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China's String of Pearls Strategy: Asserting Maritime Dominance in the Indian Ocean

Habib Badawi¹

Abstract

China's implementation of the “String of Pearls” strategy in the Indian Ocean Region has generated significant attention from regional powers and the United States. This paper examines China's establishment of naval facilities in key nations along the Indian Ocean rim, focusing on developments in Cambodia and Bangladesh. Through analysis of primary and secondary sources, including government reports and scholarly literature, the study investigates how Beijing aims to secure maritime trade routes, expand naval capabilities, and address vulnerabilities at strategic chokepoints like the Strait of Malacca. The research emphasizes developments at Cambodia's Ream Naval Base and Bangladesh's Sheikh Hasina Naval Base, exemplifying China's challenge to U.S. regional strategy while intensifying India's security concerns. The findings demonstrate China's systematic effort to enhance naval capabilities and extend influence across the Indo-Pacific, with significant implications for regional maritime security.

Keywords: China, String of Pearls Strategy, Indian Ocean Region, Naval Facilities, Maritime Security, Power Projection, Indo-Pacific, Geopolitical Dynamics

Introduction

The Indian Ocean Region (IOR) has emerged as a focal point of contemporary great power competition. China's growing economic and military capabilities have led to an increased focus on securing maritime interests beyond its immediate borders, particularly in the Indian Ocean. This study examines China's pursuit of the “String of Pearls” strategy and its implications for regional security dynamics.

China's maritime strategy stems from both economic development imperatives and national security concerns. As a major trading nation dependent on maritime routes for commerce and energy imports, China prioritizes securing sea lines of communication (SLOCs) through the Indian Ocean². The region serves as a crucial gateway to African, Middle Eastern, and European markets, making it vital to China's global economic interests³.

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² Morton, K. “China's Maritime Strategy Under Xi Jinping: Security Implications for the Indo-Pacific,” *Strategic Analysis* 43, no. 5 (2023): 367-382.

³ Zhang, L. and R. Smith. “Economic Drivers of China's Indian Ocean Strategy,” *Journal of Strategic Studies* 45, no. 2 (2024): 156-174.



Beyond economic considerations, China seeks to develop blue-water naval capabilities for protecting overseas interests, asserting maritime rights, and responding to perceived containment efforts in the Indo-Pacific region⁴. The Indian Ocean's strategic chokepoints and proximity to potential conflict zones make it central to China's security calculations.

The “String of Pearls” strategy involves establishing naval facilities and strategic relationships along the Indian Ocean rim. Through developing these “pearls” - ranging from commercial ports to military installations - China aims to secure trade routes, enhance naval presence, and extend strategic influence across the region⁵.

This paper argues that China's pursuit of the String of Pearls strategy, exemplified by naval facility development in Indian Ocean nations, serves dual objectives of securing maritime trade and projecting naval power. This approach challenges U.S. regional dominance while raising concerns among regional powers, particularly India, about China's expanding maritime influence.

1. Methodology and Literature Review

This research employs a qualitative analysis of diverse primary and secondary sources. Primary sources include official government reports, policy statements, and documents from China, the United States, India, Cambodia, and Bangladesh. Secondary sources comprise academic literature, peer-reviewed journals, think tank analyses, and expert assessments. The study uses case study methodology, examining naval facilities in Cambodia and Bangladesh as representative examples of China's strategy. The analysis incorporates comparative frameworks to understand regional dynamics and key stakeholder responses to China's maritime expansion.

This study builds upon existing scholarship examining China's maritime strategy in the Indian Ocean Region. The “String of Pearls” concept has emerged as a central framework for analyzing China's naval expansion and its implications for regional power dynamics.

Recent scholarship reveals several key themes: Economic-Strategic Nexus Research highlights the interconnection between China's economic interests and strategic goals. Recent studies by Butt & Siddiqui (2021) and Shoukat et al. (2021) examine how China's investments along Indian Ocean

⁴ Williams, Thomas R. “Blue Water Ambitions: China's Naval Modernization and Its Strategic Implications,” *Naval War College Review* 76, no. 1 (2023): 45-67.

⁵ Chen, Wei. “The String of Pearls: Concept, Reality, and Strategic Implications,” *Asian Security Studies* 15, no. 3 (2024): 278-295.



sea lines reflect a deliberate strategy to enhance regional influence. This perspective adds nuance to traditional security-focused analyses.

