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NON-STRATEGIC FACTORS IN CHINESE NAVAL SHIPBUILDING

by

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December 2023

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NON-STRATEGIC FACTORS IN CHINESE NAVAL SHIPBUILDING

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Submitted in partial fulfillment of the
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ABSTRACT

Naval analysts often hold that maritime strategy determines the course of a country's naval shipbuilding. This thesis argues that priorities and patterns of naval shipbuilding in the People's Republic of China cannot be fully explained through the lens of maritime strategy alone. First, what possible non-strategic factors may affect naval shipbuilding are determined through case studies of Imperial Germany and Imperial Japan, both of which pursued similar strategies to Communist China and whose navies followed similar courses of development. Second, the development of the People's Liberation Army-Navy is examined from its beginning to the modern day and similar or unique non-strategic factors are evaluated. Lastly, the thesis infers broader lessons about naval development from comparative analysis of each of the countries.

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LIST OF ACRONYMS AND ABBREVIATIONS

A2AD	Anti-Access/Area Denial
BDI	Baltic Dry Index
CCP	Chinese Communist Party
CETC	China Electronics Technology Enterprise
CMC	Central Military Commission
CSIC	China Shipbuilding Industry Corporation
CSSC	China State Shipbuilding Corporation
DWT	Deadweight Tons
GPCR	Great Proletarian Cultural Revolution
IGN	Imperial German Navy
IJN	Imperial Japanese Navy
LNG	Liquified Natural Gas
LPG	Liquified Petroleum Gas
PLA	People's Liberation Army
PLAN	People's Liberation Army-Navy
PRC	People's Republic of China
SLOC	Sea Line of Communication
USN	United States Navy

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I. INTRODUCTION

Since the rise of China in the latter half of the twentieth century, it has taken a strong maritime turn in its strategic outlook. Experts have remained divided on the overall reasons for this abrupt shift from a great power which dominated the Asian landmass for thousands of years. Furthermore, understanding China's naval development has become pressing in the last decade, as conclusions often bear on whether one perceives China as a threat to the United States.

In order to explore the reasons for China's maritime shift, this thesis proposes to consider both strategic and non-strategic factors, weighing their relative impact on why China has built the largest navy in the world. Only by considering both can a full picture emerge. However, while strategic factors at play tend to always remain visible, the functions of non-strategic factors often remain subtle.

This thesis will first explore how maritime strategy often influences shipbuilding. Next, influential non-strategic factors will be illustrated with historical examples to act as signposts for similar motivations and effects in China. After that, the history of the People's Liberation Army-Navy (PLAN) will be explored for non-strategic factors which have measurable impacts on its shipbuilding.

Because naval expansion often aims to compete with other modernized navies, Communist China's naval expansion progressed in ways similar to other countries who developed fledgling navies. In other ways, however, it followed its own course. Non-strategic factors peculiar to itself sometimes held greater influence than maritime strategy itself, and these factors were often responsible for China's unique history of naval development.

A. ALTERNATIVE EXPLANATIONS FOR NAVAL SHIPBUILDING, CONTRASTED WITH CONVENTIONAL WISDOM ON THE PRIMACY OF MARITIME STRATEGY¹

The conventional wisdom of naval analysts maintains that a country's maritime strategy occupies a place of prime importance in determining the course of its naval shipbuilding. According to Sir Julian Corbett, "Classes of ships which constitute a fleet are, or ought to be, the expression in material of the strategical and tactical ideas that prevail at any given time."² Alfred Thayer Mahan also writes, "Conditions and weapons change; but to cope with the one or successfully wield the others, respect must be had to...those wider operations of war which are comprised under the name of strategy."³ More recently, Andrew S. Erickson has written that "ships are the ultimate embodiment of maritime strategy," while other analysts state that "ships are the essential element of the 'means' by which the 'ends' of maritime strategy are achieved."⁴ In a study of late-nineteenth century U.S. naval expansion, Benjamin Apt observed, "A powerful nation did not make do with accumulated older craft simply because they were at hand but rather constructed its navy according to explicit strategic requirements."⁵ These authors bare this premise explicitly, but the idea underlines much analysis of navies without being overtly stated.

How does a country's maritime strategy determine fleet design? An ideal, rational model involves a flowdown of requirements. This may be conceptually understood by the following formulation: maritime strategy exists as a component of grand strategy and

¹ Parts of this section were previously published by Strategy Bridge. Tyler Self, "Primacy of Maritime Strategy in Naval Shipbuilding? The Case of Imperial Germany," Strategy Bridge, September 6, 2023, <https://thestrategybridge.org/the-bridge/2023/9/6/primacy-of-maritime-strategy-in-naval-shipbuilding-the-case-of-imperial-germany>.

² Julian S. Corbett, *Some Principles of Maritime Strategy* (New York: Longmans, Green and Co., 1918), 93.

³ Alfred Thayer Mahan, *The Influence of Sea Power Upon History, 1660-1783* (Boston: Little, Brown, and Company, 1898), 7, <https://babel.hathitrust.org/cgi/pt?id=hvd.32044013659107&view=1up&seq=9>.

⁴ Andrew S. Erickson and Manfred Meyer, in *Modern Chinese Maritime Forces*, ed. Larry Bond and Chris Carlson (Admiralty Trilogy Group, 2022), 3; Christopher P. Carlson and Jack Bianchi, "Warfare Drivers: Mission Needs and the Impact on Ship Design," in *Chinese Naval Shipbuilding: An Ambitious and Uncertain Course*, ed. Andrew S. Erickson (Annapolis, MD: Naval Institute Press, 2016), 19.

⁵ Benjamin L. Apt, "Mahan's Forebears: The Debate over Maritime Strategy, 1868-1883," *Naval War College Review* 50, no. 3 (Summer 1997): 105, <https://www.jstor.org/stable/44638752>.

establishes mission requirements, which in turn generate capabilities requirements, before final decision on shipbuilding's technical requirements. By linking the means of naval "fighting forces," as Michael Howard and Peter Paret translate Clausewitz's phrase, with their "creation, maintenance, and use," strategy should ensure acquisitions and innovation remain directed toward a clearly defined goal.⁶ Such a framework resembles the structure of the U.S. military's first unified maritime strategy document.⁷ Procedurally, the process outlined above resembles how former U.S. Secretary of the Navy Andrew Lehman described the 1986 U.S. maritime strategy's role in shipbuilding. "First strategy, then requirements, then the [Program Objective Memorandum], then budget," he said.⁸ In order to ensure "strategic guidance and priorities...strongly influence the plans across the shipbuilding plan horizon," the resource allocation process of the United States Navy (USN) involves planning, programming, budgeting, and execution in consecutive steps.⁹

The range of maritime strategies is as broad as the number of navies, but Geoffrey Till provides an outline of their conceptual range. First, Mahan's "bluewater tendency" emphasizes decisive battle, capital ships, and sea control.¹⁰ For Mahan, decisive battle between large fleets relegates navies to their "proper sphere" of offense, and promises to bestow the victor with control of the sea, which Mahan asserts "is the chief among the merely material elements in the power and prosperity of nations."¹¹ The desirability of

⁶ Carl Von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton, New Jersey: Princeton University Press, 1984), 95.

⁷ U.S. Department of the Navy, *A Cooperative Strategy for 21st Century Seapower* (Washington, DC: Pentagon, 2007).

⁸ Dmitry Filipoff, "Secretary John Lehman on Strategic Credibility and Leveraging Command of the Seas," Center for International Maritime Security, March 22, 2021, <https://cimsec.org/secretary-john-lehman-on-strategic-credibility-and-leveraging-command-of-the-seas/>.

⁹ Irv Blickstein et al., *Navy Planning, Programming, Budgeting, and Execution: A Reference Guide for Senior Leaders, Managers, and Action Officers* (Santa Monica, CA: RAND, 2016), 8, https://www.rand.org/content/dam/rand/pubs/tools/TL200/TL224/RAND_TL224.pdf; Office of the Chief of Naval Operations, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2023* (Washington, DC: Pentagon, 2022), 10, <https://media.defense.gov/2022/Apr/20/2002980535/-1/-1/0/PB23%20SHIPBUILDING%20PLAN%2018%20APR%202022%20FINAL.PDF>.

¹⁰ Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (New York: Routledge, 2013), 56–57.

¹¹ Alfred Thayer Mahan, *Naval Strategy: Compared and Contrasted with the Principles and Practice of Military Operations on Land* (Boston: Little, Brown, and Company, 1911), 153; As quoted in Till, *Seapower*, 57.

victory at sea entails a focus on capital ships—battleships in Mahan’s time—owing to their “possessing a maximum of fighting power” which promise to “affect decisively the issues of a maritime war.”¹²

It may be added that control of sea lines of communication (SLOC) strategies exist as a form of sea control. SLOC control aims “to use a given part of the ocean/sea and associated air (space) for military and nonmilitary purposes and to deny the same to the enemy in a time of open hostilities.”¹³ In Mahanian terms, it seeks to control some of the “well-worn paths” of the “wide common” of the sea, whether to ensure merchant deliveries or maintain access to important seas.¹⁴ According to Raoul Castex, to acquire or dispute military and economic SLOCs constitutes “the goal, the raison d’être, the final end of naval war.”¹⁵

Second, Till distinguishes Sir Julian Corbett from Mahan based on Corbett’s theories never departing from the importance of events on land.¹⁶ Corbett, who decries how “impotent [sea power] is of itself to decide a war,” highlights the importance of coordinating what happens on the sea with one’s land strategy as a composite whole.¹⁷ Till also highlights Corbett’s skepticism of decisive battle at sea, as when Corbett writes how “naval strategy, so long as it merely contemplates bringing the enemy’s fleet to successful action and securing the command of the sea...may fail to achieve a point in the war which combined or co-ordinated action would have given it.”¹⁸ According to a USN 1992 white paper, power projection occurs when “naval forces maneuver from the sea using their dominance of littoral areas to mass forces rapidly and generate high intensity, precise

¹² As quoted in Till, *Seapower*, 57.

¹³ Milan Vego, *Maritime Strategy and Sea Control: Theory and Practice* (New York: Routledge, 2016), 24.

¹⁴ Mahan, *The Influence of Sea Power Upon History*, 25.

¹⁵ Raoul Castex, *Strategic Theories*, trans. Eugenia C. Kiesling (Annapolis, MD: Naval Institute Press, 1994), 357.

¹⁶ Till, *Seapower*, 63.

¹⁷ Julian S. Corbett, *England in the Seven Years’ War: A Study in Combined Strategy, Vol I* (New York: Longmans, Green and Co., 1907), 5, <https://babel.hathitrust.org/cgi/pt?id=hvd.32044024247389&seq=9>.

¹⁸ Till, *Seapower*, 65–67; Corbett, *England in the Seven Years’ War*, 7.

offensive power at the time and location of their choosing under any weather conditions, day or night.”¹⁹ Whether fleeting or facilitative of permanent events by land-bound troops, Corbett’s school of thought holds power projection as the pinnacle of sea power.

Third, Till outlines “war on commerce/guerre de course” as the first of “more radical alternatives” to the strategies described above.²⁰ He primarily sketches the ideas of the French *Jeune Ecole* school of thought as “a kind of asymmetric warfare.”²¹ *Jeune Ecole* achieved popularity thanks to the writings of French maritime theorists Richild Grivel, Théophile Aube, and Gebriel Charmes.²² Grivel wrote that the French navy could not “permit itself any illusions regarding an inequality so clearly revealed by geography, history, and statistics.”²³ After conceding British superiority at sea, *Jeune Ecole* aimed to articulate “what [a navy] could achieve in a position of inferiority, with the limited resources at hand.”²⁴ Its fundamental tenet preached waging war on a superior enemy’s shipping to whittle down its economy.²⁵ In Charmes’s words, *Jeune Ecole* “seek [s] by a series of individual catastrophes to destroy general prosperity.”²⁶

Lastly, Till describes coastal defense strategies which have “tended to be of particular interest to weaker and smaller navies.”²⁷ He focuses on the Soviet Young School as his exemplar due to its “detailed and articulate enunciation of clear ideas.”²⁸ According to Robert Herrick, the foundation of the Soviet Young School was the idea of “a primarily continental war in which the role of the Soviet navy would be only auxiliary to that of the

¹⁹ U.S. Department of the Navy, *From the Sea: Preparing the Naval Service for the 21st Century* (Washington, DC: Pentagon, 1992), 6, <https://apps.dtic.mil/sti/pdfs/ADA338570.pdf>.

²⁰ Till, *Seapower*, 73.

²¹ Till, *Seapower*, 74.

²² Arne Røksund, *The Jeune École: The Strategy of the Weak* (Boston: Brill, 2007), 1, 6, <https://doi.org/10.1163/ej.9789004157231.i-242>.

²³ As quoted in Røksund, *The Jeune École*, 3.

²⁴ Røksund, *The Jeune École*, x.

²⁵ Røksund, *The Jeune École*, 10; Lawrence Sondhaus, *Naval Warfare, 1815-1914* (New York: Taylor and Francis, 2012), 24, <https://doi.org/10.4324/9780203132234>.

²⁶ As quoted in Røksund, *The Jeune École*, 8.

²⁷ Till, *Seapower*, 76.

²⁸ Till, *Seapower*, 76.

Soviet Ground Forces.”²⁹ In a 1928 article, Ivan Ludri, a founder of the Soviet Young School, wrote of the need to “organically fuse” the army and navy for “the common mission for the defense of our borders against the offensive.”³⁰ The Soviet Young School embraced small watercraft in joint coordination with local coastal assets like minefields and artillery.³¹

The term “Anti-Access/Area Denial” (A2AD) has become a popular term to describe a kind of broad, regional coastal defense strategy, especially in regards to China.³² As a form of sea denial, it works to “[prevent] partially or completely the enemy’s use of the sea for military and commercial purposes,” while according to the Pentagon’s 2010 *Quadrennial Defense Review*, anti-access strategies “seek to deny outside countries the ability to project power into a region.”³³ As an asymmetric threat, A2AD often includes a significant shore component utilizing artillery and land-based aircraft, although more recent technology has extended A2AD range with anti-ship ballistic missiles and cyber capabilities.³⁴

Some types of ships have come to be associated with particular maritime strategies. For example, vessels associated with coastal defense concepts often include fast craft and diesel-electric submarines.³⁵ *Jeune Ecole* advocated the use of light, unarmored cruisers

²⁹ Robert W. Herrick, “Roles and Missions of the Soviet Navy: Historical Evolution, Current Priorities, and Future Prospects,” in *The Soviet and Other Communist Navies: The View from the Mid-1980s* (Annapolis, MD: Naval Institute Press, 1985), 19.

³⁰ Herrick, “Roles and Missions of the Soviet Navy,” 17.

³¹ Till, *Seapower*, 77.

³² M. Taylor Fravel and Christopher P. Twomey, “Projecting Strategy: The Myth of Chinese Counter-Intervention,” *The Washington Quarterly* 37, no. 4 (2014): 171–87, <https://doi.org/10.1080/0163660X.2014.1002164>; Toshi Yoshihara, “Anti-Access Lessons from the Past,” U.S. Naval Institute Proceedings, December 2013, <https://www.usni.org/magazines/proceedings/2013/december/anti-access-lessons-past>.

³³ Milan Vego, *Maritime Strategy and Sea Denial: Theory and Practice* (New York: Routledge, 2019), 18; US Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Pentagon, 2010), 31, https://dod.defense.gov/Portals/1/features/defenseReviews/QDR/QDR_as_of_29JAN10_1600.pdf.

³⁴ Alexandr Burilkov and Torsten Geise, “Maritime Strategies of Rising Powers: Developments in China and Russia,” *Third World Quarterly* 34, no. 6 (2013): 1043, <https://doi.org/10.1080/01436597.2013.802499>.

³⁵ Burilkov and Geise, “Maritime Strategies,” 1043; Till, *Seapower*, 77.

for war on commerce, and reserving torpedo boats and gunboats for coastal defense.³⁶ Because sea lines extend the world over, SLOC control strategies require ships with better sea-keeping capable of operating beyond land-based systems, such as destroyers, frigates, and nuclear-powered submarines. Power projection also requires blue-water ships, but with the added capability to deliver force ashore far into enemy territory, whether in the form of ordnance, aircraft, or marines. Power projection is often characterized by the use of aircraft carriers, amphibious ships, and ballistic- or guided-missile submarines.³⁷ Due to their distance from home shores and proximity to enemy territory, ships maximized for SLOC control and power projection always require capabilities for defense against submarines and aircraft.

Navies, however, need not exclusively pursue a single maritime strategy. Power projection, for instance, depends upon the fleet's capability to depart one's shores, transit to the area of operations, and execute missions in theater. The goal of A2AD or coastal defense, then, may contribute to SLOC control or power projection, so long as one possesses the necessary ships. Corbett touches upon this conceptual nesting when he writes, "In methods of exercising command [of the sea] are included all operations not directly concerned with securing command or with preventing its being secured by the enemy."³⁸ Furthermore, expensive aircraft carriers and amphibious platforms always entail smaller naval combatants like cruisers and destroyers for protection, because projecting force ashore usually requires command of the sea lanes to the enemy's coast, although submarines may deliver land-attack missiles or special forces into enemy territory through stealth. Confusion of this framework perhaps explains disagreement among analysts regarding the precise contours of Chinese maritime strategy, with Alexandr Burilkov and

³⁶ Røksund, *The Jeune École*, xi, 26.

³⁷ Burilkov and Geise, "Maritime Strategies," 1042.

³⁸ Corbett, *Some Principles*, 210.

Torsten Geise stating that China primarily pursues A2AD, while Toshi Yoshihara and James Holmes argue China now pursues a Mahanian blue water strategy.³⁹

Ships themselves, of course, may be tasked with a variety of mission sets, and do not fall under particular maritime strategies in a rigid, platonic way. Nesting of maritime strategies may lead to modifications of existing naval hulls for the accomplishment of new mission sets entailed in more ambitious strategy. For example, if a nation procures frigates for the purpose of SLOC defense, and then later widens its maritime strategy to include power projection, it may modernize its frigate force with land-attack missiles so as to perform both roles.

In short, the conventional wisdom of naval strategists holds that maritime strategy holds a place of primacy in determining ship acquisitions, because it conceptually precedes shipbuilding by generating requirements for fulfillment in hull construction. As a general pattern, progression along the spectrum from A2AD toward power projection tends to create a need for ships that are larger and more sea-keeping. By the time one arrives at the capability of power projection, one's navy has reached its most modernized form. While the use of smaller, unmanned ships has risen in prominence in recent years, the comparative relationship between size and capability has thus far remained.⁴⁰

In contrast to the ideal, rational model, the influence of non-strategic factors, defined as ideas or desires not derived from maritime strategy, often impose themselves on naval shipbuilding. While the dimension of non-strategic factors is large, this thesis examines prestige, interservice rivalries, economics, and corruption as factors unrelated to maritime strategy, but ones that could nevertheless conceivably affect the composition of a country's navy.

³⁹ Burilkov and Geise, "Maritime Strategies," 1050–51; James R. Holmes and Toshi Yoshihara, *Chinese Naval Strategy in the 21st Century: The Turn to Mahan* (London: Routledge, 2008), 8; Toshi Yoshihara and James R. Holmes, *Red Star Over the Pacific: China's Rise and the Challenge to U.S. Maritime Strategy* (Annapolis, MD, 2010), 2.

⁴⁰ Julian Turner, "Sea Hunter: Inside the US Navy's Autonomous Submarine Tracking Vessel," Naval Technology, May 3, 2018, <https://www.naval-technology.com/features/sea-hunter-inside-us-navys-autonomous-submarine-tracking-vessel/>; Sakshi Tiwari, "China Claims Inducting World's 1st Unmanned Drone Carrier That Can Function Completely on Its Own," Eurasian Times, January 14, 2023, <https://eurasianimes.com/china-claims-inducting-worlds-1st-unmanned-drone-carrier/>.

Prestige has emerged as an important concept in the international relations literature on status-seeking. Robert E. McGinn defines prestige as a “reservoir of favorable opinion” conferred on one by a community whose approbation can either increase or decrease.⁴¹ Anne L. Clunan, on the other hand, notes prestige functions as a fundamental variable in social competition, where a country exerts “an effort to join the [prestigious] group through promoting recognition of the self’s similarity to the group.”⁴² Because it is often conceived as a relative evaluation, Bernd Wegener characterizes prestige as “a variable representing a hierarchy of individual social positions.”⁴³ Being of prestigious social position is desirable because, as Lilach Gilady writes, “prestige affects patterns of deference and responsiveness, regulates access to positions of influence, and shapes the distribution of material benefits.”⁴⁴

Lilach Gilady argues that conspicuous consumption is one of the most visible forms of prestige-seeking behavior.⁴⁵ Her analysis of conspicuous consumption in international relations relies heavily on Thorstein Veblen, who characterized conspicuous consumption as “specialized consumption of goods as an evidence of pecuniary strength” and as “a means of reputability.”⁴⁶ This signaling behavior carries over into conspicuous consumption in international relations as well. For Gilady, the features of conspicuous consumption in international relations are high price and conspicuousness of the good, as well as a hierarchy and “cycles of status symbols” among countries.⁴⁷ The objects of

⁴¹ Robert E. McGinn, “Prestige and the Logic of Political Argument,” *The Monist* 56, no. 1 (1972): 105–6, <https://doi.org/10.5840/monist197256123>.

⁴² Anne L. Clunan, *The Social Construction of Russia’s Resurgence: Aspirations, Identity, and Security Interests* (Baltimore, MD: Johns Hopkins University Press, 2009), 84.

⁴³ Bernd Wegener, “Concepts and Measurement of Prestige,” *Annual Review of Sociology* 18 (1992): 273, <https://www.jstor.org/stable/2083454>.

⁴⁴ Lilach Gilady, *The Price of Prestige: Conspicuous Consumption in International Relations* (Chicago: University of Chicago Press, 2018), 9.

⁴⁵ Gilady, 3.

⁴⁶ Thorstein Veblen, *The Theory of the Leisure Class* (New York: Vanguard Press, 1912), 68, 75, https://www.google.com/books/edition/The_Theory_of_the_Leisure_Class/gXMwAAAAMAAJ?hl=en&gbpv=0.

⁴⁷ Gilady, *The Price of Prestige*, 27–28.

conspicuous consumption tend to provide both objective and subjective prestige benefits.⁴⁸ Objective benefits provide “tangible advantages,” such as “an investment in social capital that can be converted into material capital,” while subjective benefits lie closer to pride, especially through “identification with a group that compares favorably to others.”⁴⁹ In short, by possessing something expensive and sought-after on the international stage, a country could set itself apart from others and signal aspects of power, wealth, and resolve to fellow countries and its people.

Interservice rivalries, or service parochialism, hold great potential in either restricting or expanding naval capability in a given country depending on the amount of funding the navy receives. It is almost a truism that the acquisition of capability cannot be accomplished without funding, and the more capable a vessel, the more expensive it becomes to build and maintain. If the leadership in charge of military funding throws its support behind its army, the construction of expensive naval warships can expect to suffer. If the leadership significantly funds the navy, one may expect a buildup of capability to occur.

Economic support of shipbuilding may conceivably function in a dynamic way to catalyze or hinder naval shipbuilding. Shipbuilding is a capital-intensive enterprise and requires enormous investments in infrastructure and raw materials. This fundamental fact means that overcapacity during an economic slowdown can have enormous impacts on the industry. Christopher W. Miller and Hugh Murphy outline such a case in Britain between 1926 and 1945, where private shipbuilders treaded water during a period of diminished mercantile orders by construction of naval warships.⁵⁰ Domestic naval shipbuilding can also create a host of blue-collar jobs and function as an outlet for pork-barrel spending.

The case of inter-war Britain also shows the potential effects of corruption on naval shipbuilding. Due to “price-fixing at taxpayers’ expense” among a secretive committee of

⁴⁸ Gilady, *The Price of Prestige* 9.

⁴⁹ Gilady, *The Price of Prestige* 9–10.

⁵⁰ Christopher W. Miller and Hugh Murphy, “Price Collusion, Rationalisation and Admiralty Oversight in British Shipbuilding: The Case of the Warship Group, 1926–1945,” *International Journal of Maritime History* 33, no. 3 (2021): 562–63, <https://doi.org/10.1177/08438714211037692>.

private shipbuilding firms, the British Admiralty paid much more for individual warships than if there had been free-market “cut-throat competition.”⁵¹ Of course, corruption can also take the form of outright bribery, but its nature may make substantial evidence for it difficult to find, especially in a country without a free press.

While always present in the compound thinking of decision-makers, when the influence of non-strategic factors supersedes that of maritime strategy, one may expect incongruence between strategy and force composition to result. Maritime strategies often change as a country grows in power, and therefore historical case studies of countries that grew from fledgling navies to powerful fleets may shed light on where, when, and how non-strategic factors supersede maritime strategy in naval shipbuilding.

B. CASE STUDIES IN THE INFLUENCE OF NON-STRATEGIC FACTORS ON NAVAL SHIPBUILDING

Case studies of Imperial Germany and Imperial Japan present an opportunity to compare the rise of modern navies from what Holger H. Herwig calls “modest beginnings.”⁵² Both cases contain a vast literature and represent canonical cases of transformation into a world-class navy, albeit for different reasons.

The cases of the rise of the Imperial German and Imperial Japanese Navies are comparable to the rise of the PLAN for three reasons. First, in all three countries, the army commanded preeminence over the armed forces, and the navy often found itself relegated to “the army’s satellite,” in the words of German officers.⁵³ While Prussia and Germany had always predominated traditionally as a land power, the Japanese army held considerable sway during the long period of Japanese isolation and the need to consolidate the control of the new Meiji government.

Second, all three embarked on intentional naval expansions that elevated the navy from its early modest origins. While the constituent domains that combined to form each

⁵¹ Miller and Murphy, 561, 564.

⁵² Holger H. Herwig, *“Luxury” Fleet: The Imperial German Navy 1888-1918* (London: The Ashfield Press, 1987), 9.

⁵³ Herwig, *Luxury Fleet*, 16.

modern country possessed few ships, by pursuing naval expansion from embryonic beginnings, each inhabited ideal contexts in which the formulation and execution of maritime strategy can be observed due to their lack of naval tradition. Study of their naval expansions allows for control of the variable of inheritance, as well as any inertia associated with the old ways of doing things.

Third, Imperial Germany and Imperial Japan have their own unique strategic similarities to China. Both Germany and China represent traditional great land powers who decided to take a strong naval turn. Japan and China, situated in Asia, both modernized in reaction to western encroachment. Only by utilizing both case studies can one gather a complete window into the possibilities represented by China.

In the cases of Imperial Germany and Imperial Japan, the analysis below proceeds first by establishing where the respective navies stood in certain eras and what maritime strategy they embraced, then outlines how their naval shipbuilding reflected strategy. After that, discrepancies are examined to determine the role of non-strategic factors. By a disaggregation of strategic and non-strategic factors, the case studies will parse apart the diverse motives driving decision-making in shipbuilding programs.

II. COMPARATIVE CASES

A. IMPERIAL GERMANY: THE STOSCH ERA, 1872–1883⁵⁴

When Germany unified in 1871, the Imperial German Navy (IGN) inherited a small navy of iron-clads and armored frigates from the North German Confederation, as well as the Prussian shipbuilding program.⁵⁵ The Prussian program, passed in 1867, called for the construction of “sixteen armored warships, twenty unarmored corvettes, eight dispatch boats,” and 22 gunboats over 10 years.⁵⁶ This modest navy reflected its relative unimportance to German strategic thinking. Because German ships proved unable to prevent the crippling of German trade by France in the Franco-Prussian War, doubt existed as to whether sailors ought to receive the war’s commemorative medals, and navy recruiting suffered a dismal reputation for the next decade.⁵⁷

Rolf Hobson traces the beginnings of the German school of naval thought to Alfred Stenzel, “the first teacher of naval strategy and history at the *Marine-Akademie*” from 1875–1881.⁵⁸ Hobson characterizes Stenzel as “the most pronounced representative of tendencies within early German naval thought which can also be substantiated by other references,” and describes his naval thought as “one long attempt to baptize Clausewitz with salt water.”⁵⁹ The substance of Stenzel’s thought may be summarized in the following passage: “Whether directly or indirectly: The destruction of the enemy forces is the foundation of all military activity; in order to bring it about, we have only one means, combat. The end for which the crew is recruited, clothed, trained and fed, for which the

⁵⁴ This section was previously published by Strategy Bridge. Tyler Self, “Primacy of Maritime Strategy in Naval Shipbuilding? The Case of Imperial Germany,” Strategy Bridge, September 6, 2023, <https://thestrategybridge.org/the-bridge/2023/9/6/primacy-of-maritime-strategy-in-naval-shipbuilding-the-case-of-imperial-germany>.

⁵⁵ Lawrence Sondhaus, *Preparing for Weltpolitik: German Sea Power Before the Tirpitz Era* (Annapolis, MD: Naval Institute Press, 1997), 108–9.

⁵⁶ Sondhaus, *Preparing for Weltpolitik*, 86.

⁵⁷ Sondhaus, *Preparing for Weltpolitik*, 96, 107.

⁵⁸ Rolf Hobson, *The German School of Naval Thought and the Origins of the Tirpitz Plan 1875 ~ 1900* (Oslo: Institutt for Forsvarsstudier, 1996), 18, <https://fhs.braage.unit.no/fhs-xmlui/handle/11250/99521>.

