

Xu Qi is deputy director of the Strategic Research Office of the Naval Affairs Science Research Institute in Beijing. He is a Senior Captain in the People's Liberation Army Navy, holds a PhD in military studies, and is author of, among other titles, A Historical Theory of Chinese Seapower (Beijing: National Defense Univ. Press, 2000).

Dr. Erickson is assistant professor, and Dr. Goldstein associate professor, of strategic research in the Strategic Research Department of the Naval War College's Center for Naval Warfare Studies. Both are founding members of the College's newly established Chinese Maritime Studies Institute.

MARITIME GEOSTRATEGY AND THE DEVELOPMENT OF THE CHINESE NAVY IN THE EARLY TWENTY-FIRST CENTURY

Xu Qi

Translated by Andrew S. Erickson and Lyle J. Goldstein

This article, published in 2004 in China's most prestigious military journal, China Military Science, merits special attention as a cogent explanation for the recent acceleration in China's naval development that has been manifested by the wide array of sophisticated warships that have emerged from Chinese shipyards since 2000. Xu asserts that contemporary Chinese maritime geostrategy is powerfully informed by a tragic history in which "China's rulers shut the door to the outside world [and] the sea . . . was neglected. . . . [Thus,] the sea became a springboard for invaders." But the geostrategic environment for China's maritime expansion is now favorable, because of a confluence of global trends, including the collapse of the USSR, the 9/11 attacks on the United States, the emergence of a "large Chinese economic bloc" as a global force, and Beijing's newly agile diplomacy. The author reviews a number of aspects of China's maritime development, ranging from expanding commerce to new construction projects in the Indian Ocean. Senior Captain Xu's rationale for an expanded PLA Navy rests on his contention that China's "long period of prosperity [as well as] the Chinese nation's existence, development, and great resurgence [all] increasingly rely on the sea."¹ He also is frank in his concern about "a concentration of strategic power in the Asia-Pacific region on [China's] maritime flank."

Geostrategy represents a country's effort in the world arena to use geographic orientation and principles to pursue and safeguard its national interests.² Entering the twenty-first century, China's geostrategic relationships, especially its maritime geostrategic relationships, are undergoing profound change. This will have far-reaching consequences for the development of China's naval strategy. It will require China's navy, when confronted with the new geostrategic environment, to develop a new orientation from the perspective of geostrategic relationships.

I. THE IMPORTANT EFFECTS OF THE KEY ELEMENTS OF GEOGRAPHIC ORIENTATION AND THE MARITIME GEOSTRATEGIC RIVALRY AMONG THE GREAT POWERS

When considering the geographical relationships between states in order to study a given state's geostrategy, the state's geographical position, comprehensive national power, and spaces separating it [from other powers can be seen to] constitute the essential elements of [its] geographic orientation and [to] have a fundamental influence on a nation-state's development, strength, and prosperity.

1. The Interrelation between the Sea and National Power Is a Vital Determining Factor in the Long-Term Prosperity of the State

Two basic factors in geostrategy are geographic orientation and geography. For a given country, the factor of geographic orientation is a variable, but the factor of geography is a constant.³ The geographical factor consists primarily of the geographical environment and position. In history, the geographic orientation afforded by a nation-state's geographical position and its rise and decline have been closely related. England is a typical case of a maritime state. Enjoying a geographical position of exceptional advantage, which afforded it both relative separation from the European mainland as well as control over northern European sea lanes and critical straits, it held sway over Continental Europe and maintained the balance of power to prevent the emergence of any Continental hegemon, thereby enabling it to create a colossal colonial empire holding sway over the entire world.

The United States, on the other hand, is situated between two great oceans, with its territory surrounded by vast sea areas that place it far away from Eurasian battlefields. This has provided an advantageous environment for national development. Furthermore, [the United States] benefited from the guidance of [Alfred Thayer] Mahan's theories of sea power, and unceasingly pressed forward in the maritime direction, capturing in succession Hawaii and the Marianas Islands in the Pacific Ocean, expanding its strategic depth on its maritime flank, securing an advantageous maritime geostrategic posture, [and thus] establishing a firm foundation for its move into the world's first-rank powers. One can draw a contrast with Germany, which although a nation proximate to the sea, with its location in Central Europe—unlike the maritime powers—more easily got caught up in two-front wars. [Friedrich] Engels, in analyzing why Germany lagged behind England in the nineteenth century, said, "First, Germany's geographic position is disadvantageous, because it is too far from the world trade thoroughfare of the Atlantic Ocean. The second reason is that from the sixteenth century until the present, Germany has been drawn continuously into wars, all

of which were fought on its own territory.”⁴ Inland states such as Poland, which was stuck between Germany and the Soviet Union, suffered predation from their neighbors, owing to their geographical position. Other inland states, such as those of the Balkan Peninsula, suffered invasion and domination by their enemies even more frequently, causing these states to suffer still more from retarded development.

2. *The Sea Has a Profound Influence on a State's Power and Prosperity*

A nation's geostrategy, including its national power, the fundamental geographical factor, can more or less determine its levels of development and strength. The American naval strategist Mahan [1840–1914] suggested geographical position, naturally good natural ports, territorial area, population numbers, national qualities, and government system as six key elements that are indicative of a great maritime power. This suggests that, in order to become a great maritime power, it is necessary to possess those key elements of national power related to the sea. It also reflects the profound influence of the key element of maritime geostrategy for a nation's power and prosperity.

美国...得益于马汉海权思想的引导,不断向海上方向挺进...相继夺取夏威夷,马里亚纳群岛,扩大了...战略纵深...走向世界一流强国。

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In terms of the key factors that constitute comprehensive national power, a nation's territorial area, natural resources, population size, and [national] qualities are the most fundamental conditions. More than other factors, these bases of a nation's economic and military power reflect a nation's geographic orientation. During the Second World War, Nazi Germany made a clean sweep of Europe, capturing much of the territory of the Soviet Union. But the contest of the war was a contest of comprehensive national powers. Although the former Soviet Union occupied a geographical area nine times that of Germany and so possessed massive material resources, it still had to depend on aid from Britain and the United States. Britain at that time could not match Germany's national strength; however, by depending on seaborne aid from the United States [it] was able to mount a tenacious resistance. Only the United States, however, could rely on its solid maritime position as an advantage, [by this means] accumulating massive comprehensive national power, unceasingly providing the Allies with large quantities of goods and materials for lease, [and thus] becoming a powerful world force for justice in defeating the strong forces of the fascists. Entering the twenty-first century, the United States draws support from the economic and military might of other strong maritime powers, [and in so doing] reinforces the

geographical weight of its comprehensive national power. It stubbornly adheres to the path of unilateralism and hegemonism, to such an extent as to violate the spirit of the UN Charter and widely recognized norms of the international system, [by] invading sovereign states under the pretext of counterterrorism, [by] gravely assaulting the existing international order, and [thus] constituting an immense challenge to the trend of multipolarization.