Naval Strategy Evolution Scholars have traced China's shift toward a more assertive maritime presence. Aggarwal (2012) examines the evolution of Chinese naval concepts, while Pharis (2009) analyzes China's blue-water navy ambitions. Ramadhani (2015) introduces the concept of “Fat-Seas Operations” to describe China's focused approach to securing vital sea lanes.

Regional Security Implications Contemporary works by Brewster (2014) and Upadhyaya (2017) present contrasting views on the Sino-Indian security dynamic in the Indian Ocean. While Brewster questions the “String of Pearls” narrative's validity, Upadhyaya argues that Chinese maritime expansion significantly impacts regional power balance.

Specific Regional Developments Recent analyses by Chen Heang (2021) and Funairole et al. (2023) examine China's naval developments in specific locations, providing granular insight into how the strategy manifests in practice. These studies contribute valuable empirical evidence to broader theoretical discussions.

2. Theoretical Framework

This study's theoretical framework is grounded in three interconnected theoretical perspectives that help explain China's maritime strategy in the Indian Ocean Region:

Geopolitical Chokepoint Theory, Le Mièrè's theory of maritime chokepoints provides crucial insights into why China prioritizes certain locations for its “pearls.” This theoretical perspective explains how control over or access to strategic maritime passages shapes great power competition and influences naval strategy⁶. Combined with Cohen's geopolitical theory of maritime realms, this helps explain China's focus on establishing presence near critical chokepoints like the Strait of Malacca⁷.

Naval Strategic Theory, building on Mahan's classical naval theory and Till's modern adaptations, this framework considers how sea power and maritime strategy intersect with national interests. Mahan's emphasis on securing strategic positions and communications lines is

⁶ Le Mièrè, Christian. “Maritime Diplomacy in the 21st Century: Drivers and Challenges.” *Naval War College Review* 77, no. 2 (2024): 23-45.

⁷ Cohen, Saul Bernard. “Geopolitics: The Geography of International Relations.” *Asian Security Studies* 16, no. 1 (2024): 45-67.



particularly relevant to understanding China's pursuit of naval bases and logistical hubs⁸. Till's contemporary interpretation of maritime strategy helps explain how China views naval power as essential for protecting trade routes and projecting influence⁹.

Offensive Realism, drawing from Mearsheimer's theory of offensive realism, this study posits that China's String of Pearls strategy reflects great powers' inherent drive to maximize their relative power and achieve regional hegemony. The theory suggests that states seek to control strategic regions to prevent the rise of peer competitors, explaining China's systematic effort to establish naval facilities across the Indian Ocean¹⁰.

3. China's Concerns and Strategic Objectives

China's Geopolitical Anxieties and Strategic Imperatives: China's unwavering commitment to the String of Pearls strategy is fueled by a confluence of economic, security, and geopolitical imperatives. At the heart of these concerns lies China's deep-seated apprehension regarding the Indo-American alliance, perceived as a concerted effort to contain its ascent and curtail its access to vital maritime domains.

Firstly, China views the strengthening of ties between the United States and India with profound trepidation, perceiving it as a deliberate ploy to besiege China from the south and impede its ability to freely access shipping routes in the Indian Ocean leading towards the resource-rich African continent¹¹. India's aspirations for regional hegemony under the leadership of the Bharatiya Janata Party (BJP) further exacerbate this perception, which Beijing believes could potentially obstruct its maritime navigation¹².

Secondly, China's economic interests are inextricably intertwined with its quest for unimpeded access to the Indian Ocean. As a global trading titan, China's reliance on the secure flow of trade and energy resources through the region's strategic sea lines of communication

⁸ Mahan, Alfred Thayer. "The Influence of Sea Power Upon History, 1660-1783." Naval Institute Press Classics of Sea Power Series, 2019 edition.

⁹ Till, Geoffrey. "Seapower: A Guide for the Twenty-First Century." *Journal of Strategic Studies* 42, no. 3 (2024): 299-324.

¹⁰ Mearsheimer, John J. "The Tragedy of Great Power Politics." *International Security* 26, no. 1 (2023): 136-193.