⁵⁹ Hobson, *The German School*, 18–19.

ships are built, equipped, and armed – is simply to fight at the right time at the right place.”⁶⁰

Stenzel held naval warfare to be “essentially very similar” to land warfare, and Hobson writes that he “seem [ed] to regard secondary operations such as commerce interdiction and blockade as akin to Clausewitz’s pursuit after battle: the objects is to complete the destruction of the enemy’s organized resistance.”⁶¹ Nevertheless, as Hobson argues, Stenzel’s teaching “provided the theoretical framework within which the Imperial Navy developed” until Alfred von Tirpitz.⁶² While his teachings, including the doctrine of offense for the purpose of destruction of the enemy, did not lead to a naval arms race with Britain 25 years early, they did make later German naval leadership more receptive to Mahanian theory in the run-up to World War I.⁶³

Albrecht von Stosch, appointed as Germany’s first chief of the Imperial Admiralty in January 1872, sought to shape the navy as an adjunct to the army. As an army general himself, he called the navy a “living coastal defence,” and Holger Herwig characterizes the role of Stosch’s navy as “prevent [ing] an enemy landing on German soil and, if possible, safeguard [ing] German coastal cities from enemy shelling.”⁶⁴ (Such a role, of course, does not seek out the enemy’s fleet for destruction, but instead passes the initiative to the enemy navy for a decision on whether to join battle.) Stosch viewed the navy as an extension of land power, even formulating naval tactics based on that of infantry, and swore to circumscribe naval growth when he told the Reichstag, “I do not believe that we are called...to compete with states that have already developed large fleets.”⁶⁵ In a new country that owed its unification to its powerful army, such a position by the head of the navy would not register controversy. As David Olivier would observe of Stosch’s navy, it “was an unofficial subsection of the army, and any efforts expended on behalf of the navy

⁶⁰ As quoted in Hobson, *The German School*, 21.

⁶¹ Hobson, *The German School*, 21.

⁶² Hobson, *The German School*, 22.

⁶³ Hobson, *The German School*, 18.

⁶⁴ As quoted in Herwig, *Luxury Fleet*, 13.

⁶⁵ Herwig, *Luxury Fleet*, 13; Sondhaus, *Preparing for Weltpolitik*, 108.

were in no way to interfere with the needs of the army.”⁶⁶ The appointments of Stosch and his successor Leo von Caprivi to head the navy, while serving as army generals, virtually ensured the priority of the army in military spending, as the navy would lack a forceful advocate in spending matters.

In part due to his influence with the Reichstag, Stosch secured its near unanimous rejection of large ships in April 1873.⁶⁷ The account provided in Olivier depicts Stosch as admitting the army must come first, and that the navy’s role must remain confined to coastal defense, blockade prevention, and “overseas duties,” the last of which was understood to mean showing the flag, merchant escort, and *guerre de course* in wartime.⁶⁸ In rejecting larger warships, Stosch and the Reichstag rejected *guerre d’escadre* against Britain or France. Stosch’s proposal not to spend funds to build the largest, most expensive warships met approval from the “conservative pro-army and left-leaning anti-military factions, united only in their insistence on the smallest possible naval budgets.”⁶⁹

In 1873, upon concluding that the 1867 shipbuilding plan could not be met in time, Stosch commenced a new expansion plan to add to the armored fleet five corvettes, and two floating batteries, as well as an additional eight corvettes, four dispatch boats, and 22 torpedo boats to the unarmored fleet.⁷⁰ (Stosch would later cancel the floating batteries and dispatch boats in favor of 13 armored gunboats.)⁷¹ Torpedo boats and gunboats would suffice to protect the North Sea coast because “in it the vulnerable area was limited to the Elbe, Weser, and Jade estuaries.”⁷² The eight new unarmored corvettes procured under this plan, already obsolete by the time of completion, would become the overseas workhorses of the Germany navy for two decades in showing the flag, gunboat diplomacy,

⁶⁶ David H. Olivier, *German Naval Strategy, 1856-1888: Forerunners to Tirpitz* (New York: Taylor & Francis, 2004), 91.

⁶⁷ Olivier, *German Naval Strategy*, 89, 96.

⁶⁸ Olivier, *German Naval Strategy*, 89, 91.

⁶⁹ Olivier, *German Naval Strategy*, 96.

⁷⁰ Ivo Nikolai Lambi, *The Navy and German Power Politics, 1862-1914* (Boston: Allen & Unwin, 1984), 5.

⁷¹ Lambi, *The Navy*, 6.

⁷² Lambi, *The Navy*, 5.

and colonial matters.⁷³ The armored corvettes, meanwhile, suffered from “limited range, seaworthiness, and fighting value.”⁷⁴ Stosch’s 1873 expansion program set the agenda conceptually until the end of his tenure, and as the only systematic program until 1898, its influence percolated into decision-making until Tirpitz. With few exceptions, Germany would adhere to Stosch’s 1873 naval expansion program even beyond its expiration. The IGN celebrated the plan by saying “funds flowed plentifully,” and Lawrence Sondhaus characterizes it as the navy’s “yardstick” in this period which allowed it to “mushroom” in size.⁷⁵

As Sondhaus points out, however, Stosch’s 1873 program had few direct connections to the strategic needs of the state.⁷⁶ Olivier writes that it possessed a “contradiction...between the demands of defence in home waters and an emphasis on lighter cruising vessels.”⁷⁷ The *Leipzig*- and *Bismarck*-class unarmored corvettes, built for commerce raiding, posed an intractable strategic problem in the fact that they could not attack enemy commerce without overseas support, which the government refused to provide by refraining from colonialism, while it was also widely understood they would be useless in fleet action against a first-rate maritime power in European waters.⁷⁸ Toward the end of his tenure, Stosch would defend his shipbuilding program on the basis that it increased Germany’s value as an ally, and Caprivi would later echo this argument in 1884, even as other European countries’ naval expansions surged past Germany’s.⁷⁹

⁷³ Lambi, *The Navy*, 6; Sondhaus, *Preparing for Weltpolitik*, 114.

⁷⁴ Lambi, *The Navy*, 6.

⁷⁵ Sondhaus, *Preparing for Weltpolitik*, 111. For comparison, the Royal Navy continued to build a battleship-centric fleet, while the French found itself torn between constructing a battlefleet or *Jeune Ecole* fleet in the aftermath of its loss to Germany in the Franco-Prussian War. See Carlos Alfaro Zaforteza, “The Age of Empire, 1870-1914,” in *European Navies and the Conduct of War*, ed. Alan James, Carlos Alfaro Zaforteza, and Malcolm Mufett (New York: Routledge, 2019), 131, 138–39, <https://doi.org/10.4324/9780429467240>.

⁷⁶ Sondhaus, *Preparing for Weltpolitik*, 143.

⁷⁷ Olivier, *German Naval Strategy*, 99.

⁷⁸ Olivier, 106.

⁷⁹ Sondhaus, *Preparing for Weltpolitik*, 143, 168.

The primary benefits of Stosch's 1873 plan lay in Stosch's intentions outside the realm of maritime strategy. His close friend Gustav Freytag recalled that "he expressed his determination to have everything that the Germany navy required procured in Germany."⁸⁰ As a newcomer to the maritime realm, Germany lacked the manufacturers and facilities to build or maintain modern ships. Stosch, however, awarded all gun contracts to the German company Krupp, and commissioned companies like A.G. Weser in Bremen, A.G. Vulcan in Stettin, Norddeutsche Schiffbau A.G. of Kiel, and the imperial shipyard in Danzig to build his ships.⁸¹ German shipyards evolved and modernized as a result. Sometimes, however, Stosch's patronage of German industry came at a price. Even as "compound iron-and-steel" armor rendered obsolete the navy's planned armored corvettes, Stosch persisted in their construction utilizing "'sandwich' armor of alternating wrought iron and teak" from a Dillengen foundry.⁸² Nevertheless, Stosch's fleet plan "freed the navy from its dependence on foreign builders and supplies" and therefore "laid the foundation of the naval-industrial complex that helped make Germany a first-class sea power after the turn of the century."⁸³

By stimulating German domestic industry, Stosch's naval expansion also assisted Germany's recovery from the depression of the 1870s and helped stamp out socialist agitation. Besides rising employment within the private and imperial shipyards, Sondhaus writes that Stosch, "to retain experienced workers...did not hesitate to authorize the imperial shipyards to pay higher wages than their private counterparts."⁸⁴ Sondhaus also documents how the imperial shipyard in Kiel, already a "hotbed of Social Democratic sentiment," retained skilled workers by "habitually hir [ing] workers idled by strikes at private shipyards and machine shops."⁸⁵ By providing employment to the burgeoning

⁸⁰ Sondhaus, *Preparing for Weltpolitik*, 111.

⁸¹ Olivier, *German Naval Strategy*, 105; Sondhaus, *Preparing for Weltpolitik*, 111, 114.

⁸² Sondhaus, *Preparing for Weltpolitik*, 136.

⁸³ Sondhaus, *Preparing for Weltpolitik*, 111, 140.

⁸⁴ Lawrence Sondhaus, "The Imperial German Navy and Social Democracy, 1878-1897," *German Studies Review* 18, no. 1 (February 1995): 52, <https://www.jstor.org/stable/1431518>.

⁸⁵ Sondhaus, 53, 55.

working-class on the coast, Stosch's shipbuilding program kept laborers too busy to protest.

B. IMPERIAL GERMANY: FROM CAPRIVI TO TIRPITZ, 1883–1897⁸⁶

With the appointment of Stosch's successor, Leo von Caprivi, in early 1883, the navy entered an improvisational era lacking any systematic shipbuilding programs. Caprivi informed the Reichstag that he would “focus on short-term goals rather than propose another long-term plan.”⁸⁷ Also an army general, he described his own intention to keep the navy “within narrow limits, as narrow as our conditions permit.”⁸⁸

According to Sondhaus, in the period of 1883–1888 the IGN suffered from “tactical and strategic confusion that reigned under Caprivi.”⁸⁹ That Caprivi was an army general, like Stosch, almost certainly made him susceptible to maritime strategic confusion in an era filled with innovation in technology that seemed to threaten old ways of thinking. Caprivi's tenure coincided with the popularity of the French *Jeune Ecole* school. At the theoretical level, the debate between these two schools of thought created uncertainties that derailed any hope for a second systematic naval shipbuilding program.

As for Caprivi, he appears to have endorsed a view closer to Stenzel's school of thought than *Jeune Ecole*. Upon taking office, he convened an Admiralty Council that affirmed major principles of *Jeune Ecole*, especially commerce raiding, but Caprivi chose to reject the Council's conclusions regarding cruiser warfare two months later before the Reichstag.⁹⁰ As an army man, Caprivi embraced the navy's coastal defense role and challenge to blockades, despite acknowledging that the IGN could not hope to destroy those of the great naval powers. Later operational planning led him to imagine melees off

⁸⁶ This section was previously published by Strategy Bridge. Tyler Self, “Primacy of Maritime Strategy in Naval Shipbuilding? The Case of Imperial Germany,” Strategy Bridge, September 6, 2023, <https://thestrategybridge.org/the-bridge/2023/9/6/primacy-of-maritime-strategy-in-naval-shipbuilding-the-case-of-imperial-germany>.

⁸⁷ Sondhaus, *Preparing for Weltpolitik*, 153.

⁸⁸ As quoted in Lambi, *The Navy*, 6.

⁸⁹ Sondhaus, *Preparing for Weltpolitik*, 172.

⁹⁰ Olivier, *German Naval Strategy*, 145, 147.

the German coast, with the IGN acting more as a suicide force than a professional fleet. He wrote, “Rules for a melee are few and simple. For every ship sunk a hostile ship must be incapacitated. No ship should leave the melee as long as it can use any of its weapons. Torpedo-boats are not to leave the melee when they have used up their torpedoes, but are to hinder hostile torpedo boats.”⁹¹

To best prepare for the envisioned melees off the German coast, Caprivi hoped to boost the navy’s battle fleet. He wrote that “wherever there is struggle for control of a part of a sea, one cannot dispense with armored ships...A navy which concentrates on the land or on the coast no longer deserves its name.”⁹² However, rapid innovation in nickel-steel armor, smokeless powders, and armor-piercing shells threatened any battle fleet construction with immediate obsolescence.⁹³ Caprivi, mindful of the possibility of wasting money on the navy, wrote that “a navy like ours cannot afford the luxury of failed experiments...We will rather proceed cautiously in the area of development of armoured ships.”⁹⁴ Construction of the *Siegfried*-class armored ships would wait until 1887, while Caprivi chose instead to build 70 torpedo boats for coastal defense and 10 unarmored cruisers.⁹⁵ Ivo Lambi describes the Caprivi building programs as characterized by confusion, owing to Caprivi’s own inconsistency over the effectiveness of commerce raiding.⁹⁶

By delaying construction of the *Siegfried*-class, Caprivi’s tenure resulted in employment at private shipyards and the imperial shipyard at Kiel falling almost 50%, because as Sondhaus observes, Caprivi’s ad hoc constructions did not provide the “the numbers of jobs nor the stimulus for domestic industry that larger armored projects had in the past.”⁹⁷ In torpedo boat construction, the navy awarded nearly all contracts to Schichau

⁹¹ As quoted in Lambi, *The Navy*, 10.

⁹² Lambi, *The Navy*, 7.

⁹³ Sondhaus, *Preparing for Weltpolitik*, 180; Herwig, *Luxury Fleet*, 26.

⁹⁴ As quoted in Olivier, *German Naval Strategy*, 147.

⁹⁵ Lambi, *The Navy*, 9; Sondhaus, *Preparing for Weltpolitik*, 166.

⁹⁶ Lambi, *The Navy*, 7, 9.

⁹⁷ Sondhaus, *Preparing for Weltpolitik*, 165, 168.

of Elbing, but divided the considerably fewer cruiser projects between all other shipyards.⁹⁸

Kaiser Wilhelm II replaced Caprivi in July 1888 with Vice Admiral Count von Monts, the first navy man to lead the IGN. His seven-month tenure, and those of Vice Admiral Baron von der Goltz from January 1889 to May 1895 and Admiral Eduard von Knorr from May 1895 to February 1897, remained bedeviled by *Jeune Ecole* with uncertainties in the effectiveness of fleet actions and commerce raiding.⁹⁹ The accession of Wilhelm II to the throne in mid-1888 caused further development confusion. His naval thinking reflected the broader debate in miniature and he constantly wavered between the philosophies of *Jeune Ecole* and a Mahanian battle fleet.¹⁰⁰ Building programs under Monts and Goltz featured torpedo boats, cruisers, dispatch vessels, and even the *Brandenburg*- and *Kaiser Friedrich III*-class battleships, such that one liberal politician lamented the “limitless fleet plans.”¹⁰¹ As Sondhaus writes, this variety betrayed an “unfocused” and “catchall program including something for everyone.”¹⁰² For these reasons, the decade of 1888–1898 has been called “the wasted ten years.”¹⁰³

The 25-year period beginning with the appointment of Stosch and ending with the appointment of Tirpitz is one of immature development in German maritime strategy. Perhaps unsurprisingly, it shares with Stenzel’s body of thought a profound lack of “an ideology of sea power.”¹⁰⁴ What is more, the influence of *Jeune Ecole*, whose popularity coincided with Caprivi’s tenure in the 1880s, exhibited an influence that further confused German naval thought, as Caprivi himself oscillated between opinions of commerce

⁹⁸ Sondhaus, *Preparing for Weltpolitik*, 164, 166.

⁹⁹ Lambi, *The Navy*, 9.

¹⁰⁰ Sondhaus, *Preparing for Weltpolitik*, 176.

¹⁰¹ As quoted in Herwig, *Luxury Fleet*, 25.

¹⁰² Sondhaus, *Preparing for Weltpolitik*, 179–80.

¹⁰³ Sondhaus, *Preparing for Weltpolitik*, 176.

¹⁰⁴ Hobson, *The German School*, 21.

raiding as “an anachronism” or “decisive.”¹⁰⁵ The only axiom that remained constant was the need for the navy to provide coastal defense.

During this era, a period marked by rapid technological change and skyrocketing costs of naval shipbuilding, German leaders chose not to compete with the great naval powers at naval expansion. Instead, naval shipbuilding occurred in furtherance of maritime strategy based heavily on land warfare and the consequent primacy of the army. Nevertheless, the construction of more robust ships, such as Stosch’s *Sachsen*-class armored corvettes, reflected a need to supply German industry with projects that filled capacity and spurred employment, even at the expense of heightened costs and immediate obsolescence.

C. IMPERIAL GERMANY: THE TIRPITZ ERA, 1897–1916¹⁰⁶

With the ascension of Alfred von Tirpitz to state secretary of the Imperial Navy Office, the IGN gained an advocate with a vision for true, systematic naval expansion endorsed by the Kaiser. Already, in 1894, he had advocated for a modern battlefleet in Service Memorandum IX, where he argued that “a state that has sea interests or – what is equivalent – world interests must be able to represent them and to make its power felt beyond territorial waters. National world trade, world industry, and to a certain extent high-seas fisheries, world transportation, and colonies are impossible without a fleet capable of taking the offensive.”¹⁰⁷ By pursuing Tirpitz’s vision, the IGN would free itself from the domination of army priorities, as well as alienate Great Britain by its challenge in the maritime domain.

German maritime strategy underwent fundamental change under Tirpitz. The navy’s mission before his tenure emphasized coastal defense, showing the flag overseas,

¹⁰⁵ Lambi, *The Navy*, 6, 9.

¹⁰⁶ This section was previously published by Strategy Bridge. Tyler Self, “Primacy of Maritime Strategy in Naval Shipbuilding? The Case of Imperial Germany,” Strategy Bridge, September 6, 2023, <https://thestrategybridge.org/the-bridge/2023/9/6/primacy-of-maritime-strategy-in-naval-shipbuilding-the-case-of-imperial-germany>.

¹⁰⁷ As quoted in Dirk Bönker, “Global Politics and Germany’s Destiny ‘from an East Asian Perspective’: Alfred von Tirpitz and the Making of Wilhelmine Navalism,” *Central European History* 46, no. 1 (March 2013): 73, <https://www.jstor.org/stable/43280550>.

and sometimes commerce raiding, but Tirpitz sought to strengthen the fleet past such strategies that implied naval weakness. While sometimes inconsistent in his precise mission for the navy, he sought to reorient the fleet toward an offensive posture. At his most optimistic, Tirpitz calculated that by achieving a 2:3 ratio of battleships with Britain, Germany could dominate the North Sea due to a combination of its greater concentration of warships in theater and greater number of warships kept in active service.¹⁰⁸ Germany could wield this threat like “a sharp knife, held gleaming and ready only a few inches away from the jugular vein” of Britain.¹⁰⁹ At his most pessimistic, Tirpitz’s Risk Theory, outlined in his preamble to the second Navy Law, argued that victory at sea did not necessarily need to occur, because “the destruction of the German fleet would so much damage the enemy that his own position as a world power would be brought into question.”¹¹⁰ In other words, a pyrrhic victory by the Royal Navy would neutralize the British fleet from the war and permanently weaken Britain on the international stage.

Tirpitz’s Mahanian bent in maritime strategy came to dominate German naval thinking due to the promotional and repressive efforts of Tirpitz himself. In 1898, Tirpitz ordered translated and distributed Mahan’s book *The Influence of Sea Power upon History*, whose popularity worldwide strengthened Tirpitz’s strategic theories, already formulated in 1894.¹¹¹ He paired these promotional efforts with repression when a book written by Vice Admiral Curt von Maltzahn, planned for publication in 1899, “stressed the advantage of avoiding sea battle against overwhelming forces and suggested that the battle fleet should not dominate the fleet’s resources, so as to retain the flexible use of cruiser warfare.”¹¹² By utilizing his proximity to the Kaiser, Tirpitz succeeded in preventing the

¹⁰⁸ Herwig, *Luxury Fleet*, 36.

¹⁰⁹ Paul Kennedy, “Tirpitz, England and the Second Navy Law of 1900: A Strategical Critique,” *Militär-geschichtliche Mitteilungen*, no. 2 (1970): 38, ProQuest.

¹¹⁰ As quoted in Hobson, *The German School*, 47.

¹¹¹ Holger H. Herwig, “The Failure of German Sea Power, 1914–1945: Mahan, Tirpitz, and Raeder Reconsidered,” *The International History Review* 10, no. 1 (February 1988): 69, <https://doi.org/10.1080/07075332.1988.9640469>.

¹¹² John B. Hattendorf, “The Caird Lecture, 2000: The Anglo-French Naval Wars (1689–1815) in Twentieth-Century Naval Thought,” *Journal for Maritime Research* 3, no. 1 (2001): 55, <https://doi.org/10.1080/21533369.2001.9668312>.

book's publication and suppressing its discussion by officers in public.¹¹³ Even the Kaiser's idea of a cruiser-battleship hybrid never made headway, and Tirpitz subjected other detractors to personal attacks.¹¹⁴ In short, as Herwig writes, "young officers who associated too closely with cruiser or submarine tactics could be assured of short careers."¹¹⁵

As part of directing the IGN toward a Mahanian offensive strategy, Tirpitz spearheaded a naval expansion program that emphasized the battle fleet. Wilhelm II signaled this significant reversal of course in an order that "greater expenditure on coastal defenses be avoided and that those defense measures made necessary by the increase of the fleet be assigned higher priority than others."¹¹⁶ With the goal of 60 capital ships and 40 light cruisers, his Naval Laws of 1898 and 1900, as well as various supplementary bills, mandated that the navy acquire modern battleships, armored cruisers, and light cruisers from German shipyards and automatically replace commissioned ships after set service lives.¹¹⁷ Even after Britain's HMS *Dreadnought* transformed the naval arms race in 1906, Tirpitz and his inner circle decided to continue their building program in the face of dire financial straits and without consultation with other financial and strategic stakeholders.¹¹⁸

While Tirpitz represented a sea change in maritime strategy and naval shipbuilding, his expansion program was also informed and motivated by domestic factors. Perhaps most contentious in the historiography is how much to understand Tirpitz's naval expansion as "social imperialism."¹¹⁹ According to this explanation, German imperialism served to hinder the forces of liberalization and socialism, and thereby maintain the privileged status

¹¹³ Lambi, *The Navy*, 166.

¹¹⁴ Herwig, *Luxury Fleet*, 38; Carl-Axel Gemzell, *Organization, Conflict, and Innovation: A Study of German Naval Strategic Planning, 1888-1940* (Stockholm: Esselte Studium, 1973), 60–61.

¹¹⁵ Herwig, *Luxury Fleet*, 39.

¹¹⁶ Lambi, *The Navy*, 168.

¹¹⁷ Herwig, *Luxury Fleet*, 36.

¹¹⁸ Holger H. Herwig, "The German Reaction to the Dreadnought Revolution," *The International History Review* 13, no. 2 (May 1991): 278, <https://www.jstor.org/stable/40106367>.

¹¹⁹ Hans-Ulrich Wehler, "Bismarck's Imperialism 1862-1890," trans. Norman Porter, J. Sheehan, and T. W. Mason, *Past & Present*, no. 48 (August 1970): 151, <https://www.jstor.org/stable/650484>.

of conservatives and industrialists. In the wake of global depressions in the 1870s and 1893, the “propertied classes” of Germany feared “electoral advances by Social Democracy and increased unionization.”¹²⁰ Shipbuilding programs in port cities like Kiel, Bremen, Danzig, and Wilhelmshaven provided blue-collar jobs and steady payment for sympathizers of social democracy. While the industrialists stood to profit from building the ships, the agrarians received tariffs on imported cereal grains that privileged domestic agriculture and helped offset the budget deficits exacerbated by Tirpitz’s shipbuilding program.¹²¹ For these reasons, the Reichstag coalition that passed the 1900 Navy Law consisted of middle-class industrialists and conservative agrarians.¹²²

The most important evidence for this “social-historical explanation” relies on Tirpitz’s private letters, such as when he wrote, “in this new and important national task of imperialism and in the economic gain that will result from it, we have a powerful palliative against both educated and uneducated social democrats.”¹²³ Because Tirpitz and Kaiser Wilhelm II viewed the fleet as the growing instrument of Germany’s imperial power, historians like Hans-Ulrich Wehler and Eckart Kehr conclude that the IGN under Tirpitz expanded for this reason.¹²⁴ Most strongly of all, Kehr argues that all German armament policy may be understood through this lens when he writes, “The actors were under the impression that they were acting independently, and yet...they merely executed what was predetermined by social power relations.”¹²⁵

¹²⁰ Geoff Eley, “Sammlungspolitik, Social Imperialism and the Navy Law of 1898,” *Militär-geschichtliche Mitteilungen*, no. 1 (1974): 30.

¹²¹ Gary E. Weir, *Building the Kaiser’s Navy: The Imperial Navy Office and German Industry in the von Tirpitz Era* (Annapolis, MD: Naval Institute Press, 1992), 53; Steinberg, “Review: The Tirpitz Plan,” *The Historical Journal* 16, no. 1 (March 1973): 199, <https://www.jstor.org/stable/2637924>.

¹²² Weir, *Building the Kaiser’s Navy*, 53.

¹²³ As quoted in Hans-Ulrich Wehler, “Bismarck’s Imperialism 1862-1890,” trans. Norman Porter, J. Sheehan, and T. W. Mason, *Past & Present*, no. 48 (August 1970): 152, <https://www.jstor.org/stable/650484>.

¹²⁴ Wehler, 153; Eckart Kehr, “Anglophobia and Weltpolitik,” in *Economic Interest, Militarism, and Foreign Policy* (Berkeley, CA: University of California Press, 1977), 39, 82.

¹²⁵ Eckart Kehr, “Class Struggle and Armament Policy in Imperial Germany,” in *Economic Interest, Militarism, and Foreign Policy*, ed. Gordon A. Craig, trans. Grete Heinz (Berkeley, CA: University of California Press, 1977), 75.

While contentious in the historiography over how much they explain German leaders' decision-making, social-historical factors shed considerable light on how Tirpitz consolidated domestic political support for the passage of his Navy Laws through the Reichstag. As already mentioned above, the promise of profit margins for shipbuilding industrialists and tariffs for imported grain were essential to the passing of Tirpitz's 1900 Navy Law. In addition, appeals to special interests in Hanseatic cities like Hamburg and heavy industry became vital to dispelling resistance aroused by Berlin banks and university professors.¹²⁶

The interests of industrialists shaped the modernization of the fleet, sometimes to its detriment. From 1894, Krupp, in conjunction with Dillinger, held a monopoly on nickel-steel armor and guns that "constantly drove ship prices up" between 1894 and 1909, before the American Midvale Company began to compete with Krupp armor in Germany.¹²⁷ The soaring price of capital ships, especially after the launch of HMS *Dreadnought*, became the recurring objection of Reichstag deputies. Even in 1897, backlash from the pro-navy Center party against a navy budget that included construction of a single *Kaiser Friedrich III*-class battleship forced the budget commission to reduce its estimates by 19%.¹²⁸ By 1908, with resistance building, Tirpitz resorted in some cases to awarding contracts for battleships and cruisers without prior approval by the Reichstag.¹²⁹

Tirpitz's policies within the navy also led to the slow adoption of turbine propulsion in German battleships. Turbine engines represented a significant improvement in surface ship propulsion. HMS *Dreadnought* was the first battleship constructed around a turbine engine plant, although British naval experimentation with the Parsons turbine had occurred since 1901.¹³⁰ Tirpitz, however, restricted navy procurement to German firms and left all

¹²⁶ Eckart Kehr, "The Social and Financial Foundations of Tirpitz's Naval Propaganda," in *Economic Interest, Militarism, and Foreign Policy* (Berkeley, CA: University of California Press, 1977), 83–84, 87, 89.

¹²⁷ Weir, *Building the Kaiser's Navy*, 31, 109.

¹²⁸ Sondhaus, *Preparing for Weltpolitik*, 216, 218.

¹²⁹ Herwig, *Luxury Fleet*, 69.

¹³⁰ Herwig, *Luxury Fleet*, 46.

innovation to the private sector.¹³¹ These policies enabled the British to maintain superiority in speed and firepower for some time. The IGN's reciprocating engines forced its battleships to use two guns with hexagonal mountings on each side, instead of *Dreadnought's* centerline turrets that brought more guns to bear during a single broadside.¹³² Eventually the navy contracted with Parsons, but because Tirpitz refused so long neither to rely on a foreign firm such as Parsons nor to steer turbine development, the IGN did not construct its first turbine-powered battleship until 1911.¹³³

Perhaps the most glaring departure from Tirpitz's fleet plan was the German submarine program. Tirpitz was outspoken about the submarine's incongruity with German maritime strategy. "The U-boat is, at present, of no great value in war at sea," he said.¹³⁴ Nevertheless, "under pressure from close aides," Tirpitz contracted with Krupp to build the IGN's first submarine in 1904, and authorized 1.5 million [German Marks] for experimentation.¹³⁵ The popularity of *Jeune Ecole* and commerce raiding had not faded in France, and as a result French improvements in submarine technology caught the eye of some in the IGN.¹³⁶ Tirpitz never succeeded in completely stamping out other maritime theorists like Karl Gakker, Kurt von Maltzahn, and Lothar Persius from advocating commerce raiding.¹³⁷

According to Tirpitz's memoirs, the IGN's experimentation with submarines sought to improve their propulsion, so as to increase their blue water capabilities.¹³⁸ Six years of testing proved the superiority of diesel engines over petrol engines, and from 1910

¹³¹ Weir, *Building the Kaiser's Navy*, 29, 95.

¹³² Herwig, *Luxury Fleet*, 59.

¹³³ Weir, *Building the Kaiser's Navy*, 96, 199; Herwig, *Luxury Fleet*, 46.

¹³⁴ As quoted in Weir, *Building the Kaiser's Navy*, 52.

¹³⁵ Herwig, *Luxury Fleet*, 86–87.

¹³⁶ Gary E. Weir, "Tirpitz, Technology, and Building U-Boats, 1897-1916," *The International History Review* 6, no. 2 (May 1984): 178, <https://www.jstor.org/stable/40105369>.

¹³⁷ Weir, "Tirpitz," 175.

