crescent Group in the east and the Am-

phitrite Group in the west. China has repeatedly used historical claims—until now unsuccessful at any international legal tribunal—as the core of its argument citing jurisdiction and sovereign rights over each disputed territory. China frequently cites the nine-dash line, often referred to as the cow’s tongue, that was established under the Nationalist Chinese government after World War II.<sup>55</sup>

One of the first islands the PRC controlled in the Paracels was Woody Island, called Yonxing in Chinese, or “Eternal Prosperity Land,” beginning in 1955, but it began to take a more aggressive stance in the Paracels toward the end of the Vietnam War. China also took advantage of the fluid nature of the war’s end to take over additional islands within in the Paracels. (Since then it has strategically applied stall tactics to avoid a negotiated settlement in the Paracels, hoping to strengthen its claims while also expanding its military presence.) Aside from the Paracels, the PRC also focused on the Spratlys. In 1988, for example, during a brief skirmish between China and Vietnam, China took over Johnson Atoll in the Spratlys, along with an additional six reefs by year’s end. Then, in 1995, China occupied Mischief Reef near the Palawan Island in the Philippines, and most recently in 2012 China took de facto control over Scarborough Shoal in the Philippines.<sup>56</sup>

Over the past several decades, Chinese island construction and fortification across its South China Sea territories have only grown more significant and expansive as China improves its maritime engineering abilities with dredging, land reclamation, and military base construction atop its many disputed rocks, shoals, and reefs in the South China Sea. According to one estimate, Chinese dredging has added more than 3,200 acres of reclaimed land for seven of the land features that it possesses in the Spratlys; by some estimates, that constitutes a more than 25 percent land increase in the South China Sea. By the end of 2018, in some instances after only three to four years of dredging and land reclamation, China had more or less completed naval, air, and missile bases or installations on seven main Spratly features: Fiery Cross, Subi, Cuarteron, Gaven, Hughes, Johnson, and Mischief Reef. This also included the construction of port and aviation infrastructure, weapon depots, antenna farms, early warning radars, and other sensor or communication structures. Additional reports cited the successful deployment of antiship and anti-aircraft missiles across several South China Sea islets, including the possibility of reaching as far away as the U.S. base in Guam. Fiery Cross Reef achieved additional triumph recently with its ability to handle any type of PLA plane or jet. A similar feat was

accomplished in 2018 on Woody Island when a long-range bomber made a successful landing. Woody Island remains the largest and most militarily sophisticated island today, with around one thousand inhabitants (mainly military and government personnel), a recently expanded 2.7-kilometer-long runway, and updated port facilities.<sup>57</sup>

In the process of building up its new South China Sea island network of basing outposts and military facilities, China carved out a substantial swath of sea that is equipped with a significant A2/AD capability. Such a capability will only serve China well in a future outbreak of conflict with the United States, Japan, India, or another power. It will never completely deter all powers from entering or patrolling certain areas across the South China Sea, but it might create a new and more formidable maritime line of defense as part of its larger strategy. It also might score strategic counterpunches against a larger adversary such as the United States. The combination of missile systems such as the YJ-12 supersonic antiship missiles (ASMs) and the medium- to long-range HQ-9B fourth-generation surface-to-air-missiles (SAMs), as well as military jamming equipment, seabed-based sensors, and early radar warning systems, provides China with some of the most advanced weaponry and technological platforms to deter or defeat an adversary. Additionally, China has recently purchased Russian S-400 SAMs that will similarly enable China to control Taiwan's airspace in the event of a conflict. It permits China to establish an air defense identification zone, which is useful when controlling foreign aircraft flying over disputed areas in the East and South China Seas. In the future, China hopes to be able to deploy up to seventy combat aircraft and several surface warships and other smaller combat vessels from three of its main island bases.<sup>58</sup>

The sum of China's militarization of its South China Sea islands is that it has growing sea control and sea deniability. China has now begun to push farther south into the South China Sea, thus creating a new maritime perimeter that can better protect its coastline and near seas, including its military and naval installations on Hainan Island. This also means that China has an emerging basing network and power projection capability to extend its maritime reach beyond just the South China Sea. China's naval and island expansion does not come, however, without significant risks of confrontation with regional and external powers alike. For one, the region's securitization will only ratchet up the rhetoric and potential points of friction where deep levels of historic mistrust already exist. As Ian Storey, a senior fellow at the ISEAS-Yusof Ishak Institute in Sin-

gapore, recently argued, “It has always been the risk with the South China Sea that a small incident in remote waters escalates into a much larger crisis through miscommunication or mishandling. That’s why this is all so dangerous. It’s not just a pile of rocks that can be ignored.”<sup>59</sup> Moreover, India, Japan, and the United States will not likely sit idle as China continues growing maritime aggression that both undermines principles of international law and promotes bullying smaller states into submission or acceptance of China’s maritime hegemony.

*More Chinese Maritime Aggression and Naval Exercises*

The Chinese expansion of naval ships, personnel, and islands has enabled more proactive naval diplomacy and high-seas aggression, a third key characteristic of China’s growing navalism. On the one hand, China has embarked on more patrols and intimidation tactics, deploying both official ships and its maritime militia, which operates in the gray areas of the maritime domain. This also means more joint naval exercises with Russia and other willing participants. But the end result is additional overcrowding and rising tensions.

Japan and Taiwan have both remarked on a noticeable increase in Chinese naval patrols and maritime aggression near their respective territories around the Senkaku/Diaoyu Islands. At the heart of the dispute between China/Taiwan and Japan in the Senkakus are eight uninhabited rocks and islands that are controlled by Japan near Okinawa Prefecture in the southwest. The islands cover an area around seven square kilometers. Before 2012, the PLAN stayed on the western edges of a median line in the Senkakus, but since 2012 China has become more aggressive, patrolling more on the eastern side of the dividing line, much to the consternation of Japan. China is similarly using its naval deployments to further “tighten the noose” on nearby Taiwan. In 2015 the PLAN carried out live-fire exercises near Taiwan that included nearly 10,000 personnel, 48 naval vessels, a nuclear-powered submarine, and 76 fighter jets. Taiwan has always been a core interest and focus of the PRC, but the PRC has increased its cross-straits exercises recently to intimidate and scare Taiwan’s government and its people. It performed a similar live-fire exercise again in 2018 just as three U.S. aircraft carriers sailed near the area.<sup>60</sup>

Outside of the Senkakus, the PLAN has demonstrated its willingness to taunt both Japan and the United States alike. In 2010, Japanese and Chinese ships had a close encounter when PLAN ships out on deployment skirted Japanese waters. When confronted by Japan’s MSDF, the PLAN sent a helicopter to buzz

one of the Japanese warships, circling it twice. As remarked by several analysts, China's navy is pushing farther east, closer to Japanese waters, which has not been previously witnessed at the same levels. Then, in September 2018, the USS *Decatur* and a PLAN vessel came within forty meters of each other during a U.S. freedom-of-navigation sail. The close encounter was viewed in the United States as an expression of China's growing aggression and desire to limit who is permitted to enter the disputed territory.<sup>61</sup>

Aside from acting more aggressively on the high seas, China bolstered its maritime security cooperation with willing powers such as Thailand and most importantly Russia. In Thailand, China conducted its first bilateral naval exercises beginning in 2004. This was followed later with the Exercise Blue Strike maritime drills in 2010. In 2017, Thailand announced that it would purchase up to three Chinese-built submarines. This was coupled with news that China would likely operate and manage a submarine maintenance and training depot at Sattahip naval base in Thailand.<sup>62</sup> The access will grant China another strategic node along its growing maritime supply, logistics, and basing network.

Last but not least, Russia. Since 2012, Russia and China have conducted the Joint Sea naval exercises. The first one took place in the Yellow Sea, but the joint naval exercises have subsequently been conducted up and down East Asia, as well as in western Eurasia, as examined in prior chapters. Additional locations have included the Sea of Japan, East China Sea, South China Sea, and Sea of Okhotsk. In 2017, Russian submarines reportedly docked in the Philippines while a PLAN submarine allegedly landed at Kota Kinabalu, a naval base in Malaysia. It is uncertain as to whether or not this was a coincidence or a growing trend. Russia and China have more in common for now with their shared desire to undermine a U.S.-led world order.<sup>63</sup>

For its part, the United States has tried to support regional powers in their own efforts to counter China's maritime rise. It regularly sponsors regional exercises such as the Cooperation Afloat Readiness and Training (CARAT) or the Southeast Asia Cooperation Against Terrorism (SEACAT) in the South China Sea. In 2014, the United States also supported or sponsored more than three hundred ship visits and drills across Asia. The United States recently established a five-year \$425 million Maritime Security Initiative to support more domain awareness and maritime security cooperation to critical maritime partners in Southeast Asia. The American scholar Patrick Cronin believes, however, that "without strong economic power and diplomatic engagement, the United States will con-

tinue to face tremendous challenges in converting military power into strategic influence.”<sup>64</sup> China’s growing naval aggression and power projection capabilities are unlikely to abate anytime soon, contributing to more regional navalism and a more fragile security architecture.

### Russia Looks East

Since 2014 and the tightening of international sanctions after Russia’s annexation of Ukraine, Russia has increasingly focused on its eastern posture as a way to buoy its economy and international posture. The Russian tilt toward the east, however, has been a long time in the making but also accelerated after the events of 2014, especially between Russia and China. From 2001 to 2013, Russian trade increased 996 percent with Japan, 1,434 percent with China, and 1,890 percent with South Korea. But the most significant boost in bilateral relations—not just from a trade standpoint—has been the ascending relationship of Russia and China, which is the main focus here. Though China and Russia share one of the longest land borders in the world at 4,200 kilometers, including continued cooperation via the land transportation corridors that weave across Central Asia, the two countries have begun to interact and cooperate geoeconomically and geostrategically in maritime East Asia. For one, China has extended a helping hand to aid Russia’s ailing economy. China is also motivated because of its need for vital natural resources, advanced military technology and platforms, and another partner across Eurasia. But Russia is also inspired because, aside from establishing stable trading relations, it, too, seeks to develop Russia’s Far East (RFE). The RFE lines the Pacific Ocean and is the largest federal district, with 6.2 million square kilometers, but it is economically depressed despite its vast wealth in natural resources. Russia’s Pacific Fleet, which is stationed in the port city of Vladivostok, has similarly experienced certain shortfalls and budget woes recently and will no doubt indirectly benefit from more development and an infusion of funding.<sup>65</sup>

China and Russia have had a hot-and-cold relationship historically, but beginning in 1996, they signed a “strategic partnership,” and then in 2001 they agreed to a Treaty of Good-Neighborliness and Friendly Cooperation. They now refer to the relationship as a “comprehensive strategic partnership of coordination,” which sits below the more formal status of an alliance. Some analysts in both Russia and China would like to see the partnership upgraded to a

formal alliance. Despite the terminology or framing of the partnership, there are still limits to this construct, including institutional mistrust. Nevertheless, the two countries have been on a trajectory of greater rapprochement since the end of the Cold War, and their emerging great power identities have been a critical bonding agent in their bilateral ties. Since the 2000s, they have largely resolved many of their historical grievances and border concerns, but potential points of friction or diverging national interests certainly still exist between China and Russia in countries such as Vietnam or elsewhere in East Asia. That said, the broader relationship has become more robust, both geoeconomically and geostrategically, in recent years. Moreover, as articulated by Gilbert Rozman, a sociologist at Princeton University, “In 2013, Xi Jinping’s ‘China Dream’ and Putin’s obsession with the threat from the West intensified this critique. The obvious conclusion is that for both states, but especially China, the post–Cold War era is best characterized as a struggle between two civilizations: theirs and the West.” Others have remarked that U.S. foreign policy, including sanctions and the trade war, under the Trump administration have pushed Russia and China closer together.<sup>66</sup>

China remains the leading partner for Russia in East Asia, economically and militarily, and this will only strengthen over time as their two economies become more enmeshed. Russia benefits from the growing connectivity with China over land and at sea, including more joint naval exercises that help to promote interoperability and a show of force. But as Russia attempts to further ingrain itself into maritime East Asia, it will only complicate the security balance and Eurasia’s bigger maritime competition. Russia, for example, desires to expand its fleet and thus will contribute to Eurasia’s navalism, in addition to using the RFE as an essential jumping-off point into East Asia and Russia’s High North.<sup>67</sup>

#### *Growing Sino-Russian Geoeconomic Ties*

The 2008 global financial crisis affected Russia and China to varying degrees, but for the past decade or more, based on several external and internal factors, they have accelerated their bilateral geoeconomic relationship. Though not the main focus here, the BRI’s land corridors that traverse Eurasia’s heartland, along with Russia’s proposed Eurasian Economic Union (EEU), both have overlapping interests that have grown in significance similar to those of China’s MSR. China and Russia have made many recent land route or border crossing improvements, including the ongoing construction of the 2.2-kilometer Amur



bridge that will link China and Russia via a 19.9-kilometer highway, enhancing overland trade and connectivity significantly by shortening certain transit distances some 700 kilometers. As Sergei Razov, Russia's ambassador to China, recently remarked, "Objectively speaking China is one of the few genuinely strategic partners our country has."<sup>68</sup> One Chinese scholar similarly asserted, "As China's relationship with the United States increasingly experiences turbulence and uncertainty, Sino-Russian ties will continue to rise in their overall importance in China's foreign diplomacy outlook."<sup>69</sup> The growing concern for Russia, however, is that it is becoming increasingly beholden to China's geoeconomic might, since Russia has suffered under mounting international scrutiny and sanctions. Russia still stands to gain significantly, especially as it attempts to establish itself in maritime East Asia.