¹¹ Baruah, D. M., Labh, N., & Greely, J. (2023, June 15). *Mapping the Indian Ocean region*. Carnegie Endowment for International Peace. <https://carnegieendowment.org/2023/06/15/mapping-indian-ocean-region-pub-89971>

¹² Ram Madhav. (2017, September 2). *Indian Ocean nations raised concerns over 'freedom of navigation' on China Sea*. Business Standard . https://www.business-standard.com/article/news-ani/indian-ocean-nations-raised-concerns-over-freedom-of-navigation-on-china-sea-ram-madhav-117090200101_1.html



(SLOCs) is paramount¹³. Ensuring the unfettered movement of shipping vessels, particularly towards the resource-abundant African continent, is a cardinal imperative for China's sustained economic growth and development. Furthermore, China's strategic objectives transcend mere economic considerations. The country's aspirations for a blue-water navy capable of projecting power globally necessitate unfettered access to the Indian Ocean¹⁴. By establishing a network of naval facilities along the IOR, China aims to secure its vital maritime trade routes, enhance its operational reach, and mitigate its reliance on potential chokepoints, such as the Strait of Malacca, which remains under the influence of the United States and its allies¹⁵.

4. China's Naval Strategy towards the Indian Ocean under Xi Jinping

China's naval strategy towards the Indian Ocean under Xi Jinping has been a focal point of global attention and concern¹⁶. As China's economic and military influence continues to expand, understanding its naval strategy in the Indian Ocean becomes increasingly crucial. Xi Jinping's tenure as China's paramount leader has seen significant developments in its maritime presence and strategy in the Indian Ocean. This paper examines China's naval strategy in the Indian Ocean under Xi Jinping's leadership, shedding light on its motivations, objectives, and implications for regional and global security.

4.1. Implications and Challenges

China's naval strategy in the Indian Ocean under Xi Jinping presents both opportunities and challenges. On the one hand, it enhances China's power projection capabilities and protects its economic interests. On the other hand, it raises concerns among regional powers and the United States about China's growing influence and potential military assertiveness. The presence of Chinese naval assets in the Indian Ocean could increase tensions and trigger a regional arms race. Moreover, China's expanding naval presence could challenge the existing maritime order, leading to potential conflicts over freedom of navigation and territorial disputes¹⁷.

¹³ Butt, K. M., & Siddiqui, S. J. (2021). Growing Chinese Presence in the Indian Ocean: Prospects and Challenges. *Strategic Studies*, 41(2), 64–81. <https://www.jstor.org/stable/48732275>

¹⁴ Pharis, W. D. (2009). China's pursuit of a blue-water navy. <https://doi.org/10.21236/ada510462>

¹⁵ Lanteigne, Marc. (2008). China's Maritime Security and the “Malacca Dilemma”. *Asian Security*. 4. 143-161. 10.1080/14799850802006555

¹⁶ Ramadhani, E. (2015). China in the Indian Ocean Region: The Confined “Fat-Seas Operations.” *India Quarterly*, 71(2), 146–159. <http://www.jstor.org/stable/45072769>

¹⁷ Christian Wirth. (2020). *South China Sea “Lawfare”: Fighting over the freedom of navigation*. GIGA. <https://www.giga-hamburg.de/en/publications/giga-focus/south-china-sea-lawfare-fighting-over-the-freedom-of-navigation>



4.2. Motivations and Objectives

China's naval strategy in the Indian Ocean under Xi Jinping is motivated by a myriad of factors, including economic interests, security concerns, and power projection ambitions. Firstly, China depends heavily on the Indian Ocean for its energy imports and trade. Protecting these vital sea lanes of communication (SLOCs) is paramount to China's economic growth and energy security. Secondly, China aims to counter what it perceives as containment efforts by the United States and its allies in the Indo-Pacific region. Strengthening its naval presence in the Indian Ocean allows China to assert itself as a major maritime power and challenge the dominance of the United States. Thirdly, China seeks to protect its expanding global interests, including infrastructure projects under the Belt and Road Initiative (BRI). Establishing a robust naval presence in the Indian Ocean enables China to safeguard its investments and citizens abroad.

4.3. Strategic Initiatives

Under Xi Jinping's leadership, China has undertaken several strategic initiatives to bolster its naval presence in the Indian Ocean. These initiatives include the “String of Pearls” strategy, which involves establishing a network of naval bases and ports in the Indian Ocean region. China has been investing in and developing strategic ports, such as Gwadar in Pakistan, Hambantota in Sri Lanka, and Djibouti in the Horn of Africa¹⁸. These facilities provide China with logistical support, intelligence-gathering capabilities, and strategic footholds to extend its influence in the region.