3. The Direct Relationship between the Geographical Significance of Vast Maritime Space and National Security

Oftentimes, threats to a nation's interests—particularly its security interests—increase as their spatial distances decrease. Even before the Second World War broke out, both Germany and the Soviet Union invaded Poland in order to expand their defensive buffer zones. Historically, the states of Central and Eastern Europe have been in a zone of rivalry between the Western great powers and Russia. During the Cold War, the former Soviet Union used Eastern Europe as a protective screen in order to expand its security space. Since the Cold War, the United States, as the head of NATO, has repeatedly infringed on Russia's strategic space, first by moving the line of defense more than eight hundred kilometers toward the Russian border, [and] most recently with another round of expansion, both breaking through the not-to-be-exceeded "red line" stretching from the Baltic to the Black Sea that Russia designated, and approaching to a distance of some tens of kilometers from St. Petersburg, [thereby] causing Russia's northwestern flank to be directly exposed. The vast expanses of the ocean thus establish the direct relationship between maritime geostrategic position and national security interests.

The ancient defenders of China's central plains faced numerous neighbors on the northern flank, [yet] had no benefit of [strategic depth and buffer zones]. From the Qin dynasty [221–207 BC] onward, each dynasty invariably expended much of its manpower and material resources in repairing the Great Wall, in order to resist the harassing attacks from its close neighbors. This had a grave effect on the development of productivity. By contrast, Japan, separated by water from China, succeeded in using the sea as a protective screen. [This screen] was removed only in the mid-twentieth century, by the American occupiers, [Japan] never having before in [its] history suffered invasion by foreigners. Of course, the geographical consequence of maritime space has sometimes also constituted an indirect threat. Take, for example, the Korean Peninsula and China's other adjoining neighbors, which were often conquered by foreign invaders and became a springboard for attacking China, thereby precipitating wars. At present, the crisis on the peninsula remains serious, influencing the stability of the Northeast Asian region.

Moreover, because of the progress of science and technology and developments over time, the function of the geography of maritime space is not really immutable. In the process of industrialization, Western states cut across the natural barriers of the oceans and with their heavily armed ships smashed down China's gate. During the Cold War era, the United States and the Soviet Union undertook an arms race, which was especially intense with regard to increases in the quantity and range of nuclear weapons, and over an even greater space reached a position of mutual [threat]. Since the Cold War, the United States has vigorously strengthened its advanced military machine, relying especially on information superiority and all along maintaining the forward presence of its formidable fleet, which is able to project power over thousands of kilometers. But the 9/11 event caused the United States to recognize that underground nonstate terrorist groups had the capability to organize a network within the United States, with the ability to project power against a target at a distance of fifteen thousand kilometers. This made it clear that the vast ocean space could not allow the United States to avoid being struck, thereby greatly transforming geographical theories regarding space and distance.

4. Throughout History, the Struggles for Supremacy among the Great Powers Have Always Emphasized Maritime Geostrategic Rivalry

Historically, great powers struggling for supremacy have invariably focused their attention on the ocean and spared no efforts in pursuing their maritime geostrategic rivalries. At the end of the eighteenth century, Napoleon sought to expel England from the European continent, and toward that end advanced into the Mediterranean on the southern flank and attempted to cut England off from its foreign markets and natural resources by way of the Persian Gulf. On the other hand, the key elements of England's strategy were its alliance with Russia and maintenance of its maritime power in the Mediterranean. As early as the reign of Peter the Great, Russia initiated a military struggle to gain access to the sea. It successively achieved access to seaports along its northern flank and expanded its influence to the Black Sea and the Persian Gulf, even contending for the Black Sea Straits, as well as nibbling at the Balkan Peninsula. Napoleon's defeat caused the breakdown of the balance of power among the great European powers, as England and Russia emerged as the new hegemonic contenders. Russia's strategic goal was to rise beyond the Baltic littoral and the Black Sea to break through England's blockade line. England's goal was to contain Russia's westward and southward advance, while at the same time preserving maritime hegemony in the Mediterranean Sea and also the Indian Ocean.

Meanwhile, the United States was quietly rising on the western side of the Atlantic Ocean. The First and Second World Wars both spread from the Atlantic

Ocean to the Pacific Ocean. In the Atlantic Ocean, England and Germany struggled for mastery of Europe, following the same path as England and France had in the nineteenth century. In the Pacific Ocean, the struggle for mastery between the United States and Japan mirrored the great power struggle in Europe. During the Cold War era, the focus of the rivalry between the United States and the Soviet Union also expanded from the Atlantic Ocean to the Pacific Ocean, but their contention for supremacy followed the path of West-East containment and counter-containment, with the struggle advancing onto the Balkan and Indochinese peninsulas [and] reaching a final decisive engagement in the northern Indian Ocean. Since the Cold War, the eastward expansion of NATO has once again erected a new “Iron Curtain” stretching from the Baltic to the Balkans. One may view England, the United States, and such maritime powers as the “spear,” the sharp point of which is fundamentally directed at containing both flanks, surrounding Central Asia, and then infiltrating into the Indian Ocean. And France, Germany, Russia, and such continental powers constitute the “shield,” supporting both flanks for the decisive battle in Central Asia and the ultimate advance into the Indian Ocean.

II. THE PROCESS OF CHINA’S ACKNOWLEDGMENT OF MARITIME GEOSTRATEGY

Although ancient China did not employ a geostrategic conception, there was already geostrategic theory, especially such geostrategies as “uniting the vertical and linking the horizontal,” which were directly employed in actual combat.⁵ But in the modern era, the development of geostrategic theory fell behind that of the West, and the understanding of maritime geostrategy witnessed a protracted process of development.

1. The Differences between Chinese and Western Maritime Geostrategic Thinking

Western geostrategic theory is principally rooted in aggressive and expansionist goals. This macroscopic geostrategic characteristic is completely obvious. The [scholarship of] Englishman [Sir Halford John] MacKinder [1861–1947] is representative of Western geostrategic theory, which takes a broad, global view. As a result of its origins in the ruthlessly violent struggle for existence and the long period of frequent warfare, this theory emphasized that the primary method of national survival is external expansion. Each state fully emphasizes the building of peripheral arcs of control, in order to increase the state’s degree of security. Other geostrategic thought also displays this aggressive and expansionist nature. After the Great Age of Geographic Discovery of the fifteenth century, the mad dash for overseas colonies and colonial empire building unfolded on a global

scale. At the same time, Western geostrategic thought paid close attention to security developments both on land and at sea, and even representatives of the “continental school” such as MacKinder stressed the comparative analysis of land and maritime power, concluding that human history was principally a struggle between land power and sea power. Mahan [, by contrast,] was a representative of the “sea power school,” which placed even greater emphasis on the global antagonism between land and sea powers, advocating that maritime states should seek to control a fringe belt on the Eurasian landmass. The modern sea power school emphasizes the problems of continental powers, their sea lanes, and their continental shelves. Thus, Western geostrategic thinkers have not historically had the tendency to emphasize continental power over naval power and have generally created systematic land and sea power theories.