In recent years, China's and Russia's economies have become more complementary and intertwined as Russia provides China with significant raw materials and natural resources, and China provides manufactured products and other cheap products that are dumped into Russian markets. In 2009 China agreed to provide \$25 billion in loans to Rosneft and Transneft, including the construction of a new pipeline, for 110 million barrels of Russian oil spread over twenty years. By 2016, Russia had become China's number one oil importer, with most oil arriving via pipeline or the sea. China is Russia's most important bilateral trading partner, compared to Russia's ranking in the top ten for China. Between 2014 and 2016, China and Russia signed more than one hundred agreements in the areas of finance, transportation, technology, energy, and mining. The biggest deal of all came in 2014 with the announcement of a thirty-year, \$400 billion natural gas deal that included Russian gas from the Far East and eastern Siberia, in addition to selling China stakes in Russian oilfields and other natural gas projects. New agreements and Russia's increasingly eastern focus have also translated into booming bilateral trade with China. By the end of 2018, trade hit \$100 billion, up from \$84 billion 2017, with future projections placing bilateral trade at \$200 billion by 2020.<sup>70</sup>

Nonetheless, Russia still aims to take advantage of the geoeconomic partnership by being able to focus more funding and development for its Far East. The RFE is one of the least developed and sparsely populated areas, with around six million people, just 4 percent of Russia's population, but its twenty-five-thousand-kilometer coastline offers Russia great geoeconomic and geostrategic potential to tap into East Asia's emerging economies. (By comparison, the Chi-

nese provinces neighboring the RFE possess an estimated 120 million people.) The RFE is tied significantly to maritime trade, with more than 80 percent of the RFE's supplies arriving via the sea. The RFE possesses twenty-eight of Russia's sixty-four maritime ports, acting as critical nodal or logistical transfer points for goods headed either west via rail or eastward to and from the sea. One of the RFE's most strategic seaports as the only warm-water port in the Pacific is Vladivostok, which in Russian means "Master of the East." Vladivostok has a population of around six hundred thousand, but its geographic location is also vital, nested within the Sea of Japan and in close proximity to the Korean Peninsula, Japan, and the opening of the Bering Strait to the north. The RFE ports, however, are generally run-down and inefficient, lack greater capacity, and can only handle a paltry 0.6 percent of the container traffic that traverses East Asia. As Russia's largest regional port, Vladivostok only handled 0.84 million TEUs, according to recent estimates, which accounted for around 18.2 percent of all Russian container traffic. Most of the cargo handled across the RFE was mainly coal, and this appears likely to remain constant moving forward. Russia's ports are therefore in dire need of major upgrades and expansion if Russia is to increase its capacity or throughput and thus succeed at integrating itself more into the region's economic engine. Some recent reports have gestured toward the fact that RFE ports have experienced significant double-digit growth in maritime container cargo traffic, especially because of rising trade with China and other state-sanctioned trade and assistance. But this growth still needs to be buoyed by more government and private-sector investment, in addition to the adoption of more simplified customs controls that speed up the transit time of maritime cargo. This will, in turn, ensure that Russia's economic growth is sustainable in the maritime sector and therefore contributes to Russia's larger aim of establishing itself as a great power in Asia.<sup>71</sup>

The RFE's port and other transportation development might not significantly materialize anytime soon, but recent activity has emerged that could bode well for regional development if China becomes more heavily involved. China is self-interested because Russia possesses abundant natural resources beyond just oil and gas that will help fuel China's economy. According to one report, the RFE produces 100 percent of Russia's diamonds, 64 percent of its silver, and 59 percent of its gold, among other earth minerals. The RFE also possesses Russia's largest coal and fifth-largest hydrocarbon reserves. In a sign of the shifting tide in Sino-Russian relations, Russia's Far East Development minister

Alexander Galushka and the chair of China's National Development and Reform Commission He Lifeng signed a memorandum on cooperation in 2017 worth an estimated \$5.15 billion (300 billion rubles) to carry out a development plan for two international transport corridors linking China and Russia, Primorye-1 and Primorye-2. Though still in their initial development phases, the transport corridors include important maritime and port connectivity components that would tie Chinese and Russian ports more closely together in the future. According to one report, "Primorye-1 includes the route Harbin–Mudanjiang–Suifenhe (all in China)–Pogranichny (Dunnin-Poltavka)–Ussuriysk—the ports of Vladivostok/Vostochny/Nakhodka. Primorye-2 will link the Chinese province of Jilin (Changchun–Jilin–Hunchun) with the ports of Slavyanka, Zarubino and Posyet in Primorye."<sup>72</sup>

More positive Sino-Russian development signs emerged at the 2018 Eastern Economic Forum, when President Xi became the first Chinese leader to attend the annual event. During the discussion hosted in Vladivostok, in a sign of their blossoming ties, Xi and Putin were pictured together making Russian pancakes with caviar, followed by a shot of vodka. A press release from the forum announced 175 agreements worth approximately \$42 billion, with most signed by Chinese firms—though it is still uncertain how many will come to fruition. As part of the BRI, Russia has already received \$46 billion for some BRI-related projects, according to some sources.<sup>73</sup>

Despite the increased momentum for more development in the RFE, China has expressed its desire for more regional economic integration. During Saint Petersburg's Economic Forum in spring 2014, Chinese vice president Li Yuanchao delivered a noteworthy address citing the RFE's importance in the larger Sino-Russian economic relationship: "We intend to integrate as one whole the program of the RFE development and the strategy for rejuvenating in northeast China. . . . If we are successful in connecting northeast China with the RFE . . . we will create a single economic integration zone."<sup>74</sup> China's newly eager rhetoric in favor of the RFE may exacerbate some fears within Moscow regarding China's push northward into Russian territory and possible attempts to reclaim the territory it lost to Russia in the Treaty of Beijing from 1860. Until recently, Russia has tried to limit the establishment of Chinese-owned firms that might economically overrun the RFE, and thus Russia's grip on power. For now, Russia has limited options, and as a result, the geoeconomic relationship appears to be moving apace owing to the strong incentives for both Russia and China. In

the RFE regional capital of Khabarovsk, for example, 45 percent of FDI arriving to the city comes from China, and to the south in Vladivostok, the Chinese are investing significant amounts of money to develop the city into a tourism destination, in addition to a Eurasian trading hub. By 2013, China had already represented 52 percent of Vladivostok's (Primorye) external trade. Some observers also speculate that China Merchants Group has explored investment and development of the Far East Russian container terminal in Posyet, but the project has yet to begin. Additionally, Russian and Chinese companies announced in 2014 that they intended to jointly fund and develop Zarubino Port in Trinity Bay located where the Russian, North Korean, and Chinese borders intersect. The proposal was to develop the port's capacity to handle 100 million tons per year. But thus far, the port only handles a trickle of maritime cargo, and the larger project does not appear to have gained much more significant traction.<sup>75</sup>

In the end, Russia has the natural resources, and China wants them. As one scholar who sees the RFE as a bellwether for Russia's future East Asian advancement argued, "The RFE's course over the next ten to fifteen years will indicate how successfully—or otherwise—Moscow is addressing some of the critical weaknesses in its approach toward Asia, such as instrumentalism. Historically, the RFE has mattered to it primarily as a springboard for asserting Russia as a Eurasian empire and Pacific power."<sup>76</sup> One should also note, however, that many in Beijing are gravely concerned over the possibility of a maritime blockade in the event of a crisis, and this is partly why it seeks better geoeconomic ties with Russia. As China's dependence on maritime trade and Eurasia's sea lanes of communication grows, especially in the South China Sea, this fear is not entirely unwarranted. Diversifying its trade routes to include the RFE and other northerly sea routes is therefore a good strategic move for China.<sup>77</sup>

#### *Russian Navalism and the Future of Sino-Russian Naval Ties*

Though Russia's Pacific naval fleet is not of the same caliber as its western or northern fleets, Russia has focused more on its buildup and development. Many obstacles lie ahead for the Pacific Fleet's full development, but its growing relationship and ties to China's navy, including more regular and advanced joint naval exercises, will only contribute to increased navalism and more maritime competition. Certain points of friction might exist between China and

Russia over Russia's recent moves to strengthen its ties with Vietnam, which has an ongoing maritime dispute with China in the South China Sea, but the general prognosis is that China and Russia are likely to stay more aligned so long as the United States remains the primary regional adversary. This will result in further ratcheting up maritime competition and the security balance that encompasses Japan and India, in addition to other regional states such as South Korea, Taiwan, and Australia.<sup>78</sup>

Russia might have the desire to tilt eastward in its naval focus, but its Pacific Fleet still lacks additional funding and assets to upgrade and modernize the fleet properly. The Russian navy has begun to modernize certain elements of its fleet and capacity in the Far East—though it still falls well behind China's naval fleet. The current Russian Pacific Fleet is smaller than the Russian Northern Fleet, possessing fifty-two surface vessels and twenty-three submarines, with many vessels approaching their end of life. The possibility exists that an estimated two to four vessels could arrive in the near future, according to a Russian spokesperson. Others also question whether or not Russia may expand its regional basing presence beyond the RFE coastline, including a possible base in the Kuril Islands chain or on either Iturup or Matua Island specifically, where the Japanese once held separate Second World War garrisons. Japan claims many islands along the chain and has expressed unease with Russia's proposal because it would give the Russian navy another platform to monitor and militarize the region's sea lanes of communication.<sup>79</sup>

Despite certain observations that Russia's naval modernization efforts have stalled, it does not appear to have slowed its continued seaward push into East Asia. Moreover, many professional analysts and observers view Russia's maritime presence as an increasing threat. In 2016, the then commander of the U.S. Pacific Command Admiral Harry Harris acknowledged during testimony to the U.S. House Armed Services Committee that "ships and submarines of the Russian Pacific Fleet and long-range aircraft routinely demonstrate Russia's message that it is a Pacific power." Harris claimed further that "Russian nuclear-powered ballistic missile submarines (SSBNs) and nuclear-powered attack boats (SSNs) continue to be especially active in the region. . . . The arrival in late 2015 of Russia's newest class of [SSBN] in the Far East is part of a modernization program for the Russian Pacific Fleet and signals the seriousness with which Moscow views this region." Chief of Naval Operations Admiral John

Richardson also perceived in a similar manner that “[Russia’s] Asia-Pacific presence was part of a wider strategic effort to propel Russia’s navy back on to the global stage.”<sup>80</sup>

One way for Russia to overcompensate for some of its modernization efforts is to continue the deployment of its current fleet deeper into East Asia. As mentioned earlier, the joint naval exercises with China symbolize Russia’s further embrace of the sea, including a more active blue-water navy. In 2014 the Russian navy deployed a task group near northern Australia ahead of a G20 summit. The Pacific Fleet’s flagship cruiser, *Varyag*, led the group in a show of strategic force. (*Varyag* has also participated in missions as far afield as Syria.) In May 2016 the Russian Pacific Fleet conducted another important signaling message when it deployed the Udaloy-class destroyer *Admiral Vinogradov* as part of a larger naval flotilla to participate in a maritime exercise in the South China Sea hosted by the ASEAN Defense Ministers’ Meeting. Another alleged incident from 2016 took place when Russian ships reportedly sailed into the contested Senkaku/Diaoyu Islands just as a Chinese PLAN frigate transited the area. All of it occurred just before the start of the India-U.S.-Japan Malabar Exercises, hosted that year near the Philippine Sea. In 2019, as previously noted, a Russian warship, sailing 1,900 kilometers from the Pacific Fleet’s home port in Vladivostok, had a near collision with a U.S. warship in the Philippine Sea in a likely sign of what more is to come from Russia’s navy.<sup>81</sup>

As Russia becomes more enmeshed in maritime East Asia, it has had to tread delicately in balancing its regional interests and relationship vis-à-vis China. But as Russia moves more closely into China’s orbit, it has started to align more closely with China’s general policies, adopting the “One China” policy related to Taiwan and Tibet and siding more readily with China in the South China Sea. In September 2016, in a first for the two powers, China and Russia’s Joint Sea exercise took place in the South China Sea. Over an eight-day period, the two navies conducted island and reef seizure drills, but spokespersons for each government denied that the exercises were aimed at any specific third party. The exercise followed the July 2016 maritime dispute ruling by the Permanent Court of Arbitration in favor of the Philippines over China in the Spratly Islands. During the G20 Summit later that fall, President Putin asserted that Russia “stood in solidarity with China’s position of not recognizing the court’s decision and opposing the interference of third parties in the South China Sea dis-

pute.” This was an important gesture because Russia has previously tried to establish its neutrality—even before the G20 Summit, it tried to stake a neutral claim—on the South China Sea maritime conflicts.<sup>82</sup>

Russia’s participation with China in joint naval exercises only complicates Russia’s recently renewed Southeast Asian partnerships with historical allies such as Vietnam. The 1990s were a period of rather insignificant Russian regional engagement, but that has changed in the past decade or more as Russia has ramped up its regional presence. Recent bilateral trade between Russia and Vietnam was estimated at approximately \$3.5 billion, more than five times larger than a decade ago. Russia is also heavily invested in several of Vietnam’s economic development projects. For starters, Vietnam was the first Asian nation to solidify a free trade agreement with Russia’s EEU. Second, Russia’s Gazprom has joined forces with a Vietnamese firm to explore several offshore oil projects, including in areas that are claimed by China in the South China Sea. Aside from economic investment and trade, Russia and Vietnam have bolstered their defense ties in recent years. Russia is currently Vietnam’s largest arms supplier and recently sold Vietnam Russian submarines, frigates, and fast attack craft. In 2009, Russia sold six of its Kilo-class submarines. The deal also included \$200 million to upgrade the facilities at Cam Ranh Bay, which India has eyed as well. The Russian navy and air force now have access to Cam Ranh Bay, placing it in greater proximity to the U.S. base in Guam.<sup>83</sup> How this bilateral relationship plays out in the future might be an important signal to how the larger Sino-Russian relationship fares. It will also be interesting to see how it might influence Russian-Indian relations; for now, however, it appears to be a nonissue.

Overall, Russia appears to be able to adequately balance the various states, but a time might come when Russia will be forced to take a stronger stand in favor of China. If the United States remains as a primary adversary and or existential threat for Russia and China, it is likely they can remain cohesive in their shared endeavors and desire for sustained great power status. Gilbert Rozman sums up the complexity and delicacy of the relationship thus: “Sino-Russian relations may be warm on the outside, tepid on the inside and chilly underneath. There is an understanding not only that dirty linen should not be displayed in public, but also that a shiny gloss covers any scuff marks in their relationship.” Some have similarly framed this relationship as a “marriage of convenience.” It appears China and Russia will continue together in such a

manner despite a certain lack of trust beneath the surface across various sectors. They prefer to see a more multipolar world where NATO, the European Union, and ASEAN, for example, are more fractured than unified.<sup>84</sup> At the same time, Russia has been careful not to roil China on core policy interests such as Taiwan, Tibet, and Xinjiang so as to remain more in concert on the global stage. But if there is a growing perception of a more aggressive Sinocentrism, Russia may begin to react in kind. Russia does not want to be relegated to a junior status compared to China.<sup>85</sup>

### China Maintains an Upper Hand

India may have pushed farther into East Asia with its Act East policy, but China still maintains the competitive edge. This is likely to become more solidified over time, especially if the United States continues with its perceived diminishing leadership role in the Asia Pacific. Robert Kaplan astutely articulates, “Assuming that China itself does not implode or even partially implode from an internal economic crisis, the serious reduction of American air and sea power—with its stabilizing effect on the region—would cause countries such as China and India, and China and Russia, to become far more aggressive toward each other.”<sup>86</sup> The regional balance of power has started to shift in favor of China, meaning that more turbulence lies ahead.