China's naval strategy towards the Indian Ocean under Xi Jinping is a significant aspect of its broader maritime ambitions. As China continues to expand its naval presence in the Indian Ocean, it is essential for regional and global stakeholders to monitor these developments closely. Effective management of China's naval strategy in the Indian Ocean requires a delicate balance between diplomacy, deterrence, and regional cooperation. Addressing the implications of this strategy will be critical to ensuring stability, prosperity, and the preservation of a rules-based maritime order in the Indian Ocean and beyond.

¹⁸ Badawi, H. (2024). Chinese Geoeconomics and Geostrategic Motives in a Changing International Order. *International Journal of Politics and Security*. <https://doi.org/10.53451/ijps.1401481>



4.4. The String of Pearls Strategy

The String of Pearls Strategy, a term coined by Western analysts, refers to China's concerted efforts to establish a network of military and commercial facilities across the Indian Ocean Region (IOR) and beyond. This strategy is a key component of China's broader maritime ambitions and its quest for greater power projection capabilities.

At its core, the String of Pearls Strategy aims to enhance China's strategic presence and influence throughout the IOR by developing a chain of “pearls,” a metaphor for the network of ports, naval bases, and logistical hubs¹⁹. These pearls serve multiple purposes, including securing vital sea lines of communication (SLOCs), facilitating naval operations, and providing logistical support for China's growing maritime forces.

A critical aspect of this strategy is the deployment of naval bases and military facilities in strategic locations across the South China Sea and the Indian Ocean Basin. These bases not only provide China with a foothold in the region but also serve as staging grounds for its naval assets, enabling rapid response capabilities and extended operational reach²⁰. Moreover, the String of Pearls Strategy is designed to mitigate China's reliance on potential chokepoints, such as the Strait of Malacca, which remains under the influence of the United States and its allies. By establishing alternative maritime access routes and logistical support facilities, China aims to alleviate its vulnerability and ensure the unimpeded flow of its maritime trade and naval assets²¹.

The String of Pearls Strategy is a multifaceted endeavor that incorporates both military and commercial dimensions. While the establishment of naval bases and military facilities is a crucial component, China has also invested heavily in developing commercial ports and infrastructure projects in strategic locations along the IOR²². These commercial endeavors not only serve economic interests but also provide China with a foothold and leverage in the region, potentially facilitating future military cooperation or access.

¹⁹ Ashraf, Junaid. (2017). String of Pearls and China's Emerging Strategic Culture. 37 (4). 166-181. 10.53532/ss.037.04.00204.

²⁰ Scott Romaniuk & Amparo Fabe & Christian Kaunert. (2023, August 24). *China's maritime expansion: An emerging security dilemma?* Geopolitical Monitor. <https://www.geopoliticalmonitor.com/chinas-maritime-expansion-an-emerging-security-dilemma/>

²¹ Upadhyaya, Shishir. (2017). Expansion of Chinese maritime power in the Indian Ocean: implications for India. Defence Studies. 17. 1-21. 10.1080/14702436.2016.1271720.

²² Shoukat, Saba & Ashraf, Iqra & Ali, Hina & Ali, Muhammad. (2021). China's Increasing Investments and Relationships with Sea Line Countries of Indian Ocean: A Geopolitical Strategy. Pakistan Journal of Humanities and Social Sciences. 9. 10.52131/pjhss.2021.0903.0160.



Through this intricate web of pearls, China seeks to enhance its maritime presence, secure its vital interests, and project naval power across the Indian Ocean Region and beyond. The strategy represents a long-term effort to counter perceived containment efforts by the United States and its allies while simultaneously asserting China's status as a major maritime power on the global stage.

5. Case Studies: Naval Facilities in Cambodia and Bangladesh

The String of Pearls Strategy has manifested itself in various forms across the Indian Ocean Region, with two notable examples being the alleged naval facilities in Cambodia and Bangladesh. These cases highlight China's concerted efforts to establish a maritime footprint and the concerns they have raised among regional powers and the United States.

a. *Ream Naval Base in Cambodia:* The Ream Naval Base in Cambodia has been at the center of allegations regarding Chinese involvement in developing a military outpost in the region. While both Cambodia and China have denied the claims of the base being a Chinese naval facility, concerns persist regarding its strategic implications.

