

Power Asymmetry and the Role of Deterrence in the South China Sea

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China's coercive activities in the South China Sea have resulted in a lively academic debate regarding strategies to deter Beijing and maintain the status quo. However, much of this literature has been dominated by the U.S.–China dynamic and has neglected the vital role of the littoral states in the region. This article, through the lens of a maritime strategic environment, deals with the potential for the littoral nations of the South China Sea to deter China. It argues that conventional deterrence by denial is a difficult but applicable strategy despite the substantial power asymmetry that exists between China and the littoral states in the region. However, such a deterrent approach must be tailored to the specific, non-existential challenges that China poses in the region. Among these challenges, this article examines deterrence within the context of China's claim to the Spratly Islands and expansive claims to economic exploitation rights. A maritime strategic environment provides multiple avenues to impose cost on a superior power and the littoral states in the region have invested heavily in naval capabilities. However, as this article finds, it remains to be seen if the littoral states in the region have the technical capability or political will to successfully enact such a deterrent strategy.

Keywords: South China Sea, conventional deterrence, naval strategy, maritime security, Spratly Islands

Introduction

How to deter China's seemingly inexorable drive to dominate the South China Sea (SCS) is a question that has gained substantial traction in policy and academic circles.¹ This debate is largely dominated by the U.S.–China dynamic and is often framed within the broader question of who will be the future hegemonic power in East Asia. Consequently, although they are central protagonists, an analytical deficit exists regarding the capacity of the littoral states of the SCS to protect their own interests against the multi-faceted

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coercive challenge posed by China.² These states are pursuing substantial naval armament programs largely driven by China's increasing maritime presence. However, there has been little analysis as to the deterrent effect of such build-ups considering the nature of the threats China poses.

In addressing this gap, this article argues that the maritime strategic characteristics of the SCS are a substantial and hitherto under-explored factor in determining both how China challenges the status quo in the region and the efficacy of conventional deterrent responses to these challenges. China presents an interconnected economic, operational and strategic threat to the littoral nations of the region. Beijing not only contests control of the Spratly Islands but also undermines the free and fair use of the sea by using its growing maritime power to further its perceived economic and strategic interests. The operational realities of this maritime strategic environment provide the littoral states of the SCS with the ability to offset some of China's power advantage but also reduce the effectiveness of conventional deterrence to meet the multitude of quasi-military challenges a recalcitrant China presents.

This study proceeds in six parts. The first demonstrates how the unique features of a maritime strategic environment inform the nature of China's operations in the SCS. The second part describes how conventional deterrence at sea under conditions of power asymmetry functions while the third highlights the potential power offsets that maritime geography and naval capabilities could provide the weaker nations in the region. The fourth part examines the role of third parties such as the United States in confronting China and the failure of such actors to deter China's actions. The fifth and sixth parts investigate the potential for asymmetric conventional deterrence in the specific contexts of the Spratly Islands and maritime resource exploitation. The article ends with some concluding observations.

The Sea Shapes the Threat

The maritime strategic geography of the SCS shapes China's application of its increasing military and economic power by constraining Beijing's ability to pose an existential threat to the region while at the same time providing China with multiple unique avenues to undermine the existing status quo and further its political, strategic and economic objectives.

In the SCS, maritime strategic geography inhibits any potential desire on China's part to pose an existential threat to nations of the region.³ The stopping power of water ensures that large-scale attacks from the sea on to land are extremely difficult and not only require military capabilities, which China does not yet possess, but also fortuitous geostrategic circumstances.⁴ This reality differentiates the SCS from a continental theater, where a superior bordering power consistently poses a potential existential threat as the Soviet Union did on the borders of Western Europe during the Cold War.

Although China cannot currently pose an existential threat from the sea, it does present a complex challenge on it. Beijing is exploiting the strategic, political and legal

characteristics of the sea to employ a gradual coercive strategy, operationalized by military, para-military and civilian actors, to reach a number of strategic and economic goals.⁵ Driven by an increasing awareness of and political emphasis on securing its perceived maritime interests, China is seeking to implement its vision of a new status quo for the SCS.⁶ One where it can extract the sea's resources, beyond the rights granted by UNCLOS, to the detriment of littoral nations and at the same time gain strategic preeminence in this vital geostrategic region.⁷

China's operational approach to the SCS is founded on the tracklessness of a maritime strategic environment. The sea is largely uncontrolled and ungoverned. In littoral areas, sovereign boundaries as defined by UNCLOS, including territorial waters, contiguous zones and EEZ are not demarcated by geographical or man-made features nor are they normally protected by the continuous presence of navies or civilian maritime law enforcement agencies.⁸ Instead, such boundaries are created by political and legal agreements made on land and maintained by a normative acceptance of such boundaries by all parties combined with a credible ability to enforce sovereign, economic or navigation rights. Consequently, at sea, there are no border fences or crossings to be defended. State and non-state maritime actors who do not agree with, or choose to ignore, the status quo, can easily contest the integrity of such boundaries by entering and exiting contested territory to assert temporary control, deny control, claim ownership or exploit resources.

China's status quo-altering approach is embodied in the ambiguous nine-dash line which encompasses 90 percent of the SCS and ostensibly represents China's claim of sovereignty over this maritime region. While China's claims have no basis in international law, having been declared illegitimate following the 2016 SCS Arbitration, the lack of enforcement mechanisms and the nature of operations at sea allow Chinese state and non-state actors to press such claims despite them not being recognized by the littoral states of the region. The nine-dash line includes the contested features of the Spratly and Paracel Islands. China, Vietnam and Taiwan claim all the Spratly Islands, the Philippines claims 53 features and Malaysia claims 12.⁹

On land, operationalizing such claims would require the crossing of hard borders by a state actor and would be legitimately construed as a belligerent act. At sea, as permanent control is nebulous, the relationship between maritime territory and outright belligerency is more opaque. In contested or strategic waters, the total control of the sea over extended periods is a near impossible task as opponents will attempt to deny such control or exploit the size of the sea to operate unimpeded in different areas. Instead, control is more often impermanent and localized. This leaves much of the sea uncommanded and allows parties with sufficient capabilities to temporarily impose their will without contest.¹⁰

These characteristics allow Chinese state and non-state actors to exploit the multibillion-dollar aquaculture and energy potential in the region in violation of established international norms. The ability to easily enter and exit areas, in and proximate to foreign sovereign waters, permits China to continuously contest maritime boundaries and ostensibly establish a new status quo, where Chinese economic and

strategic interests and interpretations of maritime law are impressed on the region's weaker littoral powers. At the same time, by building up its naval and maritime law enforcement presence, China can use coercive pressure to influence the littoral nations and potentially control the vital SLOC which run through the region. Consequently, states such as Singapore, which are not in direct territorial or economic dispute with Beijing are potentially threatened by this new reality as they have a vested interest in maintaining maritime stability.