A further challenge that will become more prevalent is the rising levels of East Asian navalism. As China, Russia, and India continue to seek greater international prestige, they will rely on their blue-water navies as an important symbol of great power status. This also means that East Asia, and the South China Sea specifically, will experience more close interactions, rising securitization, and the expanding threat of an inadvertent outbreak of conflict between two or more rival naval powers. Since 2016, the spokesperson for the U.S. Pacific Fleet reported “19 unsafe and/or unprofessional interactions with China and Russia . . . (18 with China and one with Russia).” The tangible spike in close encounters only reinforces just how precarious the situation could become in the future as more naval forces and ships traverse the region.<sup>87</sup>

Two main maritime groupings have started to emerge in East Asia: Russia and China versus India, Japan, and the United States. For the latter, it appears that India and Japan could be laying a foundation to operate more independently from the United States in the future if the United States is less actively engaged



regionally. As many fear, India and Japan might have to become more self-reliant to secure and protect their maritime geoeconomic and geostrategic interests. But in the end, it will still be China that continues to dominate the maritime competition because of its massive geoeconomic footprint and burgeoning naval expansion that will use its reinforced network of artificial islands and other naval outposts or logistics hubs to move beyond East Asia. Russia will likely be drafting closely behind China as the relationship strengthens and their economies become more intertwined, all while both seeking to restructure or undermine a U.S.-led world order.

## Maritime Eurasia's Future Frontier: The Arctic

IN 1944, THE GEOGRAPHER Nicholas Spykman wrote, "It is sea power which has made it possible to conceive of the Eurasian Continent as a unit and it is sea power which governs the relationships between the Old and New Worlds." But when writing about the Arctic, Spykman went on to say, "It is equally unlikely that peace-time trans-polar traffic will grow to any considerable dimensions." This dynamic, however, has evolved substantially as the Arctic begins to melt at rates unprecedented in prior decades. Russia's "fourth wall," previously seen as a critical element of Russian containment, is now slowly opening up, and Russia has already taken advantage with rising investments in natural resource exploration, scientific research, Arctic basing upgrades and new construction, and a broader military presence. Russia has also started to partner more with China to leverage shifting maritime transit routes and to project power. The end result is that Russia and now China are taking advantage of a melting Arctic to advance their aim of undermining a U.S.-led world order. They desire to use the Arctic as a way to further solidify their great power status. In a speech from 2014, for example, President Xi Jinping used the term "polar great power," asserting that China would soon become one: "Polar affairs have a unique role in our marine development strategy, and the process of becoming a polar power is an important component of China's process to become a maritime great power." China's push to become a polar power aligns well with its larger maritime strategy, which applies a Mahanian way of thinking.<sup>1</sup>

Though increased investment and activity in the Arctic have started to take shape, the Arctic will not be entirely ice-free anytime soon, with additional crit-

ical hurdles to overcome—floating icebergs, extreme weather conditions, high insurance rates, poor infrastructure, and the costly fleet of icebreakers—that will pose challenges for Russia, China, and others. But the more rapid melting of the Arctic and updated predictions show that it could be ice-free during several summer months in the next few decades, according to some models, and this will be a geoeconomic boon for Russia and China alike due to the Arctic's critical natural resources, fisheries, rare earth minerals, and shorter shipping routes. A ship traversing the Northern Sea Route could take 23 days compared to 34 days if headed to a similar destination traversing the Suez Canal route or 46 days around the Cape of Good Hope. Arctic surface temperatures have increased twice as rapidly in recent years compared to other regions worldwide, and this is resulting in significant summer ice loss, as well as winter ice decline. According to the National Snow and Ice Data Center, summer ice has retreated around 13.3 percent each decade during the past three decades or so of measurements.<sup>2</sup> The dwindling Arctic ice aligns with the larger argument that maritime Eurasia will become increasingly interconnected via its sea lanes from north to south and east to west if current models continue in a similar trajectory.

As Russia and China pay more attention to the Arctic, the Arctic region is becoming more securitized as both countries push, deliberately or not, to do more to protect their emerging geoeconomic interests. They also view the Arctic as a significant jumping-off point from which to project power farther in eastern or western Eurasia. If Russia, in particular, can reinforce its control or influence over the Arctic's transit routes, it can then gain unfettered access to the Atlantic and Pacific Oceans, thus contributing to the shifting world order that undermines the West across maritime Eurasia. Russia has begun taking measures to accomplish this by investing more substantially in its Northern Fleet and Arctic bases, including more military exercises. For China's part, it has started to heavily invest in Arctic natural resource exploration, scientific research, and an icebreaking fleet. China wants to ease its overreliance on current sea lanes of communication and the strategic maritime choke points of southern Eurasia. Moreover, it hopes to play a more proactive role in the Arctic Council as an official observer nation to garner more international prestige. Though India is an Arctic Council observer nation, its interests are more tied to the (negative) effects that climate change has on the monsoons, increasing surface temperatures, and rising sea levels that tie into India's development and commercial and agricultural patterns. India does not have many significant Arc-

tic projects compared to Russia and China, but it could gain from easier access to Russian Arctic energy resources, as well as exerting a stronger voice on Arctic issues at the international level.<sup>3</sup>

India aside, a looming danger persists that the Arctic could become increasingly securitized as Russia invests more in its military modernization and basing footprint. The Russian defense minister Sergei Shoigu warned in the fall of 2018 that “the Arctic has turned into an object of territorial, resource, and military-strategic interest for a number of states. This could lead to growth in the potential for conflict in this region.”<sup>4</sup> Other Arctic nations, especially NATO nations, began responding in kind owing to mounting rhetoric and Russian activity in the High North. Shi Chunlin, a Chinese maritime specialist, has previously written, “The Arctic sea route is a strategic military route; whoever controls the Arctic will have the upper hand over other opponents.” Additional Chinese scholars have concurred that “whoever controls the Arctic Ocean will control the new corridor for the world economy.”<sup>5</sup> The overall situation has resulted in the emergence of a classic security dilemma, and it could become more accentuated as the Arctic ice melts further. As Marlene Laruelle, a George Washington University scholar of Russia and the Arctic, has written, “The Arctic is not the new geopolitical pivot point, but it could be one of the balance-shifters in the global equilibrium of power. It does not change the fundamental order, but it adds new weight for various states. It could contribute to reshaping some geopolitical axes such as transatlantic commitments, the Nordic Europe-Russia partnership, or Asia-Russia, and specifically the China-Russia pairing.”<sup>6</sup> Either way, Russia and China are already establishing an upper hand over the United States and other Arctic powers that will have lasting repercussions.

### Historical and Geostrategic Perspective

Like the Pacific in the mid-twentieth century, the Arctic is an area of recently heightened activity, taking on greater importance every year. It is named after the Greek word *arktos*, or bear. Today we see maps of disappearing sea ice or hear increasing vocal anger and dismay from the indigenous populations and other concerned groups about the rapid climate changes across the Arctic Circle. We read about disputes between the region's neighbors over rights of passage and claims to valuable offshore natural resources—from its 240 different species

of fish to potentially 30 percent of the world's natural gas reserves and 13 percent of the world's oil. The Arctic, and mainly Russia, is a veritable gold mine with its abundant rare earth minerals, including palladium, diamonds, platinum, cobalt, nickel, tungsten, and other metals.<sup>7</sup> And that is my aim here: to contextualize the geoeconomic, geostrategic, and historical significance of the Arctic.

The Arctic is frequently compared to the Mediterranean, since it is more a large sea than an ocean. It is only one-fifth the size of the Indian Ocean, or about one and a half times bigger than the United States. The surface area covers about 14 million square kilometers with average depths around 1,200 meters, with the deepest known point around 4,570 meters. From a Eurasian perspective, the Arctic spans from the northern reaches of Greenland in the west to the Pacific Ocean, with a critical opening through the Bering Strait between Russia and the United States. For those frequenting the High North, the region's main characteristics are defined by a harsh climate and remoteness, with three months of complete darkness and three months of entire daylight. To quote an old Icelandic expression, summer is so bright that there is enough light "to pick the lice off your shirt." The Arctic shores lack not only trees or shrubs but also blades of grass. One observer once remarked: "The water is ice. The land is rock; the sea a frozen corpse, the earth a bare, grinning skeleton, that meets you everywhere, that seizes you in its bony clasp, and will not let you go; the skeleton of a dead world."<sup>8</sup>

Despite its harsh climate, explorers have attempted to unveil the natural wonders and possible riches of the North Pole for centuries. At the same time, indigenous populations have lived and survived across the Arctic, hunting for seals, fish, bears, and whales. Most of the Arctic Circle's population lives in the south, in cities such as Moscow, Stockholm, and Oslo, and has little direct experience with the Arctic, even though it has such a direct influence on their economies and cultures. Nonetheless, for several centuries, international explorers have methodically mapped the Arctic's landscapes one voyage at a time like meticulous ice sculptors. As eloquently expressed by Barry Lopez in *Arctic Dreams*, our imaginations have been enraptured by the allure of a space with no defined boundaries. Despite certain successes, the Arctic shores are complex waterways, and exploration has often meant skirting Russia's shorelines. A ship had to thread shallow passageways in a series of marginal seas filled with many obstacles; most voyages depended on the ice conditions. The Northern Sea Route, for example, included fifty-eight straits and three archipelagos from

Novaya Zemlya in the west to the Bering Strait in the east. The coast is low and flat and hard to detect, even today with radar. Sea ice is always significant, drifting in the summer especially. In winter, the shallow seas freeze first; this means that the waters near the coast often freeze first and are the thickest, making them often impassable. In a similar manner, the Northwest Passage is equally as complicated with five main routes, but only two of them are suitable for deepwater navigation.<sup>9</sup>

Evolving over the past five hundred years, Russia's historical relationship to its northern shores is important, since Russia seeks to expand its embrace of maritime culture and way of life. Its shoreline bows around the Arctic Basin in a huge arc, embracing almost half of the entire Arctic Circle. The White and Barents Seas provided Russia with its first seacoast, serving as Russia's attachment to an oceanic life until the scouting of the Pacific in the early 1600s and the building of Saint Petersburg on the Baltic in the early 1700s. Throughout this period, Russian adventurers and merchants traversed virtually all the northern Eurasian coastline, trading for furs and looking for the mouths of the great Siberian rivers. They were interested in the Arctic as a means or avenue for reaching deeper into Siberia. The desire to exploit land-based resources was prompted by the exploration of the coastal waters off Siberia. Today, Russia remains the largest claimant to the Arctic region, asserting rights over a zone totaling 1.2 million square kilometers that runs into the North Pole. Russia's continental shelf is also massive, blanketing about a third of its seabed and pushing well northward beyond Russia's 200-nautical-mile exclusive economic zone. Its continental shelf also extends 1,200 kilometers in width.<sup>10</sup>

The Arctic remained unknown for a long time but now takes on a new dimension of centrality with global climate change and emergent global shipping routes aided by longer periods of partially open seas. The impact of global warming on Arctic transportation raises interesting questions about a brave new world. In August 2015, sea surface temperatures near western Greenland and in the Kara Sea were about 4 degrees Celsius warmer than the August mean in the same areas between 1982 and 2010. The Arctic Sea ice thickness has declined about 43 percent over a twenty-five-year period from the 1970s to the 1990s. This fits into an expanding consensus that the planet is warming and the Arctic's ice is melting at faster rates. The melting ice is tied to rising sea levels and greater amounts of flooding in coastal cities. Many experts believe that Russia, in particular, will be vulnerable in the White Sea, the Baltic, and the Gulf of

Finland, with the possibility of more frequent flooding in Saint Petersburg by 2030. This has major implications for international relations and the littoral countries of the Arctic, as well as the region's local populations who rely on the food and other natural resources. Additionally, the melting of the Arctic means increased tensions between Arctic nations such as Russia and Canada over national sovereignty. Less ice suggests more maritime traffic and greater fears about the safe passage of ships and freedom of navigation.<sup>11</sup>

Arctic security in an age of climate change is significant because 80 percent of world industrial production takes place north of 30 degrees latitude, while 70 percent of all metropolises lie above the Tropic of Cancer. In other words, Arctic transit could provide the shortest routes between Europe and Asia as some of the world's most important industrial centers of the world. Opening the Arctic to transcontinental or intercontinental traffic would be the biggest change in shipping routes since the opening of the Panama Canal in 1914. The time saved would be noteworthy, producing an estimated \$500,000 in fuel savings for a large cargo ship making a one-way Arctic transit. Possible crises in the canal regions (or the Strait of Malacca) could make the passages more attractive to avoid any further escalation of violence along Eurasia's southern rimlands. Russia and China are already planning for the impending opening of an ice-free Arctic by investing in icebreakers, research and development, and offshore exploration. India has also expressed its interest in the future of the Arctic's energy resources and new shipping routes.<sup>12</sup> The melting of the Arctic has started to alter the politics of Eurasia in significant ways, and Eurasia's maritime domains will only continue to grow in prominence as the main powers turn seaward.

### Russian Geoeconomic Interests

During an end-of-year press conference in 2017, Russian president Vladimir Putin was asked a question on the Arctic, and his response was telling in regard to how much Russia values the region: "Today, the wealth of Russia will grow with the expansion into the Arctic. And the reason is that this is the place with the biggest reserves of mineral resources." When asked about how China fits into the larger picture, he replied, "I hope we soon will be able to achieve economically far more favorable transportation of goods between Asia and Europe on the Northern Sea Route compared with alternative routes. . . . We will in all

possible ways encourage China's use of these advantages."<sup>13</sup> As many scholars have noted, Russia's Arctic policy today is a logical follow-on from the Arctic policies and posture of the Tsarist and Soviet periods. Since the 2000s, Putin has believed that the Northern Sea Route is a central element in Russia's economic development strategy. Russian nationalist groups have similarly taken on the cause of the Arctic as a vital component in reestablishing Russia's great power status. Some extreme-right Russian nationalists such as Alexander Dugin have been strong defenders of the Arctic, especially in the context that Russia was established by the Aryans and thus has the purest progeny. As the former leader of the Eurasianist Youth Movement Alexander Bobdunov, who was inspired by Dugin's writings, once declared, "The North is not only a base of economic resources, our future in the material sense, but also a territory of the spirit, of heroism, and of overcoming, a symbolic resource of central importance for the future of our country."<sup>14</sup>

Though Russia's Arctic zone is not clearly defined, its geoeconomic interests are heavily tied to the region. In September 2008, then Russian president Dmitri Medvedev's government published "The Foundations of the State Policy of the Russian Federation in the Arctic Up to and Beyond 2020," which enunciated Russia's focus on developing the Arctic's resources and transforming the Northern Sea Route into a "unified national transport corridor," among other strategic elements. This was followed in 2009 by "Russia's National Security Strategy to 2020," which focused largely on the importance of energy security in the Arctic, Siberia, and Caspian Sea. In 2013, Russia issued another Arctic strategy that again emphasized engagement with the Northern Sea Route for domestic and international shipping that fell under Russian authority. Russia is right to focus on the Arctic, since 20 percent of Russia's GDP is derived from the polar region, including one-quarter of its export revenues. Russia's Arctic is responsible for producing around 95 percent of Russia's gas and an estimated 70 percent of its oil, counting nearly two hundred oil and gas deposits and other continental shelf discoveries. The Arctic also yields 99 percent of Russia's diamonds, 96 percent of its platinum, and 90 percent of its nickel and cobalt, among other rare earth minerals. Russia's geoeconomic interests have remained largely consistent: (1) harvest and protect the Arctic's natural resources such as oil, gas, and fisheries; and (2) leverage the emerging shipping routes and reinforce Russia's Arctic ports that support Russia's economy and development, including the development and maintenance of a robust icebreaker fleet. As the



Arctic melts more rapidly, Russia is well positioned to gain substantially from the region's rich natural resources to support its larger aim of achieving international prestige. Certainly, it still has structural problems to overcome, such as a declining population and worker shortages, especially in the far reaches of northern Siberia, where it lost an estimated 15 percent of its already sparse population between 1993 and 2009.<sup>15</sup> As Russia and China become more geoeconomically intertwined, Russia will nevertheless need an accompanying infrastructure and logistics network that can adequately support and protect its burgeoning geoeconomic interests. China will also be directly interested in Russia's Arctic development as it becomes more heavily engaged.