中国濒海度相对较大,但由于陆海方向毗邻情况特殊,海洋一度被视为坚固屏障而未及防范。到了近代,海洋一变而成外敌人侵的跳板。...海上国门已被近代列强打破。

China's coastline is quite extensive, but its land-sea orientation was powerfully influenced by the special circumstances of its neighbors; for a time, the sea was viewed as a solid barrier and so was neglected. In modern times, the sea became a springboard for foreign invaders [as] the great powers [smashed] in [China's] maritime gate.

Because China was exposed over a long period to the Confucian school notions of benevolence and justice, as well as the “doctrine of the mean” philosophy, the influence of these notions was relatively deep. China has always pursued peaceful coexistence with neighboring countries, taking the form of a national tradition of goodwill and good-neighborliness. China’s field of vision was strictly limited to its own territory and borders, [although] the Ming dynasty [Adm.] Zheng He’s seven voyages into the Western Ocean opened up a maritime silk route, which preceded the Western Great Age of Discovery by a century.⁶ But in comparison to the Western great powers’ [ships], loaded to capacity with firearms and gunpowder that wantonly slaughtered and pillaged colonies in a frenzy, all that Zheng He’s flotillas carried was silk and porcelain, bringing goodwill and friendship to each country. The land area of ancient China was vast and its actual power and level of cultural development invariably surpassed those of neighboring countries. The primary threat to the imperial court on the central plains was the northern nomadic peoples moving south, so that successive dynasties all built [up] the Great Wall in order to resist this continental threat. This geographical characteristic determined that most of China’s wars were ground campaigns. Even if during the Ming dynasty Japanese pirates and small Western colonial powers invaded China’s littoral, they did not pose a threat to imperial rule. Although in the Qing dynasty [Gen.] Zuo Zongtang [1812–85] emphasized paying equal attention to land and sea challenges, he was unable to have any real impact.⁷ This kind of land-based survival viewpoint had firm and

deep roots, causing Chinese geostrategic thought from beginning to end to emphasize land power at the expense of sea power.

2. Chinese Maritime Strategic Thought Was Gravely Restricted

From ancient times, China had the beginnings of maritime geostrategic thinking. In the Warring States period [which began in the fifth century BC and culminated in the unification of China for the first time by the Qin dynasty in 221 BC], [China] developed a coastal economy. Zheng He's intercontinental navigation as envoy across the Western Ocean, in particular, had a strong geographical impact on the consolidation of coastal defense, as well as [for] promoting development in Southeast Asia. But after a long period, China's foundation of a self-sufficient agricultural economy and its viewpoint of "China as the center [of the world]" doomed the Zheng He expeditions and such appreciation and accomplishments of maritime geostrategy to the same fate as the continuously declining feudal society, and [it] remained silent thereafter. During the period of the European great powers' unbridled colonial expansion, China's rulers shut the door to the outside world with Decree(s) Forbidding Seafaring.⁸ This societal attitude of closing oneself off runs counter to the openness and global circulation characteristic of the ocean itself.

而中国海区虽南北贯通,四海相连,但进出大洋的通道被两条岛链所阻断,海上地缘战略态势处于半封闭状态。

China's sea areas are linked from south to north and connected to the world's oceans; however, passage in and out of the [open] ocean is obstructed by two island chains. [China's] maritime geostrategic posture is [thus] in a semi-enclosed condition.

In the world, island nations surrounded on four sides by water, such as England and Japan; other coastal nations that focused on external development historically, such as Portugal [and] the Netherlands; as well as the contemporary United States; can all be described as strong maritime nations. The major characteristics of their geostrategies include a tendency to emphasize overseas trade and alliance strategy, a greater reliance on threats than actual combat, and the maintenance of supremacy at sea and balance of power on land, etc. The fundamental patterns and characteristics of the geostrategies of coastal nations [are as follows]: first, having a contiguous border with the vast ocean [such that] geostrategy must take [both] land and sea into account; second, having some space on land in which to operate, as well as maritime barriers and transport corridors that can be utilized. When engaged in war with maritime powers, [coastal nations] have been able to bring their strength to bear on land and limit the opportunities of their adversaries to occupy territory. When engaged in war with neighboring land powers, they have had to concentrate forces on their land flanks, especially to avoid being attacked from the front and rear on land and sea

[and in this manner] fall into the trap of being encircled by an alliance of sea and land powers. With respect to military structure, [such powers] have emphasized a balanced mix of land and sea forces and having a geostrategy that comports with this balance.

These characteristics have been reflected to some degree in China's naval geostrategic conception. Both France and Germany are coastal nations, but the extent of their coasts is somewhat different, and the emphasis that they place on land and sea has [also] been somewhat different. Although Russia has a very extensive coastline, most of this coast is frozen during a majority of the year, inhibiting its strategic maritime disposition. Therefore, both Germany and Russia's geostrategies have emphasized land power. China's coastline is quite extensive, but its land-sea orientation was powerfully influenced by the special circumstances of its neighbors; for a time, the sea was viewed as a solid barrier and so was neglected. In modern times, the sea became a springboard for foreign invaders. While the great powers were smashing in [China's] maritime gate, China [simultaneously] confronted the expansionist czarist Russia and dared not let down its guard on its land flank. This clearly illustrates how a nation's maritime geostrategy can be affected by its relationship with its neighbors on land.

3. The Present Situation and Development of China's Maritime Geostrategic Relationships

The geostrategic theory of the People's Republic of China is represented by [Chairman] Mao Zedong's "three worlds" theory, which analyzed the division and composition of world political power from a geographical perspective.⁹ Deng Xiaoping applied the "North-South and East-West" theoretical relationships to analyze the world situation and geostrategic structure, [thus] providing an incisive framework for understanding the relationship between global strategic power and geostrategy.¹⁰ These concepts helped to safeguard China's borders and, from geographical factors, established the overall conception of national foreign policy. In particular, serious deliberations on maritime geostrategy within this framework reflect the general direction of the development of China's maritime geostrategy.