Asymmetric Deterrence at Sea

As maritime strategic geography shapes the nature of China's operations in the SCS, it equally plays a role in determining the efficacy of conventional deterrence strategies designed to meet these threats. Deterrence is a strategy designed to prevent one party from performing an unwanted action by reducing the benefits or heightening the potential costs of said action.¹¹

In a paradigm where there is power parity, or the deterring party has superiority, a naval force will ideally develop a deterrence strategy which contains elements of both punishment and denial.¹² This is the standard assumption on which naval analysts espouse the unique capacity of seapower to implement conventional deterrence.¹³ The forward-deployed and based U.S. Navy is the most powerful naval force in the world and thus has the capacity to employ both elements. It maintains assets which can "impose unacceptable consequences on an aggressor" and "deny an adversary the physical or psychological benefits of its aggression."¹⁴

However, in a maritime theater such as the SCS where the weaker side is the deterring party, the power imbalance limits the available deterrent options. Deterrence by punishment functions on the threat of retaliation if an opponent undertakes aggressive action.¹⁵ It is the fear of these costs which deters unwanted action. The ability to operationalize deterrence by punishment is dependent on the possession of credible capabilities sufficient to hurt an aggressor.¹⁶ Under conditions of power asymmetry, punitive conventional naval capabilities that could sufficiently punish a larger power are beyond the capacity of smaller navies. The pursuit of such an approach is not only inefficient but is inherently risky under conditions of power asymmetry as it could provoke the larger power into pre-emptive action.

Consequently, a weaker navy's preferred deterrence option is deterrence by denial. Deterrence by denial concentrates on the prevention of an aggressor meeting its immediate goals.¹⁷ This is enacted by "convincing an adversary that it cannot achieve its objectives rapidly or convincingly" thereby preventing a *fait accompli* and reducing the benefits of aggression.¹⁸ Naval forces can be deployed to increase the uncertainties and heighten the potential costs to an aggressor even if said military forces could not mount an effective defense.¹⁹ In this case a deterrent capacity may be demonstrated in actual operations, when deterrence initially fails but the defensive act, even if unsuccessful, imposes sufficient costs to deter repeat occurrences or further action.²⁰

Despite their relative weakness, smaller navies can impose a denial strategy as described above. Small navies are strategically and operationally relevant when pitted against a more powerful opponent.²¹ This is particularly true in littoral waters where navies can leverage geography and technology to punch above their weight and impose substantial cost on an attacking force.²² Under such conditions, victory in battle does not have to be the primary objective; instead the smaller force can maintain capabilities which can alter an opponent's perception regarding the advantages of aggression.²³ Therefore, the smaller naval force can make aggression prohibitively costly at an operational level or can prolong a conflict in the hope of garnering international assistance or sympathy, thereby raising the cost on a political level.²⁴

Credibility, Geography and Capabilities

Although, the weaker powers of the SCS may attempt to enact a deterrence by denial strategy, China's sheer power advantage calls into question the credibility of any such deterrent strategy. However, in the strategic maritime environment of the SCS where the nature of the conflict is, as described above, limited, coercive and non-existential, power asymmetry can be mitigated during everyday operations.

Credibility is at the heart of deterrence; an aggressor must be convinced that an opponent is capable and willing to carry out a deterrent strategy.²⁵ Mearsheimer, in addressing conventional deterrence on land writes that "where asymmetry is so great that the attacker does not have the slightest doubt that he will succeed on the battlefield...the concept of conventional deterrence does not apply."²⁶ The power differential suggests that at sea such a premise may also ring true and that the littoral nations of the SCS cannot credibly deter China's actions in the region.

However, China's maritime geostrategic position and the nature of operations at sea serve to partially offset its numerical superiority in everyday operations. This is relevant, as in cases of deterrence, it is not the ratio of total capabilities but the "immediate and short-term balance of forces" in proximity to the target that has the most impact on deterrence calculations.²⁷ As the UK discovered during the Falkland invasion, despite the possession of nuclear weapons and a relatively powerful military capability in Europe, if there are no forces to credibly impose cost at the point of attack, deterrence is more likely to fail.²⁸

That China possesses a vast superiority in terms of naval and civilian platforms is not in doubt. Table 1 demonstrates China's significant numerical advantage in terms of deployable naval platforms, while Table 2 highlights the scope of Beijing's policy to bolster the capacities of its maritime law enforcement agencies to the disadvantage of the other claimant states. Further, China also uses a state-supported civilian maritime militia operating from its massive fishing fleet to further increase its presence in the region.²⁹ China's superior production capacity ensures that it is almost certain to maintain its advantage in ships. Between 2016 and 2017, China added 15 1500+ ton vessels and over 100 vessels between 250 and 1500 tons to its maritime law enforcement agency fleets while in the same period the nations of the SCS added on three vessels over 1500 tons.³⁰

Table 1. List of current naval vessels operated by littoral states in the SCS.

	SSN	SSK	Cruiser	Destroyer	Frigate	Patrol Ship	Patrol Craft	Patrol Boat	Amphibious Ship	Landing Ships	Maritime Patrol Aircraft
China	5 (2)	47 (16)	0	21 (9)	57 (31)	27	140* (41)	40	4 (3)	52 (20)	21*
Brunei	0	0	0	0	0	4	4	4	0	0	1
Indonesia	0	2	0	0	12	20	22	42	5	50	23
Malaysia	0	2	0	0	10	4	4	29	0	1	4
Philippines	0	0	0	0	1	3	12	52	1	4	2
Singapore	0	4	0	0	6	6	6	18	4	0	5
Taiwan	0	4	4	0	22	1	1	39	1	12	35
Vietnam	0	5	0	0	2	6	6	43	0	8	6

() represent figures for China's South Sea Fleet.

* represents approximate figures.

Source: IISS, "Chapter 6: Asia," *The Military Balance 2017* (2017), 237–350.

Table 2. List of civilian law enforcement vessels operated by littoral states in the SCS.

	Patrol Ship	Patrol Craft	Patrol Boat
China	71*	206*	246*
Brunei	0	0	10
Indonesia	2	9	128
Malaysia	2	0	218*
Philippines	0	7	54
Singapore	0	0	102
Taiwan	9	14	137
Vietnam	7	15	56

* represents approximate figures.

Source: IISS, "Chapter 6: Asia," *The Military Balance 2017* (2017), 237–350.

China is, however, unlikely to concentrate the entirety of its maritime forces in one theater. With a coastline of over 14,500 kilometers, China has a long littoral and large maritime interests to defend. The United States, Japan and South Korea maintain substantial naval forces on its eastern flank and Beijing is in an ongoing dispute in the East China Sea with Tokyo over the Senkaku/Diaoyudao Islands.³¹ Additionally, China's

increasing global interests require more vessels to be deployed away from littoral waters. These facts serve to reduce China's numerical superiority in both naval and maritime law enforcement platforms over the littoral nations of the SCS who have fewer maritime interests and smaller territories to manage. Further, as Cable notes, a sustained deployment of a vessel at distance requires a ratio of three to one, further diluting China's quantitative advantage.³² Table 1 demonstrates that taking the China's South Sea Fleet in isolation substantially reduces the Chinese advantage in terms of platform numbers.