### *Harvesting the Arctic's Natural Resources*

Though Russia is beholden to fluctuating oil and gas prices, where energy resources generate a substantial portion of the government's revenues, the Kremlin is banking much of its future trajectory on continuing to exploit the Arctic's vast natural resources. Under greater international pressure, however, Russia has turned increasingly toward China and its banks to assist in its energy exploration endeavors. China has gladly obliged, enabling Russia to continue with plans to extract oil, gas, and other rare earth minerals from the Arctic.

The Kara, Pechora, and Barents Seas possess some of the largest oil and gas deposits in Russia's Arctic zone. Warming temperatures will permit Russia to expand and extract these natural resources to sell more readily to global markets. Although some Arctic natural resource exploration is not economically viable because of lower oil or gas prices, Russia has already begun to explore more expansive drilling through joint ventures with numerous international firms in locations such as Shtokman gas field in the Barents Sea or Prirazlomnoye field in the Pechora Sea, among other locations.<sup>16</sup>

One of the more significant areas to watch is the Yamal Peninsula off the Kara Sea. It is one of Russia's most lucrative areas of oil and gas with its thirty-two fields, where Russia has joined forces with many international firms, including French and Chinese companies, to expand drilling and exports. According to the Russian state-owned global energy company Gazprom, Yamal is believed to have an estimated 16.7 trillion cubic meters in gas reserves and 300 million tons of oil. The first trunk line leaving Yamal, the Bovanenkovo-Ukhta line, became operational in 2012, with a second one going live in early 2017. That same year, the Yamal Peninsula produced 82.8 billion cubic meters of gas.

Aside from pipelines, Russia has started to develop a LNG plant and the accompanying port of Sabetta on the eastern side of Yamal Peninsula in Ob Bay, which will soon begin exporting larger LNG shipments to global markets. The LNG plant is expected to cost \$27 billion and is a joint venture between Russia's Novatek, the French energy firm Total, and China National Petroleum Corporation (CNPC). Sabetta port, which is already partially operational, is expected to cost \$2.03 billion. In 2016, 120 vessels docked at Sabetta, doubling the number from 2015. The ships transported approximately 505,000 tons of goods worth an estimated \$5.2 billion.<sup>17</sup>

As Sabetta's operations ramp up, Russia has supported the development of a fleet of fifteen Russian and international icebreaking LNG carriers that can hold 170,000 cubic meters of LNG. (The ship financing is largely provided by the Chinese shipping firms COSCO and China Merchants Group, which stepped in as sanctions on Russia grew tighter.) By building up its Arctic shipping fleet, Russia hopes the increased commercial traffic will help pay for its expensive icebreaker services. Korea's Daewoo Shipbuilding and Marine Engineering Corporation won the current contract to build the LNG fleet. In 2017 the first LNG carrier in this class, the *Christophe de Margerie*, began sea trials, and in August it successfully traversed the Northern Sea Route in nineteen days from Norway to South Korea without needing icebreaker support. Many observers are optimistic that the *Christophe de Margerie* can traverse the Northern Sea Route westward from Sabetta throughout the year and eastward from July to December. A trip under ideal conditions from Sabetta to European ports takes around ten days one way, and a trip from Sabetta to the Chinese port of Jiangsu Rudong has taken nineteen days in a one-way transit. Symbolically, these transits demonstrate what lies over the horizon for Arctic shipping and how Russia is well poised to dominate much of the region's maritime transport. On the oil export side, the Novoportovskoye oil field and the Arctic Gate offshore oil-loading terminal in Yamal entered commercial operation in 2016, but not as much emphasis has been placed on its development compared to Sabetta port. The Arctic Gate terminal has the ability to handle up to 8.5 million tons per annum.<sup>18</sup>

Aside from oil and gas exploration, Russia has focused on the importance of the Arctic's fisheries. Per capita, fish consumption has grown significantly in recent years, but the other important phenomenon is that as the world's oceans experience rising temperatures, many types of fish have begun to migrate farther north in search of colder temperatures. The Arctic is rich in fish, including

species such as pollock, halibut, shrimp, herring, and Arctic, Pacific, and Atlantic cod. In 2015, the Arctic Five (Russia, Canada, Denmark, Norway, and the United States) signed a moratorium on fishing in the Central Arctic region called the “Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean.” This was followed in 2017 with an international agreement, including China, Russia, the United States, Japan, and others, that places the Central Arctic region out of bounds to commercial fisherman for the next sixteen years while more research is conducted on climate change, the local marine ecology, and the size and type of fishing stocks. The agreement is automatically renewable for five years or until a fisheries quota and rules are clearly established. It is hoped that the agreement will aid in mitigating potential tension over future fishing rights and other geoeconomic tensions. The Arctic states, including Russia, have largely tried to resolve most Arctic-related issues through multilateral dialogue, but if the Arctic opens up farther, it will usher in more actors, especially industrial fishermen, that might disrupt the equilibrium.<sup>19</sup>

#### *Shipping, Ports, and Icebreakers*

The Northern Sea Route and the Arctic's other sea routes are still in their infancy and are not competitive with other traditional shipping routes across the Indo-Pacific or over land. To demonstrate the stark contrast of the northern versus southern routes, 16,800 ships carrying an estimated 974 million tons of cargo traversed the Suez Canal in 2016, compared to just 19 ships carrying 214,513 tons of cargo that traversed the Northern Sea Route during the same year. Significant maritime traffic still operates in various Arctic sectors at any given moment, either traveling shorter routes or making transports within Russian territory. According to the U.S. Coast Guard, there were 485 transits of the Bering Strait in 2016, compared to just 220 transits in 2008.<sup>20</sup>

As the largest Arctic power, Russia has been proactive in laying a foundation for when the Arctic will open up for longer periods during the year. Russia also continues to state its interpretation of UNCLOS when applied to specific areas. Within certain Arctic archipelagos along the Northern Sea Route, Russia frequently claims territorial or internal waters, while others define the same areas as “high seas” as laid out under UNCLOS, thus granting foreign-flagged ships the right of innocent passage. The difference in legal interpretation could likely become more of a friction point in the future as the Arctic melts more and the “ice-covered waters” dwindle. “Ice-covered waters” are covered under article

234 in UNCLOS and frequently cited by Russia to help control maritime surface traffic within its EEZ.<sup>21</sup>

Aside from applying UNCLOS in its favor, the Russian government has passed legislation in recent years that will ensure it maintains greater control and oversight over the expansion of Arctic shipping. In 2012, the Federal Law on the Northern Sea Route was passed, and the following year, the Ministry of Transport published its Rules of Navigation along the Northern Sea Route. The combined documents state that “vessels navigating the NSR are responsible for environmental pollution, tariffs, and providing proof of liability and insurance. Russia further demands that foreign ships pay for weather and ice reports, Russian pilots to guide the vessels, and using icebreaker services.” Further legislation passed in late 2017, as well as spring 2018, proclaiming that all oil and gas shipments along the Northern Sea Route will be nationalized. The combination of the two bills means that oil and gas shipments from the Arctic must be transported on both Russian-built and Russian-flagged ships. Enforcement began in 2019, though the government announced it would grant exceptions, since many of the current ships supporting Russian exports are neither Russian-flagged or Russian-built ships.<sup>22</sup>

In addition to passing legislation, the Russian government released a transport strategy in 2014 that outlined the geostrategic significance of the Northern Sea Route “for commercial shipping activity, the development of resources on the Arctic shelf and the territories of the Arctic Zone, and providing transportation services for remote areas of the Russian North.” The Russian transport strategy also included language supporting the modernization and buildup of Russia’s icebreaker fleet. Specifically, it called for the “construction of three nuclear-powered LK-60 ice-breakers, three diesel-engine LK-25 ice-breakers, and a number of smaller ice-breakers and ice-breaker support ships.” Last, the strategy made a case for the buildup of more ports and transshipment infrastructure to support increased maritime activity in the High North. This included proposed efforts to upgrade or expand Dikson port on the Kara Sea, Pevek port on the Eastern Siberian Sea, Tiksi port on the Laptev Sea, and Murmansk on the Barents Sea. Russia is also in discussions with Chinese firms, including COSCO, to develop and operate the deepwater port of Arkhangelsk in northwest Russia on the White Sea. Overall, Russia has around sixteen deepwater ports that sit along the Northern Sea Route, and Putin hopes that Russia will be able to create a more robust shipping and logistics network in the Arctic

through more investments and expansion of the region's ports. The bigger goal is to tie Russian ports into more established shipping hubs and routes outside the Arctic.<sup>23</sup>

For Russia to achieve its Arctic aspirations, it will continue to rely heavily on its icebreaker fleet, which is the largest in the world. Though the icebreaker fleet is varied in terms of age and operational capability, the fleet totals forty icebreakers, with another eleven in development. Four of these icebreakers are nuclear powered, and a fifth one, *Arktika*, is currently undergoing sea trials. (By comparison, the U.S. Coast Guard has one in service, the *Polar Star*, and another one that is currently inactive.) For Russia to attract more international shipping, however, it will need to lower some of its icebreaker escort service fees, in addition to streamlining the bureaucratic process with which international firms have to engage. This will in part be difficult, since some unconfirmed estimates assert that Russian icebreaking firms already receive around 30 percent in government subsidies.<sup>24</sup>

### Russia Securitized the High North

As in other parts of Eurasia, Russia's and China's growing maritime embrace of the Arctic is largely driven by geoeconomic interests. But with increased investments and economic interests comes a need to secure and protect these assets; the ability to conduct search-and-rescue missions is also needed for those affected by the extreme and unpredictable weather conditions. Russia has largely supported multilateralism to resolve many of the Arctic's geoeconomic issues from fisheries to energy exploration. And most of its development has been focused on energy resource development and shipping. At the same time, Russia has embarked on a greater buildup of its Arctic military and naval presence, from bases to missile installations. Russia has ratcheted up its rhetoric and emphasis on the Arctic and related sovereignty claims after its intervention in Ukraine in 2014. This does not sit well with entities such as NATO and other states tied to the Arctic. A growing concern exists in Europe about Russia's increased military activity that is spilling southward, thus hardening the region's security further. In 2010, then Russian president Dmitri Medvedev stated, "Russia was watching NATO's increased activity in the Arctic 'intently and with some concern.'" <sup>25</sup> To see how Russia has started to securitize the Arctic, I first examine Russia's recent Arctic strategy. This is followed by an analysis of Rus-

sia's modernization efforts for its Northern Fleet and basing expansion, in addition to recent observations about Russia's increased naval activity and military exercises. Like China, Russia has embraced many strategic elements from the Alfred Mahan playbook that view control over the sea lanes of communication as a key element to achieving great power status. A larger basing presence and greater ability to project naval power are also critical factors.

### *Russia's Arctic Strategy*

Russia has not published one specific Arctic security document, but its security policy can be gleaned from its Arctic strategies and military and maritime doctrines over the past decade or more. In 2008 it published "Foundations of Arctic Policy," and this was followed by a 2013 Arctic Strategy. These documents were coupled with other foundational Arctic policy documents, including the 2009 and 2015 National Security Strategies, the 2014 Military Doctrine, and the 2015 Maritime Doctrine. Combined, they assisted in laying out Russia's official stance on the Arctic, among other issues and areas, and how to defend against certain perceived threats. The 2014 doctrine was particularly noteworthy because it was the first time that Russia expressed its desire to protect its "national interests in the Arctic." In summer 2017, Putin issued an updated naval doctrine where he underscored the importance of the Arctic as one of Russia's top priorities. One of the biggest apparent threats enunciated in the doctrine was the "ambition of a range of states, and foremost the United States of America and its allies, to dominate the high seas, including in the Arctic, and to press for overwhelming superiority of their naval forces." Additionally, Russia saw a "strong navy as a vital instrument of strategic containment, and which will help project Russian presence in practically any area of the World Ocean in order to strengthen Moscow's position in a multipolar world order."<sup>26</sup>

Russia's overall Arctic strategy can be summarized as follows: "First, to demonstrate sovereignty over the Arctic Zone of the Russian Federation . . . ; second, to protect its economic interests in the High North; and third, to demonstrate that Russia retains its great power status and has world-class military capabilities."<sup>27</sup> Russia increasingly sees a rising competition with other world powers and wants to ensure that in regions such as the Arctic it can dominate or control the space. Russia is also concerned about NATO's increased Arctic efforts. The Duma Speaker Sergey Naryshkin went so far as to call NATO "a cancerous tumor at the heart of Europe." Russia, by contrast, sees China as a

“strategic partner” and desires to promote and support more joint collaboration, in addition to remaining the primary gatekeeper to the region. Russia’s growing anxiety over the rising competition helps explain in part why it has sought ways to build up its military and basing presence as a response to the changing dynamics of the region. (In 2007 the deputy chairman of the Russian Duma Artur Chilingaraov, as the head of an expedition to the North Pole, famously planted a Russian flag four kilometers beneath the ice on the seabed, proclaiming that “the Arctic is ours and we should manifest our presence.”) But since 2007, Russia has tried to take a more measured approach in its Arctic rhetoric and actions, underscoring the importance of maintaining peaceful cooperation and coexistence across the region. This included signing the 2008 Ilulissat Declaration with the five other Arctic coastal states reaffirming their collective commitment to upholding international legal structures on issues tied to the Arctic. Russia also signed on to the Arctic Council’s 2011 Nuuk Declaration, which is mainly focused on non-Arctic states operating in the region, as well as promoting environmental protection and sustainable development. Supporting a multilateral framework is beneficial to Russia, and one of the reasons why Russia voted to approve the addition of official observer states to the Arctic Council is because it will ensure that Russia can seek outside support in the larger development or protection its maritime geoeconomic interests in the Arctic, including navigational-related issues tied to UNCLOS.<sup>28</sup> Great power competition, however, still looms in the background and factors into Russia’s national psyche.