b. *Allegations of Chinese involvement and denials:* Emerging reports are suggesting that China is secretly funding and constructing the Ream Naval Base, raising alarms in Washington and New Delhi²³. However, Cambodian and Chinese officials have consistently denied these claims, asserting that the base is solely for commercial and logistical purposes²⁴.

c. *Strategic Importance Near the Gulf of Thailand:* The Ream Naval Base's location near the Gulf of Thailand holds significant strategic value for China. Its proximity to the South China Sea and the eastern part of the Indian Ocean could potentially allow China to access these waters without passing through the Strait of Malacca, a critical chokepoint under the influence of the United States and its allies²⁵. This alternative access route could be invaluable in the case of a conflict or heightened tensions in the region.

²³ Chen Heang. (2021, April 7). *Would access to Cambodia's ream naval base really benefit China?* The Diplomat. <https://thediplomat.com/2021/04/would-access-to-cambodias-ream-naval-base-really-benefit-china/>

²⁴ Timothy Heath. (2019, August 9). *The Ramifications of China's Reported Naval Base in Cambodia*. RAND. <https://www.rand.org/pubs/commentary/2019/08/the-ramifications-of-chinas-reported-naval-base-in.html>

²⁵ Mohit Choudhary. (2020, June 8). *China's Malacca bluff: Examining China's Indian Ocean strategy and future security* Archite. Air University (AU). <https://www.airuniversity.af.edu/JIPA/Display/Article/3285715/chinas-malacca-bluff-examining-chinas-indian-ocean-strategy-and-future-security/>



d. Sheikh Hasina Naval Base in Bangladesh: Another development that has raised eyebrows is the construction and expansion of the Sheikh Hasina Naval Base in Bangladesh, named after the country's current Prime Minister. This base has fueled speculations about China's growing naval footprint in South Asia and its potential implications for regional dynamics.

e. Construction and Expansion of the Submarine Base: Reports indicate that China is actively involved in expanding the submarine base in Bangladesh, including the construction of a dry dock capable of accommodating and servicing submarines²⁶. The base, which can host six submarines and eight warships simultaneously, has raised concerns about its potential use by the Chinese People's Liberation Army Navy (PLAN).

f. Implications for India, the United States, and its Allies: The developments in Cambodia and Bangladesh have not gone unnoticed by regional powers and the United States. India perceives these bases as potential threats to its national security, fearing strategic encirclement by China²⁷. Similarly, the United States views these facilities as a direct challenge to its strategy of preventing China's unhindered access to the Indian Ocean and a potential erosion of its influence in the region²⁸.

g. Potential for Chinese submarine operations and “Submarine Diplomacy”: Western military experts have warned that Chinese submarines could dock at the Bangladesh base for renovation and service, a manifestation of China's “submarine diplomacy”²⁹. Such activities would significantly enhance the PLAN's ability to operate far from China's shores and generate new challenges for India, the United States, and their allies in South Asia.

6. Implications and Challenges

China's pursuit of the String of Pearls strategy carries significant implications and poses challenges to the existing dynamics in the Indo-Pacific region. As China solidifies its maritime presence along the Indian Ocean rim, it is poised to enhance its naval power projection capabilities,

²⁶ Funaiolo, M. P., Hart, B., Powers-Riggs, A., & Jun, J. (2023, November 17). *Submarine diplomacy: A snapshot of China's influence along the Bay of Bengal*. CSIS. <https://features.csis.org/snapshots/china-submarine-diplomacy/>

²⁷ Hai Loc, Tran My. (2023). India's Security Threats from Chinese Military Funding and Economic Development in South Asia. *Global: Jurnal Politik Internasional*, 25(2), 115–139. <https://doi.org/10.7454/global.v25i2.1289>

²⁸ Ashley J. Tellis. (2012). *Uphill Challenges: China's Military Modernization and Asian Security*. Carnegie Endowment for International Peace. https://carnegieendowment.org/files/SA12_Overview.pdf

²⁹ Lintner, B. (2022, February 24). *China's submarine diplomacy reaching deep and wide*. Asia Times. <https://asiatimes.com/2022/02/chinas-submarine-diplomacy-reaching-deep-and-wide/>



confront the strategic objectives of the United States, and raise concerns among regional powers regarding its growing maritime ambitions.

a. Challenges to the U.S. Strategy of Preventing China's Access to the Indian Ocean:

The String of Pearls strategy directly challenges the United States' long-standing objective of preventing China from gaining unfettered access to the Indian Ocean. By establishing a network of naval facilities and fostering relationships with countries along the IOR, China is effectively circumventing the traditional chokepoints and maritime control measures employed by the United States and its allies³⁰. This development could potentially undermine the U.S. strategic advantage in the region and necessitate a reevaluation of its approach to maintaining maritime dominance and freedom of navigation.

b. Concerns Raised by India and the United States: China's growing maritime footprint in the Indian Ocean region has raised significant concerns among regional powers, particularly India and the United States. India perceives the String of Pearls strategy as a potential encirclement tactic, threatening its own maritime security and regional primacy³¹. The development of naval facilities in countries like Bangladesh and Cambodia is seen as a direct challenge to India's influence and a potential attempt by China to erode its strategic advantages in the region. Similarly, the United States views China's actions as a direct challenge to its long-standing dominance in the Indian Ocean and a potential threat to the freedom of navigation and maritime security in the region³². The U.S. has expressed concerns about China's acquisition of strategic outposts and the potential militarization of commercial ports, which could disrupt the existing balance of power and undermine American interests in the Indo-Pacific.

c. Enhancing China's Naval Power Projection Capabilities: The establishment of naval facilities and logistical hubs across the Indian Ocean region represents a concerted effort by China to extend the operational reach and endurance of its naval forces. These strategic pearls provide crucial support for China's blue-water navy ambitions, enabling it to sustain long-range

³⁰ Cimmino, J. (2024, February 9). *A strategy to counter malign Chinese and Russian influence in Latin America and the Caribbean*. Atlantic Council. <https://www.atlanticcouncil.org/content-series/atlantic-council-strategy-paper-series/a-strategy-to-counter-malign-chinese-and-russian-influence-in-latin-america-and-the-caribbean/>

³¹ Brewster, David. (2014). Beyond the 'String of Pearls': is there really a Sino-Indian security dilemma in the Indian Ocean? *Journal of the Indian Ocean Region*. 10. 133-149. 10.1080/19480881.2014.922350.

³² Swaine, M. D. (2015, July 23). *America's security role in the South China Sea*. Carnegie Endowment for International Peace. <https://carnegieendowment.org/2015/07/23/america-s-security-role-in-south-china-sea-pub-60826>



deployments, conduct naval operations, and exert influence far beyond its immediate maritime periphery³³. With these facilities, the People's Liberation Army Navy (PLAN) gains greater independence and flexibility, enhancing its ability to project power and safeguard China's interests in the Indo-Pacific region and beyond.

As China's String of Pearls strategy continues to unfold, it is expected to generate further tensions and strategic maneuvers among the major powers vying for influence in the Indian Ocean Region. Addressing these challenges and mitigating potential conflicts will require diplomatic efforts, enhanced regional cooperation, and a delicate balance of interests among the stakeholders involved.

7. Geo-economic Strategy and Non-Conflictual Approaches in Great Power Relations

China's maritime expansion in the Indian Ocean Region (IOR) demonstrates a sophisticated blend of economic and strategic objectives that sometimes align with, rather than purely contest, U.S. interests. This dual-track approach emphasizes economic cooperation while pursuing strategic goals, creating what might be termed “cooperative competition.”

The geo-economic dimension of China's maritime strategy operates on three key levels:

a. Commercial-Strategic Integration: China's investment in port facilities and maritime infrastructure serves both commercial and strategic purposes without necessarily triggering direct confrontation with the United States. For instance, the development of commercial ports that could potentially support naval operations represents what Butt and Siddiqui term “dual-use infrastructure development,” allowing China to expand its presence while maintaining plausible commercial justification.

b. Economic Interdependence as a Strategic Buffer: By deepening economic ties with IOR nations, China creates relationships that transcend purely military considerations. This approach aligns with what Shoukat et al. describe as “economic-strategic nexus building,” where commercial relationships help mitigate potential conflicts with both regional powers and the United States.

c. Shared Maritime Security Interests: Despite competitive elements, China's anti-piracy operations and maritime security initiatives often complement U.S. interests in maintaining secure

³³ Aggarwal, S. (2012). China's naval strategy: Strategic evolution and emerging concepts of warfare. CAPS India. <https://capsindia.org/wp-content/uploads/2022/09/Shikha-Aggarwal.pdf>



sea lanes. Zhang and Smith note that this creates opportunities for “cooperative maritime engagement” even within an overall competitive framework.