The size of the SCS at approximately 3.5 million square kilometers further mitigates China's power superiority. China's claimed areas of sovereignty cover 90 percent of the theater, posing a problem regarding the dispersal of naval assets. The Spratly Islands are over 520 kilometers from Hainan naval base, the longest distance for any of the claimant states. While the construction of facilities on Woody Island and island-building on the Spratly Islands can reduce the burden of distance by turning previously insignificant features into air bases and ports for basing and resupply, they do not completely alleviate the numerical leveling that geography and strategic requirements impose.

Conventional Capabilities at Sea

Under conditions of asymmetry, modern naval capabilities can further contribute to the effective employment of a credible deterrent strategy. The proliferation of increasingly inexpensive but still high-end off-the-shelf naval systems has allowed for a substantial and ongoing naval rearmament program in the SCS, which has increasingly been driven and influenced by the threat China poses.³³ The region's militaries are now able to deploy surveillance and defensive capabilities which can have an out-sized operational impact in relation to their investment. However, the sustainable and effective deployment of such capabilities to enact a deterrent strategy at sea will remain a challenge for the resource-limited navies in the region.

For smaller navies, the capacity for the early detection of potentially hostile forces in their area of operations is vital for the efficient and quick deployment of resources and is a requirement for an effective asymmetric deterrent strategy. Modern, intelligence, surveillance and reconnaissance (ISR) capabilities can create an environment where concealment at sea is increasingly difficult.³⁴ In the SCS, there is a pronounced interest in the procurement of ISR capabilities, including coastal and air defense surveillance systems from a multitude of foreign suppliers. Indonesia has recently deployed three modern Cn-235MPA maritime patrol aircraft which are equipped with hard points for anti-ship missiles or torpedoes and foreign sensors.³⁵ Vietnam has procured six DHC Twin Otter aircraft and the Philippines is bolstering its maritime surveillance capability by availing of Japanese capacity-building in the form of TC-90 patrol aircraft and the purchase of two modern long-range surveillance planes.³⁶

Table 3 shows that since 2000, navies across the SCS have looked to replace and upgrade their surface and subsurface capabilities. While domestic shipyards feature more heavily in the construction of these vessels, there is a continued reliance on foreign

suppliers for weapon and sensor systems. None of the navies possess the capacity to undertake offensive operations against a superior force like the PLAN but are seemingly pursuing a somewhat balanced fleet structure capable of undertaking a multitude of missions.³⁷

Table 3. Major naval platforms deployed or confirmed for procurement since 2000.

	NAME	TYPE	DISPLACEMENT	NEW/REPLACE
Brunei	4 Darussalam	OPV	1625	New
Indonesia	4 Makassar	LPD	8400	New
	6 Martadinata	Frigate	2365	Replace
	4 Diponegoro	Corvette	1692	New
	16 Clurit	FAC	250	New
	3 Changbago	Submarine	1400	New
Malaysia	6 SGPV	Frigate	3100	New
	6 Kedah Class	Corvette	1850	Replace
	2 Scorpene	Submarine	1870	New
Philippines	2 Tarlac	LPD	11,583	New
	3 Hamilton	Frigate	3250	New
	3 Balikpapan	LCH	517	New
Singapore	8 Independence	OPV	1200	Replace
	4 Type 218	Submarine	2000	Replace
	6 Formidable	Frigate	3530	New
	4 Endurance	LPD	8500	New
Taiwan	4 Kee Lung	Destroyer	7289	New
	1 Cheng Kung	Frigate	4169	New
	1 La Fayette	Frigate	3600	New
	12 Tuo Chiang	Corvette	567	New
	30+ Kuang Hua VI	Missile Boat	171	New
Vietnam	6 Gepard	Frigate	1930	New
	8 Molniya	Corvette	540	New
	6 Kilo	Submarine	3950	New

Source: IISS, "Chapter 6: Asia," *The Military Balance 2017* (2017), 237–350; and SIPRI, Arms Transfer Database.

Table 4. Naval missile systems introduced since 2000.

Name	Range	Operator	Number	Origin
Anti-Ship Missiles (Surface)				
Harpoon	67 nm+	Singapore/Taiwan	185	US
Naval Strike Missile	100 nm+	Malaysia	100	Norway
Otomat	97 nm	Malaysia	24	Italy
C-802	64 nm	Indonesia	License	China
C-705	75 nm	Indonesia	License	China
Exocet Block 3	97 nm+	Malaysia/Brunei	60	France
Exocet Block 2	38 nm	Indonesia	70	France
SS-N-25	70 nm	Vietnam	400	Russia
Anti-Ship Missiles (Coastal)				
SS-N-26	65–162 nm	Vietnam	40	Russia
Hsuing Feng-II	?	Taiwan	?	Taiwan
Anti-Air Missiles				
Mistral	6 km	Indonesia	160	France
MICA	20 km	Indonesia/Malaysia/Singapore	190+	France
Seawolf	10 km	Malaysia	31	UK
Aster-15	30 km+	Singapore	300	France
Aster-30	120 km+	Singapore	200	France
Standard-1MR	74-167 km	Taiwan	204	USA
Standard-2MR	74-167 km	Taiwan	292	USA
SA-19	8 km	Vietnam	200	Russia

Source: IISS, “Chapter 6: Asia,” *The Military Balance 2017* (2017), 237–350; and SIPRI, Arms Transfer Database.

Notably, the procurement of modern naval capabilities has significantly strengthened the surface warfare potential of these navies. At sea, small numbers of modern anti-ship (AShM) can impose significant cost on an enemy force. At short ranges they are difficult to intercept and require quick and effective hard and soft kill measures to be stopped.³⁸ As they can be launched from the surface, subsurface, air and land, these weapons can alter the cost calculation of any offensive operation as even for large navies platforms are limited assets which are difficult and costly to replace.³⁹ As Table 4 indicates, except for the Philippines, the navies of the region currently, or will, deploy modern Russian or NATO–origin anti-ship missiles, including the latest version of Exocet, the Norwegian Naval Strike Missile, KH-35 and Klub missiles. Between 2006 and 2016, the number of deployable AShM missiles on Vietnamese vessels has risen by almost 400 percent from 56 to 216. Indonesia has doubled its capability over the same period from 80 to 160 with a similar emphasis on fielding modern weapons. Additionally, Indonesia, Malaysia and Singapore are deploying advanced surface-to-air missiles on their platforms, providing them with a much needed short and medium–range defensive and air denial capability. This is a noticeable gap in the Vietnamese navy’s capabilities, which was created when an order for Dutch–built *Sigma* class frigates fell through.

Despite the formidable denial capability that shore-based anti-ship missiles provide, only Taiwan and Vietnam currently deploy them. The former possesses an unknown number of Hsuïng Feng II missile systems, which are deployed to hinder any potential Chinese invasion. Vietnam has procured 40 missiles for the Russian made K-300P Bastion-P coastal defense system. This portable long-range system gives Vietnam an effective sea-denial capacity within its littoral zone.