### *Russia’s Northern Fleet*

The perception of great power competition has in part fueled Russia’s Northern Fleet modernization and reinforcement efforts, including investments in updated basing infrastructure. Russia’s defense minister Sergey Shoigu stated in 2015, “A broad spectrum of potential challenges and threats to our national security is now being formed in the Arctic. Therefore, one of the defense ministry’s priorities is to develop military infrastructure in this zone.” As noted by Caitlyn Antrim, a Russian Arctic scholar, the military needs to pay particular attention to “the protection of the ballistic-missile submarine fleet; protection of trade routes along the Arctic and from the Arctic to other parts of the world; defense of coasts, ports, and shipping; and the movement of warships between

the Atlantic and Pacific oceans.” Russia’s 2015 Maritime Doctrine makes the additional case that to decrease the threats emanating from the Arctic, strengthening the Northern Fleet through the reinforcement of its capabilities must be a priority.<sup>29</sup>

The Northern Fleet is one of the most powerful arms of Russia’s navy. The fleet has been situated on the Kola Peninsula in the western Arctic jutting southward between the Barents and White Seas since 1933. The Northern Fleet’s location enables it to deploy into the Atlantic or down into European seas. The Kola Peninsula is similarly ideal because the Russian submarine fleet is able to depart more stealthily under the noisy and shifting polar ice cap compared to other areas that are closely monitored such as the Bering Strait or along the straits between Greenland, Iceland, and the United Kingdom. The geostrategic importance of the Kola Peninsula for Russia is symbolized further by the fact that up to 81.5 percent of Russia’s sea-based strategic nuclear weapons are stationed there.<sup>30</sup>

The Northern Fleet has only grown back to a more formidable shape in the past decade or so. During the 1990s, the fleet atrophied rather significantly owing to the disintegration of the Soviet Union and Russia’s subsequent financial shortfalls. Since the mid- to late 2000s, the Russian government has finally reconstituted the fleet through its larger military modernization efforts and other Arctic investments. During the heyday of the Soviet navy, the Northern Fleet possessed 180 nuclear submarines, but that number dwindled to 42 submarines, many of which were in significant disrepair. In 2018 the Northern Fleet maintained and operated forty-one submarines and thirty-eight surface combatants. This included eight SSBNs, Russia’s only aircraft carrier, *Admiral Kuznetsov*, six destroyers, a nuclear cruiser, and many other updated surface warships. The Northern Fleet has new and sophisticated electronic warfare systems that could prove useful in detecting radio signals while also deploying software that can reroute enemy systems away from certain targets in the event of a potential future conflict. Last, the Russian government either has begun to roll out new drone technology or is in the final testing stages for unmanned underwater vehicles that will be deployed in the Arctic and elsewhere. Russian media reported on the unveiling of three particular underwater submersibles: a 1.5-ton aerial drone with a 4,000-kilometer range, a smaller submersible drone that can be used for underwater surveillance, and a larger nuclear-capable autonomous



torpedo called *Poseidon* that could carry up to a two-megaton nuclear warhead. The *Poseidon* is allegedly capable of devastating naval bases, aircraft carriers, or whole seaside cities by unleashing a massively harmful tsunami wave.<sup>31</sup>

In addition to building back the Northern Fleet, President Putin announced beginning in 2013 that he would start to reopen prior Soviet-era Arctic bases “to ensure the security and effective work of the Northern Sea Route.” In 2014 the Russian military launched the Arctic Joint Strategic Command as a fifth military district, headquartered at Severomorsk near Murmansk. The new strategic command has oversight of the Northern Fleet dispersed across several main bases in the Murmansk region, among other joint strategic assets, and aims to protect Russian interests across the Northern Sea Route. The creation of a new district came with the additional announcement that Russia would begin to focus on building up old ports, bases, and accompanying airstrips, along with modernizing the Russian Arctic missile defense network, including the sophisticated S-400 surface-to-air missile systems. The Russian government planned to open new bases at Nagurskoye (Franz Josef Land), Mys Shmidta, Rogachevo, Cape Schmidt, Wrangel, and Sredniy. Russia aims to upgrade other basing facilities at Alykel, Amderma, Anadyr, Naryan-Mar, Rogachevo, Severomorsk-1, Temp, and Tiksi. Many of these new facilities or maritime docking areas are located on several of Russia’s Arctic islands or archipelagos. In 2015, Putin announced the reopening of the small town of Roslyakovo, located just west of Severomorsk, which had been closed to nonmilitary personnel for several generations. The town has a population of eight thousand, most of whom are Russian naval personnel, military contractors, or others tied to shipbuilding. It is another sign of Russia’s determined Arctic expansion.<sup>32</sup>

Russia today has the largest basing presence in the Arctic compared to the other littoral states, and in the words of Russia’s defense minister Sergey Shoygu, “A constant military presence in the Arctic and a possibility to protect the state’s interests by military means are regarded as an integral part of the general policy to guarantee national security. . . . One of the Ministry’s prioritized areas is development of military infrastructure in the region.” According to Shoygu, Russia has constructed 425 buildings, totaling 700,000 square meters, over the past five years on the Russian Arctic islands of Kotelny (in the remote New Siberian Islands), Alexandra Land (Franz Josef Land), and Wrangel (in the Chukchi Sea), as well as on Cape Schmidt. Over time, the Defense Ministry hopes to

complete construction on more than one hundred military facilities spread across the Arctic.<sup>33</sup>

Russia has had relative success in resurrecting its Northern Fleet and basing infrastructure over the past decade. With its fleet of icebreakers, Russia has great potential to ensure the safety and security of its Arctic assets as the polar ice recedes. That said, it must still overcome structural shortcomings when it comes to its languishing Arctic infrastructure and ailing shipbuilding and ship maintenance sectors. In a symbol of its continued struggles, Russia's aircraft carrier, *Admiral Kuznetsov*, was sitting in a dry dock (PD-50) near Murmansk in the fall of 2018 when the dry dock began to tilt. The *Kuznetsov* was there to begin its projected \$400 million refit and modernization. As the dry dock began to shift, one of the massive dry dock cranes came crashing down, puncturing the aircraft carrier's hull with a 3.5-by-4.5-meter hole above its waterline. The dry dock subsequently proceeded to sink into the water, but the *Kuznetsov* remained afloat. The official cause of the accident was listed as a power outage of the dock's water pumps, but some suspect that the dockyard had previously cut back on its electrical maintenance crew and diesel engines that could have helped avoid the disaster. At the end of 2019, a deadly fire also broke out while the *Kuznetsov* was being serviced, killing two people and injuring fourteen others. Many cite this and the 2018 dry dock incident, among other prior accidents at PD-50, as being emblematic of Russia's larger modernization and maintenance challenges moving forward. With these latest events, the *Kuznetsov*'s return to service will presumably be further delayed.<sup>34</sup>

#### *More Naval Activity and Military Exercises*

Despite recent modernization challenges, Russia is still well positioned to further project its naval power across the Arctic and beyond. It is beginning to develop a stronger A2/AD capacity that could serve it well if it needs to carry out Arctic sea-denial operations. In the 2010s, many observers witnessed exactly this: more Russian naval activity and a larger number of naval and other types of joint exercises. Though Russia still maintains that its military is meant to secure and protect the Northern Sea Route and Russia's other geoeconomic interests, many regional states are concerned about Russia's more aggressive military activity and growing capacity in the High North. It will only contribute further to Eurasia's rising navalism and maritime competition, which will cer-

tainly become more fraught as the Arctic polar ice cap melts. It will also add to the Arctic's mounting security dilemma, especially as NATO begins to respond.

The increased number of Russian submarine outings in recent years helps to demonstrate Russia's growing naval reach and blue-water naval activity. Arctic naval patrols, as well as exercises, have been at their highest levels in the 2010s compared to the 1990s. In 2015 nuclear-powered submarines from the Northern Fleet were out at sea for 1,500 days total. This was a more than 50 percent increase compared to the prior year. In 2016 the Russian navy announced that it had also started to focus more on combat patrols and combat duty. The Russian coast guard has also started to ramp up its coastline patrols across the Northern Sea Route. The government has invested in several ice-class vessels such as Project-22100 patrol ships (*Polyarnaya Zvezda*), as well as additional financial backing for the expansion of search-and-rescue centers across the Arctic.

Furthermore, the Russian navy has commenced planning more naval and military exercises to assert its greater dominance and control over the Arctic's sea lanes and the broader region. Beginning in 2012, Russia launched its first-ever amphibious land exercise on the Arctic archipelago of the New Siberian Islands. The exercise included twenty ships and seven thousand personnel from the Northern Fleet. This was followed by *Vostok-2014*, one of Russia's largest joint exercises in the Far East since the collapse of the Soviet Union. It included 100,000 troops, 1,500 tanks, 120 airplanes, and 70 ships. "The exercises included protection of the coastline from seaborne assault, antisubmarine and antisabotage training, mine-laying operations and a landing on Wrangel Island in the Arctic. Marines and paratroopers also undertook survival tests in the Arctic Circle as part of the exercises."<sup>35</sup>

At the start of 2015, the Russian navy held more exercises for its nuclear submarines underneath the North Pole, stating that its intent was to be prepared to protect against emerging threats to Russian Arctic interests. Some analysts believed that Russia was sending a reminder to NATO about its nuclear capabilities. That same year, the Russian military organized two additional exercises. The first one was a "snap" exercise in March ordered by President Putin just as NATO was running its own exercise near Russia's borders. He called for a readiness alert test of the entire Northern Fleet, including its 38,000 soldiers and all its naval vessels, aircraft, and vehicles. The implicit subtext of the exercise, however, was to prepare for the possibility of a widespread clash with NATO. The follow-on exercise in August involved only one thousand soldiers

and took place on the Taymyr Peninsula between the Leptev and Kara Seas. The exercise focused mainly on adapting to the Arctic's unknown geography but also promoted greater joint readiness and coordination.<sup>36</sup>

In 2017, Russia again put its military and maritime might on display through another series of aggressive exercises. In June, it test launched an intercontinental ballistic missile (ICBM) from the nuclear-powered submarine *Yuri Dolgorsky* in the Barents Sea. In the fall, Russia hosted additional Arctic war games, including more test missile launches from its submarine fleet exercising in the Barents Sea and Sea of Okhotsk. It also tested four ballistic missiles, making it the largest nuclear missile drill in post-Soviet history. Russia's Western Arctic Seaport Administration closed down large portions of the Barents and Kara Seas, among other areas, to carry out the tests.<sup>37</sup> For all of 2017, the Russian Ministry of Defense reportedly announced that "Russia's navy in the north carried out more than 200 practice launches of missiles and rockets within the past year, as part of more than 300 exercises." At the start of 2018, Russia carried out antimissile combat drills in the Barents Sea. This was followed by an Arctic exercise in June that the Ministry of Defense deemed the Northern Fleet's largest exercise in a decade. Thirty-six combat vessels participated in the exercise, including nuclear and diesel submarines. Combined with the land forces, the Russian military carried out seventy tactical maneuvers and nineteen live-fire exercises. Some analysts state that the exercise was likely a direct response to a combination of factors, including the reconstitution of the U.S. Second Fleet, NATO's mirror exercise *Dynamic Mongoose*, or the recent doubling of U.S. Marines stationed in Norway.<sup>38</sup>

The result of these exercises and greater naval activity is that the Arctic is becoming more militarized and dangerous as Russia heightens its presence and force projection. Ethan Corbin, director of the NATO Parliamentary Assembly, recently observed: "Faster ships patrol the waters, and Russian command-and-control capabilities in the region have vastly improved alongside its reinvestment in the region's bases as well as its forces' equipment. For example, via the installation of the S-300/400, air defense systems have greatly improved the ability to block access to the region via almost any means." Corbin further adds that Russia is therefore quickly building up its A2/AD capabilities in the Arctic, which might soon be quite effective if Russia wants to one day control certain Arctic access points or transit routes.<sup>39</sup> For the moment, Russia's geoeconomic interests overshadow most of its security interests, but Russia's military has

begun to establish a strong security network that will enable it to transform or even control major portions of the High North very rapidly and with mounting competence.

### China Looks Northward

Based on China's movement elsewhere, it is logical that China has been angling for a more integrated role in the politics of the Arctic over the past decade or more, even declaring itself as a "near-Arctic state." In 2013, in a positive step toward China's greater desire to exert enhanced influence in the High North, the Arctic Council accepted China, among others, as an official and permanent observer. As mentioned previously, China seeks to become a polar great power, and this urge is assimilated into its larger maritime strategy. Some Chinese polar experts have previously gone so far as to describe this current period as China's polar "great leap" in terms of its rapid ascension and polar development. It was a not-so-subtle reference to Mao Zedong's Great Leap Forward from 1958 to 1962, when China underwent rapid economic advancement under immense pressure, with devastating consequences. Much has been written of late on China in the Arctic, but I focus here on China's Arctic vision, which prioritizes maritime security, geoeconomics, and scientific research as three core maritime geostrategic interests for the region.<sup>40</sup>

In late 2015, during a meeting of the Arctic Circle Assembly, Chinese vice foreign minister Zhang Ming proclaimed that China was "a major stakeholder in the Arctic." In 2018, China issued its "Polar Silk Road" or Arctic strategy to map out its vision for the Arctic and rising regional interests. The Arctic enables China to diversify its investments, in addition to providing alternative shipping routes if something were to occur along the sea lanes of communication across southern maritime Eurasia. Certainly, China is motivated by Russia's vast natural resources, and this is why China has partnered with Russia in this space. Though China's military is not regularly active in the Arctic, it has begun to test the waters, as exhibited by the naval flotilla it sent into Arctic waters near Alaska in 2015. In general, China views the Arctic Ocean as open "international waters." Several years ago, the prominent PLAN officer Yin Zhuo declared in a similar manner, "The North Pole and surrounding area do not belong to any state; they are part of the common heritage of humankind." In other words, contrary to some reported mistranslations, "No country can claim to

own the North Pole.” China has started to invest in greater Arctic scientific research that could aid in improving navigational systems, as well as studying weather patterns that affect China. At the same time, China is investing more to develop an icebreaker fleet that can assist both the PLAN and other Chinese shipping firms more heavily interested in developing Arctic shipping routes. China is a relative newcomer to the Arctic, but it now views itself as “a legitimate stakeholder in Arctic affairs,” and its Arctic presence will only grow more heightened in an age of climate change.<sup>41</sup> China’s strengthening ties to Russia mean that the two nations will remain more aligned in the near future with their shared world vision, in addition to geostrategically and geoeconomically leveraging the Arctic toward both their separate and collective advantages.

