

## **‘Beyond Hardware and Technology’: The Intangibles of China’s Naval Power (Part 1)**

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*This is part one of a three-part series on China's naval power*

### **(PART 1: MILITARY-STRATEGIC LEVEL)**

The past two decades have witnessed a phenomenal growth in China’s naval capabilities. The ‘rise’ of China as a global power has led to its increased politico-military assertiveness far from Chinese shores. In turn, this is leading to shifting regional military balances and attendant insecurities, beginning with the Pacific Asia, and spilling over into the broader Indo-Pacific region. Attendant upon this is the enhanced attention of strategists, academicians and policymakers around the globe to China’s growing potential for maritime force projection in the Indo-Pacific region and beyond.

In this regard, much analysis thus far has focused on examining the military balance based on the PLA Navy’s existing and projected force-levels, and associated hardware inductions and technological progression; either in general, or specifically in the context of a conflict in the Western Pacific rim. Undeniably, examining these tangible elements could provide valuable indicators of the potency of China’s naval power. However, military capability is a function of more than merely hardware and technology.

The intent, objectives and strategy; tradition, operational experience and joint-service synergy; and the trends with regard to training and exercises, maintenance philosophy, and so on; all constitute rather intangible elements of the PLA Navy, which would play a major role in determining the effectiveness of China’s naval power in combat. The most fundamental intangible character is ‘Doctrine’: a set of beliefs and principles that spans all three levels – military-strategic, operational (theatre/ campaign-level) and tactical – and governs all other intangible elements of maritime-military power. This part of the paper

intends to examine the intangibles of Chinese naval power at the ‘military-strategic’ level. The ‘operational’ and ‘tactical’ levels would be assessed later as parts 2 and 3 respectively as sequels to this part of the paper.

## **Transformation of Naval Doctrine**

Naval Doctrine is the set of beliefs and thoughts of a country’s naval forces, on how the forces would preserve national interests and objectives relating to the maritime domain; those including - but not exclusive to – safeguarding national-security military and non-military threats. Usually such a doctrine evolves over a relatively long period of time through iterations based on maturing of national-strategic doctrine. But in case of China, which has traditionally been a continental power, the change of its naval doctrine has been transformative. It has occurred in such a short time duration so as to be unprecedented in modern history.

China has not been transparent in this process, making it difficult to develop a more profound understanding of its military doctrines. Nonetheless, if one tracks the trajectory of the doctrinal developments and its major facets, two characteristics emerge clearly. First, the perception of severe threat against its sovereignty by potential adversaries has pushed China to ‘fast-track’ its military doctrine development, particularly its naval doctrine. Second, it is clear that Chinese naval doctrine has been shaped by the symbolism of acquiring the G-2 ‘Great Power’ status aside the United States, and hence driven by a sense of competition with the Western maritime powers, against the backdrop of China’s sense of inferiority, and even an emotion of vengeance. Due to the rapid nature of its evolution, at the strategic level, China’s naval doctrine cannot be considered as ‘mature’ in the traditional sense, due simply to the sheer speed of its development.. This emerges clearly from an analysis of the trajectory of the PLA Navy’s doctrine development since the 1980s.

### ***The 1980s***

Until the mid-1980s both the United States and the Soviet Union were very real potential adversaries. At that time, the “[People’s War](#)” doctrine sought ‘strategic depth’ by capitalizing upon China’s advantages in terms of vast territory and population. By mid-1980s, owing to the Cold War nuclear stalemate and conflicts like the 1982 Falklands War, China realized that large-scale wars were unlikely; and therefore, reconfigured its military doctrine from “People’s War” to fighting a conventional “[Local and Limited War](#)”. This led to the shift in naval doctrine from static “coastal defense” to “[active offshore defense](#)”. The term ‘active defense’ draws from China’s updated military doctrine of offensive action at operational and

tactical levels, while retaining a defensive posture at the strategic level. In more functional terms, it necessitates the neutralisation of a threat well outside China's periphery; and thereby translates into the need for 'strategic depth' beyond – rather than within – Chinese sovereign territory. The measure of such 'depth' was deliberately not defined deliberately, since China wanted to enhance it progressively in tandem with the increasing distance to which the China's military would be capable of influencing events. Likewise, in naval terms, the quantification of 'offshore' was dynamic.