A. China's Maritime Geostrategic Development Faces Historical Opportunities.

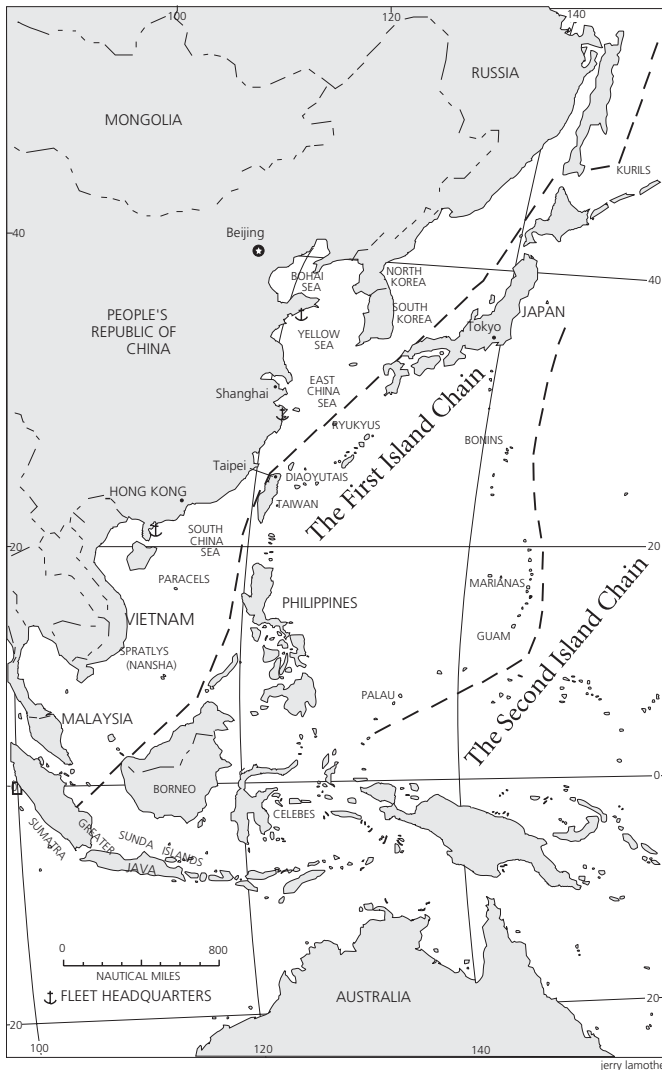
The "collapse of the Soviet Union" that occurred in the twentieth century and the "9/11" event of the twenty-first century caused a great transformation of the international strategic situation and had a profound effect on the global geostrategic situation. At the same time, these events have provided historical opportunities for China's maritime geostrategic development. Along with China's full-speed economic development, the economies of Taiwan, Hong Kong, and Macau [have] gradually integrated, thus forming a large Chinese

economic bloc. This development of economic and geostrategic relations precipitated a turning point. At the same time, the geostrategic environment along China's borders has obviously improved. At the end of the twentieth century, China successively concluded border demarcation talks with neighboring countries and signed a "Friendship Cooperation Treaty" with Russia. With China and Russia in the leading roles, the Shanghai Cooperation Organization, operating on the principles of mutual confidence, equality, and cooperation [and] on the basis of a "New Security Concept," initiated and implemented a model of regional cooperation. In 2003, China and India signed the "Declaration on Principles for Relations and Comprehensive Co-operation" and the two countries' navies carried out joint exercises for the first time. Meanwhile, China, still adhering to multilateral diplomacy, signed a "Joint Declaration on Bilateral Co-operation" with Pakistan. In 2002, at the Greater Mekong Subregion Senior Officials' Meeting [the SOM, held in Phnom Penh, Cambodia, on 25 September 2002] and the ASEAN [Association of Southeast Asian Nations] Leadership Meeting, China adopted toward ASEAN the policies of "eliminating the deep-rooted China threat theory [and] guaranteeing [that] economic development cannot destabilize the peripheral environment" and simultaneously published a declaration on avoiding conflict [concerning] the sovereignty of the Spratly Islands. In 2003, in the ASEAN Forum Ministerial Conference and Asia-Pacific Economic Cooperation conference, China [formally joined] the Treaty of Amity and Cooperation in Southeast Asia. China and ASEAN [also] signed a trade agreement and initiated a dialogue concerning security and cooperation. China's Bo Ao Asia Forum established the theme of "Asia seeking common gains, [and] cooperatively promoting development," [which has] had important significance for promoting peace and stability on China's maritime borders, the region, and even the world.

B. China's Maritime Geostrategic Security Continues to Face Threats. The tension of the world situation has eased overall, but hegemonism and power politics still exist and have become major causes of threats to world and regional peace and stability. There exist many uncertain factors in the security environment along China's borders, especially in the maritime dimension. In particular, China faces a concentration of strategic power in the Asia-Pacific region on its maritime flank. The geostrategic tendency is dangerously uncertain. Since this maritime strategic region and, more broadly, the strategic region of the periphery of the Eurasian landmass constitute points of contention, they are also important arenas for global great-power competition. From a geostrategic perspective, China's heartland faces the sea, the benefits of economic development are increasingly dependent on the sea, [and] security threats come from

FIRST AND SECOND ISLAND CHAINS

This graphic did not accompany the original Chinese article.



Source: Huang, "Chinese Navy's Offshore Active Defense Strategy."

the sea. The United States has deployed strong forces in the Western Pacific and has formed a system of military bases on the First and Second Island Chains [with] a strategic posture [involving] Japan and South Korea as the northern anchors, Australia and the Philippines as the southern anchors, [and] with Guam positioned as the forward base.¹¹ Moreover, relations along China's maritime boundary are variable. From the Korean Peninsula and the Taiwan Strait to the Spratly Islands, there exist many uncertain factors. The maritime contradictions between [China] and neighboring nations and regions are rather complicated. The new "Guidelines for U.S.-Japan Defense Cooperation" with respect to "situations in areas surrounding [Japan]" has expanded to [encompass] Taiwan and the South China Sea area. The North Korean nuclear crisis [has] initiated a chain reaction [involving] Japan and South Korea and may transform the East Asian maritime geostrategic situation. India has

improved relations with [China] but is still intensifying its military preponderance in the Indian Ocean, while extending strategic feelers into the South China Sea.

C. China's Maritime Geostrategic Relations Are Developing amid Trends of Global Integration. China's maritime strategic development, [spurred by] global integration, is continuously expanding the strategic influence of maritime geostrategic tendencies. On issues of international security, China emphasizes both cooperation and contestation, stressing that any security measure must be taken in the interest of collective security. China has played an active

role in the Six Party Talks pertaining to the North Korean nuclear problem and has also worked with its neighbors such as ASEAN states in an active effort to improve China's maritime geostrategic posture. Through cooperation with nearby countries, during the 1990s, China constructed harbor wharves in the eastern Indian Ocean in Burma [and] cleared the Mekong waterways, in order to gain access to the sea in [China]'s southwest. In 2003, China leased a port in Russia's Far East and negotiated with Russia in an attempt to develop the mouth of the Tumen River.¹² On the Makran seacoast of southwest Pakistan, China invested U.S. \$1 billion to construct a deepwater port [at Gwadar], in order to establish a trade and transport hub for Central Asian nations and simultaneously expand China's geostrategic influence. For the past few years, China has provided aid to the South Pacific region and also strengthened economic and trade ties. Particularly since entering the World Trade Organization, [China] has strengthened economic and trade cooperation with Africa and the Caribbean region. These [achievements have] all contributed to the development of China's maritime geostrategic relationships.