The pursuit of submarines has featured prominently in the commentary regarding the build-up of naval forces in the SCS. Modern diesel submarines, while expensive and complex, are a powerful force multiplier. They have the capacity to cut off sea lanes or interdict attacking surface vessels at distance from their objective.⁴⁰ Importantly, if operated efficiently, they substantially increase the strategic and tactical reach of a smaller navy extending the operational range beyond the littoral.⁴¹ These qualities explain the substantial expenditure that the SCS has witnessed in recent years. Vietnam is adding six *Kilo* class diesel submarines while Indonesia is procuring three *Chang bogo* submarines from South Korea. The latter will initially complement the Indonesian Navy's two Type 209 submarines; however, both vessels are reaching the end of their useful service life. Malaysia operates two French-built *Scorpene* submarines while Singapore is seeking to maintain a fleet of four vessels with four German Type 218SG being procured to replace their existing fleet.

Aircraft procurement in the region reveals a mixed picture with small numbers of new aircraft being procured from foreign suppliers. Airpower is a vital tool in contested waters, particularly in small sea spaces or in the littoral where naval forces are particularly vulnerable to airpower.⁴² In the short term, even small numbers of aircraft can deny an opponent the secure use of the sea by imposing significant costs on their operations.⁴³ Malaysia and Vietnam are investing in formidable strike aircraft with the former operating eight U.S.-made F-18D and 18 Russian SU30 MKM multi-role fighters and the latter purchasing over 40 SU-30MMK to supplement its aging fleet of SU22 aircraft. Singapore operates a powerful mix of 40 American-built F-15 and 60 F-16 multi-role fighters. Indonesia now operates a combination of Russian and U.S. fighters and has selected the long-range and capable SU-35 to further bolster its fleet.⁴⁴ The Philippines, however, is severely deficient in aircraft. Taiwan operates a significant number of F-16 and Mirage 2000 but must focus on the threat of invasion from China rather than the SCS.⁴⁵

Taking this procurement at face value the navies of the SCS are developing a capacity to enact a credible deterrent strategy. However, despite the build-up of capabilities, the pursuit of such a strategy under conditions of asymmetry does present many challenges. The sustained deployment of subsurface, surface and air assets, which can respond to events at sea, presents formidable economic, maintenance, training and command control difficulties. To effectively utilize modern naval systems, these navies must develop advanced C2 capabilities often across services. Such capabilities take time to develop and integrate into existing systems and organizations.⁴⁶ While some littoral nations of the SCS, such as Singapore, have successfully pursued such integration, it remains to be seen how effective such efforts will be across the region.

Further, smaller forces often struggle to create a “critical mass” of operational platforms that can sustain a state of operational readiness while also keeping to maintenance and training cycles.⁴⁷ For resource limited forces, naval and air capabilities are expensive and represent large proportions of defense capital expenditure. It takes considerable time to procure and then optimally integrate new platforms into existing fleets. The chief of the Malaysian Navy recently noted that possessing many different platforms and systems was a burden on budgets.⁴⁸ Consequently, the Malaysian Navy will reduce its number of ship classes from fifteen to five, thereby freeing resources for the effective operation of existing and future platforms.

This burden could become a factor in the Indonesian and Vietnamese navies and air forces, which now operate large numbers of vessels and aircraft of different types and origin. This not only challenges budgets but also operational efficiency and training. It is no surprise that the Singaporean Navy is regarded as one of the most competent in Asia, given its consistent procurement plans and small number of ship classes.

The time needed to develop an effective deterrence posture at sea exposes smaller navies to a fundamental dilemma that arises from a deterrent strategy. For any form of conventional deterrence to succeed, the deterrer is required to communicate its capabilities.⁴⁹ This is not a risk-free strategy, as effective communication of capabilities gives time for an aggressor to respond.⁵⁰ This suggests a degree of fluidity to a deterrent relationship, where strategy, tactics and capabilities must be continuously adjusted to the threat posed. This provides an advantage to resource-superior navies as they have a greater capacity to design around specific deterrent capabilities.

Submarine operations encapsulate many of these issues. The littoral navies of the SCS have invested substantial sums into submarine procurement. They are perceived as being force multipliers whose inherent stealth make them optimal deterrent platforms. However, submarines are complex machines that are expensive to operate and maintain. For small navies with limited budgets, the choice to pursue such a capability may open a Pandora’s box of financial, manning and operational challenges over the long term, many of which the navies of the SCS have yet to overcome.⁵¹ Further, for submarines to optimally deter, they would have to advertise their capabilities and deployment patterns, thereby reducing the strategic benefits of their inherent stealth.⁵² Larger navies often possess the capability to design around such threats or use critical mass to overwhelm a smaller submarine force. In the Falklands conflict, the Royal Navy was not deterred by the presence of Argentinean submarines.⁵³ Instead the Royal Navy committed resources and altered tactics to operate around the threat. Chinese reactions to Vietnam’s submarine capacity suggest a confidence that they can deal with such a capability arising from their ability to develop anti-submarine capabilities which could neutralize a sub-surface threat.⁵⁴

Deterrence and the Third-Party Offset

The littoral nations of the SCS are vulnerable to the coercive potential of China's developing maritime power. Growing maritime capabilities provide governments with the potential to pursue foreign policy goals at increasing distances from land.⁵⁵ In the case of China, the naval and maritime capabilities that they have developed allow them to enact a series of policies which may conform with domestic Chinese law and interests but violate international agreements and states' rights in the SCS. However, the geostrategic reality of operating at sea ensures that the littoral states of the region do not necessarily have to face such challenges alone and may gain support from international actors with economic or strategic interests in the region. Such international involvement may further offset the asymmetric position in which the littoral powers of the region find themselves and many states in the region have looked to foreign partners to balance China's presence with varying but often disappointing levels of success.

The fact that the sea is a global commons and vital medium for economic activity adds a strategic element not normally found in continental theaters.⁵⁶ The sea draws non-contiguous third parties, who may not be directly threatened but have economic or strategic interest in contested waters. Collective security actions such as the international anti-piracy operation in the Gulf of Aden or individual efforts such as U.S. tanker escort operations in the Middle East during the Iran-Iraq War demonstrate how the sea pulls states towards distant seas when their security or economic interests are threatened. In the SCS, the littoral states of the region can leverage the economic and strategic importance of the region to draw in external powers to deter the detrimental consequences of China's operationalization of its maritime claims.⁵⁷

The deterrent effect of third parties is, however, uncertain within the context of the challenges posed by China to the littoral nations of the SCS. The U.S. Navy is the most active third party in the SCS and it views the region as fundamental to its strategic interest. Yet its consistent presence in the SCS has failed to deter China from land reclamation on the Spratly Islands. Further as the United States does not take a position on the legitimacy of contested claims, and instead advocates adherence to international laws and norms, Washington has largely been unwilling to involve itself in the vital resource exploitation conflicts that characterize much of China's challenge to the littoral states of the region.