¹³⁸ Alfred von Tirpitz, *My Memoirs, by Grand-Admiral von Tirpitz, Volume II* (England: Hurst & Blackett, 1919), 571, <https://babel.hathitrust.org/cgi/pt?id=uc1.31210006877748>.

to 1914 the IGN ordered 26 submarines.¹³⁹ It should be noted that, unlike Tirpitz's battleships, submarine acquisition was greatly assisted by the fact that they "tended to come in extremely close to contract cost," which aided their continued funding by the Reichstag.¹⁴⁰ While the Germans would come to rely heavily on their submarines late in World War I, their role provides a curious inversion of the conventional wisdom of maritime strategy and warship capability. In the submarine's case, the existence of capability preceded strategy in commerce raiding. In the words of Daniel Moran, the submarine's "effective use was less a matter of invention than discovery," because "the possibilities only became apparent once [World War I] started."¹⁴¹

D. SUMMARY

For most of its history, the IGN's maritime strategy remained confused by the popular theories of the day and the ignorance of Stosch and Caprivi, both of whom set the tone of naval shipbuilding until 1898. After Tirpitz's appointment, his new strategic theories corresponded to a new direction for German naval shipbuilding. While the Battle of Jutland in 1916 would discredit Tirpitz's theories and the navy would subsequently revert to commerce raiding with its submarines, this later change occurred as a result of warfare necessity and not as a theoretical change in maritime strategy.

German strategic confusion and the lack of any systematic naval expansion between the years 1883 and 1898 allowed various non-strategic factors to assert themselves in shipbuilding. Even in its earliest days, German leaders wielded the navy as a tool for the interests of heavy industry and in the struggle against leftists. In Stosch's case, because he contracted only German firms, armored ships in his construction program could not be maximized for their foreseen role in breaking a blockade. The lack of systematic construction that ensued with Caprivi created unpredictability in shipbuilding orders, and

¹³⁹ Tirpitz, 572; Herwig, *Luxury Fleet*, 87.

¹⁴⁰ Weir, "Tirpitz," 184.

¹⁴¹ Daniel Moran, "Technological Disruption and Strategic Innovation: Underwater Weapons in World War I," in *Maritime Strategy and Naval Innovation: Technology, Bureaucracy, and the Problem of Change in the Age of Competition*, ed. Alessio Patalano and James A. Russell (Annapolis, MD: Naval Institute Press, 2021), 76.

led to a significant decline in the industry for 15 years. The resumption of armored warship construction in 1887 functioned as a stabilizer for some shipyards, but the industry's revival would wait until Tirpitz's took office in 1897.

Under Tirpitz, the navy possessed the clarity of a maritime strategy and an accompanying shipbuilding program, but his plan morphed the navy into an even more significant tool of industry's special interests. Moreover, Tirpitz himself admitted that his naval expansion served, in part, to combat the Social Democrats. When these purposes of Tirpitz's plan conflicted, maritime strategy sometimes lost in the battle for primacy. German deviations from maritime strategy, such as the deliberate diminishing of firepower in the face of Britain's superior *Dreadnought* in order to continue patronizing German firms, and submarine construction in pursuit of innovation that pulled increasing amounts of money from the battle fleet, served to weaken the navy against Britain's fleet, which Tirpitz deemed the navy's principal enemy.¹⁴²

E. IMPERIAL JAPAN: EARLY MEIJI ERA, 1868–1882

With the proclamation of the Meiji government in 1868, Imperial Japan consisted of a ragtag collection of vessels from different domains, with many bought from western powers during decentralized military development under the Tokugawa.¹⁴³ Joseph H. Langford described Japan at this time as “the recognized market for the disposal of obsolete and worn-out ships.”¹⁴⁴ Satsuma, chief among the domains for donating vessels, contributed the most modern British-built steamers to the navy.¹⁴⁵ J. Charles Schencking notes, however, that many of the ships contributed by the domains of Satsuma, Choshu, Kaga, Tosa, and Chizuken would not survive the war of restoration or subsequent rebellions, and therefore, without a shipbuilding plan in its first four years, the Imperial

¹⁴² Herwig, *Luxury Fleet*, 36.

¹⁴³ Charles J. Schencking, *Making Waves Politics, Propaganda, and the Emergence of the Imperial Japanese Navy, 1868-1922* (Stanford, CA: Stanford University Press, 2005), 15.

¹⁴⁴ As quoted in Schencking, 16.

¹⁴⁵ Schencking, 15–16; David C. Evans and Mark R. Peattie, *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887-1941* (Annapolis, MD: Naval Institute Press, 1997), 8–9.

Japanese Navy (IJN) of 1872 consisted of 14 warships.¹⁴⁶ Unlike Germany, the IJN constituted an almost complete *tabula rasa* for naval construction.

Like the early years of Germany, however, the IJN was subservient to the needs of the army. Even after the navy became an independent ministry in 1872, its role remained confined to ferrying army troops due to the 160 domestic rebellions in the previous four years, as well as the need to transport soldiers on a punitive expedition to Taiwan in 1874.¹⁴⁷ The first head of the Navy Ministry, Kawamura Sumiyoshi, an army man, reflected similar dynamics of army dominance over navy affairs as that of Stosch in Germany.¹⁴⁸

The earliest Japanese naval acquisitions occurred in an improvisational manner, without systematic planning. The first procurement of vessels occurred during the Taiwan expedition, when the Japanese government purchased 13 foreign-built steamers after the governments of its chartered steamers claimed neutrality, temporarily stranding the Japanese expeditionary force at Nagasaki.¹⁴⁹ The next purchase of warships, which Hans Lengerer calls Japan's "first significant naval expansion," consisted of one ironclad and two armored corvettes from Britain in October 1874.¹⁵⁰ This purchase stemmed from alarm when Kawamura learned in August that China had purchased British ironclads superior to every Japanese ship.¹⁵¹ With insignificant wooden ships under construction in Tokyo and Yokosuka shipyards, the IJN would number 12 vessels by 1878.¹⁵² In short, the earliest composition of the IJN reflected the need to apply army force within its own borders and overseas, and growing anxiety over China.

¹⁴⁶ Schencking, *Making Waves Politics*, 15–16.

¹⁴⁷ Schencking, 15, 18; Hans Lengerer, "Pre-History of the Sino-Japanese War 1894–1895: The Taiwan Expedition: Impulse to the IJN's First Expansion and Basis for the Formation of a Merchant Marine," *Warship International* 56, no. 2 (June 2019): 115, 124, <https://www.jstor.org/stable/26864226>.

¹⁴⁸ Schencking, *Making Waves Politics*, 15.

¹⁴⁹ Lengerer, "Taiwan Expedition," 120–21.

¹⁵⁰ Hans Lengerer, "A Pre-History of the Sino-Japanese War 1894–1895: Introduction and Summary," *Warship International* 56, no. 1 (March 2019): 49, <https://www.jstor.org/stable/10.2307/26864210>; Schencking, *Making Waves Politics*, 19.

¹⁵¹ Lengerer, "Taiwan Expedition," 127–28.

¹⁵² Schencking, *Making Waves Politics*, 19, 28.

Other factors, however, shed as much light on what ships Japan purchased as much as what it did not purchase. Most restrictive of all to early Japanese naval growth were the nation's finances, which led the government to reject proposals from Kawamura for the purchase of "two 1300-ton warships" from Britain and Holland in 1870, 1872, and 1874.¹⁵³ In light of the government's rejection of this modest proposal, other "grandiose" plans for expansion, like Navy Minister Katsu Kaishu's "eighteen-year plan that called for the construction of 104 warships" in response to the government request for a detailed expansion plan, were rejected in 1873.¹⁵⁴ Finances, then, constrained major Japanese naval procurement outside of immediate necessities created by the Taiwan expedition and China. Indeed, urgency of the moment characterizes nearly all naval procurement during this period, as major Japanese purchases remained fundamentally reactionary to events in 1874.

The procurement of the 13 steamers, in particular, reflect domestic factors. While only two, purchased for a combined \$160,000, sufficed to transport the IJN's stranded troops from Nagasaki to Taiwan, the surplus 11, and indeed all 13 at the end of the expedition, were "entrusted to Mitsubishi and Company" in the form of a lease to "operate them in mercantile service."¹⁵⁵ Whereas previously the government subsidized Mitsubishi's competitor, Steamship Mail Company, the government in 1874 decided to lease the steamers to Mitsubishi.¹⁵⁶ According to Shuko Shiroyanagi, this change in patronage by the Prime Minister and Finance Minister occurred, in part, due to Mitsubishi owner Iwasaki Yotaro's "campaigning behind the scenes—mostly at famous inns and *geisha* houses."¹⁵⁷ Furthermore, the leasing of the 13 steamers allowed Mitsubishi to put Steamship Mail out of business, and challenge the American Pacific Mail Steamship

¹⁵³ Schencking, *Making Waves Politics*, 16–17.

¹⁵⁴ Schencking, *Making Waves Politics*, 16–17.

¹⁵⁵ Lengerer, "Taiwan Expedition," 121, 131.

¹⁵⁶ Kozo Yamamura, "The Founding of Mitsubishi: A Case Study in Japanese Business History," *The History Business Review* 41, no. 2 (Summer 1967): 147, 149, <https://doi.org/10.2307/3112564>.

¹⁵⁷ Yamamura, "Mitsubishi," 149.

Company for the Shanghai-Japan shipping route.¹⁵⁸ In short, Japan's first purchase of ships for its navy involved a strong measure of business competition and corruption.

F. IMPERIAL JAPAN: SATSUMA ERA, 1882–1895

In the 1880s, Japanese foreign policy in East Asia sought a foothold into the affairs of Korea. Because it lay on the other side of the Tsushima Strait, Japan feared that the great powers could undercut Japanese influence on the peninsula and use Korea as a springboard to interfere in Japan as well. From Japan's point of view, Korean resistance to Meiji-style modernization left it weak in the face of encroaching colonialism.

Japanese desire for primacy in Korean affairs created new security dilemmas for the Japanese state which provided the justification for naval expansion. Iwakura Tomomi would articulate Japan's dilemma by stating that if the government did not expand the navy, and war broke out over Korea, then Japan would lack the ability to protect the home islands and attack overseas simultaneously.¹⁵⁹ While advocating for naval expansion, Navy Minister Kawamura wrote an 1882 paper titled "Opinions Regarding Naval Expansion" and asserted that "the warships, gunships, and torpedo vessels that [China] is currently constructing at home and abroad are beyond counting."¹⁶⁰ Anticipation of the possibility of war loomed large throughout the 1880s, and Japanese military spending gradually increased throughout the decade.¹⁶¹

In 1881, Kawamura submitted a naval expansion plan for 60 battleships over 20 years that was subsequently rejected, but further lobbying resulted in the approval of an eight-year construction program of 48 ships, "nearly half of which were to be torpedo boats," and a "corollary" of 12 warships to be constructed in the subsequent eight years,

¹⁵⁸ Yamamura, "Mitsubishi," 149–50.

¹⁵⁹ Peter Duus, *The Abacus and the Sword: The Japanese Penetration of Korea, 1895-1910* (Berkeley, CA: University of California Press, 1995), 62.

¹⁶⁰ Junji Banno, *Empire and Constitution in Modern Japan: Why Could War with China Not Be Prevented?*, trans. Arthur Stockwin (New York: Bloomsbury, 2021), 30.

¹⁶¹ Duus, *The Abacus and the Sword*, 62.

“thus bringing the total to Kawamura’s original sixty.”¹⁶² Kawamura also succeeded in obtaining a parallel expansion plan in February 1883 for 32 ships over eight years.¹⁶³

The same technological innovation in the 1880s that gave Capri a pause in German shipbuilding also affected Japanese decision-making, with the difference that a strong navy remained a strategic necessity for Japan. Schencking writes that “by 1885 the warships ordered in 1882 had been surpassed by newly designed state-of-the-art warships as the core vessels of a large battle fleet,” and Lengerer documents specifically that Japan’s “central casemate type ironclad” had become “old fashioned,” and Japanese shells had no hope against the armor of two battleships China had received from Germany.¹⁶⁴

To solve this crisis, Japan turned to the French architect Louis-Emile Bertin, whose adherence to *Jeune Ecole* informed Japanese ship acquisitions for the rest of the decade. As Lengerer asserts, while Japanese leaders recorded no definitive statement of maritime strategy at this time, the hiring of Bertin and the supersession of the FY1883 shipbuilding plan with a new program in 1886 constituted a tacit change in maritime strategy.¹⁶⁵ Lengerer also documents at length how under Bertin’s direction, Japan built cruisers, coast defense vessels, dispatch vessels, gunboats, and torpedo boats in the French style, with its characteristic “unusually shaped keel and considerable tumblehome.”¹⁶⁶ To match the Chinese ironclads, he also supervised the construction of three *Matsushima*-class unarmored cruisers with a single big gun capable of defeating the ironclads’ armor, but which made the cruiser heel if pointed amidships.¹⁶⁷ Judging by later events, namely only

¹⁶² Hans Lengerer, “Louis Emile Bertin and the Imperial Japanese Navy—French Predominance in Naval Architecture Revived and Lost Again,” *The Mariner’s Mirror* 93, no. 4 (November 2007): 482; Schencking, *Making Waves Politics*, 34.

¹⁶³ Schencking, *Making Waves Politics*, 35; Hans Lengerer, “The 1882 Coup d’État in Korea and the Second Expansion of the Imperial Japanese Navy,” *Warship International* 57, no. 3 (September 2020): 189, <https://www.jstor.org/stable/10.2307/27142942>.

¹⁶⁴ Schencking, *Making Waves Politics*, 36; Hans Lengerer, “The 1884 Coup d’État in Korea – Revision and Acceleration of the Expansion of the IJN,” *Warship International* 57, no. 4 (December 2020): 294, <https://www.jstor.org/stable/10.2307/27142965>; Lengerer, “The 1882 Coup,” 192.

¹⁶⁵ Lengerer, “The 1884 Coup,” 293; Lengerer, “Louis Emile Bertin,” 486.

¹⁶⁶ Lengerer, “Louis Emile Bertin,” 487–89.

¹⁶⁷ Lengerer, “Introduction and Summary,” 52; Lengerer, “Louis Emile Bertin,” 487.

a single instance of commerce raiding in the First Sino-Japanese War—the sinking of the steamship Kowshing with “1,100 Chinese troops on board”—Japan was most interested in the coastal defense aspects of *Jeune Ecole*.¹⁶⁸ For the Japanese, the tutelage of Bertin represented Japan’s first embrace of a coherent maritime strategy tailored to its current capabilities and limitations.

The decade of the 1880s began the heyday of influence by the Satsuma clan, whose preeminence in the navy drove its leaders to further their own parochial interests. As already related, the Satsuma domain contributed the most to the early Meiji navy, but throughout the 1880s the clan consolidated a “near monopoly of power at the admiral level,” such that “the navy became a bastion of Satsuma influence and power, a counter to the growing influence that the Choshu clan exerted over the army.”¹⁶⁹ David C. Evans writes, “Of the fifteen full admirals in Meiji...only one was not from Satsuma.”¹⁷⁰ While “most real abuses of Satsuma factionalism...consisted of unfair personnel policies,” Kawamura, in order to pass his expansion requests in 1882 and 1883, leveraged Satsuma ties with Iwakura and Finance Minister Matsukata Masayoshi to secure their approval.¹⁷¹

The strongest evidence of the essentiality of Satsuma patronage in naval expansion at this time comes from the abrupt change after the Japanese Diet took control of appropriations in 1890. The first Diet inherited the weak finances of the previous regime, and when Navy Minister Kabayama proposed the construction of 53 ships, only two cruisers, a torpedo-gunboat, and two torpedo boats were approved.¹⁷² In the next year, however, when Matsukata, a Satsuma man, became Prime Minister, Kabayama felt emboldened enough to seek approval for the construction of 11 major warships and 60 torpedo boats, but the Diet summarily rejected all expansion proposals, citing “a long litany

¹⁶⁸ S. C. M. Paine, “Missed Opportunities in the First Sino-Japanese War, 1894–1895,” in *Commerce Raiding: Historical Case Studies, 1755-2009*, ed. Bruce A. Elleman and S. C. M. Paine (Newport, RI: Naval War College Press, 2013), 105, <https://digital-commons.usnwc.edu/usnwc-newport-papers/40/>.

¹⁶⁹ Schencking, *Making Waves Politics*, 23, 27.

¹⁷⁰ David Christian Evans, *The Satsuma Faction and Professionalism in the Japanese Naval Officer Corps of the Meiji Period, 1868-1912* (Ann Arbor: University Microfilms International, 1986), 117.

¹⁷¹ Evans, *The Satsuma Faction*, 159; Schencking, *Making Waves Politics*, 26–27.

¹⁷² Lengerer, “Introduction and Summary,” 52.

of supposed abuses of power and corruption in the navy at the hands of Satsuma officers.”¹⁷³ Ozaki Yukio gave voice to the others’ contempt when he said, “Any amateur, so long as he happen [ed] to come from Satsuma [could] become [navy] minister.”¹⁷⁴ Owing to the navy and its Satsuma leaders’ cronyism and unwillingness to reform, the Diet would continue to reject naval expansion bills until the reform-minded Yamamoto Gonnohyoe forced retirements and the Chinese indemnity relieved the fiscal pressure of warship construction on Japan.¹⁷⁵ Through Yamamoto’s reforms, “only two men of Satsuma origin were among the twenty-five to achieve full admiral’s rank in the Taisho period.”¹⁷⁶ Thus, while tensions with China over Korea grew in the early 1890s, domestic politics hindered Japanese naval expansion to meet the Chinese strategic threat.

Schencking also argues that besides Satsuma patronage, the success of naval expansion in the 1880s can also be attributed to the fostering of a “South Seas consciousness” in the Japanese people.¹⁷⁷ As a “constructed consciousness,” the Japanese navy first cultivated the image of a maritime frontier south of Japan through cadet voyages that functioned both as training missions and explorations of the maritime frontier, then promoted the writings of participants like Shiga Shigetaka, who wrote, “when whales and crocodiles in the South Seas wave their tails, the waves surge to the foot of Mount Fuji and shake the mountain.”¹⁷⁸ This romantic enthusiasm created popular support among the public for naval expansion. The navy eventually advocated imperial expansion into Japan’s maritime south through partnership with groups like the Tokyo Geographical Society, the Colonization Society, and the Oriental Society, which “serve [d] as political pressure organizations” while “navy men held important positions in nearly every society.”¹⁷⁹

¹⁷³ Schencking, *Making Waves Politics*, 56, 58–59.

¹⁷⁴ As quoted in Schencking, *Making Waves Politics*, 59.

¹⁷⁵ Schencking, *Making Waves Politics*, 73–74, 88.

¹⁷⁶ Evans, *The Satsuma Faction*, 122.

¹⁷⁷ J. Charles Schencking, “The Imperial Japanese Navy and the Constructed Consciousness of a South Seas Destiny, 1872–1921,” *Modern Asian Studies* 33, no. 4 (October 1999): 769, <https://doi.org/10.1017/S0026749X99003649>; Schencking, *Making Waves Politics*, 28.

¹⁷⁸ Evans and Peattie, *Kaigun*, 544; Schencking, “Constructed Consciousness,” 772–74.

¹⁷⁹ Schencking, “Constructed Consciousness,” 775–76.

Japan's South Seas consciousness dovetailed with the navy's promotion of the ideology of *nanshin*, or southern advance, such that "by 1939...the 'southward advance' and the expansion of the Japanese fleet...had attained an almost symbiotic relationship in the minds of the navy's aggressive middle echelon."¹⁸⁰ Mark R. Peattie notes that in the Meiji era, *nanshin* was "unsupported by concrete planning" and "far less a strategy than another argument with which to contend with the army for public attention and governmental appropriations."¹⁸¹ *Nanshin* in the Taisho era, however, "tended to be more practical in nature," and took on aspects of maritime strategy based on "economy, trade, and industries of the region."¹⁸² At that time planning took shape, and Japan would go on to seize German colonies in Micronesia during the first World War.

Naval expansion and ideas of a southern advance also fall within the larger concern of Meiji Japan with prestige. Peter Duus has outlined Meiji-era Japan's process of realization of its subordinate place in a hierarchy of nations after signing unequal treaties with western powers, which stood as "a considerable affront to national amour-propre."¹⁸³ As a result, "early foreign policy was shaped by an almost obsessive concern with enhancing 'national prestige' or 'national rights'" and "the pursuit of international status continued to consume the Meiji leadership down through the 1890s."¹⁸⁴ When Iwakura successfully argued for Kawamura's naval expansion plan to the cabinet in 1882, he noted that "a large, modern navy...had the added potential benefit of imbuing Japan with greater international prestige" because "navies were internationally recognized benchmarks of power and status."¹⁸⁵ This period of the IJN, then, reflects similar dynamics of nationalism and prestige that Robert Ross observes in the naval beginnings of France, Germany, and the United States. "Naval nationalism," he writes, "can have the effect of encouraging

¹⁸⁰ Mark R. Peattie, "Nanshin: The 'Southward Advance,' 1931-1941, as a Prelude to the Japanese Occupation of Southeast Asia," in *The Japanese Wartime Empire, 1931-1945*, ed. Peter Duus, Ramon H. Myers, and Mark R. Peattie (Princeton, New Jersey: Princeton University Press, 1996), 219.

¹⁸¹ Evans and Peattie, *Kaigun*, 50.

¹⁸² Peattie, "Nanshin," 194.

¹⁸³ Duus, *The Abacus and the Sword*, 12-13.

¹⁸⁴ Duus, *The Abacus and the Sword*, 14-15.

¹⁸⁵ Schencking, *Making Waves Politics*, 26-27.

expansionist maritime policies, which can force acquisitions that are not informed by strategic interests.”¹⁸⁶

G. IMPERIAL JAPAN: THE BATTLEFLEET ERA, 1895–1945

After the Sino-Japanese War, when military expansion fever swept Japan, Navy Minister Saigo Tsugumichi asked Yamamoto to craft a fleet expansion plan, which he finished in July 1895.¹⁸⁷ His plan called for 16 capital warships, 23 destroyers, and 16 torpedo boats, later including additional armored cruisers.¹⁸⁸ By “seeking to assemble a modern fleet from the waterline up,” Yamamoto’s plan would, in the words of Schencking, “fundamentally transform the navy into a world-class military fleet.”¹⁸⁹ Indeed, the renewed pursuit of capital ships signified a return to the pre-*Jeune Ecole* desires for ironclads and “large ships” styled after a British battle fleet.¹⁹⁰

In order to sell the plan politically, Saigo later asked Yamamoto to “prepare a detailed series of position papers with which he could legitimate such a significant naval increase to the government.”¹⁹¹ Yamamoto returned with estimations based on the number of battleships a major naval power like Britain might dispatch in conjunction with that of France or Russia, among other technological minutiae and lessons from the recent war.¹⁹² In other words, the maritime strategic assessment crafted by Yamamoto served to further a shipbuilding request already decided upon. In any event, as regarded naval shipbuilding, *Jeune Ecole* appeared to be dead.

Yamamoto received an assist from the 1896 publication of Mahan’s *The Influence of Sea Power upon History* in Japanese translation, which became studied as a textbook in

¹⁸⁶ Robert S. Ross, “Nationalism, Geopolitics, and Naval Expansionism: From the Nineteenth Century to the Rise of China,” *Naval War College Review* 71, no. 4 (2018): 12, <https://www.jstor.org/stable/26607088>.

¹⁸⁷ Schencking, *Making Waves Politics*, 85.

¹⁸⁸ Schencking, *Making Waves Politics*, 85, 87.

¹⁸⁹ Schencking, *Making Waves Politics*, 84–85.

¹⁹⁰ Lengerer, “The 1882 Coup,” 189; Schencking, *Making Waves Politics*, 219.

¹⁹¹ Schencking, *Making Waves Politics*, 85.

¹⁹² Evans and Peattie, *Kaigun*, 58; Schencking, *Making Waves Politics*, 86.

the Japanese Naval and Army Staff Colleges.¹⁹³ Already in vogue in the west, seminal theories of sea power and their derivative maritime strategies provided a convenient rationale for the Japanese navy to build a modern battle fleet. Around the same time, Yamamoto himself had begun to speak in Mahanian terms, stating that “the purpose of the [naval expansion] plan was to gain command of the seas around Japan.”¹⁹⁴ The Japanese Navy Ministry initially embraced Mahanian maritime strategy, not necessarily as a blueprint for future naval development, but as a confirmation and justification of the path on which it had already embarked.

Commissioned by Yamamoto to construct a maritime strategy, Sato Tetsutaro articulated Japan’s first complete maritime strategy in a 1902 treatise, which he later enlarged into a book in 1908.¹⁹⁵ Like Mahan’s book, Sato’s served as “an apologia for naval appropriations.”¹⁹⁶ By this time, however, Japan had an additional 39 destroyers and eight armored cruisers in construction to supplement Yamamoto’s naval expansion program.¹⁹⁷ Heavily influenced by Mahan, Sato would first articulate the doctrines of command of the seas and decisive battle in a Japanese context, both of which would become articles of faith in the Japanese Navy.¹⁹⁸ With Sato’s Mahanian theories seemingly confirmed by the Japanese victory at Tsushima under the auspices of decisive battle and battleships, force planning began to revolve around threat-based assessments on the “hypothetical enemy” of the United States Navy and the Japanese Navy proceeded on a shipbuilding program that emphasized the battle fleet.¹⁹⁹

¹⁹³ Bose Himadri, “Influence of Alfred Thayer Mahan on Japanese Maritime Strategy,” *Journal of Defence Studies* 14, no. 1 (2020): 53, <https://idsa.in/system/files/jds/14-2-2020-influence-of-alfred-thayer-mahan-hbose.pdf>.

¹⁹⁴ Evans and Peattie, *Kaigun*, 64.

¹⁹⁵ Evans and Peattie, *Kaigun*, 136–37.

¹⁹⁶ Sadao Asada, *From Mahan to Pearl Harbor: The Imperial Japanese Navy and the United States* (Annapolis, MD: Naval Institute Press, 2013), 8; Schencking, *Making Waves Politics*, 2–3.

¹⁹⁷ Evans and Peattie, *Kaigun*, 62, 136.

¹⁹⁸ Evans and Peattie, *Kaigun*, 132, 139.

¹⁹⁹ Himadri, “Influence,” 55.

Indeed, Japan's commitment to the battle fleet from the late 1890s onward remained almost total. Naval construction programs stemming from subsequent Japanese concepts like the eight-eight fleet, the 70% ratio, and a campaign of attrition before a decisive battle, emphasized the battle fleet. As Hedley Willmott points out, Japanese adherence to this strategy became so rigid that it came "at the expense of a balanced force," which ultimately undermined Japan's strength in World War II due to the absence of a fleet train.²⁰⁰ While Japan's maritime strategy from 1902 to 1945 may have led it to defeat against the United States, bad maritime strategy is still strategy, and Japan pursued the shipbuilding visions of Yamamoto and Sato in the conventional manner envisioned by maritime strategists, and never looked back.

H. SUMMARY

Like Germany, Japan's earliest efforts at naval expansion remained constrained by financial concerns. In the IJN's case, however, rather than determining that defense spending ought to strategically focus on the army, the early Meiji leaders assessed that parity with the great naval powers simply lay beyond the financial capabilities of the state at its level of development. Indeed, the paucity of significant naval procurements and the rejection of naval expansion planning during this period provide glimpses of the state's financial straits. But because Japan existed as an island nation with continental interests, its shipbuilding choices landed first on dual-use steamers that could assist in Japan's economic development outside of war, and then on a small number of armored ships in an attempt to close the gap with the Chinese navy.

As the IJN matured into a force independent of the army, it grew into a separate interest group whose interests overlapped significantly with the Satsuma clan and domain. As one of the founding domains of Imperial Japan, its sons often found themselves close to the levers of government. The conjunction of Satsuma men at the highest levels of the IJN and the government finally broke the financial constraints on naval expansion in the 1880s. To be sure, finances did not cease to be factors, because the Diet's assumption of

²⁰⁰ Hedley Paul Willmott, *Empires in the Balance: Japanese and Allied Pacific Strategies to April 1942* (Annapolis, MD: Naval Institute Press, 1982), 89.

financial decisions regarding expensive naval expansion halted shipbuilding until reforms divorced Satsuma interests from those of the navy. Those advocating the interests of the navy, and by extension Satsuma, often appealed to concerns about Japan's prestige on the world stage. Concerns over Japan's prestige preoccupied Imperial Japan's leaders from the country's earliest years and continued to inform ship acquisitions until the IJN reached full maturity.

In the mid-1890s, the IJN debuted on the world stage as a formidable naval power with an explicit maritime strategy crafted to maintain its position. The Chinese indemnity ensured shipbuilding costs after the Sino-Japanese War would not cause naval expansion to fail in the Diet. The subsequent victory in the Russo-Japanese War confirmed the navy's course set a decade earlier, when it aimed for a fully modernized battle fleet. Yamamoto's reforms in the IJN succeeded in restoring confidence by diminishing Satsuma parochialism, thereby allowing him to pursue the interests of the navy alone. But while his naval expansion plan in 1895 set the tone for the succeeding decades, it preceded any articulated maritime strategy in its conception. In short, Japan's new Mahanian maritime strategy, which it would adhere to until 1945, had its origins in justifying Yamamoto's original plan for naval expansion following the Sino-Japanese War.

I. CONCLUSION²⁰¹

These case studies of Imperial Germany and Imperial Japan indicate a common path of progression in maritime strategy and shipbuilding. Neither had a strong maritime tradition, and both navies began as extensions of army power, whose force had united their respective nations. As such, they functioned as coastal defense forces with little to no independence apart from land-based power. In their earliest days, articulated maritime strategies remained conspicuously absent, although maritime strategizing certainly occurred. Not until both navies had reached a mature stage did either country begin to articulate explicit maritime strategy.

²⁰¹ Parts of this section were previously published by Strategy Bridge. Tyler Self, "Primacy of Maritime Strategy in Naval Shipbuilding? The Case of Imperial Germany," Strategy Bridge, September 6, 2023, <https://thestrategybridge.org/the-bridge/2023/9/6/primacy-of-maritime-strategy-in-naval-shipbuilding-the-case-of-imperial-germany>.