III. THE DEVELOPMENT OF CHINA'S MARITIME GEOSTRATEGIC RELATIONS AND NAVAL STRATEGIC CHOICES

China is [part of] what the geostrategist MacKinder termed the "the Inner or Marginal Crescent" on the fringe of the Eurasian landmass, with undoubted geostrategic preponderance on the continent. China's sea areas are linked from south to north and connected to the world's oceans; however, passage in and out of the [open] ocean is obstructed by two island chains. [China's] maritime geostrategic posture is [thus] in a semi-enclosed condition. Entering the twenty-first century, in order to carry out its primary mission of safeguarding the nation's maritime interests, China's navy must make [important] strategic choices with regard to the nation's maritime borders, its maritime domain, the global oceans, and the overall strategic space.

1. The Nation's Strategic Choice Concerning Land and Sea Territory

Reviewing history, China over a long period of time undertook a policy that forbade maritime activities, [thus] precipitating a "deliberate absence" from the world's oceans. These Chinese policies enabled the Portuguese, who did not have an Eastern sea power with which to contend, to rapidly achieve dominance in the Indian Ocean.¹³ If the world were forever isolated on the basis of separate oceans, this would perhaps not have a great effect on a nation. But from the beginning of the nineteenth century, the world's oceans melded together into an integrated thoroughfare. In particular, economic and technological development made global integration [both] a requirement and a possibility. An

increasingly connected and inseparable world was reduced in scale to a “global village.” If a nation ignored maritime connectivity, it would lack a global perspective for planning and developing, and it would likely have difficulties in avoiding threats to its security.

A. The Interconnection between Land Territory and Maritime Territory. Land territory is a nation’s terrestrial territory, [whereas] maritime territory is categorized as a nation’s sea territory. China’s land territory [encompasses] 9.6 million square kilometers, the fourth largest in the world; hence, China is a great land power. But China’s maritime territory is also extremely vast. On the basis of the provisions of the “United Nations Convention on the Law of the Sea” and China’s [claims], China has jurisdiction over and administers three million square kilometers of maritime space. This is equivalent to the combined geographical dimensions of twenty Shandong provinces or thirty Jiangsu provinces. Coastal seas and continental-shelf areas [combine to] approach 273 million hectares. This area is more than two times that of China’s total arable land. For coastal nations, the development of land and maritime territory are equally important. As for China, with the world’s largest population and relatively deficient resources, the sea is even more the most important strategic space for sustainable development. [As land resources are depleted], the sea can serve as a strategic resource replacement area.

B. The Significance of the Maritime Domain for China’s Future Development Is Still More Far-Reaching. China is a great maritime power: it has a very long shoreline, numerous islands, vast administered sea areas, and abundant ocean resources. For the past few years, it has become a world energy-development focal point for “methane hydrates”; the reserves in China are vast. The country’s long period of prosperity [as well as] the Chinese nation’s existence, development, and great resurgence [all] increasingly rely on the sea. At the same time, the sea is an important realm for the nation to participate in international competition. It is the nation’s main artery of foreign trade. Along with the accelerating process of economic globalization, China’s maritime economy is moving toward the great oceans. By 2020, China’s maritime commerce will exceed U.S. \$1 trillion. It may be [come] necessary to import three-quarters of [China’s] oil from overseas. Sea lines of communication [are] becom[ing] lifelines of national existence [and] development. At the same time, the maritime economy is a burgeoning economic realm with huge development potential. More than twenty clusters of industrial groupings have been developed, while maintaining the relatively rapid pace of [overall] development. In 2001, major maritime industry increased in value to 3.44 percent of GDP [and is] estimated to reach approximately 5 percent by 2010, thus becoming an important pillar and a new

growth point of national economic development. Vigorously developing the ocean economy involves forming a coastal belt economic zone [encompassing the] continental shelf, while also administering maritime economic zones and international seabed mining zones together as a [unified] maritime economic zone. Simultaneously, the drive for further development of the terrestrial economy, by forming great ocean provinces, counties, and cities, with [China's] eastern area taking the lead in modernization and comprehensively constructing a [relatively] affluent society, [will be] an enormous contribution.

C. Naval Strategic Choices Must Be Grounded in the Imperative to Defend National Maritime Territory. The navy is the armed force [with which the nation can] resist threats from the sea. Defending national sovereignty [and] upholding national maritime rights and interests are sacred duties with which the navy has been entrusted. In peacetime, the navy devotes itself to defending each maritime area within the scope of nationally administered sovereignty. National political, economic, and diplomatic policies are closely interrelated and in general directly embody national will. Under specific conditions, [such policies] achieve national political and diplomatic goals. After its founding, the People's Liberation Army Navy, from the north at the mouth of the Yalu River to the south in the vicinity of the Beilun River's mouth, carried out its unshakable historical mission. Along with continuously expanding maritime and overseas interests, the relationship between maritime rights and interests and fundamental national interests becomes ever more significant. To meet the requirements of national security and development interests, the navy must not only develop the important function of defending national sovereignty but also unceasingly move toward [the posture of] a "blue-water navy" [and] expand the scope of maritime strategic defense, in order to contribute to the defense of national maritime rights and interests. To this end, the navy must take to heart the maritime interests of the nation, pay close attention to changes in the circumstances of maritime geostrategy, raise the nation's naval defense combat capability, [and] provide [a] reliable guarantee of national maritime security.

2. The Strategic Choice of Offshore Regions and Open Ocean Areas

The navy is the maritime defense component of the armed forces, which has an important international role because naval vessels are symbols of state power and authority.¹⁴ [Naval vessels] are not only adept at administering waters [over which China has jurisdiction] but also can act as "mobile territory" and freely navigate the high seas of the world.¹⁵ These special characteristics of naval forces determine that their mission is not limited to offshore defense.

Offshore defense is the fundamental guarantee of national maritime security. In the 1970s, Deng Xiaoping promulgated our strategy of preparation for

combat in the offshore area, since the main scope of our maritime strategic defense was close in to shore. This was done for the purpose of designating a practical set of strategic guidelines for China's navy and includes the scope of sovereignty of China's territorial waters and islands, etc. It also covers all maritime areas over which China has jurisdiction under international maritime law. The distinguishing feature of the maritime strategy put forward on this "offshore defense" foundation is the realization of national unification, giving a prominent position to the safeguarding of maritime rights and interests [and] emphasizing that the navy must be able to respond to a regional war at sea, [as well as] to neutralize enemy encroachments. According to the requirements of national interests and the development of naval battle operations capability, the scope of naval strategic defense should progressively expand. In the direction of the South China Sea, the sea area extends 1,600 nautical miles from mainland China, but the scope of naval strategic defense is still within the first island chain.