Freedom of Navigation operations do contest Chinese interpretation of navigation rights and may underline the United States' commitment to deterring China from preventing legitimate activity in the region. However, it is uncertain how stable such a deterrent effect is. The impact of such signaling and coercive operations is difficult to gauge, as the utility of coercive naval diplomacy has most likely reduced as target societies become more advanced, weapons technology more diffuse and the use of force less acceptable.⁵⁸ Given that the sea is trackless, the U.S. Navy cannot maintain forces in every location, allowing China's large naval and maritime law enforcement presence to impose its will on the littoral nations of the SCS. Essentially, the U.S.' deterrent effect is transitory given the size of the maritime theater and the scope of China's challenges

which allow Beijing to selectively operationalize its policy preferences in the region.

The one exception is the case of the Philippines—the sole state in the SCS formally allied with the United States—which seems to have benefitted from the alliance to deter Chinese encroachment on their territory. There is evidence that in April 2016 the United States deterred China from artificially altering the Scarborough shoal by deploying additional air and sea assets in the region.⁵⁹ However, for the Philippines, this approach is not ideal; as analysts have highlighted, the U.S. commitment to the defense of the islands is not guaranteed despite the existence of a defense treaty.⁶⁰

Beyond the United States, the international reaction to China's actions has largely been confined to pleas for adherence to international law. States such as Japan, Australia, India and the United Kingdom have focused on emphasizing international norms and limited capacity building, but have not deployed forces to the region beyond those carrying out port visits and exercises. Naval diplomacy often produces a political signaling effect, but as of yet, such actions have failed to deter or alter China's actions in the region as most states are unwilling to employ credible measures to support the international order

Despite these weaknesses, the littoral states in the region have persisted in drawing in outside support. Singapore is a good example of a state that has embraced the United States as a security partner to act as a counter-weight to China in the region. Singapore does not contest waters or islands with China and does not fear invasion or even direct military conflict with Beijing. Over seventy percent of its population is ethnically Chinese. Yet, its strategic concern arises from the potential for Chinese domination of the maritime sphere on which Singapore is reliant for its economic and strategic security. Singapore has sought to enable the U.S. presence in the region and emphasize its strategic importance to Washington without being burdened with a formal alliance. Singapore has allowed four U.S. Littoral Combat Ships to be deployed on a rotational basis from Changi naval base, while in 2016, the United States committed to using Singapore as an occasional place of deployment for its maritime surveillance aircraft. They also constructed docking facilities capable of hosting a U.S. Navy aircraft carrier.

Other countries in the region have modeled this approach albeit to different extents. Vietnam has embraced increased maritime engagement with the United States and other external parties, notably Japan and India.⁶¹ This has taken the form of naval and coast guard exercises, capacity building and providing access to the deep-water port at Cam Ranh Bay.⁶² It is also a beneficiary of U.S. aid, receiving capacity building assistance, most notably in the form of 18 U.S.-made patrol boats for the coast guard. Hanoi's security relationship with Tokyo has also matured, with over 15 high-level defense meetings occurring between 2011 and 2014. Japan donated six used coast guard vessels to the Vietnamese maritime police in 2014. However, Vietnam is wary of antagonizing China and the benefits of a U.S. presence, for example, may not explicitly strengthen deterrence within the context of the challenges China poses.⁶³ This logic can be extended to Indonesia which has long pursued an independent defense and security policy. In 2015, it upgraded or improved its defense and security relationships with the United States and Japan. These ties provide the opportunity for technical assistance,

procurement and some operational coordination. However, they are limited in their impact on Indonesia's immediate challenge around the Natuna Islands.

Deterrence and the Spratly Islands

China's superior maritime capabilities imply that features in the SCS held by opposing parties are vulnerable should China commit to taking them by force. As the Paracel Islands are now firmly under Chinese control, it is the Spratly Island Chain which is now the epicenter of the deterrent challenge where the claimant states must maintain their holdings in the face of Chinese power. Absent third party support, the role of the claimant states' military forces is to alter China's calculations regarding the benefits of such action by ensuring that any effort would result in a high political or physical cost. Although the maritime strategic environment provides the weaker powers with the ability to partially offset their inferiority, ultimately any deterrent strategy is reliant on Beijing's unwillingness to accept such costs in relation to the potential gains of offensive action.

The build-up of military capabilities in the SCS suggests that such a strategy is being pursued by many of the claimant states. China's distance from the islands ensures that their naval forces must run a potential gauntlet of opposing capabilities to both take and resupply their features in the region. Southeast Asian investment in surface, subsurface and air launched ASHM provides the capacity to narrow the areas through which Chinese forces could travel safely.⁶⁴ This reality provides the littoral states of the SCS with the ability to both implement sea denial operations and make any attempt to hold territory extremely difficult. However, despite the continued development of this capability, an open question exists regarding the willingness of the claimant states to continue a conflict after China has accomplished a *fait accomplis* given the potential economic, political and military costs such a conflict would entail. While the sea provides an offset against China's maritime power, deterrence requires the willingness of the littoral states to utilize their military strength in this non-existential context.

Therefore, the prevention of a *fait accomplis* is of primary importance in this maritime strategic environment. This explains the weaker claimants' primary deterrent approach which is to ensure that any Chinese effort to take disputed features would involve displacing forces in-situ. The need to engage with opposing, weaker forces with the prospect of casualties in a non-existential matter raises the potential political cost for Beijing. China's takeover of Mischief Reef and the Scarborough Shoal occurred in part due to the Philippines' inability to maintain the permanent presence required to enforce its claim.⁶⁵ Vietnam, the Philippines, Taiwan and Malaysia have now all implemented a sustained manning approach, placing forces on permanent features such as islands, platforms and in the case of the Philippines, grounded vessels. These forces, often lightly armed, and stationed on small outcrops or platforms, are vulnerable should Beijing wish to undertake offensive action, but are essential to both maintain sovereignty over

existing holdings and ensuring that no Chinese action would be cost-free.

These states have also sought to reinforce their positions on many features. Added defensive measures are aimed at imposing some physical cost on any Chinese action, no matter how successful it may be. There is evidence, however, that some states are reluctant to heavily reinforce their holdings to avoid an escalation of tensions with Beijing, indicating that China's political and economic power has a detrimental effect on their deterrent capacity.