### *China’s Polar Silk Road*

During the past several years, a more concerted effort has been made to promote the emergence of China’s Polar Silk Road in conjunction with the MSR. In 2017, President Xi first unveiled the concept of a Polar Silk Road as part of the larger BRI and MSR. The following year, in January 2018, China released its first official Arctic policy white paper that outlined this explicit regional vision. The paper focused largely on the importance of securing shipping lanes, engaging in more scientific research, protecting the environment, and extracting vital natural resources, including energy deposits and fisheries. It officially stated that “China is ready to co-operate with all relevant parties to seize the historic opportunity in the development of the Arctic, to address the challenges brought by the changes in the region.” Moreover, the paper emphasized that “Chinese enterprises will be encouraged to carry out infrastructure development along the Arctic shipping routes and to put pilot sailings into effect in preparation for actual commercial voyages. It noted that navigational safety will be key to the initiative and that China had been carrying out studies about these routes and has ramped up hydrographic surveys to enhance navigation, security and logistics capabilities.”<sup>42</sup> This is unsurprising but also aligns with my prior analysis of China’s solidification of a global maritime supply and logistics network. The Arctic is the last piece of this maritime Eurasia puzzle.

One critical component to unpack from China’s white paper is the emphasis it places on traditional and nontraditional security challenges. Ann-Marie Brady, a leading global expert on China as a polar great power, lists China’s core polar security interests as “preserving freedom of transportation, particularly sea lanes

of communication; projecting global maritime power; and strengthening defense.” As for nontraditional security interests, China needs a peaceful and secure environment to carry out its economic and research interests. Though I focus primarily on the Arctic here, China’s vision equally includes Antarctica; it will be a critical maritime region to continue following in the future. But the baseline still remains the same: China seeks great power status, and Beijing is increasingly emphasizing the Arctic to help move China to the center of the world’s stage.<sup>43</sup>

*China’s Geoeconomic and Geostrategic Interests in the Arctic*

China has turned its focus on the Arctic in part as a means to safeguard the polar sea lanes of communication for its shipping firms that endeavor to dominate the high seas. Energy security is also another critical factor and motivation for China. But what is most significant in all of this is Russia’s and China’s strengthening regional ties. Energy exploration and shipping are joined at the hip, and Russia and China make a perfect team, especially in the Arctic. China has the financial resources and the relevant markets, while Russia possesses natural resources to quench China’s thirst for energy. At the same time, China has invested in more scientific research that will further serve its global strategic endeavors.

China benefits from the opening up of any of the major Arctic sea routes, mainly the Northeast Passage, the Northwest Passage, the Northern Sea Route, the Arctic Bridge, and the Transpolar Sea Route. In the long term, China prefers the Northern Sea Route that hovers closer to Russia’s coastline because it views the passage as traversing international waters, thus upholding the right of innocent passage for Chinese vessels. As mentioned, Russia prefers to cite article 234 and the “ice-covered waters” clause of UNCLOS to dismiss such interpretations, a position that holds for now; but as the Arctic ice cap melts and the Arctic opens up, this might become a critical point of friction between the two countries. Even so, some official Chinese observers speculate that anywhere between 5 and 15 percent of China’s future global maritime trade might one day traverse the Northern Sea Route. Chinese experts similarly project that the new Arctic shipping routes that are shorter and faster might save between \$53 and \$127 billion in international maritime trade costs depending on how long certain passageways are ice-free during a given year, in addition to seeing a decline in icebreaker operating fees, which are currently exorbitant.<sup>44</sup> This will still not

deter China from becoming more involved in the Arctic even if it is not deemed economically viable in the short run. China has begun to seek stronger partnerships with, or a foothold in, other Arctic states such as Iceland and Greenland. In 2016 the Chinese government also issued a 356-page Northwest Passage guide promoting the transit route for China's merchant marine. As Ann-Marie Brady further argues, "Beijing's well-known interest in the Arctic sea route is a clever way to position China as having legitimate interests in the Arctic region, so that it can ensure that it has a seat at the table in any future negotiations there. Although China's shipping companies are required to make a profit, as state-owned enterprises they must also follow national policy and in the case of the Arctic, geostrategic needs will trump commercial interests."<sup>45</sup>

China still has a way to go before building up its Arctic shipping prowess, including capable ships and icebreakers that can make the journey. In 2012, COSCO shipping ordered a shipping study on the Arctic, which was released in 2015. In 2013 it sent its first maritime vessel, *Yong Sheng*, westbound across the Northern Sea Route. Between 2015 and 2016, six COSCO ships also attempted the trans-Arctic journey (one in 2015 and five in 2016). In 2017 and 2018, approximately a dozen vessels transited the Northern Sea Route each year. Though these transits are significant, China will continue to rely heavily on Russia for its navigational expertise, weather reports, and experienced icebreaker fleet to lead Chinese ships through the Arctic. It is also important to note that the Russian government mandates the use of Russian icebreakers when ships traverse the Northern Sea Route, adding to the high transit fees of the voyage. The Russian maritime transport company Sovcomflot and the Chinese energy firm China National Petroleum Corporation, for example, previously signed a long-term cooperation agreement on Arctic navigation. The agreement included clauses where China promised not to dispute Russian sovereignty claims in territorial waters along the Northern Sea Route.<sup>46</sup>

Aside from increased Chinese interest in Arctic shipping, China began ramping up icebreaking vessels that are capable of carrying out significant scientific research. Additionally, China has promoted science diplomacy and other related outreach efforts to Nordic states seeking to collaborate or establish Arctic research centers in China, Norway, or elsewhere in the Arctic. China currently has two permanent Arctic research stations, in addition to other temporary sites. It has built up its Arctic research presence mainly over the past decade and a half. China established its first Arctic station, referred to as Yellow River Station,



in Ny-Ålesund, on the Norwegian archipelago of Svalbard. Today, with thirty-seven summer and four winter employees, the station remains the largest foreign-occupied site compared to other state-operated sites. Most of China's Arctic research examines the interactions between ice and the atmosphere and how they affect climate change. China's Arctic research has also charted navigational routes, as well as meteorological stations to receive satellite data that can track climate change and other shifting weather or ice flow patterns.<sup>47</sup>

Beginning in 1994, China acquired its first Polar Class 5 icebreaker from Ukraine. Named the *Snow Dragon*, or *Xuelong*, the vessel has successfully conducted independent research across the Antarctic and Arctic. Currently China's budget is higher for the Antarctic because it is easier to operate and establish bases there, but in the Arctic, China has led eight or more expeditions since 1999. In 2017 the *Xuelong* was the first Chinese vessel to successfully traverse the Northwest Passage. COSCO is equally a critical player in Arctic expeditions, since it provides logistics and other services for the icebreaker throughout its round-trip journeys. China has recently constructed the *Xuelong 2*, which entered service in 2019. It is China's first indigenously constructed polar icebreaker. Moreover, the PLAN operates three icebreakers in the Bohai Sea, two of which came online in 2016. Others have speculated that China has started to design and construct a new class of nuclear icebreakers. The China Maritime Nuclear Power Development, a new joint venture with China National Nuclear Power as the controlling shareholder, and Jiangnan Shipyards, among others, commissioned the nuclear icebreaker's construction. Successful completion of the project will provide China with more international credibility and prestige as a rising polar great power.<sup>48</sup>

As in other regions across maritime Eurasia, Sino-Russian ties have advanced rapidly in the Arctic, especially in the energy sector. Russia was reportedly pleased to see China unveil its official Arctic strategy in 2018 because of the tremendous potential that it could provide to Russia as it seeks to realize its own Arctic aspirations. In June 2018, Presidents Xi and Putin issued a joint statement declaring their willingness to "boost cooperation in the Arctic via the implementation of joint infrastructural-, transportation-, and energy-related projects." The 2018 joint statement was in many respects a culmination of successive and recent Chinese Arctic investments in Russian energy exploration projects. In 2013, for example, China National Petroleum Corporation purchased a 20 percent share in the Russian Novatek's investment in the Yamal Peninsula

LNG project in a deal worth an estimated \$20 billion. In 2016, China's Silk Road Infrastructure Fund bought a 9.9 percent stake in Novatek's Yamal gas project worth \$12 billion.<sup>49</sup>

As Russia has grown more internationally isolated since 2014, Russia's energy shipments to China have risen considerably. Prior bilateral energy agreements are also beginning to come online. In 2010, China received its first Russian oil via tanker, but in a sign of things to come, on July 19, 2018, China welcomed the first Novatek LNG shipment from the new Yamal Peninsula plant that arrived via the Northern Sea Route. Chinese Arctic energy investments were finally coming to fruition. The trip took nineteen days at sea, which is sixteen fewer days than a traditional Suez Canal transit. Beginning in 2019, CNPC is expected to receive regular shipments amounting to three million tons per year of 16.5 million tons total in LNG.<sup>50</sup>

China and Russia are likely to advance discussions on more Arctic energy development and exploration projects in the future. In 2017, Novatek signed another agreement with CNPC and the China Development Bank to cooperate on an additional LNG project in the Arctic.<sup>51</sup> The United States does not appear focused on the Arctic, which means that Sino-Russian relations will only strengthen and incomparably enable Russia, as well as China, to solidify and grow their influence in the Arctic. Russia will remain a dominant Arctic player, but China has laid a substantial foundation to make it a legitimate stakeholder as well.

### Arctic Securitization Lies Ahead

Maritime geoeconomics drive the flurry of recent Arctic activity by Russia and China, and it is unlikely to abate soon. Russia has the natural resources, and China needs them to sustain its continued economic expansion. But as in other regions, security must always be a close second consideration, and Russia is certainly laying the groundwork to establish a more heightened military and basing presence. Besides, both China and Russia view the Arctic as a way to solidify their international status as global powers. Russia's Arctic geography means that it already has a head start in either influencing or controlling the sea lanes of the High North. China, however, will continue to grow its footprint and focus on the Arctic. China has already started to examine the laying of an under-sea Arctic cable between China and Finland. The proposed 10,500-kilometer

fiber-optic cable still appears to be under negotiation, but as the Arctic continues to melt, the cable will soon no longer be out of the realm of the possible. It highlights China's growing desire to use the Arctic as an alternative route for information flows that will remain independent of other networks.<sup>52</sup> Since Russia and China appear more aligned against a U.S.-led world order, their Arctic foreign policies will likely remain more in sync as they develop additional ways to safeguard and control the Arctic.

The larger question and concern are whether or not the Arctic will become a more securitized region of tension and competition. The initial signs are not reassuring, though Russia has largely solved Arctic issues and questions over Arctic governance by using the Arctic Council or other multilateral frameworks. The difficulty nonetheless is the buildup of its bases and greater oversight of sea lanes that pass through Russian territorial or internal waters. Russia claims that it is building up bases and its military presence to further promote Arctic peace and cooperation. But in the process, Russia is setting up a classic security dilemma. How do others view the buildup of Russia's Northern Fleet, for example? Is it defensive or offensive in nature? NATO is increasingly concerned by Russia's maritime strength and aggressive behavior and has therefore responded in kind through more exercises and a buildup of NATO forces along Europe's northern flank.

Though China is not an Arctic military power in any sense, it has started to push farther north, deploying naval forces, as well as scientific expeditions that support mapping and other navigational efforts. The most recent and noteworthy Chinese naval visits to the Arctic came in 2015 and again in 2017. In 2015 five PLAN ships sailed into the Arctic for the first time ever near Alaska's coastline. China was reportedly trying to intimidate President Barack Obama, who was making his first visit to the Arctic state. Later in the fall, China sent a smaller naval flotilla to visit several Nordic countries in another show of its expanding Arctic interests. In 2017 it repeated a similar voyage near Alaska but this time was reportedly there to observe and gather intelligence on the U.S. military missile testing of its Terminal High Altitude Area Defense system.<sup>53</sup> As China's geoeconomic and geostrategic interests expand in the Arctic, it is likely that China will continue to focus on how to best secure them. Certainly, China will also be aided by its burgeoning Arctic relationship with Russia. As China builds up its polar vessel fleet, it can safely rely on Russian assistance, but

whether or not this relationship is sustainable is something that China will need to address.

What is perhaps most troubling in all of this is the relative absence of the United States. The United States has largely been focused on land-based conflicts, primarily in the Middle East and Central Asia, during the past nineteen years. In the process, it has more or less neglected strategic regions such as the Arctic while Russia and China charge ahead to take advantage of the melting ice cap and changing maritime transit routes. A former commandant of the U.S. Coast Guard, Admiral Paul Zukunft, most recently sounded the alarm bell for the United States in the Arctic, stating: "They've got all their chess pieces on the board right now, and right now we've got a pawn and maybe a rook. If you look at this Arctic game of chess, they've got us at checkmate right at the very beginning."<sup>54</sup> Many allies are further concerned that in the growing event of an inadvertent accident or outbreak of conflict, the United States will be unwilling to take the lead in committing forces to resolve the conflict. The Arctic is maritime Eurasia's last frontier, but the United States has yet to lead or focus on this strategically vital region, creating yet another vacuum for Russia and China to fill. Russia and China are well positioned to unify and control the strategic sea lanes of communication that surround Eurasia, or what many call the "World Island." And for China, the Arctic is just the beginning, as it now sets its sights on the development of the Antarctic, demonstrating further just how significant this maritime competition has become.

## Heightened Maritime Competition and Shifting Seas

*It is not the taking of individual ships or convoys, be they few or many, that strikes down the money power of a nation; it is the possession of that overbearing power on the sea which drives the enemy's flag from it, or allows it to appear only as a fugitive; and which, by controlling the great common, closes the highways by which commerce moves to and from the enemy's shores. This overbearing power can only be exercised by great navies, and by them (on the broad sea) less efficiently now than in the days when the neutral flag had not its present immunity.*

Alfred T. Mahan, *The Influence of Sea Power upon History, 1660–1783*

SINCE THE END OF THE COLD WAR, the United States has ruled the waves and the international order that came with it. Though the United States still remains the dominant world military and naval power, the perception is that the United States is on the wane, and there is a void to be filled by Eurasia's rising powers. Or at the least, China and Russia hope to undermine and rewrite the U.S.-led world order. The three continental powers examined here—China, Russia, and India—aspire to achieve great power status and the ability to influence or sway world politics. Each power also recognizes that maritime might and a blue-water navy are two key ingredients to achieving this goal.