Open ocean-area defense is an essential shield of long-term national interests. At the end of the twentieth century, the weapons systems of [certain] powerful nations developed extremely rapidly and quickly made other nations' weapons "technologically obsolete." In the future, some maritime powers may employ long-range strike weapons to attack into the depths of China. The vast, unobstructed character of the naval battlefield [is] favorable for military force concentration, mobility, [force projection], [and] initiating sudden attacks. Future at-sea informationalized warfare has characteristics of noncontact and nonlinearity [and] in particular uses advanced informationalized weapons, space weapons, and new-concept weapons, etc. [It] can carry out multidimensional precision attacks in the sea area beyond the first island chain [and] threaten important political, economic, and military targets within strategic depth. The maritime security threat comes from the open ocean. [This] requires the navy to cast the field of vision of its strategic defense to the open ocean [and to] develop attack capabilities for battle operations [on] exterior lines, in order to hold up the necessary shield for the long-term development of national interests.

3. The Strategic Choice of World Maritime Space and Grand Strategic Space

Facing the situation of a new rapid revolution in military affairs, China's navy, in order to adapt [to] the requirements of national interest, must also make strategic choices [with] a vast field of vision, in the world maritime space, in inner and outer space, and in the entire strategic space.

The development of national interests [in] world maritime space. From the composition of geostrategic relations, one can plainly see that the main territory

for human mobility, aside from land, also includes the grand strategic spaces of world ocean space, atmospheric space, and outer space, etc. These do not belong to any nation but rather to regions of global passage [and] are called “common space.” The world maritime space comprises three sections, [ranging] from na-

海上安全威胁来自远海, 要求海军将战略防御视野投向远海, 发展外线作战的攻击力量, 为国家利益长远发展竖起必要的盾牌。

The maritime security threat comes from the open ocean. [This] requires the navy to cast the field of vision of its strategic defense to the open ocean [and to] develop attack capabilities for battle operations [on] exterior lines, in order to hold up the necessary shield for the long-term development of national interests.

tionally administered sovereign interior waters [to] the entire “international waters” beyond the territorial-sea exclusive economic zone, [to] the seabed at a depth of 3,000–3,500 meters or more, beyond which nations do not have the right of jurisdiction, as well as the [ocean] bottom’s entire “international seabed area” [and] the “international navigation channels” beyond the breadth of national territorial seas. Aside from Antarctica, almost every piece of land in the world has explicit jurisdiction. World oceans beyond the scope of sovereignty and administration, all “international maritime space,” comprise a total area of 64.2 percent of total ocean area (approximately 231 million square kilometers). This area is regarded as high seas for humanity’s common use. All nations may use it with freedom and equality. In international affairs, China attends globalized maritime scientific research activities, develops ocean science and technological cooperation extensively, and jointly develops the ocean with other countries. We have numerous national interests in “international maritime space” and “international navigation channels,” [our] open ocean transport routes pass through every continent and every ocean, [we] navigate through each important international strait, [and we] have experience with over six hundred ports in over 150 nations and [administrative] regions. China is the fifth largest investor in international seabed-area [development]. In 1991, with the permission of the UN International Seabed Authority, China obtained seventy-five thousand square kilometers of special joint exploration [and] development area in the Pacific Ocean southeast of Hawaii and within this area possesses international seabed development rights [to] an abundance of metal nodules.¹⁶ [China’s] ocean technology and economy are constantly developing, [and its] national interests are spread all over the world ocean space. This requires the navy to defend a larger scope.

Space warfare has a profound influence on naval warfare. An essential factor in geographic orientation is spaceflight technology development cutting across the atmosphere and space. Outer space has become a hot spot for world powers to race to seize and a strategic space of the utmost importance for

future warfare. Space weapons can not only strike the enemy's satellites in space [but] can also attack any terrestrial target from space. They have a tremendous influence on land and sea warfare. As early as 1964, the U.S. promulgated [the notion that] "control of space means control of the world" and later advanced plans for both "Star Wars" and "Missile Defense." [The United States also] put forward such new concepts as "space deterrence" and "using space to control the sea," striving to seize absolute superiority in the space domain. In 2001, the U.S. had a hundred military satellites and 150 commercial satellites in space, which constituted nearly half the world's satellites. During the Iraq War in 2003, the U.S. used over fifty satellites to support battle operations. U.S. Secretary of Defense [Donald] Rumsfeld planned to emphasize strengthening the military development of space, to define and master the "space control" mission, to spend U.S. \$165 billion on space-related activities in fiscal years 2002–2007, [and] to implement long-range precision strike and achieve decisive victory [by] guiding land, sea, and space-based platforms, either through direct sea and land attacks or rapid minimum casualty war in order to capture [objectives]. China's launch of the *Shenzhou 5* manned spacecraft [on 15 October 2003] was successful. China [thereby] became only the third nation, after Russia and the U.S., to be capable of launching a human into space. This demonstrated that our country's national interests already extend to the reaches of outer space. [Space] has become China's strategic interest and new "high ground." At the same time, it also demonstrates that our satellite communications, global positioning, and radar information and transmission systems, etc., have obtained prominent success. [This] is beneficial for enhancing the information strength to safeguard our sea power.

The navy's strategic choice must be oriented toward the world's oceans and formulated with a perspective of the grand strategic space. Confronting a world that [has] enter[ed] the space age, China's navy must aim in the development direction of the new global revolution in military affairs, actively advance a revolution in military affairs with Chinese characteristics, [and] on the basis of informatization leading mechanization, accelerate the achievement of informatization. At the same time, it is still more essential to surmount traditional concepts of geographic orientation, to closely monitor the development of space technology and space weapons in maritime warfare with a long-term perspective, [and] to build a powerful navy that possesses relative space superiority. In order to answer the threat from the sea, it must continue to improve China's maritime geostrategic posture and contribute to peace, progress, and development in the region.

MAIN REFERENCES

马克思恩格斯全集, 第8卷 [The Complete Works of Marx, vol. 8] (Beijing: 人民出版社 [People's Press], 1961).

霍小勇等主编 [Huo Xiaoyong et al., editors], 中华海权史论 [A Historical Theory of Chinese Seapower] (Beijing: 国防大学出版社 [National Defense Univ. Press], 2000).

程广中 [Cheng Guangzhong], 地缘战略论 [Geostrategic Theory] (Beijing: 国防大

学出版社 [National Defense Univ. Press], 1999).