Vietnam has stationed naval infantry across its holdings in the Spratly Islands. It has also deployed 14 Dk-1 platforms on a number of shallow banks and has undertaken its own limited island augmentation program.⁶⁶ It has constructed a runway on the Spratly Islands and is augmenting its defensive features on at least four islands and reefs that it controls.⁶⁷ U.S. officials have indicated that Vietnam maintains weapons systems, such as the Israeli-made extra rocket artillery system on these facilities.⁶⁸ Malaysia maintains five naval stations on its significant features—the largest on Swallow Reef has a runway for both military and civilian use. It is reported that the Malaysian garrisons in the region are equipped with fast patrol craft, artillery and anti-air systems.⁶⁹

Similarly, Taiwan maintains a substantial garrison on Itu Aba. This is manned by the Taiwanese Coast Guard supported by the Taiwan Marine Corps.⁷⁰ Facilities on this island have also undergone upgrades, with the runway being repaired and the pier modified to take larger 3000-ton coast guard vessels.⁷¹ There is evidence of weaponry on the island and the coast guard has been given six 155 millimeter howitzers which could be deployed to the island in case of emergency.⁷² However, Taiwan seems reluctant to permanently deploy such capabilities lest it raises tensions with China or other claimant nations.⁷³ The Philippines is in the weakest position, stationing forces on a grounded vessel near the Second Thomas shoal, and garrisons on a small number of islands. Its largest facility is on Thitu Island which has a runway, a small civilian population and limited defenses.⁷⁴ While it has committed to modernizing these facilities, there is little evidence this is occurring and in the current period of detente between Manila and Beijing, the Philippines appears reluctant to risk China's ire and economic good will by altering the status of its forces in the region.⁷⁵

Deterrence and Economic Exploitation

The role of conventional deterrence in managing China's economic activities in the SCS is even more problematic than the case of the Spratly Islands. Conventional deterrence as enacted by military actors has limited utility in this context where contestation of rights is often more important when, absent a political or legal solution, there is little hope of deterring China. Nevertheless, the littoral nations of the SCS are investing in maritime law enforcement capabilities and are increasingly using military capabilities to support these agencies.

China's relative power superiority ensures that the littoral nations of the region cannot bring coercive strategies or political leverage to bear to prevent China from

operationalizing its expansive economic claims. The resort to legal mechanisms, as demonstrated by the Philippines arbitration in 2016, has had little effect on the ground, as currently, China refuses to recognize the authority of such decisions and there are no mechanisms for enforcement.

Chinese fishing fleets have been found consistently operating in the EEZ of neighboring states thereby implicitly pressing Beijing's maritime claims,⁷⁶ notably in the case of Indonesia around the waters of the Natuna Islands, and Malaysia around the Luconia and James shoals. China's state-owned energy concerns have also performed survey operations in contested areas. Chinese coast guard and militia vessels have interfered with and detained foreign vessels undertaking legitimate economic activities such as oil exploration and fishing.⁷⁷ The same agencies also support Chinese economic activity, protecting HD-981 during its controversial deployment. While China's civilian maritime forces and fishing fleets take the lead, they are supported by the Chinese military.⁷⁸ During the Scarborough Shoal incident in 2012, the PLAN provided planning support to the Coast Guard and during the HD-981 incident the PLAN provided "over watch" support.⁷⁹

Aspects of conventional deterrent strategies to prevent illegal resource exploitation have functioned in the past. The fishing wars between Canada and Spain, Brazil and France and the United Kingdom and Iceland all saw military and civilian maritime law enforcement assets being deployed to protect maritime interests in contested areas.⁸⁰ In all three cases, the use of such assets raised the political and physical cost of pressing such claims and political solutions were subsequently found.

There is, however, little evidence that the employment of robust military or maritime law enforcement measures have successfully deterred Chinese state and non-state actors from economic exploitation operations in the SCS. Strategies to deter illegal Chinese economic activity or Chinese-state support of such activity have largely failed, as Beijing does not recognize the illegality of its activities and does little to prevent its large fishing fleet or state energy concerns from operating in contested waters.

Some states in the region, notably Indonesia and Malaysia, have employed robust "sink the boat" initiatives where vessels caught in the process of illegal fishing are seized and then destroyed, *pour encourage les autres*.⁸¹ However, there is little evidence that such action has discouraged Chinese large-scale economic activity in contested waters. This reality, where Beijing seems willing to ignore the political cost of supporting illegal economic activity has been replicated in the East China Sea. The presence of the JMSDF and Japanese Coast Guard have failed to deter illegal Chinese economic activity in contested waters particularly around the Senkaku/Diaoyudao islands. Large-scale intrusions of Chinese fishing vessels escorted by the Chinese Coast Guard have occurred in these waters despite the presence of Japanese vessels.

The one exception has been illegal Chinese fishing around the strategically important Han River estuary off the west coast of the Korean Peninsula. In this case, Chinese vessels were operating in an area controlled by the United Nations Command Military Armistice Committee and were likely in violation of the 1953 Armistice Agreement. South Korean police boats flying both the UN and South Korean flags began operating

in the area and interdicted, expelled and captured several Chinese-flagged vessels. Importantly, they provided evidence to the Chinese government of such illegal actions as South Korea recognized that “to fundamentally resolve the issue of illegal fishing by Chinese boats, China’s own law enforcement efforts were needed to stop them from entering ROK territorial waters.”⁸² The active enforcement of international law and the involvement of the UN raised the political cost for Beijing and forced China to prevent further illegal economic activity. However, in other cases in waters surrounding the Korean Peninsula, illegal Chinese fishing activity persists despite robust efforts on the part of the Korean Coast Guard and Navy to prevent and deter it.

This does not imply however, that deterrence in the SCS has no role. The presence of naval and coast guard capabilities has a potential conventional deterrent function in preventing China from using excessive force in impressing its state and non-state economic interests. Indonesia, for example, has reinforced its capabilities on the Natuna Islands to better combat China’s intrusions in the vital economic areas nearby. This is reported to include the bolstering of the islands’ air defenses and surveillance capability, improving runway facilities, developing docks for larger surface and sub-surface assets, and increasing the number of military personnel from 800 to 2000.⁸³ Indonesia has also responded to the state/non-state element of China’s encroachment in its waters. In 2016, Chinese Coast Guard ships forced an Indonesian vessel to return a seized Chinese trawler. Consequently, the TNI-AL has deployed larger vessels thereby raising the cost of Chinese Coast Guard interference and going as far as firing warning shots at Chinese-flagged vessels operating around the Natuna Islands.

Beyond deterring the use of force, the littoral states of the SCS need to maintain a sustained presence and continue the assertion of authority within their claimed borders. Vietnam’s actions during the deployment of the HD 981 are a good example of this strategy. It was unable to stop such a deployment without the use of undue escalatory force, but by contesting its presence, Vietnam sustained its own claim to the region and highlighted Chinese violations. This strategy partially explains the build-up in coast guards in the region, with notable increases in tonnage and capabilities. Vietnam is in the process of introducing several new vessels, including fast patrol boats, 2000-ton patrol boats and a replenishment oiler to sustain coast guard vessels at sea.⁸⁴ Taiwan introduced two 3000-ton vessels in 2015 while the Malaysian Maritime Enforcement Authority is procuring six new 297-ton patrol craft which will also be equipped with UAV.⁸⁵

Despite this build-up of capabilities, China’s increasing political, economic and military power will continue to pose substantial difficulties for the littoral states of the SCS. Vietnam’s 2017 suspension of oil exploration activities in the SCS was attributed to China’s threat to use force against Vietnamese installations in the region.⁸⁶ This purported unwillingness to risk conflict with China over resource exploitation has substantial negative implications for deterrence. By indicating that maintaining resource exploitation rights at sea was not worth the potential cost of conflict with China, Vietnam’s deterrent credibility was undermined. While the littoral states of the SCS may be able to contest China’s presence in contested waters, without sufficient political will they may struggle to ensure their own ability to exploit the sea’s resources.