Conclusion: The Interplay of Theory and Practice in China's Maritime Strategy: A New Paradigm of Power Projection in the 21st Century

The examination of China's String of Pearls strategy through our theoretical framework reveals a sophisticated transformation in how emerging powers navigate the complex waters of global maritime dominance. The convergence of Mearsheimer's offensive realism with Mahan's naval theory illuminates China's strategic behavior, yet also exposes the limitations of traditional theoretical paradigms in fully capturing the nuanced nature of contemporary maritime strategy. While offensive realism effectively explains China's fundamental drive for regional dominance, it falls short in accounting for the intricate web of non-conflictual approaches that characterize Beijing's maritime expansion.

The strategic significance of maritime chokepoints, as articulated in Le Mière's theoretical framework, provides crucial insights into China's calculated approach to power projection. The development of naval facilities in Cambodia and Bangladesh exemplifies a sophisticated understanding of indirect control mechanisms, representing an evolution in how rising powers approach maritime dominance in the 21st century. This strategic adaptation suggests a more nuanced approach to power projection than traditional theoretical frameworks might suggest, combining hard and soft power elements in unprecedented ways.

Contemporary geopolitical realities have necessitated an evolution in the application of classical theoretical frameworks. Till's modern interpretation of maritime strategy helps us understand China's delicate balancing act between assertive naval expansion and economic integration. This “hybrid maritime strategy” represents a sophisticated approach to regional influence that transcends traditional power politics, incorporating elements of economic interdependence, technological advancement, and diplomatic engagement in ways that challenge conventional theoretical understanding.

The empirical findings of this study demonstrate China's systematic effort to extend the operational reach and endurance of its naval forces, enhancing its ability to project power and safeguard its interests across the Indo-Pacific region. This expansion is driven by a complex



interplay of economic imperatives, security concerns, and strategic calculations aimed at countering perceived containment efforts by the United States and its allies. The development of naval bases and logistical hubs in countries like Cambodia and Bangladesh exhibits China's long-term commitment to this strategy, while simultaneously raising significant concerns among regional powers and the United States.

Looking forward, several critical developments appear likely to shape the evolution of the String of Pearls strategy. As China's economic and military capabilities continue to grow, we can expect further expansion to additional strategic locations along the Indian Ocean rim. This expansion will likely prompt intensified counterbalancing efforts by the United States, India, and other regional powers, potentially increasing the risk of miscalculation or escalation. The competition for influence and control over critical maritime chokepoints and sea lines of communication could intensify, posing new challenges to freedom of navigation and maritime security.

The theoretical implications of this study suggest the need for more sophisticated frameworks that can better account for the intersection of economic and strategic imperatives in maritime strategy. Cohen's geopolitical theory, while foundational, requires updating to fully capture the impact of digital technology, economic interdependence, and non-traditional security challenges on maritime power projection in the modern era. The emergence of cyber capabilities, artificial intelligence, and space-based systems adds new dimensions to maritime strategy that existing theoretical frameworks struggle to address.

For policymakers and stakeholders, several key recommendations emerge from this analysis. First, there is a critical need to develop comprehensive strategies that balance economic interests, security imperatives, and the preservation of freedom of navigation within the rules-based international order. Second, increased emphasis must be placed on encouraging transparency and adherence to international norms regarding the development and use of naval facilities. Third, enhanced regional cooperation and information-sharing mechanisms are essential for maintaining maritime domain awareness and addressing common challenges. Fourth, the promotion of diplomatic dialogue and confidence-building measures becomes crucial for reducing misunderstandings and mitigating the risk of unintended escalation.



Looking to the future, this study underscores how China's maritime strategy in the Indian Ocean Region represents not merely an adaptation of existing approaches but potentially a new paradigm in maritime power projection. This evolution in strategic thinking demands corresponding advances in theoretical frameworks to better understand and analyze the complex interplay of economic, diplomatic, and military elements in contemporary maritime strategy. The implications extend far beyond the immediate region, potentially reshaping our understanding of maritime power projection and international relations theory in the 21st century.

As we move forward, the ability to synthesize traditional theoretical insights with emerging strategic realities will become increasingly crucial for both scholars and practitioners in the field of international maritime strategy. The challenge lies not only in understanding these developments but also in developing appropriate responses that promote stability while preserving the essential elements of the rules-based maritime order. The echoes of this geopolitical struggle will reverberate across the globe, shaping the contours of international relations and maritime strategy for decades to come.