### ***The 1990s***

In the early-1990s, the fall of Soviet Union reduced the likelihood of a major war further, and validated China's military doctrine tailored for limited wars. However, the first Gulf War highlighted China's vulnerability in terms of its warfighting technology differential vis-à-vis the United States. Accordingly, in 1993, Beijing promulgated its national military strategy titled "The Military Strategic Guidelines for the New Period," wherein it stressed on military modernisation encompassing equipment development and procurement, and institutional and organizational reforms; and introduced the concept of "local wars under high-technology conditions". (Later in 2004, this concept was modified to "local wars under informationalized conditions".)

As a result of China's increased emphasis on technology, by the first half of 1990s, the PLA Navy began inducting domestically-designed second-generation platforms, which represented a quantum leap over its Soviet-design platforms (built before 1980s), which were equipped with obsolete weapon systems and were prone to machinery breakdowns. A notable induction was the new-generation *Shang*-class nuclear attack submarines (SSN).

Nonetheless, China's military doctrine remained antiquated in all its dimensions – land, sea and air. This realization dawned upon China soon after the Taiwan Strait crisis of 1996, which made it critical for China to upgrade its doctrine, particularly to secure its vulnerable maritime frontier. In 1999, China issued new classified campaign guidance documents called [\*Campaign Ganguyao\*](#) (纲要), fleshing out the warfighting concept for each service through service-specific combat-doctrine manuals (战斗条令).

Meanwhile, China accelerated the technological upgradation of its naval platforms. By late-1990s, China began to build modular design third-generation naval platforms *Luhai*-class destroyers and *Jiangwei*-class frigate to improve upon its second-generation ones of the early-1990s, which has been beset by many constructional flaws and design deficiencies. Notably, in 1999, the PLANavy also began inducting the Russian *Sovremenny* destroyers and

also the *Song*-class indigenous attack submarine (SSG) capable of submerged missile launch.

### ***The 2000s***

By early 2000s, China has accumulated much self-confidence as a major power, with the attendant realisation of the importance of the sea for retaining and perpetuating such status. A [Chinese writing](#) says,

“Until the 17<sup>th</sup> century, the global economy was dominated by continental powers. Later, with sea trade gradually replacing land-based economy, and locus of world economy gradually shifted westward, leading to prosperity in Europe, and then the Americas. Countries like Spain, the Netherlands, the United Kingdom, and later the United States who mastered sea power, prospered and took turns in exercising hegemony across the globe. Despite China’s inherent economic strengths, its weakness to influence events at sea is a major adversity which China has not overcome over the ages. But now, with the rise of China having led to global focus on Asia, China will need to realize the continued relevance of sea-power for economic interactions (paraphrased extract translated from Mandarin)....”

Soon, China’s political leadership began a campaign for psychological mobilization of Chinese youth to build Chinese “sea power” by recalling the country’s long-forgotten 15<sup>th</sup> century seafaring tradition of Zeng He. This led to a major transformation in China’s naval doctrine. In 2004, China’s Central Military Commission issued a revised set of “military strategic guidelines”. While the emphasis of China’s strategy was still on traditional military security in the Western Pacific (and this has continued so), and began developing blue-water naval power to preserve its expanding economic interests. As the same [Chinese writing](#) says,

“...Of course, as compared to exercising influence over events on land, developing effective sea power is easier said than done. It needs to be achieved progressively outwards from the first island chain – even if it implies in military opposition to the United States and other inimical littoral countries – so as to create strategic depth for China (paraphrased extract translated from Mandarin)”.

Possessing an effective blue-water navy was not an easy task for a traditionally continental power like China, but it was essential for two reasons:

- First, for distant power-projection, including projection of ‘soft’ power to propagate national influence; and later, for (hard) ‘force-projection’, as and when required to preserve its vital interest overseas.