Beyond strategy, domestic factors in Imperial Germany and Imperial Japan impacted naval shipbuilding throughout their lifespans. Domestic factors could strengthen naval expansion or constrain it. In the case of Germany, naval shipbuilding became an important source of rents for the Kaiser and navy leaders to pay to the blue-collar classes in places like Kiel, Bremen, Danzig, and Wilhelmshaven. As centers of social-democratic organization, reliable employment in these cities minimized the opportunity for shipyard workers to organize. The navy's patronage of shipyard-related industries also subsidized technological innovation in sectors such as armor and steel. In the case of Japan, domestic factors for the island nation are most noteworthy for what they prevented, as finances constrained naval shipbuilding until the turn of the century. Satsuma parochialism, while temporarily loosening Japan's cinched purse-strings before 1890, brought naval expansion almost to a complete halt until after the Sino-Japanese War. But early Japan also subsidized its industry through naval procurements for Mitsubishi, whose corruption behind the scenes enabled Japan's earliest naval procurement.

Prestige emerged as a prominent non-strategic factor in the case of Japan, but not Germany. Perhaps because the founding of Germany occurred during victory over France, the perceived greatest power in Europe at the time, appeals to Germany's prestige, especially in naval shipbuilding, did not occur in any significant way. Japan, on the other hand, whose earliest history was shaped by unequal treaties and forced opening, exhibited anxiety over its prestige much earlier. By the time it had defeated China and Russia and began building some of the largest and most powerful battleships, prestige ceased as a noteworthy factor.

It may be inferred, therefore, that for rising navies, non-strategic factors such as prestige, economic subsidies, technological innovation, and corruption, may exhibit influences that precede or override maritime strategy in naval shipbuilding. Put another way, leaders almost always exhibit composite thinking in naval shipbuilding decisions. These case studies will serve as possible signposts of the same dynamics at work in China, as well as plausibility tests of observations.

III. PEOPLE'S REPUBLIC OF CHINA (1949–1985)

A. ANALYSIS

When Mao Zedong declared the establishment of the People's Republic of China (PRC) on October 1, 1949, the composition of the PLAN drew from the April defection of the Nationalists' Second Coastal Defense Squadron that April. The defection of “one destroyer, three destroyer escorts, one patrol gunboat, five landing ships, and eight smaller auxiliaries,” plus the enlistment of various junkers into a crack naval force, is celebrated in China as the PLAN's birthday.²⁰² While the prior mutiny and defection of the Nationalist flagship *Chongqing* in February turned that ship into the first Chinese Communist warship, and therefore Elleman argues that this event is the true birthday of the PLAN, the Chinese Communist Party (CCP) appears unwilling to consider this date significant, perhaps, as Elleman argues, due to embarrassment.²⁰³

In these early days, Chinese strategists talked about a “Near-Coast Defense.” This centered on a fundamental anxiety about external interference or invasion from foreign enemies. While the principal adversary changed throughout the decades, the military power of the United States and the Soviet Union loomed large in the minds of PRC leaders.²⁰⁴ It emerged in the immediate context of the continuation of the Chinese Civil War in events such as the Communist attack on Quemoy and the People's Liberation Army (PLA) invasion of the Miao Islands and Hainan Island, as well as Nationalist-PLA fighting over Dalushan, Nanri Island, and Tongshan Islands.²⁰⁵ Beyond fighting over territory, mines

²⁰² Bruce A. Elleman, *A History of the Modern Chinese Navy, 1840–2020* (London: Routledge, 2021), 139; Bruce Swanson, *Eighth Voyage of the Dragon: A History of China's Quest for Seapower* (Annapolis, MD: Naval Institute Press, 1982), 182.

²⁰³ Elleman, *A History of the Modern Chinese Navy*, 133, 139.

²⁰⁴ John R. O'Donnell, “An Analysis of Major Developmental Influences on the Peoples Liberation Army-Navy and Their Implications for the Future” (master's thesis, Fort Leavenworth, Kansas, Army Command and General Staff College, 1995), 2, <https://apps.dtic.mil/sti/pdfs/ADA299253.pdf>.

²⁰⁵ Swanson, *Eighth Voyage*, 185–86, 188–89; Elleman, *A History of the Modern Chinese Navy*, 141.

threatened the commerce of Shanghai, and Nationalist harassment of PRC-bound shipping reached 90 separate incidents between 1950 and 1953.²⁰⁶

Some analysts trace the origins of Near-Coast Defense to the influence of the Soviet Young School, a theory of naval strategy “made to order for the newly established People’s Republic,” in the words of David G. Muller.²⁰⁷ The PLAN’s first commander in chief, Xiao Jingguang, studied in Moscow from 1927 to 1931, when the Young School formed.²⁰⁸ Like the Soviets, the early PLA focused the fight on land, and therefore conceived naval operations as simply in support of land operations.

Like the early PLAN, ships of the early Soviet navy were built against the backdrop of economic hardship that precluded the construction of large capital ships.²⁰⁹ Unsurprisingly, then, another Young School founder, Aleksandr Yakimychiev, wrote in 1928 that the Soviet navy ought to build “airplanes, submarines, torpedo boats, and other fast, light forces of a surface fleet.”²¹⁰ In 1930, another founder, Aleksandr Aleksandrov, argued for the submarine as the main naval weapon of this asymmetric strategy.²¹¹ During the second Five-Year Plan, the Soviets built the largest submarine fleet in the world with nearly double that of the French, the next highest.²¹² John O’Donnell argues that the importance of submarines to the Young School confirms its influence on the PLAN, as a 1958 Central Military Commission (CMC) resolution stated that “the Navy takes the development of submarines as its focal point, with a corresponding development of necessary surface ships.”²¹³

²⁰⁶ Toshi Yoshihara, *Mao’s Army Goes to Sea: The Island Campaigns and the Founding of China’s Navy* (Washington, DC: Georgetown University Press, 2022), 44; Swanson, *Eighth Voyage*, 186.

²⁰⁷ David G. Muller, *China as a Maritime Power* (Boulder, CO: Westview Press, 1983), 49.

²⁰⁸ Muller, *China as a Maritime Power*, 15.

²⁰⁹ Bryan Ranft and Geoffrey Till, *The Sea in Soviet Strategy* (Annapolis, MD: Naval Institute Press, 1989), 94–95.

²¹⁰ As quoted in Herrick, “Roles and Missions of the Soviet Navy,” 20.

²¹¹ Robert W. Herrick, *Soviet Naval Theory and Policy: Gorshkov’s Inheritance* (Annapolis, MD: Naval Institute Press, 1988), 34.

²¹² Robert W. Herrick, *Soviet Naval Strategy: Fifty Years of Theory and Practice* (Annapolis, MD: Naval Institute Press, 1968), 24.

²¹³ As quoted in O’Donnell, “Major Developmental Influences,” 28.

Other analysts perceive in Near-Coast Defense a continuation of Mao's doctrine of guerrilla warfare and People's War. Toshi Yoshihara writes that in his campaign plan to capture offshore islands in 1950, Zhang Aiping "was very consciously drawing experiences from the PLA's operational traditions in land warfare to the naval domain."²¹⁴ None of Mao's writings on strategy, however, explicitly reference maritime strategy. "Despite being known as the 'Great Helmsman,'" Peter Brookes writes, "Mao was so focused on the army after taking power that it was not until 1953 that he made his first tour of the Chinese navy, spending four days visiting a pair of frigates."²¹⁵ Furthermore, official publications from the late 1950s onward tended to speak in Maoist and increasingly anti-Soviet terms. For example, a 1958 editorial published by "party cadres at the Nanking Naval War College" decried "imitating foreign shipbuilding designs," while Lin Biao's 1966 article "Long Live the Victory of People's War" denounced "Khrushchev revisionists" as allied with U.S. imperialism.²¹⁶ Sentiments such as these, however, may reflect factional disputes, as outlined below.

Because Mao's thought developed through land warfare, if principles must be extended to the maritime domain, it must be done in a more general way. Maxims like "the outcome of war is decided by the people, not by one or two new weapons," and "the movement of guerrilla troops must be secret and of supernatural rapidity; the enemy must be taken unaware, and the action entered speedily" require specific naval applications not addressed by Mao.²¹⁷ Indeed, given a navy's heavy reliance on technology, they would actually diminish the navy's importance. "Each type of warfare has methods peculiar to

²¹⁴ Yoshihara, *Mao's Army Goes to Sea*, 45.

²¹⁵ Peter Brookes, "The Great Wall Goes to Sea," *Armed Forces Journal* 147, no. 1 (2009), <http://armedforcesjournal.com/flashpoint-the-great-wall-goes-to-sea/>.

²¹⁶ Bruce Swanson, "The PRC Navy—Coastal Defense or Blue Water?," United States Naval Institute, May 1976, <https://www.usni.org/magazines/proceedings/1976/may/prc-navy-coastal-defense-or-blue-water>; Piao Lin, "Lin Piao on the 'People's War,'" *Current History* 51, no. 301 (September 1966): 172–74, 180, <https://www.jstor.org/stable/45311562>; Swanson, *Eighth Voyage*, 211, 236.

²¹⁷ As quoted in Edward N. Smith, "From Books on the Shelves to Boots on the Ground: Mao Zedong's Revolutionary Guerrilla Strategy in Context, Development, and Application" (master's thesis, University of Central Oklahoma, 2013), 20, <https://shareok.org/handle/11244/324796>; Tse-Tung Mao, *Mao Tse-Tung on Guerrilla Warfare*, trans. Samuel B. Griffith (Pickle Partners, 2014), 64, <http://ebookcentral.proquest.com/lib/ebook-nps/detail.action?pq-origsite=primo&docID=4809290>.

itself, and methods suitable to regular warfare cannot be applied with success to the special situations that confront guerrillas,” Mao writes.²¹⁸ Sometimes advocates dispensed entirely with concrete strategizing in favor of an almost mystical adherence to these maxims. A *People’s Daily* editorial in November 1966 preached that the “tremendous power of men armed with Mao Zedong thought is incalculable...With such power, miracles can be performed and the enemy, no matter how powerful, can be defeated.”²¹⁹

While the extension of guerrilla war to the maritime environment requires some imagination, its articulation in Near-Coast Defense may owe much to previous maritime strategizing by Zheng Chenggong, also known as Koxinga. The parallels between his thought and the modern strategic picture at the beginning of the 1950s, when Near-Coast Defense began to crystallize, are striking. In April 1661, when the Dutch occupied Taiwan, Koxinga launched an invasion from the Pescadores and expelled the Dutch.²²⁰ While he used the island to oppose the Qing, he is celebrated in the Chinese Naval Encyclopedia because he “commanded landing operations to expel the Dutch colonizers and recover Taiwan.”²²¹ As Bruce Elleman writes, “it is Koxinga’s strategic and military theories of how to retake Taiwan...that are most often studied by contemporary PLAN officers.”²²² His strategy, according to the Chinese Naval Encyclopedia, proceeded by “clear [ing] away a thorny path” to Taiwan by occupying outlying islands first, and using them as a launch point in his invasion.²²³ For Koxinga’s efforts, he is characterized as “conducting the Chinese people’s first attack against Western colonial invasion [and] making an important historical beginning to defense of China’s coastal areas and territorial waters.”²²⁴

The PLA’s official encyclopedia states that under its initial coastal defense strategy, the PLAN was responsible for the following:

²¹⁸ Mao, *On Guerrilla Warfare*, 62.

²¹⁹ As quoted in Muller, *China as a Maritime Power*, 115.

²²⁰ Elleman, *A History of the Modern Chinese Navy*, 10.

²²¹ As quoted in Elleman, *A History of the Modern Chinese Navy*, 11.

²²² Elleman, *A History of the Modern Chinese Navy*, 11.

²²³ As quoted in Elleman, *A History of the Modern Chinese Navy*, 11.

²²⁴ Elleman, *A History of the Modern Chinese Navy*, 11.

First, conducting maritime guerrilla operations using small naval and naval aviation formations to attack and harass dispersed and isolated enemy forces. Second, conducting rapid naval sorties to attack the enemy's sea lanes and coastal targets within China's immediate periphery. Third, carrying out small coastal naval operations under cover of ground artillery and land-based aircraft.²²⁵

Before this could occur, however, Zhang Feng writes that the PLAN would aim “to preserve [its] strength through concealing and dispersing ships, and transferring planes to the second-line bases,” in accordance with Maoist thought.²²⁶ Because it relied on land-based weapons coverage, Near-Coast Defense remained fundamentally defensive and reactionary in nature.

Near-Coast Defense was characterized by vessels such as patrol craft, torpedo boats, gunboats, and conventional submarines, all procured from the Soviet Union, and which operated as “an expendable force used to defend the immediate coastal zone.”²²⁷ Soviet exports of technology and equipment “totaled 9,409 hundred million rubles” in value from 1950 to the mid-1960s.²²⁸ As catalogued by Bruce Swanson, in the 1950s the Soviet Union delivered dozens of naval vessels to China, including P 4 motor torpedo boats, *Mike*- and *Sierra I*-class submarines, *Gordy*-class destroyers, *Kronstadt*-class submarine chasers, and *T 43*-class minesweepers.²²⁹ The Soviets also helped China to build “small district patrol craft (YPs),” *Riga*-class destroyers, *Kronstadt*-class ASW craft, *T 43* minesweepers, *P 6* motor torpedo boats, and *Whiskey*-class submarines.²³⁰ In general, naval construction and procurement emphasized vessels small enough to hide along China's coast and speedily attack enemy ships. Their size and maneuverability would

²²⁵ As quoted in “The Father of the Modern Chinese Navy—Liu Huaqing,” Center for International Maritime Security, October 8, 2014, <https://cimsec.org/father-modern-chinese-navy-liu-huaqing/>.

²²⁶ Nan Li, “The Evolution of China's Naval Strategy and Capabilities: From ‘Near Coast’ and ‘Near Seas’ to ‘Far Seas,’” in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders and Christopher Yung (Washington, DC: National Defense University Press, 2011), 113.

²²⁷ Swanson, *Eighth Voyage*, 185, 196.

²²⁸ Baichun Zhang, Jiuchun Zhang, and Fang Yao, “Technology Transfer from the Soviet Union to the People's Republic of China: 1949-1966,” *Comparative Technology Transfer and Society* 4, no. 2 (August 2006): 116, <https://doi.org/10.1353/ctt.2006.0024>.

²²⁹ Swanson, *Eighth Voyage*, 196.

²³⁰ Swanson, *Eighth Voyage*, 196.

protect them from airborne attack, while slower vessels, like *Whiskey*-class submarines and the later Soviet *Romeo*-class replicas, would submerge for the same reason.²³¹

In particular, the large number of diesel-powered submarines commissioned in the PLAN throughout the period may serve as a profound example of applying Mao's ideas of guerilla warfare to the maritime domain. Submarines, most of all, possess the qualities of secret movement and surprise attack valued by Mao in a guerrilla campaign. In a more general way, their transgressive method of fighting and ability to disrupt conventional operations overlapped significantly with how the PLA succeeded in maintaining its tactical position in China until 1949. Throughout the 1950s, China imported or constructed Soviet *Romeo*- and *Whiskey*-class submarines until the Soviet Union terminated its conventional submarine program in favor of nuclear submarines in 1958.²³² After that, submarine construction continued in serialized form. Even during the disruptions caused by the Great Proletarian Cultural Revolution (GPCR), 12 *Romeo*-class submarines were built, and the pace of construction only increased thereafter, such that the PLAN possessed more than 60 by 1978 and more than 100 by 1982.²³³

Principles of Near-Coast Defense guided PLAN strategy against the Nationalists offshore throughout the 1950s. During the 1950 PLAN invasion of Pishan Island, PLAN gunboats managed to surreptitiously come alongside four Nationalist warships anchored offshore and attack, and thanks to this element of surprise the Communists succeeded in eliminating two of the warships.²³⁴ Swanson relates multiple incidents of PLAN small craft concealing themselves among fishing junks and attacking Nationalist vessels by surprise, leading the CCP press to hail such strategies as “example [s] of guerrilla warfare at sea,” perhaps due to Mao's maxim which says “[guerrillas] may be likened to water and the [people] to the fish who inhabit it.”²³⁵ The perils of departing from such a strategy were illustrated by the sinking of PLAN gunboat No. 3 in conventional naval action against

²³¹ Yoshihara, *Mao's Army Goes to Sea*, 45.

²³² Swanson, *Eighth Voyage*, 213.

²³³ Swanson, *Eighth Voyage*, 246, 255, 264, 276–77.

²³⁴ Yoshihara, *Mao's Army Goes to Sea*, 49.

²³⁵ Swanson, *Eighth Voyage*, 189, 221; Mao, *On Guerrilla Warfare*, 61.

a Nationalist warship on July 9, 1950, after the gunboat captain “launched a premature and unauthorized attack on its own.”²³⁶

The windfall of Soviet assistance in naval matters in the 1950s eventually gave way to intense rivalries that hindered naval development for decades. Because Near-Coast Defense represented a subordination of the navy to the army, the PRC in the early years lacked the inter-service rivalry that characterized much of the struggle within the military of Imperial Japan. Instead, rivalry existed between those in favor of professionalization and modernization who sought to elevate the PLAN to compete in war under modern conditions, and those in favor of traditional CCP ideology who cast suspicion on those who deviated from Mao’s concept of “people’s war” and foreign influence in general.²³⁷ Structurally, this dynamic in China reflects Eric Heginbotham’s thesis that, in East Asia, “navies will generally support liberal nationalist domestic positions, whereas armies will frequently support integral nationalist ones,” where liberal nationalist positions are defined as “policies that emphasize national progress through integration with global markets and the free flow of people and ideas across borders.”²³⁸ Integral nationalist positions, however, stress “economic development and increasing national power...by unifying the nation.”²³⁹ In China, the Red faction advocated the latter proposition primarily through enforcement of ideology.

The Expert faction in the 1950s advocated technical expertise in general as a way to develop the Chinese nation after years of war. Eddy U characterizes “the role of intellectuals” as “the principal issue of Chinese socialism” at this time.²⁴⁰ During the Rectification campaign, some intellectuals protested that Chinese “development had been harmed because of management by cadres who often lacked professional knowledge and

²³⁶ Yoshihara, *Mao’s Army Goes to Sea*, 47.

²³⁷ Swanson, *Eighth Voyage*, 191.

²³⁸ Eric Heginbotham, “The Fall and Rise of Navies in East Asia: Military Organizations, Domestic Politics, and Grand Strategy,” *International Security* 27, no. 2 (2002): 96, 98, <https://doi.org/10.1162/016228802760987833>.

²³⁹ Heginbotham, “The Fall and Rise of Navies in East Asia,” 97.

²⁴⁰ Eddy U, “Intellectuals and Alternative Socialist Paths in the Early Mao Years,” *The China Journal*, no. 70 (July 2013): 2, <https://doi.org/10.1086/671338>.

skills.”²⁴¹ One spokesman at the Eighth Party Congress declared, “only the specialists know the fine points of a certain field of science. When we have scientific problems, we must learn humbly from specialists.”²⁴²

A pursuit of expertise most characterized the stance of the PLA at this time. The four goals of PLAN aviation in 1955 each emphasized professionalism, and, as David Muller points out, “political objectives were not even mentioned.”²⁴³ The same 1958 CMC resolution that prioritized submarine development also stated, “no matter whether the development is for submarines or surface ships, it should especially emphasize the use of new technologies, such as guided missiles and atomic propulsion.”²⁴⁴

Due to Soviet mentorship in military development, the PLA’s expert faction increasingly advocated Soviet expertise in particular. In the early 1950s, “a ratio of 1 Soviet advisor to every 30 Chinese naval personnel” has been estimated.²⁴⁵ In February 1955, the PLA adopted the Regulations on the Service of Officers, which sought “to modernize [the] military establishment along Soviet lines.”²⁴⁶ The regulations incentivized technical expertise by giving those with demonstrated proficiency higher ranks in the navy through direct commissions or promotion.²⁴⁷ After the navy instituted a “rating or specialty structure” in April 1956 to develop “master technicians,” the *Qingdao Daily* observed of the navy that “the study of military skills and techniques has become the rage.”²⁴⁸

Besides developing greater technical know-how, the expert faction sought to copy Soviet naval warships. In the mid-1950s, Chinese shipbuilders built “small district patrol

²⁴¹ U, “Intellectuals and Alternative Socialist Paths,” 10.

²⁴² As quoted in Swanson, *Eighth Voyage*, 197.

²⁴³ David G. Muller, “The Politics of the Chinese People’s Republic Navy,” *Naval War College Review* 28, no. 4 (Spring 1976): 33, <https://www.jstor.org/stable/44641660>.

²⁴⁴ As quoted in O’Donnell, “Major Developmental Influences,” 28.

²⁴⁵ Muller, “Politics,” 34.

²⁴⁶ Swanson, *Eighth Voyage*, 198.

²⁴⁷ Swanson, *Eighth Voyage*, 198.

²⁴⁸ As quoted in Swanson, *Eighth Voyage*, 198.

craft” and four Soviet *Riga*-class destroyer escorts with Soviet help.²⁴⁹ After the Sino-Soviet split, shipbuilders created a *Golf*-class submarine based on “left behind” Soviet blueprints, and generated replicas of Soviet *Romeo*-class submarines in the mid-1960s.²⁵⁰ To celebrate the tenth anniversary of the PRC in 1959, Admiral Xiao Jingguang wrote, “The development of the Chinese navy is inseparable from the fraternal aid of the Soviet Union. At a time when our industry was still weak and our science and technology comparatively backward, the Soviet Government...rendered us selfless aid.”²⁵¹

On the other hand, a radical Red faction advocated a greater adherence to revolutionary principles, and tended to discount the threat of modern weaponry in favor of political and ideological work, rather than military training and combat readiness. In general, the Red faction viewed professionalism as a deviation and distraction from Communist principles, and the Anti-Rightist Campaign represented its most significant embodiment before the GPCR. During the Anti-Rightist Campaign, intellectuals such as “scientists, writers, [and] professors,” as well as some military personnel were declared counterrevolutionaries due to their criticisms of the party and CCP policy.²⁵²

Even the PLA succumbed to the Red pressure and appeared to back away from earlier professional advocacy. The chief of staff of the PLAN Headquarters, Vice Admiral Zhou Xihan, wrote that “the highly class-conscious members of the Navy fully realize that the Party’s leadership of the people’s armed forces is absolutely necessary and that if it had not been for the Party there would have been no people’s armed forces.”²⁵³ Against Soviet mentorship, a 1958 *Liberation Army Daily* article declared that “all superstition concerning foreign superiority, blind relief in rules and orders and in copying from others represent

²⁴⁹ Swanson, *Eighth Voyage*, 196.

²⁵⁰ Swanson, *Eighth Voyage*, 226.

²⁵¹ *Communist China Digest* No. 8, JPRS-1106-D (Arlington, VA: US Joint Publications Research Service, 1960), 76, <https://infoweb.newsbank.com/apps/readex/doc?p=JPRSX&docref=image/v2%3A1370B42AEC50B618%40JPRSX-15B51A496BB10A1C%402436949-15B37C22842C820B%4083>. Xiao published these remarks in a Soviet journal, perhaps due to sensitivities at home during the xenophobic Anti-Rightist Campaign.

²⁵² Ning Wang, *Banished to the Great Northern Wilderness: Political Exile and Re-Education in Mao’s China* (Ithaca: Cornell University Press, 2017), 23, <https://muse.jhu.edu/book/56501/>.

²⁵³ As quoted in Swanson, *Eighth Voyage*, 211.

slave ideology. We must bring the downfall of slave ideology.”²⁵⁴ Sometimes articles appeared describing advanced western naval platforms, like carriers and nuclear submarines, but mainly to describe them as similar in barbarity to chemical weapons and emphasize their perceived disadvantages.²⁵⁵ In any event, when the Sino-Soviet Split led to the removal of the Soviet Union’s experts from China, “a general slowing of naval construction” followed, with Swanson citing China’s inability to fit out “two W[hiskey]-class submarines” already completed for over a year.²⁵⁶

For his part, Mao appears to have straddled both camps. Regarding the Reds and Experts, he said that “the ‘tangibles’ and ‘intangibles’ must be integrated. Those dealing in ‘intangibles’ must do some research on ‘tangibles;’ and those dealing in ‘tangibles’ must use some politics.”²⁵⁷ His February 1953 inspection of the East Sea Fleet, for example, has given rise to conflicting interpretations as to its meaning. Bruce Swanson quotes Mao as saying “it is necessary to learn from the advanced experience of foreign countries,” and implies that the four days he spent there indicate his “fascination with China’s new naval projects.”²⁵⁸ David Muller, however, notes the inspection’s omission from the press, “signifying that the visit was for other than ceremonial purposes.”²⁵⁹ Subsequent press publications on the inspection’s anniversaries did reveal that Mao “gave important instructions” to cadres and devoted “meticulous attention to the political progress of the

²⁵⁴ As quoted in Swanson, *Eighth Voyage*, 212.

²⁵⁵ Po Yuan and Hang Hai, “Aircraft Carriers--US Paws of Aggression,” in *Communist Chinese Scientific Abstracts. Engineering and Equipment: No. 60*, JPRS-38604 (Arlington, VA: Joint Publications Research Service, 1966), 23; Ho Li, “Dead Ducks on the Sea--U.S. Imperialists’ Aircraft Carriers,” in *Communist Chinese Scientific Abstracts. Popular Science: No. 5*, JPRS-38604 (Arlington, VA: Joint Publications Research Service, 1966), 30–31; US Joint Publications Research Service, “Stop the Demoniac Paws of U.S. Imperialist Aggression,” in *Communist China Digest, No. 172*, JPRS-36983 (Arlington, VA: US Joint Publications Research Service, 1966), 2, <https://infoweb.newsbank.com/apps/readex/doc?p=JPRSX&docref=image/v2%3A1370B42AEC50B618%40JPRSX-14A1389FA1D1C31F%402439353-14A0C7D55E94F350%409>; Li Ho, “What Is a Nuclear Submarine?,” in *Communist Chinese Scientific Abstracts. General Science: No. 27*, JPRS-41924 (Arlington, VA: Joint Publications Research Service, 1967), 63. These articles appeared most often during the Cultural Revolution and in response to developments throughout the US war in Vietnam.

²⁵⁶ Swanson, *Eighth Voyage*, 215.

²⁵⁷ US Joint Publications Research Service, *Miscellany of Mao Tse-Tung Thought (1949-1968)*, JPRS-61269-1 (Arlington, VA: US Joint Publications Research Service, 1974), 77.

²⁵⁸ Swanson, *Eighth Voyage*, 196.

²⁵⁹ Muller, “Politics,” 34.

cadres and fighters.”²⁶⁰ During his lifetime, both sides of the Red-Expert divide cited Mao and Maoist thought in the press, and his statements appear to have given fodder to both.

At the forces level, the debate between professionalism and ideology resulted in varying “degree [s] of attention devoted to military training on the one hand and political activity on the other.”²⁶¹ Early attempts to rein in professionalism in favor of ideology forced sailors to participate in irrelevant cultivation of pigs, grain, and vegetables in 1957.²⁶² Sailors also labored at the construction of caves suitable for concealment of small craft into the 1980s, as documented by future PLAN commander Liu Huaqing, despite the trend by that time of constructing modern surface combatants.²⁶³ Liu wrote in his memoirs that construction of such obsolescent support facilities occurred in accordance with the slogan “near mountains, in a scattered way, and in caves,” which led workers to derisively call the arrangement “goat shit.”²⁶⁴

Regarding shipbuilding, Mao appeared to undergo a change of heart regarding PLAN construction in May 1975. On the third of that month, he declared the inability of the PLAN to meet the PRC’s strategic needs, and “directed the navy leadership to submit a detailed plan for the development of a modern naval force.”²⁶⁵ PLAN leadership submitted a plan in July, but the Gang of Four, representative of the Red faction and opposed to PLAN modernization, commenced obstructionism that “rebutted, postponed, chopped off, and squeezed out” naval construction from the submitted plan, according to the People’s Daily.²⁶⁶ As a result, new procurements and constructions, such as foreign

²⁶⁰ Muller, “Politics,” 34.

²⁶¹ Muller, “Politics,” 32.

²⁶² Swanson, *Eighth Voyage*, 210.

²⁶³ Liu Huaqing, *The Memoirs of Liu Huaqing*, trans. Foreign Broadcast Information Service, CPP20060707320001001 (Reston, VA: Foreign Broadcast Information Service, 2006), 6. Quotations from this source refer to an unpaginated PDF of FBIS’s English translation of chapters 16–20 of Liu’s memoirs. Page numbers cited refer to the corresponding PDF pages.

²⁶⁴ Liu, 6, 36. The slogan appears to be a translation of “*fenshan, kaoshan, yinbi*,” which was Mao’s slogan for the Third Front. If so, PLAN cave construction would date to at least 1965. See John Wilson Lewis and Litai Xue, *China’s Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford University Press, 1994), 91.

²⁶⁵ Muller, *China as a Maritime Power*, 154.

²⁶⁶ Muller, *China as a Maritime Power*, 155.

imports and the *Fuqing*-class oiler, the latter of which would become necessary for a true ocean-going fleet, were postponed.²⁶⁷

The prevalence of the Red faction over the Experts during the GPCR further constrained naval development. In the summer of 1968, a PLAN conference was held in Beijing, where spokespersons vowed “to wage a sharp struggle against the bourgeoisie reactionary military line” and “make the navy a great red school of Mao Zedong’s thought.”²⁶⁸ The purge of Admiral Fang Qiang, “who was charged with naval construction and research and development,” stemmed partly from disagreement over the proper management of shipyards.²⁶⁹ While Fang and other Experts wished to place technocrats in charge of shipyard oversight, Reds in the press charged him with “letting specialists run the factories” and preaching “such nonsense as ‘you should pay more attention to technique and study it well.’”²⁷⁰ Swanson documents how after Reds assumed control of shipyards, the production of crankshafts at Shanghai Iron and Steelworks, diesel engines at Hudong and Hongqi shipyards, and reverse-gear systems declined.²⁷¹

During the GPCR, naval innovation suffered most of all, but shipyards maintained quantity in construction. Dozens of *Shanghai*-class gunboats and approximately one dozen *Romeo*-class submarines were built in the mid- to late-1960s.²⁷² Swanson points out, however, that these “were still primarily based upon 1950s technology.”²⁷³ While the PLAN did commission the new Type 053 frigates in this period, they were based on the Soviet *Riga*-class and contained no missile capability at this time.²⁷⁴ (Type 053 frigates include the *Jiangdong*-, *Jianghu*-, and later *Jiangwei*-class frigates.) Efforts to arm the

²⁶⁷ Andrew S. Erickson, “China’s Naval Modernization, Strategies, and Capabilities,” in *International Order at Sea: How It Is Challenged, How It Is Maintained*, ed. Jo Inge Bekkevold and Geoffrey Till (London: Palgrave Macmillan, 2016), 64; Muller, *China as a Maritime Power*, 156, 159.