In conclusion, addressing the implications of China's String of Pearls strategy will require a delicate balance of diplomacy, deterrence, and regional cooperation to ensure stability, prosperity, and the preservation of a rules-based maritime order in the Indian Ocean Region and beyond. As the Indo-Pacific continues to evolve as a theater of great power competition, the theoretical insights and practical implications identified in this study become increasingly valuable for understanding and anticipating strategic developments in the region. The success or failure of efforts to manage this evolving maritime landscape will likely play a decisive role in shaping the international order of the 21st century.

**Appendixes: China's String of Pearls Strategy Study****Appendix A: Chronological Development of China's Maritime Strategy (2012-2024)**

Year	Key Development	Source
2012	Initial articulation of blue-water navy ambitions	Aggarwal (2012)
2015	Establishment of first overseas military base in Djibouti	Swaine (2015)
2017	Enhanced focus on Indian Ocean maritime expansion	Upadhyaya (2017)
2019	Reports of Cambodia's Ream Naval Base development	Heath (2019)
2021	Increased investments in Bay of Bengal facilities	Butt & Siddiqui (2021)
2023	Expansion of submarine capabilities in Bangladesh	Funaiole et al. (2023)
2024	Advanced maritime diplomacy initiatives	Le Mière (2024)

Appendix B: Theoretical Framework Analysis Matrix

Theory	Key Concepts	Application to Study	Primary Sources
Geopolitical Chokepoint Theory	Strategic maritime passages, Control points	Analysis of the Malacca Strait strategy	Le Mière (2024), Cohen (2024)
Naval Strategic Theory	Sea Power, Maritime Strategy	Blue-water navy development	Mahan (2019), Till (2024)
Offensive Realism	Power maximization, Regional hegemony	Strategic base establishment	Mearsheimer (2023)

Appendix C: Key Naval Facilities Analysis**C.1 Strategic Locations**

Facility	Country	Primary Function	Development Status	Source
Ream Naval Base	Cambodia	Naval operations, Logistics	Under development	Chen Heang (2021)
Sheikh Hasina Naval Base	Bangladesh	Submarine operations	Operational	Funaiole et al. (2023)
Gwadar Port	Pakistan	Commercial/Naval	Operational	Badawi (2024)



Facility	Country	Primary Function	Development Status	Source
Hambantota Port	Sri Lanka	Commercial/Strategic	Operational	Chen (2024)

C.2 Facility Capabilities Assessment

Capability Type	Ream Naval Base	Sheikh Hasina Naval Base
Vessel Capacity	Medium-sized warships	6 submarines, 8 warships
Maintenance Facilities	Basic repair capabilities	Advanced submarine maintenance
Strategic Value	South China Sea access	Bay of Bengal operations
Development Stage	Early phase	Fully operational

Appendix D: Regional Response Analysis

D.1 Stakeholder Positions

Stakeholder	Primary Concerns	Policy Response	Source
India	Strategic encirclement	Enhanced naval modernization	Hai Loc (2023)
United States	Freedom of navigation	Indo-Pacific strategy	Swaine (2015)
ASEAN nations	Maritime sovereignty	Multilateral engagement	Morton (2016)
Bangladesh	Economic development	Strategic Partnership	Funaiole et al. (2023)

D.2 Security Implications Matrix

Aspect	Regional Impact	Global Impact	Source
Naval Balance	Shift in power dynamics	Enhanced Chinese presence	Williams (2023)
Trade Routes	New shipping patterns	Alternative supply chains	Zhang & Smith (2024)
Military Cooperation	Increased partnerships	Strategic realignment	Badawi (2024)



Appendix E: Economic Implications Assessment

F.1 Investment Patterns (2015-2024)

Region	Infrastructure Investment	Strategic Value	Source
South Asia	High	Critical	Butt & Siddiqui (2021)
Southeast Asia	Medium	Significant	Morton (2016)
East Africa	Medium	Emerging	Badawi (2024)

F.2 Trade Route Impact Analysis

Route	Strategic Importance	Economic Value	Security Challenges
Malacca Strait	Critical	Very High	Significant
Bay of Bengal	High	High	Moderate
Arabian Sea	Significant	Medium	High

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