- Second, for enhancement of ‘strategic depth’. While this was the most immediate compelling need for the nation’s territorial security, in the longer term, it was also essential for securing China’s vital maritime and overseas interests.

China thus began to take concerted measures to bolster its naval power, and even named the PLA Navy as a “strategic service”. In 2003-04, the PLA Navy began to assume a role in higher policy-making when Admiral Zhang Dingfa, the PLA Navy Commander (along with his counterparts of PLA Air Force and Second Artillery) became members of the Central Military Commission (CMC) for the first time. Around the same time, China began to reorganise its Coast Guard for better management of its extensive maritime-territorial claims, which freeing the naval forces for distant blue-water missions (yuanhai, 远海). Around mid-2000s, the PLA Navy began inducting blue-water assets such as the Type 052 B/C destroyers and the Type 054 frigates, besides the *Yuan*-class submarines. It was also the time when China’s geo-strategic intent in the Indian Ocean Region (IOR) appeared, expressed as “[String of Pearls](#)”. However, it was not amply clear at that time if China’s intent was to develop overseas military bases in the IOR. In December 2008, the PLA Navy began the anti-piracy mission in Gulf of Aden, which was its first foray into the Indian Ocean and began to be [predicted](#) as a precursor to China’s permanent naval presence in the IOR.

### ***The 2010s***

In the beginning of the current decade, China blue-water endeavours became more conspicuous, including for securing its overseas interests beyond the Western Pacific. For instance, in 2010, PLA Navy began conducting annual humanitarian assistance missions with *Anwei*-class (Type 920) hospital ship *Peace Ark* deployed to South Asia (2010), Latin America (2011) and Africa (2013). In 2011, China evacuated approximately 36,000 Chinese nationals from Libya predominantly via the sea (also employing its warships). In February 2014, China undertook an unprecedented show of naval might when its warships sailed through the Sunda Strait, conducted a [naval exercise](#) off Australia’s Christmas islands, and returned to the South China Sea via the Lombok strait. Similar exercises in the same area were conducted on [two occasions](#) in the later years.

President Xi Jinping’s ‘[Maritime Silk Road](#)’ ([21世纪海上丝绸之路](#)) vision launched in 2013 reinforced the imperative for the PLA Navy to adhere to the dictum ‘flag follows trade’. Accordingly, China’s 2014 Defence White Paper published in May 2015 – which was first official articulation of China’s military strategy - was the first to explicitly state the PLA Navy’s task of “open seas protection”. This indicated a shift from the PLA Navy’s doctrine of ‘offshore defence’ to that of ‘offshore defence-cum-open seas protection’ for securing China’s distant

interests. Undeniably, the most critical of these interests is China's energy 'lifelines' transiting the IOR that make up much of its 'strategic vulnerability' to a interdiction by the US or India. This makes the protection of its Sea Lines of Communication (SLOC) among the most important functions of PLA Navy missions in the IOR, and reinforces the prognosis of China's permanent naval presence in the IOR.

## **Doctrine Duality: Sea Denial & Sea Control**

China's prevailing military-strategic doctrine of "active offshore defense – cum – open sea protection" has compelled the PLA Navy to tailor itself for both 'Sea Denial' and 'Sea Control', thereby diluting its naval doctrine. China's primary strategic imperative is to build strategic depth in the Western Pacific against its potential adversaries, who continue to be vastly superior in technological terms, a reality that is not lost upon Beijing ever since the demonstration of US military-technological prowess in the 1990s. In maritime-military terms, this translates into the suitability of 'sea-denial' concept (as part of the overall strategy of asymmetric warfare), which continues to be PLA Navy's primary doctrinal approach. As China's [9<sup>th</sup> Defence White Paper](#) of 2014, published in 2015 stated, "You fight your way and I fight my way."