As a liberal global order declines, and emerging powers such as China, Russia, and India begin to assert themselves more forcefully on the world stage, we enter a new world in transition. Students of history recognize that the rise and fall of great powers are natural occurrences in international relations. What we

are witnessing today, however, is a dynamic global transformation that necessitates balancing multiple great power aspirants, and one that will influence the future of the world economy, international politics, and the security and stability of the global commons.

Maritime geoeconomics are the primary motivating force that has led to the intensifying maritime embrace of these three Eurasian continental powers. India and China have burgeoning economies that need vital natural resources to sustain economic growth. Russia has the requisite natural resources to sell to global markets, most of which will travel via the sea from the Arctic in the future; it also needs China as a strategic market and geostrategic partner under a tightening international sanctions regime. As each nation seeks great power status, an intensifying maritime competition has emerged. With most goods or resources arriving via the sea, all three nations appreciate the need to safeguard and secure Eurasia's sea lanes of communication, in addition to building up blue-water navies that are capable of both projecting power and securing national assets or investments abroad. But the end result has been rising navalism and a heightening of political rhetoric and regional securitization from East Asia and the South China Sea to the Indian Ocean, Europe, and the Arctic Ocean. Each Eurasian power analyzed here has started to push farther beyond its regional or near seas to both signal maritime might and ensure that its maritime geoeconomic interests are protected.

Rising navalism can be particularly dangerous in regions that are highly contested or where naval forces have become increasingly proactive and aggressive. As exhibited in the South China Sea, the United States, Japan, and others have had close encounters with Chinese vessels on numerous occasions. This does not mean that India, Japan, and the United States should stop supporting freedom-of-navigation operations in the South China Sea, but the United States should also be aware of the growing perception of U.S. retrenchment and declining leadership on the world stage. Under such an environment, where the United States appears to be withdrawing from its role as a global policeman or enforcer, many U.S. allies are beginning to discuss ways to defend interests on their own terms and without U.S. leadership or U.S.-led force deployments.

Beneath such a pretext, the open question, then, is: what to do about it? I take the liberty here of proposing a preliminary list of recommendations that are worthy of additional exploration and debate. Not all is lost if one looks at the world prism from a liberal-world-order perspective, but the United States and

its European and Asian partners and allies must not waste any more time in their deliberations on how to best manage the rapidly changing dynamics of maritime Eurasia, because China is already leaps and bounds ahead in its geoeconomic and geostrategic investments. For the past eighteen-plus years, the United States, along with many of its allies, has been far too focused on the land-based conflicts in Iraq and Afghanistan. Counterterrorism and counterinsurgency operations have been the main muscle movements of the Department of Defense, but the end result has been that the U.S. military has atrophied in its abilities to carry out strategic thinking and analysis about more traditional functions such as great power competition. (However, the 2017 National Security Strategy and 2018 National Defense Strategy change this calculation and focus.) Let us also be honest with ourselves: what is going on in maritime Eurasia cannot be resolved by the U.S. military or navy alone, despite its 514 main operating bases worldwide. The U.S. military is just one component of what must be a much larger strategy for the United States and its partners and allies. Aside from the United States, China, Russia, and India can be doing much more to help relieve certain international pressure points that have begun to mount over strategic issues such as the BRI and MSR, China's maritime militia, and Arctic security. It will be critical for each power to manage the emerging maritime competition so that it does not escalate into something more unwieldy or dire.

*Drive a wedge between Russia and China.* Though Russia and China are more closely aligned owing to shared interests and a desire to reconfigure a Western-led world order, many issues persist where the two countries diverge and where a country might be able to strategically wedge them apart as a way to balance certain dynamics of the growing competition. In Southeast Asia, for example, Russia has not taken an official stance in favor of China's claims across the South China Sea. Ostensibly, the unspoken consensus is that Russia will not openly push back against China in its sphere of influence, and vice versa. China will not challenge Russia's core interests in the Arctic or eastern Europe. Despite this perceived and implicit mutual understanding, Russia still actively engages with many Southeast Asian nations for arms and munitions sales. Russia is also motivated by energy exploration or sales and counterterrorism and training efforts in countries such as Vietnam, Laos, Cambodia, and Myanmar. Additionally, Russia is looking at the Philippines as another possible venue to expand its military-industrial reach. By selling more weapons or plat-

forms to many of these Southeast Asian nations, Russia will inevitably run up against China, which is also trying to corner the market for arms and equipment sales. Furthermore, Russia's active engagement with Vietnam puts it directly at odds with China over maritime disputes in the South China Sea. Though China is tolerant for now, a time might come when China requests more active and official support from Russia—or China might request that Russia scales back its sales in certain nations that are adamantly opposed to China's maritime or other territorial claims.

Along the far western reaches of Eurasia, China has similarly remained quiet on strategic issues tied to Russian geostrategic and geoeconomic interests in the Baltic and Black Sea regions, including Ukraine and Georgia. With the BRI, China has growing investments in both regions, and there is some concern that Russia's rising aggression could jeopardize these investments and partnerships. For the time being, however, the two appear to continue papering over their differences in favor of their larger shared interests. This might change if China sees a need to bolster its forward military presence in the Mediterranean to protect its growing maritime geoeconomic interests across the basin.

This aside, India might have a play in all of this as well, driving a possible wedge between the two nations under certain conditions. India continues to maintain military ties with Russia, albeit under weaker terms compared to the Cold War period. Russia is critical for India's submarine warfare program, in addition to other Indian technological platforms. If India is able to continue balancing its arms and technology purchases between Russia and the United States and European powers, it might be able to keep Russia closer in its orbit. Certainly, this comes with risks, especially as Russia grows increasingly ostracized by the United States and other European nations, but it might be a worthwhile strategy for now. Many analysts have similarly speculated that Russia advocated for India to become a member of the Shanghai Cooperation Organization (SCO) because it could act as a possible critical ally and counterweight to China. Though inherently terrestrially focused, the newly emerging dynamic at the SCO, including India's (and Pakistan's) new membership, gestures toward the certain level of mistrust between China and Russia. Russia must recognize at some level that it needs China more than China needs Russia, and therefore must continue to think about how it can best balance against China in possible future scenarios where their collective interests might diverge. It will be important to continue studying how to balance Russia and China as a future strategy.



*Infuse more transparency, oversight, and standards into the Maritime Silk Road and the Belt and Road Initiative.* One of the open criticisms of the MSR and BRI is that they lack transparency, standard rules, and procedures, in addition to being financially predatory. Growing concerns persist that many of the port projects are meant as dual-use infrastructure projects that could be used easily by the PLA or PLAN in the future, especially with the accompanying multidecade port leases. Beijing is aware of the criticism, and that is why it is readapting and readjusting the public face of its global initiative. During the April 2019 BRI summit hosted in Beijing, the government tried to convey the message that it was prepared to change some of its prior practices that were often criticized internationally. In a statement, Xi Jinping declared, “Everything should be done in a transparent way and we should have zero tolerance for corruption. We also need to ensure the commercial and fiscal sustainability of all projects so that they will achieve the intended goals as planned.” Additionally, Beijing tried to showcase that it was pushing for more environmentally friendly projects that implemented fair labor practices and more standardized operating procedures. The fair labor practices address in part the dissatisfaction that many observers have expressed regarding how some of the Chinese port projects are implemented with little local involvement and an allegedly indentured Chinese work crew. As one Chinese scholar pointed out to me, the Chinese Communist Party (CCP) leadership has relatively limited oversight and control over MSR and BRI projects; many Chinese corporations have significant political clout and sway within the CCP, making it a further challenge to rein some firms in. As a result, China will need to work on closing down certain loopholes on overseas investments where there is currently little to no Chinese government monitoring or oversight of multinational corporations and other state-owned enterprises. Accountability is largely absent if something goes awry in a foreign country or if a project is poorly executed. As Li Mingjiang, a Chinese scholar based at Singapore’s S. Rajaratnam School of International Studies, has argued, “Better rules and standards for the BRI will facilitate the participation of other major powers in the BRI. More multilateral cooperation under the BRI may significantly help mitigate the geopolitical competition between China and other major players.”<sup>1</sup> Until many of the loopholes are fixed and greater transparency is infused into China’s MSR and BRI investment apparatus, China will continue to face many challenges, including risky financial loans and investments, and the bad publicity that has come with it on certain projects. China’s

latest BRI summit was a step in the right direction toward promoting higher standards and “fiscal sustainability,” but it still has a long way to go to overcome mistrust that has festered in some host nations where projects have either been placed on hold or canceled altogether because of a variety of factors. Even so, the MSR and BRI have already demonstrated noteworthy success in many areas and are unlikely to change significantly; but if Xi Jinping seeks to sustain his grand vision, then China will need to stay attuned to the mounting concerns affiliated with the MSR and BRI, both domestically and abroad.<sup>2</sup>

*Fight economic development with economic development.* USAID and State Department funding levels have struggled in recent years. Time and again, many analysts and officials lament the declining power of the State Department and its influence on operations abroad. U.S. economic aid is a critical instrument of statecraft and needs to be replenished to serve the needs and interests of the United States abroad. For fiscal year 2019, for example, a 29 percent cut, worth an estimated \$16.2 billion, was proposed for the State Department’s budget. Though the U.S. Congress has fought back to restore many of the cuts, they still send a resounding message about the diminished importance of the State Department in the current administration. The further problem is that China has emerged as a powerful economic developer around the world under the guise of the BRI and MSR. The amount of money that China has shoveled into poor and developing countries has been astounding. The United States needs to do more to highlight the dangers associated with taking low-interest loans that can financially entrap developing countries such as Sri Lanka, the Maldives, Djibouti, Malaysia, and others. Moreover, the Department of Commerce and other U.S. government entities could be doing more to promote U.S. businesses abroad that can support key infrastructure and development projects. According to some estimates, the world is poised to spend an estimated \$94 trillion on infrastructure by 2040, and this is something the United States could easily tap into.<sup>3</sup> The recent news that the United States will reformulate the former Overseas Private Investment Corporation (OPIC) into the International Development Finance Corporation (IDFC) to counter China’s BRI projects is a step in the right direction. Some skeptics argue, however, that China already has a significant geo-economic foothold in so many places that it will make it hard to alter China’s international development trajectory. The IDFC has inherited OPIC’s \$6 billion budget, but it still has a lot of ground to cover if it desires to succeed in its larger intent.<sup>4</sup> Much of my analysis in this book also supports this claim.

The United States is a critical actor in promoting economic and sustainable development, but India, Japan, Australia, and the European powers, among other nations, should be equally engaged in developing their geoeconomic and development strategies to compete against China's BRI. President Modi has been proactive in promoting SAGAR, along with his many other strategic initiatives, though the key now is for the Indian government to execute these initiatives in a timely and efficient fashion. India maintains a strategic upper hand over China and others across the Indian Ocean region due to geographic proximity and shared culture and history with its neighbors, but it must also do more to ensure that Indian businesses can more easily invest and operate across the Indian Ocean. One initial way to facilitate India's regional investments and proposals is to increase the size of the ministry of external affairs and its foreign service officer corps. Currently, India's foreign service only accepts around eight to fifteen foreign service officers per year. In total, it only has around six hundred officers who serve approximately 162 Indian missions worldwide. For a country with an estimated 1.3 billion persons, this is an unacceptably low figure. If India wants to be taken seriously with its initiatives in the future, it will need to start first by increasing its ministry of external affairs staff and foreign service officer corps, which in turn can act more readily in promoting India's regional and global interests more effectively.<sup>5</sup>

*Deploy more U.S. and European treasury employees abroad.* Throughout the research of this book, the most innovative program I saw in action to support partners indebted to China was through the assignment of U.S. Treasury officials to a host foreign central bank. In one particular instance, the U.S. Treasury posted officers to the Central Bank of Sri Lanka to help them manage their balance sheets and other interest payments due to China. A smoking-gun solution never exists for any of these financial dilemmas, but the program appeared to produce certain successful outcomes. If a host nation is open to such a program, the U.S. Treasury and State Department, along with other developed European allies such as France or Great Britain, should consider expanding the scope and breadth of such programs. It also ensures that these developed nations continue to think more strategically about the important role of economic statecraft or geoeconomics. China has already ensnared numerous developing nations with its megalomans and is likely to continue with similar practices. This type of initiative could be one smart way to help stave off future financial challenges for some nations.

*Support partners and allies.* If the United States is not going to take the lead on certain flaring foreign policy issues, it must enable its allies to take on greater risk and leadership instead. Certainly, the United States continues to maintain strong relationships with South Korea, Taiwan, Australia, and other ASEAN nations. But the United States should do more to continue promoting interoperability with its key allies through additional joint multilateral exercises, weapons sales, advanced technological transfers, and greater intelligence sharing. Promoting more interoperability between the United States and its European and Asian allies will ensure better preparedness in the event of a major conflict. Additionally, the United States should begin to think more strategically about expanding the scope and purview of the Quadrilateral Security Dialogue between the United States, Japan, India, and Australia. Some officials have suggested that the Quad's membership should be expanded to include other strategic allies, such as Great Britain and France, which also have strong interests across the Indo-Pacific. More movement should occur toward transforming the Quad from a security dialogue grouping to something that has more teeth on issues related to the collective security of the global commons.