Conclusion

This article has argued that the maritime strategic environment both determines the conditions in which China challenges the status quo and affects how conventional deterrence is applied. Despite substantial power asymmetry, deterrence by denial is in part an applicable strategy for the littoral nations of the region. However, conventional deterrence under these conditions is unstable and uncertain as it relies on China being unwilling to accept cost in pursuit of its policy goals. If deterrence is to function, the littoral states of the region are required to also accept risk and impose cost on China. However, despite the build-up of substantial military capabilities, core questions remain regarding their willingness to use force and risk the potential political, military and economic backlash from China over what are non-existential issues. This is particularly true in the case of maritime economic exploitation rights where conventional deterrence has a limited, but still important, utility. Contesting violations of sovereign territory may be the best option in this scenario, but sufficient capabilities must be credibly deployed to deter China from using excessive force.

The SCS will likely remain a melting pot of conflicting geostrategic interests and the potential deterrent strategies of the littoral states of the region should not be discounted as important elements in ensuring that stability can be maintained. However, even with effective deterrent strategies, China is unlikely to alter its overall approach to the region and will continue to undermine the status quo. The nature of the maritime environment ensures that a long-term solution would require a political compromise on land most likely reinforced by the threat of punishment against China. The littoral nations of the SCS are not able to take such action, but as this article has determined, third parties, including the United States, have so far proved unwilling to fully engage with the strategic dilemmas China is posing in the SCS. The deterrent approaches of the littoral nations in the region would further benefit from consistent third-party assistance in dealing with China's actions. However, research is required on understanding the economic, political and military modes and consequences of such third-party actions. The SCS is a complex geostrategic maritime environment, and if stability is to be maintained, it will ultimately require nuanced responses, including deterrence tailored to the individual challenges China's rise poses on the seas of Southeast Asia.

Notes

1. Mira Rapp Hooper, "Uncharted Waters: Extended Deterrence and Maritime Disputes," *The Washington Quarterly* 38, no. 1 (2015): 127–46; Ely Ratner, "Course Correction: How to Stop China's Maritime Advance," *Foreign Affairs*, June 13, 2017, <https://www.foreignaffairs.com/articles/2017-06-13/course-correction> (accessed July 11, 2017); and Michael Green et al., *Countering Coercion in Maritime Asia: The Theory and Practice of Gray Zone Deterrence* (Lanham, MD: Rowman & Littlefield, 2017).
2. The littoral states in question are Vietnam, Malaysia, Singapore, Indonesia, Brunei, the Philippines and Taiwan. In some of the literature on the South China Sea, there is an acknowledgement of the role of smaller navies. However, there is little treatment of how they

- can be utilized. See: Bill Hayton, *The South China Sea: The Struggle for Power in Asia* (New Haven, CT: Yale University Press, 2014); and Robert D. Kaplan, *Asia's Cauldron: The South China Sea and the End of a Stable Pacific* (New York, NY: Random House, 2014).
3. Robert S. Ross, "The Geography of the Peace: East Asia in the Twenty-First Century," *International Security* 23, no. 4 (1999): 102–13. There are two exceptions: China's nuclear weapons present a potential existential threat no matter how unlikely their use. Second, Vietnam, in sharing a land border with China, faces a greater threat than any other nation in the South China Sea.
 4. John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York, NY: W. W. Norton & Company, 2001), 114–28. Offensive amphibious operations require maritime superiority, specialist skills and training, joint operational capability, surprise and technological superiority. See: Geoffrey Till, *Seapower: A Guide for the Twenty-First Century*, 2nd ed. (Oxford: Routledge, 2009), 191–97; and Ken Booth, *Navies and Foreign Policy* (London: Croom Helm, 1977), 173. The U.S. DOD argues that with its current amphibious capabilities, China would struggle to invade and hold the geographically proximate Taiwan, let alone a more distant state. See: Ronald O'Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities – Background and Issues for Congress* (Washington, D.C.: Congressional Research Service, 2017), 40–41.
 5. Coercion as described here is as defined in Jack S. Levy, "Deterrence and Coercive Diplomacy: The Contributions of Alexander George," *Political Psychology* 29, no. 4 (2008): 537–52.
 6. The State Council Information Office of the People's Republic of China, *China's Military Strategy*, May 2015, http://eng.mod.gov.cn/Database/WhitePapers/2015-05/26/content_4586711.htm (accessed August 10, 2017).
 7. David Shambaugh, "China's Military Views the World," *International Security* 24, no. 3 (1999/2000): 74; Alan Dupont and Christopher G. Baker, "East Asia's Maritime Disputes: Fishing in Troubled Waters," *The Washington Quarterly* 37, no. 1 (2014): 87–91; M. Taylor Fravel, "China's Strategy in the South China Sea," *Contemporary Southeast Asia* 33, no. 3 (2011): 296; and Tim Huxley and Benjamin Schreer, "Standing Up to China," *Survival* 57, no. 6 (2015): 130.
 8. Milan Vego, *Maritime Strategy and Sea Control: Theory and Practice* (Oxford: Routledge, 2016), 34.
 9. Currently, Vietnam occupies 27 features, the Philippines occupy eight, China occupies seven, Malaysia five and Taiwan one.
 10. *Ibid.*, 46.
 11. For variations of this definition see: John J. Mearsheimer, *Conventional Deterrence* (New York: Cornell University Press, 1983), 14–15; Lawrence Freedman, *Deterrence* (Cambridge: Polity, 2004), 27–28; and Glenn H. Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton, NJ: Princeton University Press 1961), 9.
 12. Michael S. Gearson, "Deterrence in the Nuclear Age," *Parameters* 39, no. 3 (Autumn 2009): 37.
 13. Chris Parry, *Super Highway: Seapower in the 21st Century* (London: Elliot and Thompson 2014), Kindle edition, Chapter 3; and Bernard D. Cole, *Asian Maritime Strategies: Navigating Troubled Waters* (Annapolis, MD: Naval Institute Press, 2013), 205.
 14. U.S. Navy, *Naval Doctrine Publication 1: Naval Warfare* (Washington D.C.: Department of the Navy, 2010), 27.
 15. John Stone, "Conventional Deterrence and the Challenge of Credibility," *Contemporary Security Policy* 33, no. 1 (2012): 109; and Barry Buzan and Eric Herring, *The Arms Dynamic in World Politics* (Boulder, CO: Lynne Rienner, 1998), 158.
 16. In a conventional environment, these capabilities would most likely be large quantities of distance precision-strike weapons. Gearson, "Deterrence in the Nuclear Age," 37.
 17. Snyder, *Deterrence and Defense*, 15.
 18. Gearson, "Deterrence in the Nuclear Age," 37; and Mearsheimer, *Conventional Deterrence*, 24.
 19. Samuel P. Huntington, "Conventional Deterrence and Conventional Retaliation in Europe,"