However, since early-1980s, the PLA Navy has been making endeavours to develop the 'sea-control' concept concurrently, aspiring to operate an aircraft carrier. As is evident from the numerous [Chinese writings](#) on the subject, this approach flows from the overbearing influence upon Chinese thought of Admiral Alfred Thayer Mahan and his concept of 'Command of the Seas'. In 1985, the *Melborne* was purchased from Australia as scrap to examine its design. At that time, this decision was driven by the PLA Navy, without much support of the political leadership. Amid much internal debate, over the following two decades, political leadership support for a carrier navy arrived in mid-2000s, paralleling along with China's rise to true "great power" status. It eventually progressed to the present state wherein the *Liaoning* is operationalized, a domestic carrier is about to be launched, and more 'flat-tops' are likely to follow.

However, given China's geo-strategic setting, a carrier-based sea-control doctrine is unsuitable in strategic and operational terms. An aircraft carrier would be highly vulnerable in China's maritime periphery that is 'dotted' by the numerous 'unfriendly' air bases. The Chinese carrier would also need to be protected against the rapidly increasing threat of advanced submarines of the US, Japan, South Korea, Vietnam; and possibly, of Australia and India. A carrier would be extremely vulnerable to the sub-surface threats, considering that the waters off the Western Pacific rim favour submarine operations due to their relatively

lesser depths and mixed gradients of temperature and salinity. The growing submarine threat becomes a very serious issue for Chinese carriers considering that Anti-Submarine Warfare (ASW) has not been among the strengths of the PLA Navy (examined in detail in Part 3 of this paper). Operating a carrier would also stretch the available resources of the PLA Navy for its protection and logistics, without commensurate operational advantages. Furthermore, this symbolic leap in China's military capabilities is adding to the alarm among China's neighbours, which is counterproductive for China to propagate its regional influence meet its broader national-strategic objectives.

Nonetheless, China has sustained its commitment to doctrinal duality – Sea Denial and carrier-based Sea Control – at a rather high cost to its core national interests in its maritime periphery. Even if the Chinese were to opt for sea-control to meet its objectives in the Western Pacific, it would have been more prudent to hinge the sea-control doctrine on land-based fighters while augmenting air-basing on its occupied islands. The currently ongoing [land reclamation of South China Sea islands](#) would have been invaluable to give effect to such doctrine.

Operationalisation of a carrier task-force to be able to establish sea-control requires a fairly long gestation time (decades), and the Chinese are well-known to think far ahead in time. Also, developing aircraft carriers would be essential for China to project power in the Indian Ocean and beyond as it continues to build on the Mahan doctrine. However, investing in carrier-based sea control doctrine is pre-mature for China, and a contradiction in strategic terms. Beijing cannot deny that its immediate challenges in the Western Pacific against the US and its allies are rather serious. Therefore, unless China's investments are prioritised, it may never be able to reach the latter envisaged stage of global power-projection. The key driver for opting for carrier-based sea control is driven by symbolism and competition – even a sense of vengeance. When symbolism outweighs substance and leads to compromise of rational thought, the result creates a paradox for Chinese strategic planning, including in terms of naval force development.

In turn, imitating the US makes China vulnerable and susceptible to to US strategic communications. In January 2017, for instance the US Navy published its Surface Force Strategy titled, "[Return to Sea Control](#)." Ostensibly, this title effectively misled the Chinese into believing that the US doctrine has been reviewed in response to the Chinese naval doctrine. Upon closer review, however, the US Navy never really deviated from its sea control doctrine. To any naval professional, the indispensability of sea-control for performing any surface mission against military opposition has never been in doubt. Post Cold War, even as the focus of US naval strategy shifted to the littoral, the doctrinal imperative remained 'sea

control, which merely shifted from ‘mid-ocean sea control’ to ‘littoral sea control’. However, beset by nationalistic sentiments, the Chinese media picked up the news of the US Navy’s doctrinal ‘review’, and [reported](#) comparisons with operationalisation of China’s own carrier *Liaoning*. Such tendency is likely to strengthen China’s misperceived resolve to pursue a sea control doctrine, which may result in an unfulfilled vision of its naval doctrine.

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