刘继贤 [Liu Jixian], 海洋战略环境与对策研究 [Research on the Maritime Strategic Environment and Countermeasures] (Beijing: 解放军出版社 [People's Liberation Army Press], 1995).

TRANSLATORS' NOTES

The article originally appeared in Chinese as 徐起 [Xu Qi], “21世纪初海上地缘战略与中国海军的发展” [Maritime Geostrategy and the Development of the Chinese Navy in the Early Twenty-first Century], 中国军事科学 (*China Military Science*) 17, no. 4 (2004), pp. 75–81. Words supplied by the translators are in square brackets.

1. Xu Qi's PLA Navy rank 海军大校 literally means “senior captain.” See “中国人民解放军军衔” [Military Ranks of the People's Liberation Army Navy], 中国军事教育学会编 [Edited by the China Military Affairs Pedagogical Association], 汉英-英汉军事大辞典 [The Chinese-English, English-Chinese Military Dictionary] (Beijing: 学苑出版社 [Xueyuan Press], 2002), p. 1701.
2. The meaning of the phrase 地缘 (*diyuan*), which appears throughout this article, is extremely difficult to convey in English when used as an individual term, and it does not appear in most Chinese dictionaries. A close equivalent might be “geographical relationships among nations.” For the sake of brevity, the authors have generally translated *diyuan* as “geographic orientation.” When used as part of a compound phrase (e.g., 地缘战略, *diyuan zhanlue*, or geostrategy), *diyuan* may be consistently translated as the prefix “geo-.” For an example of *diyuan* as used in other Chinese scholarship, see 苏浩 [Su Hao], “地缘重心与世界政治的支点” [Geogravitational Centers and World Political Fulcrums], 现代国际关系 [Contemporary International Relations], no. 4 (2004), pp. 54–61.
3. Here Senior Captain Xu is apparently arguing that each nation possesses both a fixed “geographical position” and a variable “geographic orientation.” The latter appears to be a strategic cultural understanding—based on such factors as historical experience, security threats, and economic development—of how best to exploit the nation's predetermined geographical position. As such, a nation's “geographic orientation” can seemingly be altered at least to some degree by its leadership and its populace to either their collective benefit or their detriment.
4. The author cites 马克思恩格斯全集, 第8卷 [The Complete Works of Marx, vol. 8] (Beijing: 人民出版社 [People's Press], 1961), p. 8.
5. The phrase “he zong lian heng,” or “uniting the vertical and linking the horizontal,” in its various forms refers to the general use of diplomacy to further strategic ends. It is taken to be a hallmark of the political culture of China's 战国时代 [Warring States Period], which lasted from the fifth century BC until the unification of China under Qin dynasty emperor Qin Shihuang in 221 BC. By the beginning of this period, regional warlords had consolidated 战国七雄 [Seven Warring States]: 齐 [Qi], 楚 [Chu], 燕 [Yan], 韩 [Han], 赵 [Zhao], 魏 [Wei], and 秦 [Qin]. Thanks to internal reforms ca. 359 BC, Qin emerged as the most powerful of the seven. Coping with Qin's expansionism became a major preoccupation of the rulers of its six competitors. Itinerant tacticians, or 纵横家, traveled among the Warring States peddling strategies that coalesced into two contending schools of thought. The 合纵 [Vertically Linked] school advocated alliance among the six lesser states to

- balance against Qin. The 连横 [Horizontally Linked] school advocated allying with Qin to benefit from its rise. Qin ultimately defeated its opponents by using the Horizontally Linked strategy to divide them and its superior power to conquer them one by one.
6. 郑和 [Zheng He], a Muslim eunuch official of China's Ming Dynasty, was sent by the Yongle emperor Zhu Di on voyages to collect tribute and establish friendly relations with neighboring countries. His "Treasure Fleet" is said to have borne over twenty-eight thousand skilled workers and soldiers on sixty-two ships, some as much as six hundred feet in length. Such ships dwarfed those of their European contemporaries, such as Christopher Columbus. Zheng He's seven voyages from 1405 to 1433, which reportedly ranged as far away as the Indian Ocean, have been recorded in "三保太监下西洋" [Zheng He to the Western Ocean]. While these missions were generally exploratory and commercial in nature, it has been widely recorded that they also engaged decisively in substantial armed conflicts in Southeast Asia. On this last point, see Louise Levathes, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405–1433* (New York: Oxford Univ. Press, 1994).
 7. General Zuo, in three decades of distinguished government service, suppressed numerous internal rebellions and advocated military modernization based on learning from the West. Zuo recorded his greatest military achievement in 1878, when he put down a Muslim uprising and helped negotiate Russian withdrawal from Ili, a border region now in China's Xinjiang province. In 1884, Zuo was given the concurrent appointments of commander in chief, imperial commissioner of an expeditionary force, and Lord Admiral of the Navy. This was part of a larger Qing Dynasty effort to develop four steamship fleets: 北洋 [North Sea], 南洋 [South Sea], 福建 [Fujian], and 广东 [Guangdong]. Zuo marshaled national forces for the Sino-French war in Fujian Province but died shortly before China was forced to conclude a humiliating truce with France in Fuzhou the following year, after its loss of a naval battle at Mawei on 23 August 1884.
 8. Rather than building on Zheng He's achievements, the Ming Dynasty Yongle emperor's successors for "several centuries" enforced such restrictions as the "禁海" [Sea Ban]. This and related edicts sought to ban private maritime trade in a counterproductive effort apparently directed at suppressing piracy and other unlawful activities. For this reason, the West's "new theories on sea strategies were rejected by China and did not have a significant influence on it." See 刘华清 [Liu Huaqing], 刘华清回忆录 [The Memoirs of Liu Huaqing] (Beijing: People's Liberation Army, 2004), pp. 433, 524. Admiral Liu served as PLA Navy commander (1982–88) and vice chairman of the Central Military Commission (1989–97). All original quotations from Liu's autobiography were checked against the wording in the FBIS translation of chapters 16–20, CPP20060707320001001. Wording different from the FBIS translation is used whenever the authors felt that it better reflected Liu's meaning or would be more comprehensible to the reader.
 9. In 1974, Mao stated, "The United States and the Soviet Union belong to the first world. The in-between Japan, Europe and Canada belong to the second world. The third world is very populous. Except [for] Japan, Asia belongs to the third world." Mao advocated supporting third world nations in their efforts to avoid domination by the first world superpowers. See "Chairman Mao Zedong's Theory on the Division of the Three World[s] and the Strategy of Forming an Alliance against an Opponent," Foreign Ministry of the People's Republic of China, 17 November 2000, available at www.fmprc.gov.cn/eng/ziliao/3602/3604/t18008.htm.
 10. In Deng's view, international security hinged on relations between nations in the East and the West, whereas economic development hinged on relations between nations in the North and the South. See "Peace and Development Are the Two Outstanding Issues in the World Today," 4 March 1985, People's Daily, available at english.people.com.cn/dengxp/vol3/text/c1330.html.
 11. Notably articulated by Adm. Liu Huaqing, the First Island Chain is formed by Japan and its northern and southern archipelagos, South Korea, Taiwan, the Philippines, and the Greater Sunda Islands. The Second Island Chain runs from the Japanese archipelago south to the Bonin and Marianas islands (including Guam) and finally to the Palau group. See map above and Liu, *Memoirs of Liu Huaqing*, p. 437. Some unofficial Chinese publications even suggest that America's Hawaiian bases are part of a Third