²⁶⁸ As quoted in Swanson, *Eighth Voyage*, 249–50.

²⁶⁹ Swanson, *Eighth Voyage*, 244.

²⁷⁰ As quoted in Swanson, *Eighth Voyage*, 245.

²⁷¹ Swanson, *Eighth Voyage*, 245.

²⁷² Swanson, *Eighth Voyage*, 251.

²⁷³ Swanson, *Eighth Voyage*, 251.

²⁷⁴ Swanson, *Eighth Voyage*, 246, 251.

PLAN's single *Golf*-class missile submarine with a submerged launch capability also failed, and it would continue to lack a missile into the 1980s.²⁷⁵ In sum, as Swanson writes, "If the GPCR was intended to reinforce technological isolationism, to lay stress on coastal defenses, and to emphasize politics at the expense of operational training and strategic weapons development, then it accomplished its goals...The GPCR's general effect on the navy was to render it catatonic"²⁷⁶

While technically, the GPCR continued until Mao's death in 1976, its effects on naval development gradually diminished after the late-1960s, as was the case across society.²⁷⁷ In the 1970s, the technical expertise made modest gains in naval shipbuilding, but innovation still faced inertia from the traditionalist Red faction. The defense budget in the latter half of the 1960s more than doubled, and the rehabilitation of technicians purged in that decade enabled completion of new ship classes, including the *Luda*-class guided-missile destroyer, launched in 1970, and the *Jianghu*-class frigate, launched in 1975.²⁷⁸ These larger and more capable ships, however, further stimulated desire for the foreign technology decried by the Red faction. The increasing cost of electronic naval defense technology, such as missiles, threatened to supersede traditional PRC industries like iron and steel that produced defense weapons like naval guns.²⁷⁹ An August 1971 *People's Daily* article called electronic technology "advanced and special," opposed it to the "foundation and center" of iron and steel that "should assume a leading role," and stated "the two cannot be mixed together."²⁸⁰

The rebirth of naval expertise in the 1970s reveals the first glaring indications of departure from Near-Coast Defense. The size of vessels like *Luda*-class and Type 053

²⁷⁵ Swanson, *Eighth Voyage*, 251, 278.

²⁷⁶ Swanson, *Eighth Voyage*, 250, 253.

²⁷⁷ Frank Dikötter, *The Cultural Revolution: A People's History, 1962-1976* (New York: Bloomsbury, 2019), xvii; Bernard D. Cole, "More Red Than Expert: Chinese Sea Power During the Cold War," in *China Goes to Sea: Maritime Transformation in Comparative Historical Perspective*, ed. Andrew S. Erickson, Lyle J. Goldstein, and Carnes Lord (Annapolis, MD: Naval Institute Press, 2009), 327.

²⁷⁸ Swanson, *Eighth Voyage*, 255, 265.

²⁷⁹ Swanson, *Eighth Voyage*, 259.

²⁸⁰ As quoted in Swanson, *Eighth Voyage*, 259.

frigates rendered them incapable of hiding among islands and narrow waterways that would enable guerrilla operations and operations of surprise. While Herrick argues that destroyers were fully compatible with the Soviet Young School, the completion of the *Luda*-class and Type 053 frigates occurred after the departure of Soviet advisors, and would not explain how such surface combatants could conceal themselves for guerrilla warfare.²⁸¹ Destroyers and frigates, moreover, are not typically characterized as expendable platforms for the purpose of mere coastal defense.

The *Luda* and Type 053 cannot be interpreted as part of the PLAN's modernization drive, because their construction predate Mao's call for a modernized navy in May 1975. Further strategic incoherence may be observed in the fact that the *Luda*-class, begun in 1970, possessed underway replenishment capability before PLAN modernizers sought fleet oilers in 1975, while *Jianghu*-class frigates, whose delivery coincided with the idea of fleet oilers, possessed no underway replenishment capability.²⁸² In any case, the construction of both ship classes, along with oilers, ramped up in the wake of the Gang of Four's fall.²⁸³

Construction of larger surface combatants likely represents another case of borrowing Soviet designs, albeit without regard to required size. While some analysts write that the *Luda* was based on designs of the Soviet *Neustrashimy* sold to China, others contend that it is based on the Soviet *Kotlin*-class destroyer.²⁸⁴ Indeed, the common shape of the mast, bridge, exhaust stacks, and main batteries between these three classes is striking.

The shortcomings of the *Luda*- and Type 053 ships also reflect the struggle between the modernists and ideologues. Due to a combination of the Red-Expert struggle and

²⁸¹ Herrick, "Roles and Missions of the Soviet Navy," 20; Muller, *China as a Maritime Power*, 102, 155.

²⁸² Muller, *China as a Maritime Power*, 159; Desmond Wettern, "P.R.C. Navy Close-Up," United States Naval Institute, March 1981, <https://www.usni.org/magazines/proceedings/1981/march/prc-navy-close>.

²⁸³ Muller, *China as a Maritime Power*, 159.

²⁸⁴ Robert Gardiner and Stephen Chumbley, eds., *Conway's All the World's Fighting Ships 1947-1995* (Annapolis, MD: Naval Institute Press, 1995), 61, 388; "Type 051 Luda Class Destroyers (1970)," Naval Encyclopedia, January 10, 2018, <https://naval-encyclopedia.com/cold-war/china/luda-class-destroyers.php>.

departure of Soviet advisors, the *Luda*-class lacked “advanced combat direction systems, firing displays, [and] variable depth sonar,” among other things.²⁸⁵ Both the *Luda*- and *Jianghu*- classes reportedly lacked a combat information center crucial for ship defense, and relied on guns as their main armament with the exception of launchers for low-tech surface to surface missiles.²⁸⁶

The development of the *Han*-class nuclear-powered attack submarine, launched in 1971, also does not reflect complete adherence to coastal defense.²⁸⁷ Its approval in August 1958 indicates an intended departure from Near-Coast Defense much earlier than the new *Luda*- and Type 053 ships.²⁸⁸ Nuclear propulsion on a submarine allows theoretically unlimited patrol range, while short range from shore constitutes an essential element of Near-Coast Defense. The tremendous cost of developing and fielding nuclear propulsion also cuts against intended cost-savings associated with the smaller craft of coastal defense. The latter point becomes poignant when viewed within the tumultuous political and economic decades spanning its development. It also represented a lone effort, as the Soviet Union rejected repeated requests from China in developing its own nuclear submarine in the same year that Chinese imports of new Soviet technology more than quadrupled, then quadrupled again in 1959.²⁸⁹ Perhaps as a result, the engineers responsible for its construction reportedly lacked any outline of its missions, cost, and tactical requirements.²⁹⁰ In their chronicle of China’s early nuclear submarine program, John Lewis and Xue Litai write that the program’s developers never “consider [ed] relevant how

²⁸⁵ Elleman, *A History of the Modern Chinese Navy*, 182.

²⁸⁶ Swanson, *Eighth Voyage*, 264; “Type 051 Luda-Class Guided Missile Destroyer,” GlobalSecurity, accessed February 28, 2023, <https://www.globalsecurity.org/military/world/china/luda.htm>; “Type 051 Luda Class Destroyers (1970),” Naval Encyclopedia, January 10, 2018, <https://naval-encyclopedia.com/cold-war/china/luda-class-destroyers.php>; Desmond Wettern, “P.R.C. Navy Close-Up,” United States Naval Institute, March 1981, <https://www.usni.org/magazines/proceedings/1981/march/prc-navy-close>.

²⁸⁷ Lewis and Xue, *China’s Strategic Seapower*, 107.

²⁸⁸ Lewis and Xue, 49.

²⁸⁹ Lewis and Xue, 12–13, 15; Frank Dikötter, *Mao’s Great Famine: The History of China’s Most Devastating Catastrophe, 1958–1962* (New York: Bloomsbury, 2017), 74.

²⁹⁰ John Wilson Lewis and Xue Litai, *China’s Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford, CA: Stanford University Press, 1994), 49.

these programs, if successful, would fit any new strategic concept or contradict the assumptions of People's War.”²⁹¹

Analysts offer different explanations for early PRC ambitions for a nuclear submarine. Lewis and Xue argue that the program's beginning reflected “the spirit of the times,” specifically the utopian optimism permeating PRC leadership preparing to embark on the Great Leap Forward.²⁹² Approval for the program in 1958 coincided with Mao's rapidly moving target of steel production and Mao's pronounced determination in the late 1950s to overtake Great Britain in steel output.²⁹³ Nan Li, on the other hand, writes that “building nuclear submarines may be understood as Mao's project to construct the Chinese national identity,” with the latter understood to be international status conferred by possession of a nuclear-powered ballistic missile submarine.²⁹⁴ Developers meant to use the thirteen-year project as a stepping-stone to “overcome the two technological ‘bottlenecks’” of “propulsion technology and the technology to launch missiles from a submarine while submerged.”²⁹⁵ Richard Pariseau likewise argued in 1979 that prestige lay at the heart of *Han*-class submarine, since it did not fit into any of China's maritime objectives at the time.²⁹⁶

Regardless of Chinese motivations, nuclear submarine construction progressed at a halting pace due to the Great Leap Forward and Mao's myriad of campaigns. Remarkably, steady progress occurred in the beginning amid the atmosphere of the Great Leap Forward, but the state of the Chinese economy could not sustain the associated missile program.²⁹⁷ The missile program would eventually restart in 1965, come to a “virtual standstill” during

²⁹¹ Lewis and Litai, *China's Strategic Seapower*, 4.

²⁹² Lewis and Xue, *China's Strategic Seapower*, 4.

²⁹³ Dikötter, *Mao's Great Famine*, 57–58; Lewis and Xue, *China's Strategic Seapower*, 4.

²⁹⁴ Li, “China's Naval Strategy and Capabilities,” 115–16.

²⁹⁵ Li, “China's Naval Strategy and Capabilities,” 115–16.

²⁹⁶ Richard R. Pariseau, “The Role of the Submarine in Chinese Naval Strategy,” United States Naval Institute, October 1979, <https://www.usni.org/magazines/proceedings/1979/october/role-submarine-chinese-naval-strategy>.

²⁹⁷ Lewis and Xue, *China's Strategic Seapower*, 25, 132.

the GPCR, and reach completion in 1980.²⁹⁸ Despite Communist leadership's attempts at shielding the program, development of the propulsion plant suffered from the persecution of technicians, the shutdown of technical schools, and lack of funds diverted to construction of Mao's Third Line.²⁹⁹ Overall, the lengthy project allowed PRC engineers to experiment with the propulsion plant, dimensions and shape, and emissions control—in other words, aspects of existing nuclear submarines that were state secrets of the United States and the Soviet Union.³⁰⁰ Eventually, lessons learned in the construction and testing of the *Han*-class contributed to the development of the *Xia*-class nuclear-powered ballistic-missile submarine, China's first submarine capable of launching nuclear missiles, and the follow-on *Jin*-class in the 2000s.³⁰¹

PLAN construction of medium-size surface combatants and the *Han*-class nuclear submarine represented simultaneous overreach and underreach. While far more capable than such a narrow coastal defense strategy required based on their ability to operate beyond land-based artillery and aircraft, they embodied virtual anachronisms in their mostly 30 year-old technology.³⁰² While possibly signaling aspirational behavior, the abortive development of the *Han* and the intentional drawbacks of the surface force defy strict strategic explanation. However, the sea-keeping capabilities of these new PLAN ships directly paralleled the growing independence of the navy, and their size enabled a kind of open architecture ready for upgrade once freed from the rigidities of Maoist ideology.

B. SUMMARY

The story of the PLAN's beginnings and subsequent expansion under its first maritime strategy is one of interrupted development. The earliest acquisitions focused on

²⁹⁸ Lewis and Xue, 139, 149, 153; Li, "China's Naval Strategy and Capabilities," 115.

²⁹⁹ Lewis and Xue, *China's Strategic Seapower*, 41–42.

³⁰⁰ Lewis and Xue, *China's Strategic Seapower*, 39–40, 50; Li, "China's Naval Strategy and Capabilities," 115.

³⁰¹ "China's Submarine Force Plans Its Great Leap Forward," *Janes*, April 1, 1997, <https://customer.janes.com/Janes/Display/jni00284-jni-1997>.

³⁰² Li, "China's Naval Strategy and Capabilities," 115.

small craft capable of blending into the coastline or among the ubiquitous Chinese fishing trawlers. However, the PLAN force soon grew into a reflection of its Soviet mentors.

While development of the IGN and IJN benefitted from a variety of sources and the free flow of ideas across borders, foreign technology arrived in PLAN hands only from Soviet and Nationalist sources. Because logistics and parts support were only sustained for Soviet-origin platforms, Chinese shipbuilding gradually produced copies or derivatives of foreign ships with ties to the Soviets. While documentation of financial arrangements is scarce, it appears that Soviet assistance eventually allowed the PRC to construct hulls beyond what an unassisted country may have expected to build at the PRC's level of economic development.

Ideology served as the greatest obstacle to PLAN expansion during its first three decades. Chinese Communism extolled the party and army as the liberators of the country, and this primacy subordinated the navy, which may have begun with a bad reputation due to its birth in treachery. The imagination required to translate People's War into the maritime domain, combined with a party busy with the consolidation of the country after the civil war, provided sterile ground on which to erect a naval strategy that could gaze long-term into the future. In addition, Communist legacy industries like steel and guns also competed with the capital-intensive requirements of naval shipbuilding to produce ships of Soviet genealogy that were nonetheless hollow in modern warfighting. Communist China's belligerency on the international stage, especially following the Sino-Soviet split in 1960, did not help it import the technology for missiles or electronic combat systems.

Efforts to cultivate professionalism that may have promised to organically develop modern warfighting and its associated industries suffered from the various campaigns launched by Maoists. Agriculture and factory work drained the time and energy of sailors and scientists during the Great Leap Forward and GPCR. Once pressure eased on the professionals in the PRC, PLAN growth could continue on ships of Soviet extraction.

Further PLAN development would require a domestic atmosphere freed of the constraints of Maoism. This situation would eventually emerge after Mao's death and the

subsequent arrest of the Gang of Four. From that point, ideology would cease to be a significant impediment to naval expansion.

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IV. THE PLAN IN THE REFORM ERA

A. ANALYSIS

The death of Mao and arrest of the Gang of Four all but ended the ideological agenda which sought to restrain professionalization throughout China and the PLAN. Individuals who voiced a growing sense of the inadequacy of the military in general, and Near-Coast Defense in particular, became freer to pursue their visions. Strategic assessments unfettered by ideological purity seeded the realization that the PRC required renewed professionalism and strategic revision.

According to M. Taylor Fravel, “a major change in China’s military strategy will occur in response to a significant shift in the conduct of warfare that arises when the party is united...When the party is divided, however, strategic change is unlikely to occur.”³⁰³ Fravel defines party unity as “the agreement among the top party leaders on basic policy questions (i.e., the proverbial ‘party line’ or general guideline) and the structure of power within the party.”³⁰⁴ As has been detailed above, party disunity characterized much of the Red-Expert debate, and Fravel asserts that this disunity was responsible for the slow adoption of strategic revisions as the late 1960s Soviet threat loomed large.³⁰⁵ Party unity and ideological consensus, however, arose in the aftermath of Deng’s consolidation of power.³⁰⁶

While changes in military strategy in response to altered strategic circumstances appear obvious, party unity is required because, as Eberhard Sandschneider writes, “the military leadership [of China] may not be regarded as counter-elite but as an integral part of the overall political leadership in the PRC.”³⁰⁷ A similar arrangement existed among

³⁰³ M. Taylor Fravel, *Active Defense: China’s Military Strategy since 1949* (Princeton, New Jersey: Princeton University Press, 2019), 4, <https://muse.jhu.edu/book/64381/>.

³⁰⁴ Fravel, *Active Defense*, 20.

³⁰⁵ Fravel, *Active Defense*, 6, 139–40.

³⁰⁶ Fravel, *Active Defense*, 154–56.

³⁰⁷ Eberhard Sandschneider, “Military and Politics in the PRC,” in *Chinese Defense and Foreign Policy*, ed. June Teufel Dreyer (New York: Paragon House, 1988), 339.

the Soviets, of whom William Odom writes, “cleavages in the leadership over military policy” are “intra-Party factional divisions, not just a division of Party vs. military.”³⁰⁸ In short, strategic factors alone remain insufficient to account for such a major strategic revision as occurred in 1980, as they awaited the necessary condition of ideological consensus to effect changes.

In September 1980, Deng approved the new military strategy of “Active Defense.”³⁰⁹ Beginning with the possibility of a surprise Soviet invasion from the north involving tanks and aircraft, the plan outlined a strategy of forward defense against predicted invasion routes to cause attrition and stalemate, during which mass mobilization would allow a shift to decisive offense.³¹⁰ “A forward defense, rather than retreat,” Fravel writes, “was viewed as key to victory in such a conflict.”³¹¹ In contrast to “luring the enemy in deep” as before, the new strategy emphasized “positional warfare” in the form of “a layered, in-depth network of defensive positions, each of which an invader would need to destroy.”³¹²

For a strategy focused on an invasion from the continental north, the application of Active Defense to the maritime domain required further elaboration. While Deng had voiced concerns over the Soviet Union’s navy and the need for a different maritime strategy since 1979, what form it would take beyond “defen [se] of waters adjacent to China” remained unanswered.³¹³ Consequently, the PLAN continued in the old ways, including cave facility projects such as those in Wenzhou, Xiaochangshan Island, and the Miaodao and Zhoushan Islands, for mooring small craft into the 1980s.³¹⁴ While such caves may have been useful in strategies that allowed an enemy to come near to shore, they would

³⁰⁸ William E. Odom, “The Party-Military Connection: A Critique,” in *Civil-Military Relations in Communist Systems*, ed. Dale R. Herspring and Ivan Volgyes (Boulder, CO: Westview Press, 1978), 41–42.

³⁰⁹ Fravel, *Active Defense*, 1.

³¹⁰ Fravel, *Active Defense*, 141–42.

³¹¹ Fravel, *Active Defense*, 142.

³¹² Fravel, *Active Defense*, 142.

³¹³ Fravel, *Active Defense*, 162.

³¹⁴ Liu, *Memoirs of Liu Huaqing*, 5, 7.

become immaterial in high-end naval fighting, as their small design could not accommodate the necessary medium- and large-size surface combatants.³¹⁵ Nevertheless, some voices called for change, with one fleet commander saying, “the calendar has turned to the 1980s, and our enemy is not the small bands which invaded the mainland in past years, but combined formations equipped with highly modernized equipment. Our past experience is obviously far from effective.”³¹⁶

The PLAN’s fortunes changed on August 28, 1982, with Deng Xiaoping’s appointment of Liu Huaqing as commander of the PLAN.³¹⁷ It may be argued that the ascendancy of Deng and Liu signaled the triumph of the Experts within the PRC and the PLAN, although progress in the wake of the Mao period would require threading a line between the two factions. Deng would begin to guide the opening of the PRC into the world economy, while Liu oversaw the modernization of the PLAN. According to Liu, at the time of his appointment, the PLAN’s “factionalism...battlefield construction, and modernization of weapons and equipment” had led the navy to be “unanimously viewed as a grave disaster area.”³¹⁸

Liu’s appointment in 1982 coincided with the adoption of the United Nations Convention on the Law of the Sea (UNCLOS), an event that enlarged China’s claim to 3 million square kilometers of water and resources as exclusive economic zones were much more expansive under this treaty.³¹⁹ Suddenly, China found itself possibly entitled to some degree of sovereignty over vast stretches of water for which it had not previously planned. At the same time, these very waters were thought to be rich in resources. While the U.S. Energy Information Administration estimates “approximately 11 billion barrels of oil and 190 trillion cubic feet of natural gas in proved and probable reserves” in the South China

³¹⁵ Liu, *Memoirs of Liu Huaqing*, 14, 36.

³¹⁶ As quoted in Muller, *China as a Maritime Power*, 172.

³¹⁷ Liu, *Memoirs of Liu Huaqing*, 1.

³¹⁸ Liu, *Memoirs of Liu Huaqing*, 2.

³¹⁹ You Ji, *The Armed Forces of China* (New York: I.B. Tauris & Co, 1999), 161.

Sea, Chinese estimates trend much larger.³²⁰ Chinese official calculations in 1989 predicted that “the Spratly Islands contained 25 billion cubic metres of natural gas and 105 billion barrels of oil and the James Shoal area a further 91 billion barrels.”³²¹ More recent estimates by the PRC Ministry of Land and Resources predict between 168 and 219 billion barrels of oil and 16 trillion cubic meters of natural gas in the entire South China Sea.³²² With a mindset of “a nation not understanding the importance of the ocean is a nation without a future,” such developments naturally tied the PLAN’s modernization with China’s economic development.³²³

Liu had previously joined the nuclear-submarine project in 1961, and his experience of the GPCR on the project likely shaped his views on PLAN reforms.³²⁴ Shortly after becoming PLAN commander, Liu sought to end “waste of time and efforts in doing useless work,” and promoted “stability and unity” so that “[t]here should be no more haggling over ‘old scores’ and no more civil wars.”³²⁵ As a result, he ended the cave projects and redirected the labor toward building infrastructure suitable to moor modern warships.³²⁶

According to Liu, the PLAN “lacked an integral ‘naval strategy’ for our naval development,” and therefore he “raised, for the first time, the question of China’s ‘naval strategy’” in late 1985.³²⁷ The former assertion is evinced by the fact of diversity in PLAN

³²⁰ U.S. Energy Information Administration, “South China Sea,” U.S. Energy Information Administration, February 7, 2013, https://www.eia.gov/international/analysis/regions-of-interest/South_China_SeA.

³²¹ Bill Hayton, *The South China Sea: The Struggle for Power in Asia* (New Haven: Yale University Press, 2014), 122.

³²² Anders Corr, “China’s \$60 Trillion Estimate of Oil and Gas in the South China Sea: Strategic Implications,” *Journal of Political Risk*, January 2018, <https://www.jpolrisk.com/chinas-60-trillion-estimate-of-oil-and-gas-in-the-south-china-sea-the-strategic-implications/>.

³²³ Bernard D. Cole, “The People’s Liberation Army Navy after Half a Century: Lessons Learned in Beijing,” in *The Lessons of History: The Chinese People’s Liberation Army at 75*, ed. Laurie Burkitt, Andrew Scobell, and Larry M. Wortzel (Carlisle, PA: Strategic Studies Institute, 2003), 182.

³²⁴ Liu, *Memoirs of Liu Huaqing*, 52.

³²⁵ Liu, *Memoirs of Liu Huaqing*, 4.

³²⁶ Liu, *Memoirs of Liu Huaqing*, 14.

³²⁷ Liu, *Memoirs of Liu Huaqing*, 17.

ship procurement up to that time. Liu writes of the “difficulties with regard to ship maintenance” because warship “models were widely varied,” a symptom of the PLAN procuring warships by capture, from abroad, and domestic building.³²⁸ “This strategy,” he writes, “should be able to serve as scientific macro guidance for our naval construction and operations for a considerable period to come.”³²⁹ Liu meant for the naval strategy to free the PLAN from the previous army-centric guidance that some held to “cover the entire war and all battlefields around the country,” because, as he argued, “sea battles were of an independent nature and had their peculiarities.”³³⁰

Liu called the proposed naval strategy “offshore defense,” and eventually the strategy came to be designated by the slogan “defend actively, operate in the near seas” or Near-Seas Active Defense.³³¹ Liu summarized its features in his memoirs. “First,” he writes, “China’s ‘naval strategy’ based on ‘offshore defense’ was a regional defense strategy” like those of “Britain, France, Germany, Italy, and Japan,” but not the U.S. and Soviet Union.³³² “Second, China’s ‘naval strategy’ was of a defense nature,” a principle he writes would continue long into the future.³³³ “Third,” Liu writes, “for a relatively long time to come, the main areas for the Navy’s operations would be the First Island Chain and its outside seas as well as the Yellow Sea, East China Sea, and South China Sea,” a scope he notes which enlarges the strategy beyond the bounds of Near-Coast Defense.³³⁴ Lastly, Liu divided the PLAN’s mission into peacetime and wartime tasks. The former included defense of China’s sovereignty and interests at sea, deterrence, and foreign policy support.³³⁵ The latter included independent or joint warfighting, SLOC defense, and

³²⁸ Liu, *Memoirs of Liu Huaqing*, 42.

³²⁹ Liu, *Memoirs of Liu Huaqing*, 18.

³³⁰ Liu, *Memoirs of Liu Huaqing*, 19.

³³¹ Liu, *Memoirs of Liu Huaqing*, 20; Li, “China’s Naval Strategy and Capabilities,” 116.

³³² Liu, *Memoirs of Liu Huaqing*, 21.

³³³ Liu, *Memoirs of Liu Huaqing*, 22.

³³⁴ Liu, *Memoirs of Liu Huaqing*, 22.

³³⁵ Liu, *Memoirs of Liu Huaqing*, 22.

nuclear counterattack.³³⁶ While Liu developed the strategy over the course of his time as PLAN commander from 1982–1988, official endorsement in the form of a formal report did not occur until 1987, although some analysts argue it did not see official implementation until 1993.³³⁷

Such a mission set smacks of Mahanian influence, whose influence Liu admitted, although he rejected the label of “the Mahan of China,” because Mahan had formulated his theories for “capitalists and imperialists.”³³⁸ However, as Li points out, his emphasis on layered defense in the form of island chains still owes much to traditional PLA strategy involving interior and exterior lines of operation.³³⁹ His introduction of island chains reflected the operationalization of layered defenses envisioned in Active Defense.³⁴⁰ Because Near-Seas Active Defense, like Active Defense, “excluded preempting a Soviet attack,” the essence of Near-Seas Active Defense remains essentially defensive and contains no real power-projection provisions.³⁴¹

Ship procurements during the era of Near-Seas Active Defense generally conformed to strategic considerations, although not in the quantity one might expect. Shortly after its official endorsement in 1987, Liu told the *China Daily* that a construction plan based on the strategy would guide PLAN modernization in three stages to the year 2000, although he would later write that the construction plan was “still guidance for the Navy’s modernization drive” as late as 2004.³⁴² Despite an approved construction plan, albeit one without public-facing specifics, PLAN growth remained virtually stagnant

³³⁶ Liu, *Memoirs of Liu Huaqing*, 22.

³³⁷ Liu, *Memoirs of Liu Huaqing*, 23; Christopher H. Sharman, *China Moves Out: Stepping Stones Toward a New Maritime Strategy*, China Strategic Perspectives 9 (Washington, DC: National Defense University Press, 2015), 4, <https://ndupress.ndu.edu/Publications/Article/717696/china-moves-out-stepping-stones-toward-a-new-maritime-strategy/>.

³³⁸ Liu, *Memoirs of Liu Huaqing*, 23.

³³⁹ Li, “China’s Naval Strategy and Capabilities,” 123.

³⁴⁰ Fravel, *Active Defense*, 142.

³⁴¹ Fravel, *Active Defense*, 142. It should be noted, however, that recent understandings of naval warfare tend to denigrate defense in favor of offense. While PRC military strategy is always putatively about defense, its framing should not necessarily be accepted at face value.

³⁴² Gangyi Wang, “Strategy for Navy’s Development Is Outlined,” *China Daily*, April 11, 1987, A1; Liu, *Memoirs of Liu Huaqing*, 49.

during the first decade of its new maritime strategy. Li writes that “all [Liu] could accomplish during his tenure as the PLAN commander and the CMC vice chair between 1982 and 1997 was the construction and deployment of two *Luhus*.”³⁴³

Li attributes PLAN stagnation to the economic focus of China at the time. Indeed, Deng’s Four Modernizations accorded defense the last in priority.³⁴⁴ “The Chinese economy had just begun to shift from agriculture-based self-sufficiency to export-oriented manufacturing,” Li writes, and thus “its dependence on overseas markets and energy supply was still low.”³⁴⁵ Because China “had not yet developed and felt the vulnerability associated with the SLOCs on which the shipment of traded goods and imported oil depends,” it did not feel pressure to expand the navy.³⁴⁶ Later expansion would prove Liu’s status as a visionary, but despite becoming a net importer of oil in 1993, China would not begin naval expansion until a few years later.³⁴⁷

The timing of significant Chinese ship purchases soon after the Third Taiwan Strait Crisis, lasting from July 1995 to March 1996, strongly imply its importance as an event. After President Bill Clinton ordered the deployment of a USN aircraft carrier battlegroup into the Taiwan Strait during heightened tensions, China purchased two *Sovremenny*-class destroyers from Russia in September 1996.³⁴⁸ The purchase, which included SS-N-22 Sunburn antiship missiles and air defense capability, made the two destroyers the most capable surface combatants in the Chinese fleet.³⁴⁹ After these purchases, and the purchase

³⁴³ Li, “China’s Naval Strategy and Capabilities,” 126.

³⁴⁴ David Mason, “China’s Four Modernizations: Blueprint for Development or Prelude to Turmoil?,” *Asian Affairs: An American Review* 11, no. 3 (1984): 66, <https://doi.org/10.1080/00927678.1984.10553699>.