In addition to the Quad, Japan came up again and again as an additional country that the United States should encourage and support above and beyond its current engagements. The United States, for example, should assist in promoting Japan's economic development initiatives and broadening military engagements across the Indo-Pacific. From Djibouti to India and Sri Lanka, Japan's burgeoning presence is emerging as an important counterbalance to China's expanding footprint. Since the Cold War, Japan's imperial legacy has shaped and influenced its MSDF and its modernization efforts, along with providing the MSDF with a clearer sense of mission and purpose. Today, the MSDF has largely prioritized East Asian security associated with protecting Japan's archipelago and disputed maritime territories. The MSDF has also placed growing emphasis on protecting the sea lanes of communication to ensure good order at sea across the global commons. As Japan pushes deeper into the Indian Ocean, however, it has been more actively engaged in issues of international maritime security compared to its imperial naval predecessor. Some have argued that Japan's MSDF has been constrained from further naval development or expansion by article 9 of Japan's constitution, while others have argued that Japan has always adopted a maritime strategic approach and posture that is inherently adaptable and flexible to maintain regional sea control as a core competency. Despite that,

Japan still relies on the United States to fill certain naval warfare capability gaps. Moving forward, the challenge for both the United States and Japan will be how they envision Japan's maritime posture and power projection capabilities across the Indo-Pacific. Japan has historically never pushed significantly beyond the Strait of Malacca except for a brief period during the height of World War II; Japan's East Asian legacy contributes further to the diplomatic delicacy of the overall situation as well. Nevertheless, owing to the deeply historical and increasingly institutionalized U.S.-Japan naval relationship, it will make it harder for Japan, if it so desires, to take a more independent strategic approach to maritime security in the Indo-Pacific. (For greater perspective, the United States currently maintains 121 basing sites in Japan, per official reporting.) In the meantime, as a high-level Japanese official emphasized to me, Japan, India, and the United States have strongly shared democratic values and interests in maintaining a free and open Indo-Pacific. They also share an increasingly dangerous potential foe in China. Japan does not want a monopoly over supply chain and logistics networks similar to what China appears to be building through its BRI and MSR. Instead, Japan wants a system that is open and transparent, aligning with other liberal world order values and norms. Furthermore, Japan has its own interests to preserve, including energy security, SLOC security, fisheries protection, growing Arctic interests, defending disputed maritime zones and islands, balancing against more aggressive neighbors such as China and Russia, and addressing growing perceptions of U.S. regional retrenchment. Despite the complex and inherent challenges of the bilateral naval partnership, the United States should continue to support the expansion of Japan's growing maritime posture across the Indo-Pacific.<sup>6</sup>

Finally, NATO and its Allied Maritime Command will be a last key anchor in any U.S. Eurasian strategy. For its part, NATO must move beyond its more terracentric border focus to embrace Europe's critical maritime regions, especially as Russia makes a more concerted push into both the North Atlantic and the Mediterranean. Additionally, NATO must start to think about strategically expanding its operations into the Atlantic, including possible plans to better protect transatlantic sea lanes of communication. That said, one must still not lose sight of the fact that much of China's strategy has largely been geoeconomic in nature and therefore does not necessarily require a purely military solution or strategy.

*Prepare India to defend the homeland from the sea.* India has historically

oriented its national security priorities inward along its disputed Himalayan frontier with both China and Pakistan in Kashmir. But as discussed earlier, India must now engage more with India's future maritime security and coastal defense. China has already deployed significant reinforcements along its contested territorial borders, but in recent years China has begun to place greater emphasis on its maritime presence in the Indian Ocean, whether through naval power projection or through its geoeconomic investments in countries such as the Maldives or Pakistan. In other words, India is largely limited in how much more pressure it can exert on China along their contested border. Be that as it may, the maritime space offers India a geostrategic arena to craft new ways to place pressure or the threat of pressure on China, since China is inherently vulnerable operating far from its shores. Indeed, India relies on the SLOCs for its survival just as much as China and other nations, and so India must be strategic in how it might respond to China on the high seas in the future. However, India must still continue to focus on building up its maritime defenses, joint readiness, and other regional and global partnerships, including regional institutions such as the Indian Ocean Rim Association, if it wants to properly manage the growing maritime competition with China. Moreover, India should be prepared for a worst-case scenario that sees the possibility of a two-front siege (on land and at sea). Some speculate that China might be able to lob missiles from Tibet at Indian warships traversing the Bay of Bengal; this is why India's joint air-land-sea responses will be critical. Or worse, China might use Pakistan as a further means of threatening India with action—some Indians openly speculate that China is possibly plotting to assist Pakistan in developing its own A2/AD capabilities that could deter India at sea in a future conflict. Though investing more in India's navy only feeds more regional navalism, India is not wrong to be concerned about China's maritime rise and how China uses Pakistan against India. The PLA or Chinese-backed private military corporations will likely become more active and aggressive in protecting Chinese investments and interests along the BRI and MSR as they blossom into a robust development and trade network.

In terms of structuring a future maritime force that meets India's growing needs at sea, India must be careful not to fall entirely into the trap of investing solely in conventional ships and other related platforms; the bureaucracy must also be enabled to support India's future naval modernization efforts. Though investing in conventional warships sends a message to China and others, the

Indian Navy should invest more heavily in both its marine force and amphibious capabilities and its subsurface or undersea assets and platforms. India's submarine arm, for example, could be larger and therefore more effective if more resources were allocated. India has already invested in antisubmarine warfare, but it could similarly invest in more A2/AD technologies across the Andaman and Nicobar Islands as one way to prepare for future challenges on the high seas. Additionally, India should be investing more in the modernization of its naval force structure, with a focus on subsurface and other capabilities such as underwater drones to protect its maritime territories and coastlines and to gather better intelligence and maritime domain awareness. If India does not continue to support a more adaptive and innovative force structure, it risks being unable to effectively compete with China on the high seas.

Aside from strategic investments in its force structure, India must do more to promote joint exercises and capacity-building efforts with partner nations. Joint maritime exercises between the United States, India, and Japan are an important annual endeavor. Moreover, India has smartly cultivated stronger ties with Indonesia, as demonstrated by Modi's first official visit to Jakarta in May 2018. During the visit, the two heads of state laid out a joint maritime vision for the Indo-Pacific, in addition to announcing the elevation of the bilateral relationship to a "comprehensive strategic partnership," which included the signing of a Defense Cooperation Agreement. Beyond Indonesia, India should continue its outreach and diplomatic efforts across Southeast Asia, including more partner capacity building with Vietnam and the Philippines. India could also act as a diplomatic intermediary for Japan in Southeast Asia, where Japan, owing to its fraught regional history, must take a more delicate and nuanced approach to its diplomatic engagement and outreach efforts.<sup>7</sup>

Last, India must think strategically about how it addresses the ongoing military outpost versus basing debate across the Indian Ocean. India has been wise to conclude several basing access agreements with strategic partners such as the United States, France, and Oman. Modi and his cabinet have been astute in placing greater emphasis on building up the military's and navy's capabilities to operate from the Andaman and Nicobar Islands (ANI), including the allocation of more resources for infrastructure projects and the conduct of nearby military exercises. Even if housing a more permanent force in the form of an ANI base proves more difficult and costly in the short term—at Port Blair, for example, no proper cover exists for ships, and it still lacks some basic infrastructure needs—

it will be important that India bolsters its other capabilities, including maritime domain awareness and other signals intelligence outposts. India has already begun to work more closely with the United States to interoperationalize communications and security, in addition to other basic information cooperation. Information sharing and gathering will be critical for both India, the United States, and regional powers alike. Similar programs need to be financed and expanded to other Indian Ocean partners as well.<sup>8</sup>

*Protect the submarine cables.* More thought and consideration need to go into securing the estimated two hundred fiber-optic cables that are responsible for most of the world's global communications and cybersphere. On land and at sea, the world's increased cyberconnectivity has had a profound effect on how we receive or protect information. The maritime sector, especially the shipping industry and major ports around the world, has similarly started to think more critically about the necessity to secure essential cyber data streams and other critical maritime infrastructure. As China begins to successfully establish a global submarine cable system that is more independent and acts as a possible redundancy line, as demonstrated by the PEACE submarine cable network, it will be important for other powers to think about how information is secured, stored, and shared from one location to the next. The private sector alone is unable to tackle the breadth and scope of maritime cybersecurity for national security purposes. As a result, India and others will need to consider more explicitly how they secure the few fiber-optic cables that are critical for sustained success and growth in a twenty-first-century global knowledge economy. China has already invested in huge research-and-development endeavors tied directly to the security and expansion of these highly valued undersea networks, in addition to supporting firms that increasingly monopolize cable laying along the world's ocean floors. Controlling key information flows that traverse the global undersea fiber-optic cable networks will be a key to strategic victory in many future conflict scenarios.

*Build up the U.S. Navy strategically.* Like India, today and in the future the U.S. Navy must continue to think about how the threatening way of war will take shape both in and outside a gray zone where the bounds between war and peace are largely blurred. Furthermore, if the United States continues to take a less active global enforcement role in world politics or in protecting the global commons, what should the future shape and posture of the force look like? Or if the United States is going to ask for more burden sharing from its strategic



allies similar to NATO, does it still require the same fleet in being? Though aircraft carrier groups are critical for the deployment and show of traditional force today, the question still remains regarding how well they will fare in areas where China and Russia have built up their A2/AD capabilities, and whether or not they should be prepared to operate in such areas. The U.S. Navy must also think about how it can best repair and secure undersea cyberinfrastructure and cables that control information flows, the current lifeline of the global political economy.

As exhibited here, China and Russia are developing technological capabilities that are not always tied to big ships or traditional naval platforms but also include information warfare that manipulates shipping data or attacks maritime cyberinfrastructure. Both China and Russia are building up strategic military outposts that are equipped with runways, sophisticated domain awareness equipment, undersea trip wires, missile launch pads, and other advanced technological platforms that could render many U.S. or other allied warships virtually helpless in certain scenarios. This is just one of many areas where the U.S. Navy needs to think more critically and strategically about the changing character of war. The size of the fleet alone will not be the only solution. The United States must also be prepared for when allies might not always fall in line with U.S. requests or demands in the future, especially if such allies begin to take on a more prominent or established role on the high seas.

*Lean forward on the Arctic and build up a globally oriented U.S. Coast Guard.* A strong chorus of voices in the United States has emerged advocating for a more proactive U.S. stance in the Arctic. Despite vocal outcry, it does not appear that the United States will make any movements on this front anytime soon. As laid out in the previous chapter, Russia and China have carved out a greater hold over both the natural resources and the emergent shipping lanes of the High North. If Russia and China increasingly control the Arctic's SLOCs in the future, this could adversely affect the United States if its geoeconomic and geostrategic interests are increasingly tied to the shorter shipping lanes to and from Europe and the abundance of the Arctic's natural resources. The United States might also lack redundancy options to safeguard its own submarine cables and other strategic waterways. China has already begun to lap the United States on its scientific research efforts, including the proposal to lay an undersea fiber-optic cable that ties China directly to Europe via the Arctic. The fact that China has more icebreakers in service, with more on the way, than the United States is equally unacceptable. In the Arctic, the coast guard is already critical,

albeit with a small footprint, in its ability to launch search-and-rescue missions and oversee icebreakers that support scientific research on climate change and how it affects the world's oceans and weather patterns. The Arctic has started to open up significantly, and as an Arctic nation, the United States should be doing much more to tout its regional leadership.

Outside the Arctic, the U.S. Coast Guard can play a vital role performing essential tasks worldwide that support U.S. and other allied interests. Some of the important roles of the U.S. Coast Guard include interdiction operations, ship-rider agreements, or assisting and advising developing countries in capacity building or training efforts. Most countries lack the funds and capacity to monitor EEZs, but the coast guard can fill this critical gap through various international agreements and training efforts. The coast guard's international affairs and shipbuilding programs should be expanded so that it can deploy more officers and ships to small and remote nations that are strategically located across maritime Eurasia. Currently, most officers are posted in small numbers to embassies, but these programs should grow in regions where the U.S. Navy does not traditionally operate. The U.S. Coast Guard is best suited to support coastal defense and monitoring, as well as port security initiatives, especially in countries where ports are a primary source of financial revenue. The coast guard should also continue focusing on international partner capacity building that includes maritime domain awareness, humanitarian assistance and disaster relief readiness, and counter-illegal-fishing and counterterrorism missions. Investing more in the coast guard's mandate and capabilities will ensure that the United States and its partners or allies can adequately confront or manage the maritime great power competition with China and Russia. Much of the current maritime competition and future tensions will unfold along the margins in isolated or disputed maritime zones. As a result, traditional responses that might have previously necessitated a naval ship deployment might not be adequate or appropriate in many circumstances. Preparing smaller nations for better resiliency against this inevitable outcome will be critical.<sup>9</sup>

*Combat Chinese paranaul groups.* To prepare further for this emerging maritime gray-zone conflict, or "maritime rights protection," as the Chinese call it, the international community and regional countries alike must continue to be proactive in supporting greater patrols, monitoring, and the deployment of ships that can help deter China's maritime militia. This also fits into the calls by the United States, Japan, and India for the maintenance of a free and open Indo-

Pacific. (To add greater legitimacy to this policy stance, the United States needs to sign and ratify the United Nations Convention on the Law of the Sea.) ASEAN has also attempted to pass and adopt a code of conduct in the South China Sea as a way of managing the escalating tensions with China. Despite the larger geopolitical divisions over disputed maritime boundaries and a call for an accepted code of conduct on the high seas, the People's Armed Forces Maritime Militia continues to operate regionally without much recourse as they swarm or intimidate smaller fishing trawlers in disputed maritime zones or other unregulated fishing areas. Since the PLA reforms and military restructuring that started in 2015, the PLAN, Chinese coast guard, and maritime militias have become more streamlined and coordinated in their command-and-control structures and interoperability. This will likely result in Beijing being able to use paranaul coercion more effectively and stealthily as a first line of defense. Fortunately, the United States has formally recognized and is actively preparing for the growing challenge that is posed by China's maritime militia through official reporting. For the time being, capacity building at the national and regional level will be an important first step.<sup>10</sup>

*What lies ahead?* It would be wonderful if the United States led a new charge to address the emerging trends associated with the rising maritime competition between China, India, and Russia across Eurasia. Because of its current domestic volatility and apparent isolationist tendencies on many world issues, however, the United States will likely hobble along internationally in the near future. This will in turn have significant repercussions for the future of world order as it shifts from a more unipolar configuration to a multipolar one where China, Russia, and India, among others, play more prominent leadership roles. The great power maritime competition is not likely to abate anytime soon. In fact, it is only likely to become more contentious and fraught as these competing nations place more emphasis on the importance of sustaining a blue-water naval presence beyond their respective regional seas. China is already looking beyond Eurasia and has pushed into Antarctica in significant ways. From Antarctica, China is then able to move more easily into Latin America, where it has eyed strategic geoeconomic footholds in geostrategic locations such as the Panama Canal.<sup>11</sup> Africa, too, is already awash in Chinese maritime investments and port project funding. Geoeconomics are the primary driver of China's recent seaward push, but with more investments comes more risk. To mitigate this risk, China must secure its assets, and one of the main ways to do this is to construct

an independent supply and logistics network, establish friendly ports or access points, and build up a blue-water navy. It is a critical play out of Mahan's strategy book and is already well under way. Russia and India have adopted similar maritime strategies that are fueling the current race to rule Eurasia's waves. As the United States appears to retrench from its global leadership role, China, Russia, and India have started in earnest to fill the void, which means turbulent seas ahead.

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## NOTES

### Chapter 1. Eurasia's New Great Power Competition at Sea

1. Spykman's quote in the chapter epigraph was a direct challenge to Sir Halford J. Mackinder's heartland theory on Eurasia. Mackinder argued in his 1904 article "The Geographical Pivot of History" that controlling the *heartland*, and not Eurasia's rimlands, enabled a great power's control of the continent and thus the world. Nicholas John Spykman, *The Geography of Peace* (New York: Harcourt, Brace & World, 1969), 43.
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#### Chapter 4. Anchoring the Seas of Southwest Asia

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## Chapter 5. The Indian Ocean as Arena

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