Island Chain. For a detailed graphic from the PRC naval studies community that shows all three “island chains,” see 阻明 [Zu Ming], “美国驻西太地区海军兵力部署与基地体系示意图” [A Schematic Diagram of the U.S. Naval Forces Deployed and System of Bases in the Western Pacific], 舰船知识 [Naval & Merchant Ships], no. 2 (January 2006), p. 24. A recent issue of China’s official People’s Daily, however, mentions only two “island chains,” the first and the second. See “美军忙著大调整” [U.S. Navy Preoccupied with Major Adjustment], 人民日报 [People’s Daily], 9 July 2004.

Chinese analysts view the “island chains” alternatively as benchmarks of China’s progress in maritime force projection and as fortified barriers that China must continue to penetrate to achieve freedom of maneuver in the maritime realm. See, for example, Alexander Huang, “The Chinese Navy’s Offshore Active Defense Strategy: Conceptualization and Implications,” *Naval War College Review* 47, no. 3 (Summer 1994), p. 18. Because neither the PLA Navy nor any other organization of the PRC government has publicly made the island chains an integral part of official policy or defined their precise scope, however, Senior Captain Xu’s reference to island chains must be interpreted with caution.

12. This is apparently a reference to reports that China arranged to lease the Russian Far Eastern port of Zharubino in 2003. See, for example, Vladislav Seregin, 中国将接收俄罗斯港口 [China Will Receive a Port in Russia], RBC Daily, December 15, 2003, available at www.rbcdaily.ru/news/company/index.shtml?2003/12/15/49395.
13. The author cites the introduction of 霍小勇等主编 [Huo Xiaoyong et al., editors], 中华海权史论 [A Historical Theory of Chinese Seapower] (Beijing: 国防大学出版社 [National Defense Univ. Press], 2000).
14. Here the Chinese term 近海 (*jinhai*) has been translated as “offshore.” The term 远海 (*yuanhai*), like its rough synonym 远洋 (*yuanyang*), may be translated as “open ocean.” To avoid confusion with the word 公海 (*gonghai*), which appears later in this translation, these terms are deliberately not translated here as “high seas.” The latter term has maritime legal implications that may not correspond to those that Beijing applies to *yuanhai* and *yuanyang*.

The related terms 沿海 (*yanhai*) and 海岸 (*hai'an*) may be translated as “coastal;” 滨海 (*binhai*) and 近岸 (*jinan*) as “inshore” (between “coastal” and “offshore”); and 中海 (*zhonghai*) perhaps as “mid-distance seas” (between “offshore” and “open ocean”). For a detailed diagram and explanation of these terms, see Huang, “Chinese Navy’s Offshore Active Defense Strategy,” pp. 16–19. These terms do not relate to specific geographic distances per se but rather to conceptual areas for naval defense and power projection progressively further from shore. The distance ranges to which these terms pertain, while relative as opposed to absolute, do appear to have expanded in scope in parallel to growth in the PLA Navy’s capabilities. To date, however, perhaps to preserve strategic flexibility, neither the PLA Navy nor any other organization of the PRC government has publicly defined the precise meaning of these terms.

Initially, the PLA Navy was a coastal defense force. During the late 1970s, the PLA Navy sent submarines into the South China Sea and beyond the First Island Chain into the Pacific Ocean for the first time. By the mid-1980s it had developed broader ability to conduct “近海作战” (offshore operations) as part of a larger “海军战略” (naval strategy) of “近海防御” (offshore defense) approved by Deng Xiaoping and articulated and implemented by PLA Navy commander Adm. Liu Huaqing. In 1983, Admiral Liu recalls, “I stressed that we should achieve a unified understanding of the concept of ‘offshore’ according to Comrade [Deng] Xiaoping’s instructions. Our ‘offshore’ areas are the Yellow Sea, East China Sea, South China Sea, the seas around the Spratly Islands and Taiwan and inside and outside the Okinawa island chain, as well as the northern part of the Pacific.” The strategic guidance for the PLA Navy is currently represented by eight characters: 积极防御, 近海作战 (active defense, offshore operations—*jiji fangyu, jinhaizuo zhan*). The former “four characters” has a more general application for all service branches of the PLA, as 军事战略 (military strategy—*junshizhanlue*) or a 军事战略方针 (military strategic guideline—*junshi zhanlue fangzhen*). The later “four characters” refers to the PLA Navy’s area of responsibility. For quotation, see Liu, *Memoirs of Liu Huaqing*, p. 434; for other data see former PLA Navy commander (1996–2003) Admiral 石云生 [Shi Yunsheng], introduction, 中国海军百科全书 [China Navy

- Encyclopedia], vol. 1 (Beijing: 海潮出版社 [Sea Tide Press], 1998), pp. 16–31; Huang, “Chinese Navy’s Offshore Active Defense Strategy,” pp. 16–19.
15. This, and all other references to “high seas,” are derived from 公海 (*gonghai*), a quasi-legal term that literally means “common seas.”
 16. China Ocean Mineral Resources Research and Development Association (COMRA) filed an application as a preferred “registered pioneer investor” on 5 March 1991 and was recently awarded the right to explore for undersea minerals in the central Pacific. See “Areas for Exploration of Polymetallic Nodules: Pioneer Investor Application Areas,” International Seabed Authority, available at www.isa.org.jm/en/default.htm; 李尚谥 [Li Shangyi], “认知海洋, 开发海洋” [Know the Ocean, Develop the Ocean], 矿冶工程 [Mining and Metallurgical Engineering] 26, no. 2 (April 2006), pp. 1–8; 杨晓光, 樊杰 [Yang Xiaoguang and Fan Jie], “我国深海资源产业化模式及其对策研究” [Research on the Operating Modes and Countermeasures of the Industrial Exploitation of Deep Sea Resources in China], 矿业研究与开发 [Mining Industry Research and Development] 24, no. 1 (February 2004), pp. 1–4; 杨金森 [Yang Jinsen], “50年, 中国要建海洋强国” [In 50 Years, China Will Become a Maritime Great Power], 海洋世界 [Sea World], no. 1, 2004, pp. 4–6.