³⁴⁵ Li, “China’s Naval Strategy and Capabilities,” 125.

³⁴⁶ Li, “China’s Naval Strategy and Capabilities,” 125.

³⁴⁷ Sergei Trough, “China’s Changing Oil Strategy and Its Foreign Policy Implications,” Brookings, September 1, 1999, <https://www.brookings.edu/articles/chinas-changing-oil-strategy-and-its-foreign-policy-implications/>; Li, “China’s Naval Strategy and Capabilities,” 126–27.

³⁴⁸ Patrick Devenny, “PLAN Procurement of Sovremenny-Class Destroyers: Developments and Repercussions,” Royal United Services Institute, May 23, 2005, <https://rusi.org/publication/plan-procurement-sovremenny-class-destroyers-developments-and-repercussions>.

³⁴⁹ “Sovremenny (Project 956E/956EM) Class (DDGHM),” Janes, July 6, 2022, https://customer.janes.com/display/JFS_0581-JFS_; “China Bound: Sovremenny Sails for the PRC,” Janes, January 19, 2000, <https://customer.janes.com/Janes/Display/jdw00173-jdw-2000>.

of two more *Sovremenny*-class destroyers two years later, China began its naval expansion in earnest, indicating the *Sovremenny*-class's initial role as a stopgap while domestic shipbuilding produced new warships.³⁵⁰

The acquisition of the larger and more capable *Luhu*-class, followed by the evolving *Luyang*-class in the 2000s, provided the PLAN with increasingly potent indigenous guided-missile destroyers.³⁵¹ During construction of the *Luhu*-class, the PLAN began to modernize its *Luda*-class destroyers. Although Liu writes that *Luda* modernization functioned as a stopgap during the ten-year development of the *Luhu*-class, it is more likely that modernization of existing ships was cheaper than building new ones before the mid-1990s.³⁵²

In the undersea domain, *Song*- and *Shang*-class submarines began to patrol within the first island chain, and the *Jin*-class became the PLAN's nuclear deterrent.³⁵³ Chinese purchases of *Kilo*-class submarines from Russia in 1993 indicate a focus on improvement in its domestic diesel submarine program.³⁵⁴ After delivery of *Kilos*, PLAN submarine construction appeared to benefit from the technology, such as the modified *Song*-class and “a distinctive ‘hump’ and large fin” incorporated into the teardrop-shaped hull of the indigenous *Yuan*-class.³⁵⁵

Analysts at the time, however, noted the weakness in sub-system variety onboard PLAN platforms. A 2005 RAND study attributed the slow progress of naval

³⁵⁰ Devenny, “PLAN Procurement of Sovremenny-Class Destroyers.”

³⁵¹ Peter A. Dutton and Ryan D. Martinson, *China's Evolving Surface Fleet* (Newport, RI: China Maritime Studies Institute, 2017), 32, 57, <https://digital-commons.usnwc.edu/cmsi-red-books/13/>.

³⁵² Liu, *Memoirs of Liu Huaqing*, 50.

³⁵³ “Type 39/Song Class Attack Submarine,” *Naval Technology*, April 15, 2010, <https://www.naval-technology.com/projects/songclasssubmarine/>; Andrew S. Erickson and Lyle J. Goldstein, “China's Future Nuclear Submarine Force,” *Naval War College Review* 60, no. 1 (2007): 4–5, <https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=1835&context=nwc-review>; Jonathan Weng, “China Unveils New SSBNs,” *Military Technology* 31, no. 12 (2007): 90.

³⁵⁴ Ronald O'Rourke, “PLAN Force Structure: Submarines, Ships, and Aircraft,” in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders and Christopher Yung (Washington, DC: National Defense University Press, 2011), 146.

³⁵⁵ “Yuan (Type 039A/B/C) Class (SSK),” *Janes*, March 28, 2023, https://customer.janes.com/display/JFS_5909-JFS_; O'Rourke, “PLAN Force Structure,” 146–47.

modernization, despite falling under Deng's "Four Modernizations Policy," to the inability of China's shipbuilding industry.³⁵⁶ Going one step further, Chong Yoon states that China's inability to modernize effectively was due to "the detrimental effects of the Cultural Revolution on the development of science and technology."³⁵⁷ Premier Zhao Ziyang himself stated, "the biggest obstacle to the accomplishment of the four modernizations...lies in talented personnel – we lack scientific, technical, and managerial personnel."³⁵⁸ To remedy this, Yoon posed China's dilemma as either "the outright purchase of weapons and equipment from abroad," or "domestic production of sophisticated weapons through technology transfers from the West."³⁵⁹

To remedy this, China appeared to choose procurement from abroad as its modernization solution for the PLAN in the short- to medium-term, with the result that at the turn of the millennium more warships were built domestically with frankenstein sub-systems. David Shambaugh observes that the domestically-built *Luhu*-class destroyers utilized two American LM2500 from General Electric for propulsion, French helicopters, missiles, and radars, German electronics, and Italian torpedoes.³⁶⁰ Sourcing of western technology, including American naval equipment like gas turbine engines, ceased in the aftermath of Tiananmen Square.³⁶¹ As a result, the single-ship *Luhai*, at first meant to be an improved *Luhu*-class in 1998, instead came equipped with similar equipment sourcing, with the exception of Ukrainian gas turbines and Russian sonar and helicopters.³⁶² While

³⁵⁶ Keith Crane et al., *Modernizing China's Military: Opportunities and Constraints* (Santa Monica, CA: RAND, 2005), 138, 182, https://www.rand.org/content/dam/rand/pubs/monographs/2005/RAND_MG260-1.pdf.

³⁵⁷ Chong K. Yoon, "Problems of Modernizing the PLA: Domestic Constraints," in *China's Military Modernization: International Implications*, ed. Larry M. Wortzel (Westport, CT: Greenwood Press, 1988), 11–12.

³⁵⁸ As quoted in Yoon, "Problems of Modernizing the PLA," 11.

³⁵⁹ Yoon, "Problems of Modernizing the PLA," 12.

³⁶⁰ David Shambaugh, *Modernizing China's Military: Progress, Problems, and Prospects* (Los Angeles: University of California Press, 2002), 268.

³⁶¹ Michael C. Grubb, "Chinese Shipbuilding: Growing Fast, But How Good Is It?," United States Naval Institute, March 2008, <https://www.usni.org/magazines/proceedings/2008/march/chinese-shipbuilding-growing-fast-how-good-it>.

³⁶² Shambaugh, *Modernizing China's Military*, 268.

perhaps overcoming contemporary limitations of domestic shipbuilders, such diverse sourcing, as Shambaugh writes, “made operations and maintenance a logistical nightmare.”³⁶³

Analysts also took note of an acceleration in Chinese defense modernization in the mid-1990s that set it on its trajectory today. The report of the US-China Economic and Security Review Commission credits the defense industry reforms of 1998 for the improvement, and states “the greatest progress appears to have been made in the shipbuilding and defense electronic sectors,” both of which would benefit the PLAN.³⁶⁴ Beginning in 1999, Chinese naval warships were built by two companies: China State Shipbuilding Corporation (CSSC), the “primary supplier of warships,” and China Shipbuilding Industry Corporation (CSIC), which “focuse [d] on civilian shipbuilding [but] also ha [d] a military division.”³⁶⁵ One improvement involved relocating shipyards of Jiangnan Shipbuilding Group, a subsidiary of CSSC, to Shanghai’s Changxing Island, thereby increasing its “capacity from 800,000 to 4.5 million deadweight tons (DWT) per year by 2010.”³⁶⁶ The State Council also established the China Electronics Technology Enterprise (CETC) in 2002, which elevated and shaped the electronics and information engineering sectors for the purposes of national strategy in conjunction with private Chinese companies like Huawei Technologies Ltd and Great Dragon Telecommunications Equipment Co. Ltd whose “connections to the PLA run deep.”³⁶⁷

These reforms strengthened the defense sectors of China and preceded breakthroughs in radar development and tactical data links. As a result, new ship classes such as the Type 052 *Luyang*-class began to field the domestically-built Type 346 Dragon Eye active electronic scanned array radar and vertical launch system in 2004, and the Joint

³⁶³ Shambaugh, *Modernizing China’s Military*, 268.

³⁶⁴ James Mulvenon and Rebecca Samm Tyroler-Cooper, *China’s Defense Industry on the Path of Reform* (Washington, DC: US-China Economic and Security Review Commission, 2009), 4, <https://www.uscc.gov/research/chinas-defense-industry-path-reform>.

³⁶⁵ Mulvenon and Tyroler-Cooper, *China’s Defense Industry*, 21–22.

³⁶⁶ Mulvenon and Tyroler-Cooper, *China’s Defense Industry*, 22.

³⁶⁷ Mulvenon and Tyroler-Cooper, *China’s Defense Industry*, 24.

Service Integrated Data Link System in 2012.³⁶⁸ The Dragon Eye system bears similarities to the USN's Aegis system and has been fielded on modernized Chinese destroyers since its introduction.³⁶⁹

Modernization efforts represent a notable change in fortunes for the PLAN, but at least one scholar perceives an overall improvement in the PLAN's status up to the year 2000, through which modernization may be understood. Alexander Huang writes, "In the early years especially, the PLA Navy lacked status and influence in Chinese politics and policy processes," but the "PLA Navy's political status improved gradually as China opened its economy to the outside world and recognized the necessity of maintaining a strong naval force for defense of its growing maritime interests."³⁷⁰ For the latter claim, he cites as key evidence the percentage improvement of the PLAN's representation on the CCP's Central Committee from 1977 to 1997. In the 11th CCP Congress (1977), PLAN seats stood at 7.45%, peaked at 15.56% in the 14th CCP Congress, and held relatively steady at 13.95% by the 15th CCP Congress.³⁷¹ (It should be noted that, because foreign analysts lack breakdowns of Chinese military budgets, representation becomes the best public data available about the relative importance of the various services.)

Upon closer examination, however, the PLAN's improvement in status does not appear as strong. While Liu's memoirs attest to the truth of the link between the PLAN's modernization and China's growing maritime interests, the key driver for the PLAN's percentage share in the CCP Central Committee contained in Huang's data is the total number of PLA seats.³⁷² In the 11th CCP Congress, the PLA and PLAN shared 94 and 7

³⁶⁸ Eric Wertheim, "Air-Defense Destroyers for the PLAN," *United States Naval Institute* 147, no. 6 (June 2021), <https://www.usni.org/magazines/proceedings/2021/june/air-defense-destroyers-plan>; Peter Wood and Roger Cliff, *Chinese Airborne C4ISR* (Montgomery, AL: China Aerospace Studies Institute, 2020), 31, https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Infrastructure/2020-12-17%20PRC%20Airborne%20C4ISR_eBook.pdf?ver=pRjVmXMh1zcNZ5mhNwEdLA%3D%3D.

³⁶⁹ Janes, "Type 346 ('Dragon Eye') Series," Janes, March 24, 2023, <https://customer.janes.com/display/JC4IM0014-JC4IM>.

³⁷⁰ Alexander C. Huang, "The PLA Navy at War, 1949-1999: From Coastal Defense to Distant Operations," in *Chinese Warfighting: The PLA Experience Since 1949*, ed. Mark A. Ryan, David M. Finkelstein, and Michael A. McDevitt (New York: M.E. Sharpe, Inc, 2003), 244, 267n7.

³⁷¹ Huang, "The PLA Navy at War," 267n7.

³⁷² Liu, *Memoirs of Liu Huaqing*, 21–22.

seats, respectively, but by the 15th CCP Congress, both shares declined to 43 and 6, respectively.³⁷³ The reduction in PLA seats after the 11th CCP Congress in 1977 reflects the broader force reductions that occurred after the adoption of Active Defense. Between 1980 and 1987, the size of the entire PLA was reduced by approximately one-third.³⁷⁴ This suggests that the mechanism of change lay in the reduction of forces in general, rather than a navy soaring in its representation, because the navy's representation also declines, albeit more modestly.

Huang also observes that prior to Liu Huaqing's appointment as vice-chairman of the CMC, the PLAN possessed no representation in that body at all.³⁷⁵ Liu's appointment more likely indicates a rise in his own status, rather than the PLAN's. In any case, from 1982 to 2002, PLA representation as a whole on the CCP Central Committee typically hovered around 20%.³⁷⁶ PLAN representation in other decision-making bodies has remained stagnant as well, with only a single PLAN officer on the CMC since 2002.³⁷⁷ Internal PRC politics are notoriously opaque, but because foreign analysts lack breakdowns of Chinese military budgets, representation becomes the best public data available, and it indicates no significant rise in the PLAN's political status over this period.

The PLAN's persistent lack of representation may explain the reason for "a growing emphasis in naval sources casting the PLAN as the protector of China's economy."³⁷⁸ In newspapers like the *PLA Daily* and *People's Daily*, as well as the journals *Modern Navy*, *National Defense*, and other "military publications," M. Taylor Fravel and Alexander Liebman detect an increase in discussion of maritime topics over the period of

³⁷³ Huang, "The PLA Navy at War," 267n7.

³⁷⁴ Fravel, *Active Defense*, 143.

³⁷⁵ Huang, "The PLA Navy at War," 244.

³⁷⁶ David Shambaugh, "China's New High Command," in *The People's Liberation Army and China in Transition*, ed. Stephen J. Flanagan and Michael E. Marti (Washington, DC: National Defense University Press, 2003), 46.

³⁷⁷ "How Did the 20th Party Congress Impact China's Military?," ChinaPower, October 25, 2022, <https://chinapower.csis.org/20th-party-congress-china-military-pla-cmc/>.

³⁷⁸ M. Taylor Fravel and Alexander Liebman, "Beyond the Moat: The PLAN's Evolving Interests and Influence," in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders et al. (Washington, DC: National Defense University Press, 2011), 42.

the late-1980s to the mid-2000s.³⁷⁹ In their study, topics such as maritime resources, resource security, sea lanes, and pirates, exhibit a marked increase in the number of articles in the early 2000s in all or most publications analyzed.³⁸⁰ Corresponding arguments about the PLAN's importance in these matters include “protecting and developing the ocean's resources is a historic responsibility that our navy cannot shirk,” and “without a strong naval force as a shield, it is very difficult to implement scientific exploration, economic development and common development [of natural resources] in disputed waters.”³⁸¹

Liu's shift to an increasingly oceanic navy widened the possibilities in strategic naval construction, however an outstanding exception to PLAN acquisitions in this period was the procurement of a Soviet-built aircraft carrier from Ukraine, which the PLA later commissioned in 2012 as *Liaoning*. Chinese interest in an aircraft carrier did not form late in the era of Near-Seas Active Defense. Liu writes that he participated in “a special feasibility study for building aircraft carriers as instructed by the higher authorities” as early as 1970, and reports indicate Chinese representatives had approached Ukraine about purchasing the Soviet carrier as early as 1992.³⁸²

Liu wished to build aircraft carriers during his time as PLAN commander, but settled for “spending 15–20 years making pre-studies of aircraft carriers...in preparation for the development of naval armament in the 21st century.”³⁸³ For his strategic reasoning, he writes:

Our purpose of developing carriers was not to race with the United States and the Soviet Union. The primary goal was to meet the needs of struggle against Taiwan, to solve the Nansha Islands disputes, and to safeguard our sea rights and interests. Apart from that, in peacetime the carriers could be used to maintain world peace, thereby expanding our international political influence. Clearly, if our Navy had carriers, its quality would change dramatically, and its fighting capacity would increase to a great extent. This

³⁷⁹ Fravel and Liebman, “Beyond the Moat,” 42–43.

³⁸⁰ Fravel and Liebman, “Beyond the Moat,” 55–56, 61, 63, 66.

³⁸¹ As quoted in Fravel and Liebman, “Beyond the Moat,” 57, 59.

³⁸² Liu, *Memoirs of Liu Huaqing*, 54; Ian Storey and Ji You, “China's Aircraft Carrier Ambitions: Seeking Truth from Rumors,” *Naval War College Review* 57, no. 1 (January 2004): 79.

³⁸³ Liu, *Memoirs of Liu Huaqing*, 49, 55.

would help raise our military prowess as well as the prestige of our country.³⁸⁴

He would go on to argue that without air cover, the newest blue-water PLAN warships could not be adequately protected.³⁸⁵ While the inherently offensive nature of aircraft carriers makes them a curious choice for a defensive maritime strategy, this thesis does not attempt to argue the incoherence of China's aircraft carrier program in this period, as Liu clearly argues that it fell within the maritime strategic framework as he conceived it.

It is worth asking, however, why China purchased and commissioned *Liaoning* when it did. After previously deprecating their status and capabilities by calling them “paws of aggression” and “dead ducks on the sea,” China continued to refrain from commissioning an aircraft carrier long after Liu's tenure as PLAN commander.³⁸⁶ Liu writes in his memoirs that the weakness of the Chinese economy proved insurmountable, although he recommended construction begin on an aircraft carrier anyway, owing to their long lead times.³⁸⁷ Liu's point proves salient in light of a statistical study that concludes the size of a country's gross domestic product is the “main determinant of naval procurement.”³⁸⁸ While it is true that China's economy gathered strength in the years between 1988 and 2012, a strong economy would merely have removed the impediment, not driven the PLAN toward a carrier in itself.

Before *Liaoning*'s commissioning in 2012, Robert S. Ross noted how Chinese nationalist pressures for building an aircraft carrier reached a high intensity in the 2000s. He observes how the idea that “all successful great powers have possessed a large blue-water navies” [sic] characterized a popular December 2006 China Central Television program about great powers, and many Chinese citizens, including “the mayor of a major Chinese city,” offered their personal and public monies to finance a carrier's

³⁸⁴ Liu, *Memoirs of Liu Huaqing*, 56.

³⁸⁵ Liu, *Memoirs of Liu Huaqing*, 56.

³⁸⁶ Yuan and Hai, “Paws of Aggression”; Li, “Dead Ducks on the Sea.”

³⁸⁷ Liu, *Memoirs of Liu Huaqing*, 55.

³⁸⁸ Gilady, *The Price of Prestige*, 68.

construction.³⁸⁹ Citing his own interviews, Ross stated that “support for an aircraft carrier ha [d] now become the ‘mainstream’ view” among “all sectors of Chinese society.”³⁹⁰ Indeed, polls in the mid-2000s showed Chinese popular support for an aircraft carrier could sometimes reach 87%.³⁹¹ This phenomenon is also congruent with the survey results of Han Xiao, Michael Sadler, and Kai Quek, who find that in China, “those who exhibit stronger national pride also prefer increased military spending.”³⁹² Developments in China in the 2000s, such as the international perception of the country as “an oasis of stability” during the 2008 financial crisis, and surpassing the United States to regain its mid-nineteenth century position as the world’s top manufacturer, reinforced Chinese perceptions that their country deserved approbation and the fruits of prestige, namely “respect, authority, deference, and responsiveness,” according to Ken Booth.³⁹³

To be sure, some nationalist arguments for a Chinese aircraft carrier conceivably rested on a strategic basis. Ross notes how “a mass-market edition of Mahan’s *The Influence of Seapower upon History* is marketed with a cover banner that asks in large type, ‘Does China need an aircraft carrier?’ and with a foldout map highlighting U.S. naval facilities along China’s coastal perimeter.”³⁹⁴ Mahan, who wrote, “the necessity of a navy, in the restricted sense of the word, springs, therefore, from the existence of a peaceful shipping,” might have agreed.³⁹⁵ Michael A. Glosny cites his own interviews with PLA

³⁸⁹ Robert S. Ross, “China’s Naval Nationalism: Sources, Prospects, and the U.S. Response,” *International Security* 34, no. 2 (Fall 2009): 61–62, <https://www.jstor.org/stable/40389213>.

³⁹⁰ Ross, “China’s Naval Nationalism,” 61–62.

³⁹¹ Andrew F. Diamond, “Dying with Eyes Open or Closed: The Debate Over a Chinese Aircraft Carrier,” *The Korean Journal of Defense Analysis* 18, no. 1 (2006): 49, <https://www.kida.re.kr/frt/board/frtNormalBoardDetail.do?sidx=707&idx=2115&depth=3&lang=en>.

³⁹² Han Xiao, Michael Sadler, and Kai Quek, “Guns and Butter in China: How Chinese Citizens Respond to Military Spending,” *The China Quarterly* 245 (March 2021): 258, <https://doi.org/10.1017/S0305741020000260>.

³⁹³ Marc Lanteigne, *Chinese Foreign Policy: An Introduction* (London: Routledge, 2019), 55; Marsh, “China to Overtake US as Largest Manufacturer,” *Financial Times*, August 10, 2008, <https://www.ft.com/content/2aa7a12e-6709-11dd-808f-0000779fd18c>; Ken Booth, *Navies and Foreign Policy* (New York: Routledge, 1977), 51, <https://doi.org/10.4324/9781315769646>.

³⁹⁴ Ross, “China’s Naval Nationalism,” 62.

³⁹⁵ Mahan, *The Influence of Sea Power Upon History*, 26.

officers, who argue for the merits of a carrier's flexibility for a range of nontraditional maritime roles.³⁹⁶

For Ross, one of the nationalists' "distinct arguments" forged the link between Chinese nationalism and aircraft carriers in the form of "an explicit demand for status."³⁹⁷ After China purchased the ex-Soviet carrier *Kiev* and turned it into a floating museum in Tianjin, an exhibit showcased "other nations' aircraft carriers, implying that aircraft carriers are a natural part of all great-power navies."³⁹⁸ Andrew Diamond writes that pro-carrier factions in China "note [d] with disappointment that China [was] the only permanent member of the U.N. Security Council never to have deployed an aircraft carrier" and that such "a scenario [was] incommensurate with China's position as a big power," while others called it "a disgrace."³⁹⁹ While Ross characterizes such arguments as "naval nationalism," Peter Dombrowski labels them as "navalism," whose first defining characteristic is the idea that "navies are essential to national greatness, defined minimally as prestige and influence with other great powers and, in the modern era, within international and regional organizations."⁴⁰⁰

China's conspicuous consumption of an aircraft carrier heightens its prestige and allows it to join "the aircraft carrier club."⁴⁰¹ Aircraft carriers became, according to George Modelski and William R. Thompson, one of the "contemporary capital ships" after 1945, along with "nuclear-attack submarines" and "ballistic-missile systems based at sea."⁴⁰² As has already been noted, by the 2000s the PLAN had already developed nuclear-armed

³⁹⁶ Michael A. Glosny, Philip C. Saunders, and Robert S. Ross, "Debating China's Naval Nationalism," *International Security* 35, no. 2 (Fall 2010): 167, <https://muse.jhu.edu/pub/6/article/394945>.

³⁹⁷ Ross, "China's Naval Nationalism," 65.

³⁹⁸ Andrew S. Erickson and Andrew R. Wilson, "China's Aircraft Carrier Dilemma," *Naval War College Review* 59, no. 4 (2006): 22, 32, <https://digital-commons.usnwc.edu/nwc-review/vol59/iss4/4/>.

³⁹⁹ Diamond, "Dying," 44.

⁴⁰⁰ Ross, "China's Naval Nationalism," 46; Peter Dombrowski, "Neo-Navalism and Naval Innovation in Russia, China, and the United States," in *Maritime Strategy and Naval Innovation: Technology, Bureaucracy, and the Problem of Change in the Age of Competition* (Annapolis, MD: Naval Institute Press, 2021), 109.

⁴⁰¹ Gilady, *The Price of Prestige* 55, 58, 86–88.

⁴⁰² George Modelski and William R. Thompson, *Seapower in Global Politics, 1494-1993* (Seattle: University of Washington Press, 1988), 86.

ballistic-missile submarines, making the aircraft carrier the sole capital ship China theretofore lacked. Among an aircraft carrier's objective prestige benefits are its contributions to "military diplomacy," the ability "to demonstrate international responsibility," and conduct "peacetime presence operations."⁴⁰³ Subjective benefits included relieving some nationalist pressure at home and adding China's name to the small list of countries practicing carrier aviation. This type of benefit, in particular, features in objections raised by Chinese citizens' which highlighted "the maritime capabilities of countries...that possess less claim than China to great power status, including...Brazil, India, Japan, South Korea, and Thailand."⁴⁰⁴ (At the time, each of these countries possessed an aircraft carrier.) This line of Chinese argument in the 2000s stressed how China had surpassed much of the world and achieved great power status, but did not compare favorably to other countries in naval platforms, which are among the most visible showpieces of military power.

Michael Glosny and Philip Saunders discount prestige and navalism as insufficient to explain China's interest in a carrier, and instead assert that the eventual refurbishment and commissioning of *Liaoning* reflected strategic thinking. They argue that "China's development of a limited naval power-projection capability reflects changes in China's threat environment and expanded Chinese national interests created by deeper integration into the world economy."⁴⁰⁵ Without dismissing prestige as a possible factor, they argue that China sought a carrier "to defend regional interests in contingencies not involving the United States, to protect expanding overseas interests, to perform nontraditional missions, to conduct military diplomacy, [and] to demonstrate international responsibility."⁴⁰⁶

Glosny and Saunders confine their analysis to the benefits in general which a Chinese aircraft carrier could provide, especially its "flexibility," but *Liaoning's* operational history since its commissioning in 2012 provides a circumstantial case that it

⁴⁰³ Glosny, Saunders, and Ross, "Debating," 166, 167.

⁴⁰⁴ Ross, "China's Naval Nationalism," 65.

⁴⁰⁵ Glosny, Saunders, and Ross, "Debating," 161.

⁴⁰⁶ Glosny, Saunders, and Ross, "Debating," 166.

functions as a mere showpiece and training platform.⁴⁰⁷ Despite PLA officers' catalogue of roles for a Chinese carrier, including "humanitarian assistance and disaster relief, counterpiracy, noncombatant evacuation, peacekeeping operations," and others, *Liaoning* has never deployed for such missions.⁴⁰⁸ Deployments of *Liaoning* and its sister carrier, the domestic-built *Shandong*, have remained confined to the western Pacific, conducting training exercises in the first island chain, east of Taiwan, and sometimes near Guam, but never outside the range of land-based Chinese aircraft.⁴⁰⁹ To be sure, the function of *Liaoning* and *Shandong* as training platforms promises to teach lessons on flight deck management and aircraft procedures, communications, and refueling, but training for modern naval combat remains severely limited due to the lack of a catapult and capable aircraft.

Liaoning's limitations provide further evidence of its use as a status-piece. The utilization of a ski-jump on each imposes significant opportunity costs in the launch restrictions of the carrier itself and the capabilities of the carrier-based aircraft. The ski-jump forces the carrier into greater dependence on the natural winds to generate sufficient aircraft lift.⁴¹⁰ For the J-15 itself, currently the PLAN's only carrier-based fixed wing aircraft, the ski-jump often requires the fighter to carry fewer weapons or fuel load.⁴¹¹ For comparison, the maximum weight of a J-15 launched from *Liaoning* is estimated at 62,000 pounds, whereas the USS *Ronald Reagan* can launch aircraft up to 100,000 pounds.⁴¹² With a greater reliance on the natural winds, enemy vessels stand to gain a tactical advantage by remaining down-wind. In order to launch an air strike against a down-wind

⁴⁰⁷ Glosny, Saunders, and Ross, "Debating," 167.

⁴⁰⁸ Glosny, Saunders, and Ross, "Debating," 167.

⁴⁰⁹ Greg Torode, Eduardo Baptista, and Tim Kelly, "China's Aircraft Carriers Play 'Theatrical' Role but Pose Little Threat Yet," Reuters, May 5, 2023, <https://www.reuters.com/world/chinas-aircraft-carriers-play-theatrical-role-pose-little-threat-yet-2023-05-05/>.

⁴¹⁰ Rick Joe, "It's Time to Talk About J-15, China's First Carrierborne Fighter," The Diplomat, April 28, 2021, <https://thediplomat.com/2021/04/its-time-to-talk-about-j-15-chinas-first-carrierborne-fighter/>.

⁴¹¹ Wendell Minnick, "Chinese Media Takes Aim at J-15 Fighter," DefenseNews, September 28, 2013, <https://webarchive.loc.gov/all/20150810120751/http://archive.defensenews.com/article/20130928/DEFREG/309280009/Chinese-Media-Takes-Aim-J-15-Fighter>; Joe, "It's Time."

⁴¹² "How Does China's First Aircraft Carrier Stack Up?," Center for Strategic and International Studies, December 9, 2015, <https://www.csis.org/analysis/how-does-chinas-first-aircraft-carrier-stack>.

enemy, *Liaoning* must turn-to, steam, and launch aircraft in the direction away from the enemy, thereby giving enemy vessels valuable time and decision space. Such limitations remain inherent in *Liaoning*'s design and cannot be fixed except, perhaps, at extraordinary cost. As China's carrier aviation program continues to progress, *Liaoning*'s inability to launch different types of aircraft guarantee its quick obsolescence. Protection of such a vulnerable high-value unit becomes a significant burden on the escort ships. The PLAN tacitly acknowledged *Liaoning*'s limitations in a 2023 documentary, where the Executive Officer, Lu Qiangqiang, explains that "*Liaoning* has been upgraded to serve in a combat role, making it more than just a training vessel," but exactly what form these upgrades take is left unsaid.⁴¹³

The debut of China's carrier program owes more to the desire for national prestige than maritime strategy. By purchasing and restoring a decommissioned aircraft carrier, the PRC managed simultaneously to signal its membership among the most important states in the world and satisfy popular demands for an aircraft carrier. Because strategic thinking undoubtedly occurred in weighing whether to commission a Chinese aircraft carrier, as Glosny and Saunders have documented, it may be concluded that its promise of prestige at the time was a necessary but not sufficient condition. Furthermore, as a prestige piece, *Liaoning* need not be able to perform a carrier's role satisfactorily, because as Barry O'Neill notes, the Latin root of prestige means "to create an illusion."⁴¹⁴

B. SUMMARY

The end of ideological civil wars in the PLA removed a significant impediment that allowed professionals and technocrats to take the lead in PLAN development. Progress occurred under Liu's leadership, who more than anyone was responsible for articulating a new maritime vision made possible by the new strategy of Active Defense. While Liu would not remain in office long enough to steer the ship himself, his vision of modern surface combatants and carriers guided those after him.

⁴¹³ China Global Television Network, "Documentary: 'Generation Blue Water,'" video, 11:00, YouTube, April 21, 2023, https://www.youtube.com/watch?v=pw24KOY4wHg&ab_channel=CGTN.

⁴¹⁴ Barry O'Neill, *Honor, Symbols, and War* (Ann Arbor, MI: University of Michigan Press, 1999), 193.

By the 2000s, one may discern a general trend of increasing size and capability in PLAN ships. Whereas ship acquisition previously overshot the required capabilities for Near-Coast Defense, Near-Seas Active Defense embraced medium- and large-size surface combatants by the time *Sovremenny* purchases took place. From that point, acquisition of increasingly larger combatants like *Jiangkai*-class frigates and *Luyang*-class destroyers corresponded to a transition from traditional naval technology like guns to modern missile capability.

That systematic guided-missile destroyer construction did not occur until later, despite an approved shipbuilding plan in 1987, indicates obstacles to naval expansion. The focus on economic development that began under Deng provides the most obvious reason for neglecting naval expansion, especially in light of widespread PLA reductions around the same time. If Chinese policy sought to save the money otherwise paid in salary to PLA members, expensive endeavors like naval expansion perhaps posed a greater drain on the economy.

The turning point of the late 1990s in PLAN development overlapped with an increasingly robust economy reliant on overseas SLOCs and the inability to respond effectively to the USN carrier battle group during the Third Taiwan Strait Crisis. Pressure to expand the navy and the fiscal means to do so coalesced in the late 1990s to chart the PLAN's course to the modern day. As noted in the introduction, SLOC defense typically requires vessels with superior sea keeping. Combined with the requirements of modern naval warfighting, the Chinese need for technologically advanced surface combatants became most acute in the late 1990s.

The new course, however, did not result in the rapid acquisition of aircraft carriers, as Liu's vision might have directed. It would be another 16 years before China would commission its first carrier. Analysis of the overarching situation, therefore, may shed light on the timing of carrier acquisition. As noted above, Chinese citizens became preoccupied with their country's prestige in the 2000s, and in naval terms this manifested as promotion of aircraft carriers. Champions of carrier aviation did not always refer to its strategic benefits. Common points included its status as a symbolic statement of China's position in

the world relative to other great powers, as well as countries possessing carriers that would not typically rate great power status.

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V. PEOPLE’S REPUBLIC OF CHINA (2015–PRESENT)

A. ANALYSIS

China has pursued its current maritime strategy since 2015, and the eight years since its adoption has left less room for analysis of non-strategic factors compared to the more than 30 years each of its previous maritime strategies. Nonetheless, the current maritime strategy has overlapped with consequential changes in the PLAN that eventually made it the largest navy in the world. This chapter will cover the PLAN’s unprecedented naval expansion and argue that China’s shipbuilding efforts in this short time are most appropriately characterized as a response to the Global Financial Crisis. After that, seemingly retrograde shipbuilding efforts will be evaluated based on prestige principles.

In the 2010s, the Chinese economy continued impressive growth rates. Throughout the decade, China’s thirst for overseas oil continued to climb until it surpassed the U.S. as the world’s largest net importer of oil in 2017.⁴¹⁵ While a plurality of this oil originated in the Middle East, a spike in maritime piracy led to the passage of United Nations Security Council Resolution 1816, which “encourage [d] States interested in the use of commercial maritime routes off the coast of Somalia, to increase and coordinate their efforts to deter acts of piracy and armed robbery at sea.”⁴¹⁶ After the 2008 kidnapping of Chinese merchantmen by Somali pirates, China deployed warships to perform escort duties in the Gulf of Aden, although not as part of an international coalition like Combined Task Force 151.⁴¹⁷ At the same time, Chinese interests in the South China Sea increased with its

⁴¹⁵ U.S. Energy Information Administration, “China Is Now the World’s Largest Crude Oil Importer,” U.S. Energy Information Administration, January 31, 2018, https://www.eia.gov/petroleum/weekly/archive/2018/180131/includes/analysis_print.php.

⁴¹⁶ “Resolution 1816 (2008),” United Nations, June 2, 2008, <https://press.un.org/en/2008/sc9344.doc.htm>.

⁴¹⁷ Cindy Cheng, *China and U.S. Anti-Piracy Engagement in the Gulf of Aden and Western Indian Ocean Region*, Africa-U.S.-China Trilateral Cooperation Research Series 5 (Atlanta, GA: The Carter Center, 2019), 4, <https://www.cartercenter.org/resources/pdfs/peace/china/trs-05-anti-piracy-engagement.pdf>; Katja Lindskov Jacobsen and Jessica Larsen, “Piracy Studies Coming of Age: A Window on the Making of Maritime Intervention Actors,” *International Affairs (London)* 95, no. 5 (2019): 1039–40, <https://doi.org/10.1093/ia/iiz099>.

ongoing island-building campaigns and militarization of existing islands and reefs, as well as international pushback from the United States and Southeast Asian nations.⁴¹⁸

These events provide context for comments by the former PRC director-general of the Ministry of Foreign Affairs, who said, “the reform of the global governance system and the international order is accelerating, and the struggle for institutional power and the dominance of the future order has become the main battlefield of the game between major powers.”⁴¹⁹ While such comments may indicate a desire to transform the rules of the international order, Isaac Kardon argues that China at bottom is not as revisionist as is often claimed, especially in light of its track record of adherence in comparison to that of the United States.⁴²⁰ However, due to the strengthening of China in the twenty-first century, Kardon continues by writing, “A China that has only marginally revisionist aims but employs substantially greater power to achieve them is more capable of changing the rules than a China with revolutionary ambitions but relatively little power to realize them.”⁴²¹

In May 2015, China published its public white paper outlining its strategy of “winning informationized local wars.”⁴²² According to the white paper, “informationization” involves, in part, the increasing use of “long-range, precise, smart, stealthy and unmanned weapons and equipment.”⁴²³ Despite this “new stage” in “world revolution in military affairs,” the concept of Active Defense still constitutes “the essence of the [CCP’s] military strategic thought.”⁴²⁴

⁴¹⁸ International Crisis Group, *Competing Visions of International Order in the South China Sea* (Brussels: International Crisis Group, 2021), 5–7, <https://www.jstor.org/stable/resrep38456>.

⁴¹⁹ As quoted in Isaac B. Kardon, *China’s Law of the Sea: The New Rules of Maritime Order* (New Haven: Yale University Press, 2023), 7.

⁴²⁰ Kardon, *China’s Law of the Sea*, 8.

⁴²¹ Kardon, *China’s Law of the Sea*, 8–9.

⁴²² The State Council Information Office of the People’s Republic of China, *China’s Military Strategy (2015)* (Beijing: State Council Information Office of the People’s Republic of China, 2015), 11, <https://jamestown.org/wp-content/uploads/2016/07/China%E2%80%99s-Military-Strategy-2015.pdf>.

⁴²³ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy (2015)*, 6.

⁴²⁴ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy (2015)*, 6, 10.

In the maritime domain, the white paper repudiates past thinking when it states, “the traditional mentality that land outweighs sea must be abandoned.”⁴²⁵ In addition to “winning informationized local wars,” the strategy directs that “the basic point for [preparation for military struggle] will be placed on...highlighting maritime military struggle and maritime [preparation for military struggle].”⁴²⁶ The paper betrays an anxiety over China’s maritime interests when it states that “some of [China’s] offshore neighbors take provocative actions and reinforce their military presence on China’s reefs and islands that they have illegally occupied. Some external countries are also busy meddling in South China Sea affairs.”⁴²⁷

To respond to these maritime anxieties, the white paper announced a new maritime strategy called “Near Seas Defense and Far Seas Protection.”⁴²⁸ The new maritime strategy directs the following mission sets: “safeguard [China’s] national sovereignty and maritime rights and interests, protect the security of strategic SLOCs and overseas interests, and participate in international maritime cooperation.”⁴²⁹ To this end, the strategy tasks the PLAN to “build a combined, multi-functional and efficient marine combat force structure,” as well as “enhance its capabilities for strategic deterrence and counterattack, maritime maneuvers, joint operations at sea, comprehensive defense and comprehensive support.”⁴³⁰ Because China possesses many overseas interests due to Xi Jinping’s Belt and Road Initiative, the blue water strategy in the 2015 white paper becomes truly global.

⁴²⁵ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 16.

⁴²⁶ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 11.

⁴²⁷ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 5.

⁴²⁸ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 14. The English version of the white paper uses the locution “offshore waters defense with open seas protection,” although some analysts use their own translation. See Jennifer Rice and Erik Robb, “China Maritime Report No. 13: The Origins of ‘Near Seas Defense and Far Seas Protection,’” *CMSI China Maritime Reports* 13 (2021): 1, <https://digital-commons.usnwc.edu/cmsi-maritime-reports/13>.

⁴²⁹ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 16.

⁴³⁰ The State Council Information Office of the People’s Republic of China, *China’s Military Strategy* (2015), 14–15.

Fravel cautions that studies of recent changes in Chinese military strategy must remain preliminary due to the paucity of contemporary evidence.⁴³¹ Nevertheless, he asserts that “the focus on the maritime domain in the 2015 white paper suggests that threat perceptions are likely to play an even more important role in future changes in China’s strategy.”⁴³² Possible threat perceptions include the label of China as the US’s “pacing challenge” and foreign arms sales to Taiwan.⁴³³

While few new ship classes have been commissioned, China has recapitalized on its existing force structure. Serialized production of surface combatants and submarines designed in the 1990s or 2000s has continued apace, and as a result, China’s adherence to this new blue-water strategy has thus far held true. Improvements of existing platforms include the launching of the *Luyang III* with modified Vertical Launch System, Dragon Eye, and extended flight deck to accommodate larger helicopters, and *Shang II* submarines incorporating noise improvements.⁴³⁴ This trend dates back to the mid-2000s, when Gabe Collins and Andrew Erickson concluded that “China’s warship buildout thus far supports modernization and replacement, not rapid expansion.”⁴³⁵ With few exceptions, serialized production marks a fundamental change from previous construction patterns that built only a handful of hulls per class, such as the previous *Luhai*-, *Luhu*-, *Luzhou*-, *Luyang I*-, and *Jiangkai I*-class ships. The serialized production of the capable *Luyang III* is particularly notable in this regard, with over 25 hulls commissioned as of this writing.⁴³⁶

⁴³¹ Fravel, *Active Defense*, 217.

⁴³² Fravel, *Active Defense*, 234.

⁴³³ White House, *National Security Strategy of the United States of America* (Washington, DC: White House, 2022), 20, 24, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>.

⁴³⁴ “Luyang III (Type 052D/DL) Class (DDGHM),” Janes, August 1, 2023, https://customer.janes.com/display/JFS_B684-JFS_; “Image Shows New Variant of China’s Type 093 Attack Submarine,” Janes, June 23, 2016, <https://customer.janes.com/Janes/Display/jdw62278-jdw-2016>.

⁴³⁵ Gabe Collins and Andrew Erickson, “U.S. Navy Take Notice: China Is Becoming a World-Class Military Shipbuilder,” *The Diplomat*, November 1, 2012, <https://thediplomat.com/2012/11/u-s-navy-take-notice-china-is-becoming-a-world-class-military-shipbuilder/>.

⁴³⁶ “Luyang III (Type 052D/DL) Class (DDGHM),” Janes, September 22, 2023, https://customer.janes.com/display/JFS_B684-JFS_.

Exceptions to new construction, however, are the *Renhai*-class cruiser, *Hulunhu*-class replenishment ships, and China's third aircraft carrier, *Fujian*. The Pentagon classifies the *Renhai* as a guided-missile cruiser, and the class "represent [s] the culmination of China's efforts to build powerful long-range surface combatants," not least of which due to possessing almost twice as many vertical launch system cells as the *Luyang* III, China's second-largest combatant.⁴³⁷ The new *Hulunhu*-class of replenishment ships, a ship-type required for a country to extend its reach far beyond its own coast, has entered serial production and is estimated to be service-built to supply aircraft carriers.⁴³⁸ *Janes* notes that *Fujian*, China's only indigenously developed and constructed aircraft carrier in service, may function as "a direct counter to the USS *Gerald R Ford*-class of aircraft carriers," especially with its electromagnetic catapult.⁴³⁹ While the incorporation of a catapult promises to erase the tactical drawbacks of *Liaoning* and *Shandong* outlined above, the capabilities of China's third aircraft carrier remain unknown at this time.⁴⁴⁰

Perhaps most prominent since the adoption of China's new maritime strategy has been the tremendous increase in the size of the Chinese battle fleet, a scale captured by the phrase "dumping dumplings [in soup broth]" in Chinese language media.⁴⁴¹ In terms of money, *Janes* estimates China will have spent approximately \$5.2 billion to \$84.8 billion in naval construction between 2010 and 2024.⁴⁴² Such estimates must be qualified by the

⁴³⁷ Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China* (Washington, DC: Pentagon, 2021), 53–54, <https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF>; Eric Wertheim, "Type 055 Renhai-Class Cruiser: China's Premier Surface Combatant," United States Naval Institute, March 2023, <https://www.usni.org/magazines/proceedings/2023/march/type-055-renhai-class-cruiser-chinas-premier-surface-combatant>.

⁴³⁸ "Second Type 901 Carrier Supply Ship in Service with PLAN," *Janes*, February 12, 2019, https://customer.janes.com/Janes/Display/FG_1645200-JDW.

⁴³⁹ "Armed to the Teeth: China's New Aircraft Carrier Provides Unprecedented Strike Power," *Janes*, January 5, 2023, https://customer.janes.com/Janes/Display/BSP_52168-JDW.

⁴⁴⁰ Jack Lau, "China Launches Fujian, PLA Navy's 3rd Aircraft Carrier," *South China Morning Post*, June 17, 2022, <https://www.scmp.com/news/china/military/article/3182032/china-launches-fujian-pla-navys-3rd-aircraft-carrier>.

⁴⁴¹ As quoted in Andrew S. Erickson, "Introduction: China's Military Shipbuilding Industry Steams Ahead, On What Course?," in *Chinese Naval Shipbuilding: An Ambitious and Uncertain Course*, ed. Andrew S. Erickson (Annapolis, MD: Naval Institute Press, 2016), 1.

⁴⁴² As cited in Alex Pape and Tate Nurkin, "China's Naval Strength: Current and Future," in *Chinese Naval Shipbuilding: An Ambitious and Uncertain Course*, ed. Andrew S. Erikson (Annapolis, MD: Naval Institute Press, 2016), 107.

fact that, as Ronald O’Rourke writes, “the planned ultimate size and composition of China’s navy is not publicly known. In contrast to the U.S. Navy, China does not release a navy force-level goal.”⁴⁴³ Table 1 depicts the extent of PLAN expansion since the year 2000.

Table 1. Numbers of Chinese and U.S. Navy Battle Force Ships, 2000–2030⁴⁴⁴

Figures for Chinese ships taken from ONI information paper of February 2020							
	2000	2005	2010	2015	2020	2025	2030
Selected ship types							
Ballistic missile submarines	1	1	3	4	4	6	8
Nuclear-powered attack submarines	5	4	5	6	7	10	13
Diesel attack submarines	56	56	48	53	55	55	55
Aircraft carriers, cruisers, destroyers	19	25	25	26	43	55	65
Frigates, corvettes	38	43	50	74	102	120	135
Total number of China navy battle force ships, including types not shown above	210	220	220	255	360	400	425
Total U.S. Navy battle force ships	318	282	288	271	296	286	290
U.S. total above compared to China total above	+108	+62	+68	+16	-64	-114	-135

This titanic construction program has led to diverse interpretations among western observers regarding its ultimate meaning, with an unsurprising majority leaning into strictly strategic explanations. Erickson, channeling Mahan, writes that “for the first time in six centuries, commercial sea power development has flowed away from the Euro-Atlantic shipyards of the West, back toward an Asian land power that is going seaward to stay. Military sea power may be poised to follow.”⁴⁴⁵ James R. Holmes and Toshi Yoshihara observe that the focus on surface combatants and operations at sea involving

⁴⁴³ Ronald O’Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, CRS Report No. RL33153 (Washington, DC: Congressional Research Service, 2023), 4, <https://crsreports.congress.gov/product/pdf/RL/RL33153>.

⁴⁴⁴ Source: O’Rourke, *China Naval Modernization*, 10.

⁴⁴⁵ Andrew S. Erickson, “Chinese Naval Shipbuilding: Full Steam Ahead,” *Maritime Executive*, January 18, 2019, <https://www.maritime-executive.com/editorials/chinese-naval-shipbuilding-full-steam-ahead>.

surface action groups may indicate a focus on seizing and defending islands in the South China Sea.⁴⁴⁶ More alarmist interpretations have argued that “the PLAN is China’s point of the spear in its quest for global hegemony.”⁴⁴⁷

Other analysts, however, have stressed domestic factors as a possible driver of Chinese naval expansion. In articles analyzing China’s shipbuilding industry for lessons learned that India could apply, Monty Khanna and S. Navaneetha Krishnan view internal processes in China’s shipbuilding industry as instrumental to understanding China’s speed of ship construction. Krishnan points to the fact that Chinese shipyards fill both civilian and military orders for ships concurrently as evidence that the latter cannot be understood without the former.⁴⁴⁸ Khanna also mused in 2019, “Surges in military shipbuilding could be used to partially fill the troughs created by economic downturns thereby maintain a threshold of yard loading. One could make the argument that the current surge of military orders in China is partially driven by these reasons.”⁴⁴⁹

From 1999, reforms in China’s shipbuilding industry generated enormous shipyard capacity but did not accompany significant PLAN growth. In July of that year, China carved China Shipbuilding Industry Corporation (CSIC) out of China State Shipbuilding Corporation (CSSC), and the two conglomerates subsequently accounted for virtually all of its military shipbuilding.⁴⁵⁰ With intelligent automation like welding robots and high-speed plasma cutting machines, China increased the speed and precision with which it

⁴⁴⁶ James R. Holmes and Toshi Yoshihara, “Taking Stock of China’s Growing Navy: The Death and Life of Surface Fleets,” *Orbis* 61, no. 2 (2017): 276, <https://doi.org/10.1016/j.orbis.2017.02.010>.

⁴⁴⁷ James E. Fanell, “China’s Global Naval Strategy and Expanding Force Structure: Pathway to Hegemony,” *Naval War College Review*, no. 1 (Winter 2019): 13, <https://www.jstor.org/stable/26607110>.

⁴⁴⁸ S. Navaneetha Krishnan, “Analysis of Chinese Shipbuilding Industry: Strategic Lessons for India,” *Maritime Affairs: Journal of the National Maritime Foundation of India* 7, no. 2 (2011): 71, <https://doi.org/10.1080/09733159.2011.641395>.

⁴⁴⁹ Monty Khanna, “Understanding China’s Naval Ship Building Industry – Lessons India Can Learn,” *Maritime Affairs: Journal of the National Maritime Foundation of India* 15, no. 1 (2019): 6, <https://doi.org/10.1080/09733159.2019.1631512>.

⁴⁵⁰ Evan S. Medeiros et al., *A New Direction for China’s Defense Industry* (Santa Monica, CA: RAND, 2005), 114–15, <https://apps.dtic.mil/sti/pdfs/ADA449324.pdf>.

could construct any type of vessel.⁴⁵¹ Steady investment in the shipbuilding infrastructure since the early 1980s resulted in an industry that could produce over 20 million DWTs in 2008, while continued investment sought to push “China to its official goal of twenty-four million tons, or 35 percent of world total shipbuilding capacity, by 2015.”⁴⁵²

China also introduced the concept of “Military-Civil Fusion,” which the U.S. State Department describes as “systematically reorganizing the Chinese science and technology enterprise to ensure that new innovations simultaneously advance economic and military development.”⁴⁵³ For example, Bohai Shipyard, the sole builder of Chinese nuclear submarines, simultaneously builds civilian bulk carriers.⁴⁵⁴ In this spirit of fusion, China allowed private investment in warship construction, which led CSIC to sell \$2.93 billion and CSSC to sell \$1.39 billion worth of shares from 2008–2011 to get their foot in the door of this industry expansion.⁴⁵⁵ Such fusion is not unheard of. Daniel Todd and Michael Lindberg write that a state “can graft onto its merchant shipbuilding a naval dimension: thriving as a result of exports, the merchant shipbuilding industry essentially cross-subsidizes the emergence of a naval industrial base.”⁴⁵⁶

A collapse in shipping prices worldwide accompanied the 2008 Global Financial Crisis. The downturn began with persistently low shipping demand as measured by the Baltic Dry Index (BDI). The BDI is the most comprehensive “general indicator of shipment rates for dry bulk cargoes,” which bases its price assessments on “26 major shipping

⁴⁵¹ *Documentary: Visiting China Navy Shipyard, World Largest Shipbuild, Jiangnan Shipyard*, December 29, 2020, Hidden China documentary in English, Video, <https://www.youtube.com/watch?v=HLZ5024CVgs>.

⁴⁵² Gabriel Collins and Michael C. Grubb, *A Comprehensive Survey of China’s Dynamic Shipbuilding Industry*, CMSI Red Books, Study No. 1 (Newport, RI: China Maritime Studies Institute, 2008), 12, 31.

⁴⁵³ Office of the Secretary of State, *Military-Civil Fusion and the People’s Republic of China* (Washington, DC: White House, 2020), <https://www.state.gov/wp-content/uploads/2020/05/What-is-MCF-One-Pager.pdf>.

⁴⁵⁴ Khanna, “Understanding China’s Naval Ship Building Industry.”

⁴⁵⁵ Gabe Collins and Eric Anderson, “Resources for China’s State Shipbuilders: Now Including Global Capital Markets,” in *Chinese Naval Shipbuilding: An Ambitious and Uncertain Course* (Annapolis, MD: Naval Institute Press, 2016), 65.

⁴⁵⁶ Daniel Todd and Michael Lindberg, *Navies and Shipbuilding Industries: The Strained Symbiosis* (Westport, CT: Praeger, 1996), 76.

routes” for Capemax, Panamax, Handymax, and Supramax ships.⁴⁵⁷ If shipping demand remains low, BDI indices will remain low as well. In an empirical study of the BDI’s relationship to new shipbuilding prices, Lei Dai et al. conclude “that freight rate volatility is the most important and the positive determinant for newbuilding price volatility” in a variety of ship types.⁴⁵⁸ The BDI was also determined by Arthur J. Lin et al. to be a “short-term signal, especially during financial crises” due to its “significant effect on the commodities and U.S. currency markets when a financial crisis occurs in the U.S. or an emerging country such as China.”⁴⁵⁹ As it happened, from a record high of 11,793 points in May 2008, the BDI began its decline before the full onset of the Global Financial Crisis on September 16, 2008, eventually reaching 700 by November.⁴⁶⁰ From that point, further declines cratered the BDI at 290 points on February 10, 2016.⁴⁶¹

Low demand for shipping led to a decline in the world shipbuilding industry as low profitability in shipping reduced the need to build more merchant vessels, causing troubles for myriads of shipbuilders worldwide.⁴⁶² Between 2015 and 2016 there was a decline of 90% in global orders for bulk carriers.⁴⁶³ (The lag in time between the drop in shipping prices and its effects on shipbuilding are due to the years it takes to build existing orders

⁴⁵⁷ Elza Jurun, Nada Ratkovic, and Frano Moro, “The Baltic Dry Index and Performance Excellence in a Crisis Environment,” *Croatian Operational Research Review* 6, no. 2 (2015): 337, <https://doi.org/10.17535/corr.2015.0026>.

⁴⁵⁸ Lei Dai et al., “The Dynamics between Newbuilding Ship Price Volatility and Freight Volatility in Dry Bulk Shipping Market,” *International Journal of Shipping and Transport Logistics* 7, no. 4 (2015): 393, <https://doi.org/10.1504/IJSTL.2015.069666>.

⁴⁵⁹ Arthur J. Lin, Hai Yen Chang, and Jung Lieh Hsiao, “Does the Baltic Dry Index Drive Volatility Spillovers in the Commodities, Currency, or Stock Markets?,” *Transportation Research. Part E, Logistics and Transportation Review* 127 (2019): 266, 274, <https://doi.org/10.1016/j.tre.2019.05.013>.

⁴⁶⁰ “Baltic Exchange Dry Index,” Trading Economics, August 12, 2022, <https://tradingeconomics.com/commodity/baltic>; Jeffrey Rothfeder, “The Surprising Relevance of the Baltic Dry Index,” *New Yorker*, June 22, 2016, <https://www.newyorker.com/business/currency/the-surprising-relevance-of-the-baltic-dry-index>; Adam Tooze, *Crashed: How a Decade of Financial Crises Changed the World* (Viking, 2018), 1.

⁴⁶¹ “Baltic Exchange Dry Index”; Jin Yang, “Data Analysis of Shipping Cycle in Dry Bulk Market,” *Asian Social Science* 17, no. 8 (2021): 1, <https://doi.org/10.5539/ass.v17n8p1>.

⁴⁶² Robert Wright, “Shipbuilders Must Navigate the Recession,” *Financial Times*, January 3, 2010, <https://www.ft.com/content/79ae40a8-f893-11de-beb8-00144feab49a>.

⁴⁶³ The Medi Telegraph, “China, State-Owned Shipbuilder Goes Bankrupt as Industry Slows,” accessed August 8, 2022, <https://www.themeditelegraph.com/en/shipping/shipyard-and-offshore/2016/01/01/news/china-state-owned-shipbuilder-goes-bankrupt-as-industry-slows-1.38163915>.

of large merchant vessels placed before financial crises.)⁴⁶⁴ In shipyards that managed to stay afloat, the shortage of orders led to excess capacity as goliath cranes and drydocks remained idle.

Chinese shipyards likely would have continued churning out civilian vessels in enormous quantities until the Global Financial Crisis destroyed demand. China's Twelfth Five-Year Plan (2011–2015) placed priority in shipbuilding on “the development of large liquefied natural gas (LNG) and liquefied petroleum gas (LPG) vessels, ocean-going fishing vessels, luxury liners, and other high-tech and high-added-value vessels.”⁴⁶⁵ Unfortunately, cancellations of orders for such vessels occurred worldwide, leading to financial trouble for many Chinese shipyards.⁴⁶⁶ China's sizeable share of the world's shipbuilding industry left it vulnerable to strong fluctuations in the global market. Panel Jia Barwick et al. observe that China's “impressive output growth was achieved via a massive entry wave of new firms, which exacerbated industry fragmentation and led to low capacity utilization.”⁴⁶⁷ Such inefficiency formed a narrow foundation for most small companies seeking a profit in an industry with small profit margins. In addition, China's Commission of Science, Technology and Industry for National Defense estimated in 2006 that China's orderbook constituted 24% of the global market.⁴⁶⁸

The downturn in the shipbuilding industry also threatened the solvency of CSIC and CSSC, China's naval shipbuilders, due to the country's shipbuilding fusion. At the

⁴⁶⁴ Martin Stopford, *Maritime Economics*, 3rd Edition (New York: Routledge, 2009), 629, 631; “Global Recession Begins to Take Its Toll on Shipbuilding Industry,” Safety4Sea, June 28, 2011, <https://safety4sea.com/global-recession-begins-to-take-its-toll-on-shipbuilding-industry/>.

⁴⁶⁵ Central Committee of the Communist Party of China, *The Twelfth Five-Year Plan for National Economic and Social Development of the People's Republic of China* (Beijing, 2011), III.9.5, <https://policy.asiapacificenergy.org/sites/default/files/12th%20Five-Year%20Plan%20%282011-2015%29%20for%20National%20Economic%20and%20Social%20Development%20%28EN%29.pdf>.

⁴⁶⁶ The Medi Telegraph, “China, State-Owned Shipbuilder Goes Bankrupt as Industry Slows.”

⁴⁶⁷ Panle Jia Barwick, Myrto Kalouptsidi, and Nahim Bin Zahur, “Industrial Policy Implementation: Empirical Evidence from China's Shipbuilding Industry,” Cornell University Department of Economics, March 2021, 2, https://barwick.economics.cornell.edu/Yr21_20210310_ChinaShipyard.pdf.

⁴⁶⁸ Yin-Chung Tsai, “The Shipbuilding Industry in China,” *OECD Journal General Papers*, no. 3 (2010): 54, https://doi.org/10.1787/gen_papers-2010-5kg6z7tg5w5l.

time, CSIC and CSSC maintained 60–70% of China’s shipbuilding industry.⁴⁶⁹ In 2015, the total revenue of the shipbuilding industry in China amounted to CN¥789.38 billion, but each year thereafter it declined until it reached CN¥394.77 billion in 2019.⁴⁷⁰

The decline also affected the value of the companies themselves. After CSIC and CSSC stock share prices peaked at CN¥18.45 and CN¥68.6, respectively, in June 2015, stocks experienced precipitous falls over the next year to CN¥6.17 and CN¥21.73, respectively.⁴⁷¹ (For comparison, Japan’s Kawasaki Heavy Industries peaked at \$21.27 in April 2015 and declined to \$10.17 by February 2016, while South Korea’s Hanjin Shipbuilding & Construction Company peaked dropped from ₩34350 to ₩15250 in the same period.⁴⁷² Both companies compete with CSIC and CSSC in the global market.) China’s response sought to reduce capacity in the shipbuilding industry in a way that favored its military shipbuilding conglomerates. In 2014, China adopted a “white list” of favored shipyards who would receive government subsidies in order to prevent bankruptcy, which included the six CSIC and CSSC shipyards building warships.⁴⁷³ While others were allowed to fail and their capacity was absorbed or eliminated from the industry, the favored shipyards eventually built approximately 90% of vessel deliveries by 2016.⁴⁷⁴ In short, a narrow manufacturing base for naval ships, combined with the majority of the shipbuilding industry held by the same two companies surrounded by a host of crumbly firms in smaller

⁴⁶⁹ Laurent Daniel and Sunhye Lee, “Shipbuilding Policy and Market Developments in Selected Economies 2022,” *OECD Science, Technology and Industry Policy Papers*, no. 131 (June 2022): 115, <https://doi.org/10.1787/f3faeb3d-en>.

⁴⁷⁰ “Total Revenues of the Shipbuilding Industry in China from 2014 to 2021,” Statista, February 3, 2023, <https://www.statista.com/statistics/1064199/china-total-revenues-of-shipbuilding-industry/>.

⁴⁷¹ Yahoo! Finance, “China Shipbuilding Industry Company Limited (601989.SS),” Yahoo!, August 8, 2022, <https://finance.yahoo.com/quote/601989.SS/>; Yahoo! Finance, “China CSSC Holdings Limited (600150.SS),” Yahoo!, August 8, 2022, <https://finance.yahoo.com/quote/600150.SS/>.

⁴⁷² Yahoo! Finance, “Kawasaki Heavy Industries, Ltd. (KWHIY),” Yahoo!, accessed September 27, 2023, <https://finance.yahoo.com/quote/KWHIY/>; Yahoo! Finance, “HJ Shipbuilding & Construction Co., Ltd. (097230.KS),” Yahoo!, accessed September 27, 2023, <https://finance.yahoo.com/quote/097230.KS/>.

⁴⁷³ Jing Yang, “Beijing Adopts Selective Lending to Force Shipyard Consolidation,” *South China Morning Post*, December 8, 2014, <https://www.scmp.com/business/china-business/article/1657280/beijing-adopts-selective-lending-force-shipyard>.

⁴⁷⁴ “China Eliminates Shipyard ‘White List,’” *Maritime Executive*, April 3, 2019, <https://maritime-executive.com/article/china-eliminates-shipyard-white-list>.

shipyards, ensured that such a collapse as occurred in the late 2000s could be disastrous for China's civilian shipbuilding industry and warship construction capability.

China also assisted CSIC and CSSC by increasing procurement of naval ships. By 2015, China had commissioned 19 Type 054A frigates, with another four planned, but after the downturn China went on to build 30 Type 054A frigates total by 2019.⁴⁷⁵ Gabe Collins and Eric Anderson document how CSIC, which received 8% of its revenue in 2013 from military orders, received 19% a year later, with a defense-related orderbook up 68% in the same time frame.⁴⁷⁶ As Figure 1 shows, both CSIC and CSSC benefitted from defense revenues between 2015 and 2019.

Increasing the number of naval ships under construction in a time of crisis fills potentially vacant shipyard capacity. With berths filled in China's white-listed shipyards, both skilled and unskilled laborers working in the industry and along China's coastal economic heartland could remain employed. Yard loading would also ensure valuable investments in capital and infrastructure do not go to waste. China's Thirteenth Five-Year Plan (2016–2020), drafted and finalized after the downturn, did not mention civilian shipping vessels specifically, but instead aimed to “ensure a better allocation and appropriate sharing of resources between the military and localities so that both peacetime and wartime needs can be met” and to “give high priority to the mobilization of forces for maritime operations.”⁴⁷⁷ The transition from the specific civilian vessels previously outlined in the Twelfth Five-Year Plan to the vague support for military and maritime needs in the Thirteenth implies a connection between the de-prioritization of civilian shipbuilding and the prioritization of military shipbuilding.

⁴⁷⁵ Gabe Collins and Andrew Erickson, “The Type 054/054A Frigate Series: China's Most Produced and Deployed Large Modern Surface Combatant,” China Signpost, August 2, 2015, <https://www.chinasignpost.com/2015/08/02/the-type-054054a-frigate-series-chinas-most-produced-and-deployed-large-modern-surface-combatant/>; “Type 054A (Jiangkai II) Class Frigate,” Naval Technology, September 4, 2020, <https://www.naval-technology.com/projects/type-054a-jiangkai-ii-class-frigate/>.

⁴⁷⁶ Collins and Anderson, “Resources for China's State Shipbuilders,” 66.

⁴⁷⁷ Central Committee of the Communist Party of China, *The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020)*, trans. Compilation and Translation Bureau, Central Committee of the Communist Party of China (Beijing: Central Compilation & Translation Press, 2016), XIX.78, <https://policy.asiapacificenergy.org/node/2509>.

Why CSIC’s defense revenues increased much more significantly than CSSC’s is not known. However, reports in 2020 announced that CSIC’s former chairman, Hu Wenming, who had retired from CSIC in 2019, had been arrested for “suspected serious violations of discipline and law.”⁴⁷⁸ His arrest followed years of investigation of CSIC for endemic corruption, including “incomplete financial records [and] exchanging bribes for research funding,” among other things.⁴⁷⁹ He previously left his post as chairman of CSSC in 2015 to head CSIC, meaning his tenure there spans exactly the period measured by Figure 1.⁴⁸⁰ CSIC as the comparatively smaller company may also have required more financial support. More speculation than this will remain unsupported by the publicly acknowledged facts out of China.

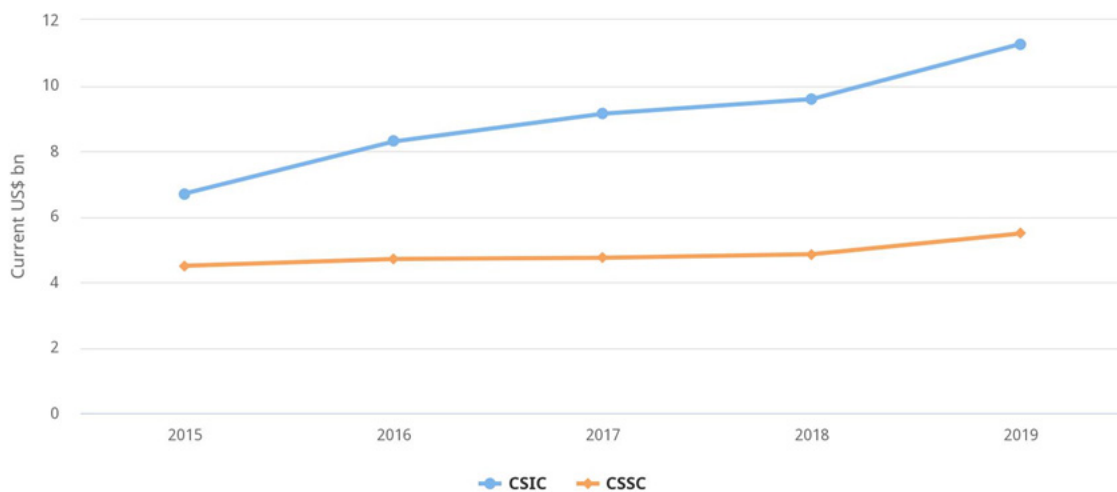


Figure 1. CSIC and CSSC Defense Revenues (2015–2019)⁴⁸¹

⁴⁷⁸ “Ex-Chairman of CSIC Under Investigation for Corruption,” *Maritime Executive*, May 13, 2020, <https://maritime-executive.com/article/ex-chairman-of-csic-under-investigation-for-corruption>.

⁴⁷⁹ Zi Yang, “The Invisible Threat to China’s Navy: Corruption,” *The Diplomat*, May 19, 2020, <https://thediplomat.com/2020/05/the-invisible-threat-to-chinas-navy-corruption/>.

⁴⁸⁰ Yang, “The Invisible Threat.”

⁴⁸¹ Source: Meia Nouwens, “Is China’s Shipbuilding Merger on Course?,” *Internal Institute for Strategic Studies—Military Balance Blog* (blog), September 4, 2020, <https://www.iiss.org/blogs/military-balance/2020/09/china-shipbuilding-merger>.

China remains the world's largest shipbuilding nation based on a delivery of 36.7 million gross tons in 2022, 13 tons more than South Korea, its nearest competitor.⁴⁸² Within China, CSSC and CSIC remain the first and second most profitable shipbuilders, respectively.⁴⁸³ Despite absorbing CSIC in November 2019, CSSC stock has increased only 5.5% since its low mark, and traded for CN¥29 as of August 2023.⁴⁸⁴ In turn, China's fourteenth and current Five-Year Plan (2021–2025) aims to “promote the simultaneous increase of national defense strength and economic strength” through “the organic combination of the military construction layout and the regional economic development layout and better serve the needs of the national security development strategy.”⁴⁸⁵ Shipbuilding is labor- and capital-intensive, and leaving shipyards and their workers idle wastes valuable expertise and infrastructure. For a country whose military shipbuilding is now dominated by a single entity, CSSC's health has become essential to maintain China's competitiveness in the global industry and naval strength.

As far as China's procurement of naval vessel types, any deviations from a maritime strategy that embraces the world will lie mostly in seemingly retrograde ships. In this category, the construction of a so-called tall ship training vessel in 2017 represents a step backward. So obvious is the step backward, of course, that its role lies completely outside capabilities and shipbuilding required by the 2015 white paper's maritime strategy. The ship of sail, reportedly used to train Chinese cadets at the Dalian Naval Academy, also

⁴⁸² “Largest Shipbuilding Nations in 2022, Based on Deliveries,” Statista, June 7, 2023, <https://www.statista.com/statistics/263895/shipbuilding-nations-worldwide-by-cgt/>.

⁴⁸³ “Revenue of the Shipbuilding Company China CSSC Holdings Ltd. from 2017 to 2022,” Statista, June 15, 2023, <https://www.statista.com/statistics/1063628/china-cssc-holdings-revenue/>; “Revenue of China Shipbuilding Industry Co.,Ltd (CSIC) from 2010 to 2022,” Statista, June 15, 2023, <https://www.statista.com/statistics/233540/revenue-of-china-shipbuilding-industry-company/>.

⁴⁸⁴ Yahoo! Finance, “CSSC Holdings.”

⁴⁸⁵ National People's Congress, *Outline of the People's Republic of China 14th Five-Year Plan for National Economic and Social Development and Long-Range Objectives for 2035*, ed. Ben Murphy, trans. Etcetera Language Group, Inc. (Washington, DC: Center for Security and Emerging Technology, 2021), 131, <https://cset.georgetown.edu/publication/china-14th-five-year-plan/>.

has advertised promise in furthering diplomacy.⁴⁸⁶ Its construction and role follows similar ships owned by the navies of Australia, Brazil, Indonesia, Oman, and others.⁴⁸⁷

A ship of sail entering port creates a less threatening impression on countries who receive it. In an era where the rise of China has generated strategic anxiety in East Asia, the quaint sight of a Chinese tall ship entering port may function as an instrument to assuage the image of China as a looming threat. While such a role would entail high visibility in the region, it has yet to visit any port in the world. Andrew Gordon denigrated the value of the “moribund art” of sailing seamanship in his analysis of the Royal Navy’s development between Trafalgar and Jutland, writing that naval cadets’ apprenticeships onboard two similar training ships amounted to “narrow formal schooling” in technology that was “an anachronism of the times.”⁴⁸⁸

With a high-visibility role, and the aim of dispelling notions of a regional Chinese threat, China’s tall ship may function as another prestige piece. If so, its role turns Gilady’s analysis upside-down by focusing on something smaller in size and perceived capability. Whereas aircraft carriers are “an effective instrument of power and therefore a credible prestige symbol,” and conspicuous based on its size and cost, a ship of sail is conspicuous in its anachronistic nature and lack of capability.⁴⁸⁹ Instead of signaling power, Chinese tall ships may function as something closer to what Gilady calls a “pure Veblen good,” or

⁴⁸⁶ Lyle J. Goldstein, “The Chinese Navy’s New ‘Tall Ship’ May Reveal Beijing’s True Intentions,” *The National Interest*, December 27, 2016, <https://nationalinterest.org/feature/the-chinese-navys-new-tall-ship-may-reveal-beijings-true-18828>; Dòmā Dòumiáo, “破浪号风帆训练舰已服役 · 我国海军又填补一项空白 [The Sail Training Ship Polang Has Entered Service, and the Chinese Navy Has Filled Another Gap],” *一点资讯* [Yidian Zixun], June 24, 2019, <https://www.yidianzixun.com/article/0MNfZIdI>.

⁴⁸⁷ John Perryman, “Semaphore: ‘Before the Mast’ in Young Endeavour,” *Royal Australian Navy*, 2011, <https://www.navy.gov.au/media-room/publications/semaphore-06-11>; Mikhail Voytenko, “Tall Ship CISNE BRANCO Collided with Bridge, Capsized Tug at Guayaquil,” *FleetMon*, October 18, 2021, <https://www.fleetmon.com/maritime-news/2021/35825/tall-ship-cisne-branco-collided-bridge-capsized-tu/>; “Dewaruci Starts Goodwill Mission to Asia,” *Antara*, July 6, 2011, <https://en.antaranews.com/news/73452/dewaruci-starts-goodwill-mission-to-asia>; “211,000 People Visit Shabab Oman II during Its 4th International Voyage,” *Times of Oman*, October 14, 2019, <https://timesofoman.com/article/2065403/oman/211000-people-visit-shabab-oman-ii-during-its-4th-international-voyage>; “中国海军破浪号的原型：荷兰2630型风帆训练舰 [Prototype of the Chinese Navy Breaking Waves: Dutch Type 2630 Sail Training Ship],” *Sina News*, December 30, 2017, <https://jmqqm1.sina.cn/ttpider/doc-ifyqcsft8383317.d.html>.

⁴⁸⁸ Andrew Gordon, *The Rules of the Game: Jutland and British Naval Command* (Annapolis, MD: Naval Institute Press, 1996), 165, 172, 174.

⁴⁸⁹ Gilady, *The Price of Prestige*, 57.

something which is “consumed solely for its signaling value” and “provides no utility of its own accord.”⁴⁹⁰ A modern navy constructing a ship of sail may signal that its builder pays respects to the origins of the maritime tradition. Conspicuous consumption of a ship of sail, while far cheaper than an aircraft carrier, remains nonetheless conspicuous when encountered on the high seas or in port.

B. SUMMARY

On April 12, 2018, Chinese president Xi Jinping conducted the largest fleet review in the history of the PRC. Onboard the destroyer *Changsha* in the South China Sea, he called for the PLAN to become a “world class force.”⁴⁹¹ As Table 1 shows, this fleet review coincided with China surpassing the United States as the country with the largest number of warships in its fleet. While still young, China’s current maritime strategy has widened the country’s maritime scope to the limit. At the same time, the PLAN has begun to build its most modernized ships in large numbers to match the mission.

Based on past patterns of shifts in Chinese maritime strategy, these stunning numbers cannot be explained through the lens of maritime strategy alone. Simply put, China lacks precedent for such a colossal naval expansion, because staggering procurements of warships never previously accompanied adoption of new maritime strategies. Strategic shifts that would entail increasing PLAN modernization, such as Hu Jintao’s 2004 New Historic Missions which aimed to defend Chinese sovereignty and interests abroad, and which Christopher Sharman characterizes as a kind of proto-maritime strategy, were not accompanied by staggering procurements of warships.⁴⁹² As Table 1 illustrates, while China led the world in shipbuilding between 2005 and 2010, no PLAN battle force growth occurred. This lack of growth implies a focus on modernization of existing ships. It was not until after 2010 that China began procuring warships in significant

⁴⁹⁰ Gilady, *The Price of Prestige*, 19.

⁴⁹¹ Ben Westcott, Steven Jiang, and Serenitie Wang, “Xi Jinping’s China Shows Off Force in South China Sea,” CNN, April 13, 2018, <https://www.cnn.com/2018/04/12/asia/xi-jinping-south-china-sea-intl>.

⁴⁹² Daniel M. Hartnett, “The ‘New Historic Missions’: Reflections on Hu Jintao’s Military Legacy,” in *Assessing the People’s Liberation Army in the Hu Jintao Era*, ed. Kamphausen, David Lai, and Travis Tanner (Carlisle Barracks, PA: United States Army War College Press, n.d.), 34; Sharman, *China Moves Out*, 1.

quantities, and the most enormous procurements occurred only after 2015. The same chronology also argues for why the 2015 shift to Near-Seas Defense and Far-Seas Protection alone cannot explain China's naval expansion, because the tide of acquisitions begins around 2010. While public-facing and otherwise classified details of China's new maritime strategy may have theoretically justified a naval expansion, it would have codified an expansion that had already begun.

Instead, when expansion occurred, it occurred in the wake of a global financial crisis with profound effects on the world's shipbuilding industry. The financial crisis fits the chronology of China's naval expansion, and the pressures it produced on China's shipbuilding industry generated strong motivators to increase naval shipbuilding. That crash in shipping demand fueled a corresponding crash in shipbuilding is evinced by a variety of empirical studies, and the causal factors are well known. In short, China's actions serve as an example of economic support of shipbuilding, divorced from maritime strategy. Like Britain between the world wars, as outlined in the introduction, China supported its domestic shipbuilding industry with naval procurements that kept shipyards and workers employed during an economic slowdown. Public spending as a response to the financial crisis was not even unique within China, as its 2008 stimulus and construction of so-called ghost cities shows.⁴⁹³ They had in common a desire to spend public funds to shore up the Chinese economy against the tsunami of crisis from the west.

⁴⁹³ Shaun Breslin, "Chinese Financial Statecraft and the Response to the Global Financial Crisis," in *Unexpected Outcomes: How Emerging Economies Survived the Global Financial Crisis*, ed. Carol Wise, Leslie Elliott Armijo, and Saori N. Katada (Washington, DC: Brookings Institution Press, 2015), 25; Wade Shepard, *Ghost Cities of China: The Story of Cities Without People in the World's Most Populated Country* (London: Zed Books, 2015), 197, <https://doi.org/10.5040/9781350220386>.

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VI. CONCLUSION

This thesis has explored the three phases of Chinese maritime strategy over the last 70 years and juxtaposed it with maritime strategy and shipbuilding evolution from Imperial Germany and Imperial Japan. Comparison of fleet composition with maritime goals articulated by PRC sources sometimes yielded inconsistencies and contradictions. With the comparative cases of Imperial Germany and Imperial Japan, unique features of the PLAN's development and driving forces may be teased out and larger lessons regarding maritime strategy may emerge.

For Imperial Germany and Imperial Japan, this study found factors like economic support, prestige, interservice rivalry, and corruption may affect a navy's development. As Sondhaus and Olivier pointed out, the emphasis of Stosch's influential 1873 naval shipbuilding program on lighter cruising vessels could neither protect home waters nor deploy without overseas bases, which Germany rejected at the time.⁴⁹⁴ The contradiction lay in Stosch's emphasis on supporting German industry, which lacked the capability to build more complex ships. The fundamental desire of German naval leaders until Tirpitz was to restrict naval spending as much as possible in favor of the army. This desire dominated all other factors, including maritime strategy, which itself suffered a period of confusion over the value of commerce raiding. Tirpitz set the IGN on a coherent path of long-term development. While inconsistent in precisely how his maritime strategy should work, his emphasis on a modern battle fleet became clear enough. Even so, battle fleet construction was sold in part on the basis of privileging industrialists and agrarians, as well as heading off socialist agitation.⁴⁹⁵

In Japan, the early Meiji government also subordinated the navy to the army and suffered from tighter budgets in its formative years. Because Japan is an island nation, however, it was forced to procure ships in reaction to immediate developments, and this pattern lent an improvisational quality to its first acquisitions. Without a long-term

⁴⁹⁴ Sondhaus, *Preparing for Weltpolitik*, 173; Olivier, *German Naval Strategy*, 99.

⁴⁹⁵ Weir, *Building the Kaiser's Navy*, 53; Steinberg, "Review: The Tirpitz Plan," 199.

shipbuilding plan with which to hold itself accountable, Mitsubishi's corruption was given freer expression in the navy than it might otherwise have had. The influence of Satsuma parochialism later proved instrumental in growing the Japanese fleet as Kawamura leveraged his ties to the clan to pass Japan's earliest shipbuilding programs.⁴⁹⁶ Furthermore, the IJN directly fostered a nationalist "south-seas consciousness" to apply political pressure to policy-makers in naval spending.⁴⁹⁷ *Jeune Ecole*, Japan's first maritime strategy tacitly endorsed in the hire of Bertin as architect of the navy, was embraced more for its lighter impact on the budget than the strategic needs of the state. Sato's later 1902 maritime strategy commissioned by Yamamoto articulated the need for a Japanese battle fleet, even though its true purpose lay in justifying appropriations Yamamoto had already decided to pursue.⁴⁹⁸ While fleet design preceded strategy in this case, Japan would nevertheless rigidly adhere to the modern battlefleet concept, to its detriment in the later Pacific War.

In China, the PLAN's development sometimes resembled the formative years of the IJN and IJN, but it underwent characteristic struggles unique to the country itself. The PRC suffered the restraints of small budgets in its early years, but this suited Chinese defense strategists who conceived the navy's role as an adjunct of the army and inseparable from power projected from land.⁴⁹⁹ Soviet assistance, however, enabled the PLAN to rapidly grow into a force able to sail beyond the horizon of land-based power. Because the navy accepted millions of rubles worth of vessels and assistance from the Soviet Union, it later faced a backlash when factions of the CCP turned against foreign technology and assistance.⁵⁰⁰ Even after the greatest constraints on the PLAN were lifted during the worst years of the GPCR, the Gang of Four decisively vetoed PLAN modernization based on Red ideology until its downfall.⁵⁰¹

⁴⁹⁶ Schencking, *Making Waves Politics*, 26–27.

⁴⁹⁷ Schencking, "Constructed Consciousness," 769.

⁴⁹⁸ Evans and Peattie, *Kaigun*, 136–37; Schencking, *Making Waves Politics*, 85.

⁴⁹⁹ Yoshihara, *Mao's Army Goes to Sea*, 45.

⁵⁰⁰ Zhang, Zhang, and Yao, "Technology Transfer," 116.

⁵⁰¹ Muller, *China as a Maritime Power*, 155.

In the 1980s, Liu as PLAN commander possessed a similar vision as Tirpitz and Yamamoto, but proved unable to translate the strategy he commissioned into a robust shipbuilding program. The dozens of naval ships delivered by the Soviet Union to China would later become the prototypes of Chinese copies or evolutions, the latter would not be constructed in large numbers. The state of the economy remained unable to support the naval expansion envisioned by Liu, which in turn failed to provide the pressures to protect China's commerce.⁵⁰² As a result, procurement from abroad characterized PLAN acquisitions for some time. Not until the Third Taiwan Strait Crisis, when the threat to China from the sea manifested itself most acutely and leaders found the economy might support naval expansion, did modernization commence in earnest. After Liu's tenure, part of the rise of nationalism in China that accompanied its emergence as a world economic force was directed toward the perceived need for an aircraft carrier.

Today's PLAN is the result of the modernization begun around the turn of the millennium, and while the acquisition of totally new ship classes has tapered off along with procurements from abroad, the current era has been characterized by serialized mass production of existing platforms. Like Stosch's shipbuilding program, the construction of hundreds of new vessels has provided financial support to strategically important companies and jobs to shipyards. This windfall of money into the industry created possibilities of corruption, and indeed China's shipbuilding conglomerates have been investigated with some leaders purged, but the scarcity of facts prevents further analysis. In any case, the unprecedented naval expansion that occurred as part of China's response to the Global Financial Crisis has made the PLAN the largest navy in the world.

The diversity of factors in naval shipbuilding and expansion provided explanations for inconsistencies between fleet composition and maritime strategy in every chapter. In some cases, inconsistencies resulted in ships more capable than what may have been required. Germany and Japan strove for armored ships early despite their cost. The PLAN procured Soviet surface combatants early, despite paying lip-service to people's war, and sought a nuclear-powered submarine throughout the 1960s theoretically capable of

⁵⁰² Li, "China's Naval Strategy and Capabilities," 125.

unlimited patrol range. A navy with surplus capability risks becoming wasteful, as the capital and infrastructure investment involved in shipbuilding can drain economic resources.

In other cases, inconsistencies produced ships less capable than they may have been otherwise. Stosch's unarmored corvettes lacked the capability to defend the coast, and his armored corvettes utilized obsolete armor. Tirpitz's precious battle fleet adopted turbine engines late, which also affected its firepower and prevented complete parity with the British fleet. Chinese destroyers built after Soviet models lacked the missile firepower of the era present in Soviet designs. Short-changing the capability of one's fleet carries significant risk in the event of war, and leaves open the possibility that any past investment may be destroyed in a single day's fighting.

Sometimes the results became mixed, even within the hull of a single ship. The single big gun of Imperial Japan's *Matsushima*-class unarmored cruiser possessed the capability to pierce armored vessels, but lacked the requisite armor for survivability. Chinese destroyers that could sail beyond coastal artillery range nonetheless lacked missile technology for self-defense against the country's recognized enemies. China's acquisition of an aircraft carrier joined its name to a short list of carrier-equipped navies, but came at the cost of a carrier lacking a catapult and whose hulk was over two-decades old by the time it commissioned. In each case, the ships suffered from severe tactical handicaps in accomplishing the mission for which they were ostensibly built.

Divergence from strategy occurred less often as a country approached modernization in its naval forces. Once serial construction of the battle fleet began, both Germany and Japan prioritized armored battleships and cruisers in shipbuilding. China has commenced serial construction of large surface combatants and carriers, combined with the auxiliary ships necessary to extend their range from shore. One may infer that, as progressive naval development closes in on the most modern technology available, there becomes less space with which to overshoot one's own required capabilities. Inconsistencies between fleet composition and maritime strategy become a matter of retrograde ships, as in submarines under Tirpitz and China's tall ships, and do not occur often due to the loss of capability and tremendous expenses already inherent in constructing

and maintaining a modern fleet. Simply put, the traditional wisdom of naval analysts that assumes maritime strategy fundamentally determines shipbuilding does not always hold true. While it may be true that maritime strategy drives the shipbuilding of mature navies, its influence may be outweighed by non-strategic factors for rising navies.

In general, a beginning strategy of coastal defense became too confining for the capabilities desired. As each country became a greater power and sought more influence abroad, the marriage of naval capability to the force projected from one's own coast restricted naval vision. If sufficient force for one's national strategy may be projected from land, there remains little incentive to store it within a ship. In each case, the limitations of coastal defense were overcome in order that the navy would remain a flexible tool of national policy.

The navies of each country developed as an interest group characterized in part by its interest in new technology, but other factors determined whether the navy succeeded in procuring and assimilating it. The comparative cases of Germany and Japan both showed naval interest in modernization for patriotic reasons, even if they may have overlapped with self-serving ones. Technological uncertainty at the time, however, forced circumspect acquisitions. But in the case of China, interest in the newest foreign technology led to suspicions regarding one's patriotism. Questions over one's commitment to revolution sprung from the perception of servitude to foreign ideas and technology. This factor set China apart from the IJN and IJN by virtue of the fact that it resulted in a conscious step backward in naval development.

In China, both ideological and economic constraints hindered naval modernization far longer than in Germany and Japan. But whereas ideological constraints evaporated over the course of a few years after Mao's death, the economy required decades of development and opening before fleet development followed suit. Like the IJN and IJN, once sufficient industrial capacity was in place, the construction of serialized modern surface combatants replaced parsimonious acquisitions.

Non-strategic factors, then, cannot be neglected in naval analysis. Because they co-exist with maritime strategy in the decision-making process, they may cause aberrations in

battle fleet design that operate in tension with maritime strategy. They may also function as the basis on which strategically rational choices are facilitated in the political process.

For the United States, the emergence of the PLAN as the world's largest navy in the previous decade functions as a potentially threatening force to its domination of the world commons. As a subject of strategic analysis, it has impressed a range of analysts who differ in the degree to which they view it as a looming threat. If non-strategic factors play a critical role in its development, including its ballooning size, then they weigh on the matter of Chinese intentions regarding the navy's role. If the large Chinese battle fleet is not China's chosen "pathway to hegemony," in James Fanell's words, and instead its size is the result of domestic factors, then its status as a looming threat is in some degree diminished.⁵⁰³

While CSSC remains a stable shipbuilder today, with the Global Financial Crisis behind it, it remains to be seen whether China will continue its accelerated naval shipbuilding program. However, there is one reason to believe it will not. Erickson wrote in 2019 that "a major mid-life maintenance bill for the overhauls of all new PLAN vessels will start coming due in the next 5–10 years...By then, China's aging society may reorient resource allocation by stimulating 'guns vs. butter,' and even 'guns vs. canes' debates."⁵⁰⁴ Furthermore, as ships reach their mid-life maintenance period, they will fill capacity in shipyards that may otherwise build new construction. Therefore, predictions of PLAN growth, such as that depicted in Table 1 which incorporate the extraordinary trend of the previous decade, may lead to overestimates. Indeed, it is at least partly due to China's accelerated construction in the 2010s that, as one analyst observes, "past foreign projections of Chinese military and Chinese navy procurement scale and speed have been underestimates."⁵⁰⁵

⁵⁰³ Fanell, "China's Global Naval Strategy," 13.

⁵⁰⁴ Erickson, "Chinese Naval Shipbuilding: Full Steam Ahead."

⁵⁰⁵ Rick Joe, "Hints of Chinese Naval Procurement Plans in the 2020s," *The Diplomat*, December 25, 2020, <https://thediplomat.com/2020/12/hints-of-chinese-naval-ambitions-in-the-2020s/>.

Further research may be conducted to examine what effects a surfeit of naval force in peacetime may create for China. If Erickson is correct that China seems destined for a readiness crisis due to future maintenance requirements for so many new ships, one may wonder whether the warships sliding down the slips now will rust pier-side in the near future, whether a use-it-or-lose-it mindset will take hold, or something between these. The IGN and IJN eventually sallied out from their bases to do battle after it became clear they would otherwise be wasted, but these were during wartime. China may find itself in a similar situation in peacetime.

As a modernizing force, the Communist Chinese navy may tend toward more rigid adherence to maritime strategy. It may also experiment with new, revolutionary designs in an effort to gain the lead in technology supremacy. Either way, the PLAN will continue to function as a cornerstone of the PRC's power abroad and remain one of the most significant hard power challenges to the United States.

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