- International Security* 8, no. 3 (1993–1994): 36.
20. Thomas C. Schelling, *Arms and Influence*, 2008 ed. (New Haven, CT: Yale University 2008), 78–79.
 21. James R. Holmes, “Strategic Features of the South China Sea: A Tough Neighborhood for Hegemons,” *Naval War College Review* 67, no. 2 (2014): 31; and Till, *Seapower: A Guide for the Twenty-First Century*, 275.
 22. Till, *Seapower: A Guide for the Twenty-First Century*, 73.
 23. John B. Hattendorf, *Naval History and Maritime Strategy: Collected Essays* (Malabar, FL: Krieger Publishing, 2000), 260.
 24. T. V. Paul highlights that small states may initiate war for this purpose also. It stands to reason that small states would utilize such a rationale for deterrence. T.V. Paul, *Asymmetric Conflicts: War Initiation by Weaker Powers* (Cambridge: Cambridge University Press, 1994), 9; and Till, *Seapower: A Guide for the Twenty-First Century*, 275.
 25. John Stone, “Conventional Deterrence and the Challenge of Credibility,” 108–123.
 26. Mearsheimer, *Conventional Deterrence*, 58–59.
 27. Edward Rhodes, “Conventional Deterrence,” *Comparative Strategy* 19, no. 3 (2000): 245–46; and Jack S. Levy, “When do Deterrent Threats Work?” *British Journal of Political Science* 18, no. 4 (1988): 510.
 28. John Arquilla and Maria Moyano Rasmussen, “The Origins of the South Atlantic War,” *Journal of Latin America Studies* 33, no. 4 (2001): 751–52.
 29. Andrew Erickson and Conor M. Kennedy, “China’s Fishing Militia is a Military Force in All but Name,” *War is Boring*, July 9, 2016, <https://warisboring.com/chinas-fishing-militia-is-a-military-force-in-all-but-name-58265cbdd7d?gi=53e09ab1d8da#.whyczlxcu> (accessed February 2, 2017).
 30. IISS, “Chapter 6: Asia,” *The Military Balance 2017* (2017), 237–350.
 31. Geoffrey Till, “Are Small Navies Different?” in *Small Navies: Strategies and Policies for Small Navies in War and Peace*, eds. Mulqueen et al. (Surrey: Ashgate, 2014), 28.
 32. James Cable, *Gunboat Diplomacy 1919–2001*, 3rd ed. (Hampshire: The Macmillan Press, 1994), 118.
 33. Richard A. Bitzinger, “A New Arms Race? Explaining Recent Southeast Asian Military Acquisitions,” *Contemporary Southeast Asia* 32, no. 1 (2010): 61.
 34. Parry, *Super Highway: Seapower in the 21st Century*, Chapter 9.
 35. “CN-235 Persuader Maritime Patrol Aircraft, Spain,” *Airforce-Technology*, <http://www.airforce-technology.com/projects/cn235mp/> (accessed August 9, 2017); and Ridzwan Rahmat, “Philippine Restarts Maritime Patrol Aircraft Acquisition Programme,” *IHS Jane’s Defence Weekly*, May 26, 2017, <http://www.janes.com/article/70826/philippine-restarts-maritime-patrol-aircraft-acquisition-programme> (accessed August 9, 2017).
 36. “Patrol for Pennies: Vietnam’s DHC-6 Twin-Otter 400s,” *Defense Industry Daily*, July 15, 2016, <http://www.defenseindustrydaily.com/vietnamese-navy-orders-dhc-6-twin-otter-400s-06373/> (accessed August 9, 2017).
 37. The procurement of large amphibious vessels is value-added for smaller navies given their inherent multi-functionality.
 38. Milan Vego, *Operational Warfare at Sea: Theory and Practice* (Oxford: Routledge, 2017), 182.
 39. Toshi Yoshihara and James R. Holmes, *Red Star over the Pacific: China’s Rise and the Challenge to U.S. Maritime Strategy* (Annapolis, MD: Naval Institute Press 2010), 102–103; Milan Vego, *Maritime Strategy and Sea Control: Theory and Practice* (Oxford: Routledge, 2016), 61.
 40. Mearsheimer, *The Tragedy of Great Power Politics*, 144.
 41. Jacob Børresen, “Coastal Power: The Sea Power of the Coastal State and the Management of Maritime Resources,” in *Navies in Northern Water*, eds. Hobson and Kristiansen (Oxford: Frank Cass 2004), 249–75, 250–51.
 42. Robert J. Schneller Jr., “On the Storm’s Outer Edge: U.S. Navy Operations in the Persian Gulf War,” in *The Eagle in the Desert: Looking Back on U.S. Involvement in the Persian Gulf War*,

- eds. William P. Head and Earl Tilford (Westport, CT: Praeger, 1996), 237; Colin S. Gray, *The Leverage of Sea Power: The Strategic Advantage of Navies in War* (London: Free Press 1992), 17; and Milan Vego, *Naval Strategy and Operations in Narrow Seas*, 2nd ed. (Oxford: Frank Cass 2003), 295–96.
43. Norman Friedman, “Shaping Naval Power: Implications of the Naval Build-up in Asia,” in *Southeast Asia and the Rise of Chinese and Indian Naval Power*, eds. Sam Bateman and Joshua Ho (Oxford: Routledge, 2010), 136.
 44. Dave Majumdar, “This Asian Power Just Bought Russia’s Lethal SU-35 (and It’s not China),” *The National Interest*, February 12, 2016, <http://nationalinterest.org/blog/the-buzz/asian-power-just-bought-russias-lethal-su-35-its-not-china-15196> (accessed August 10, 2017).
 45. Chien Chung, “Military Culture and Air Force Restructuring,” in *Taiwan’s Security and Air Power: Taiwan’s Defense Against the Air Threat from Mainland China*, eds. Martin Edmonds and Michael M. Tsai (London: Routledge Curzon 2004), 155.
 46. Vego, *Maritime Strategy and Sea Control*, 65.
 47. Till, “Are Small Navies Different?” 23.
 48. “Royal Malaysian Navy 15 to 5 Transformation Program by Admiral Kamarul,” *Defense Web TV*, July 5, 2016, <https://www.youtube.com/watch?v=jrO6c9O4M5M> (accessed November 6, 2016).
 49. Stone, “Conventional Deterrence and the Challenge of Credibility,” 226.
 50. *Ibid.*, 227–29.
 51. Jan Joel Andersson, “Submarine Capabilities and Conventional Deterrence in Southeast Asia,” *Contemporary Security Policy* 36, no. 3 (2015): 478–91.
 52. Till, *Seapower: A Guide for the Twenty-First Century*, 273.
 53. Ian Speller, “Delayed Reaction: UK Maritime Expeditionary Capabilities and the Lessons of the Falklands Conflict,” *Defense and Security Analysis* 18, no. 4 (2002): 367.
 54. Lyle Goldstein, “China’s Nightmare: Vietnam’s New Killer Submarines,” *The National Interest*, March 29, 2015, <http://nationalinterest.org/feature/chinas-nightmare-vietnams-new-killer-submarines-12505> (accessed December 14, 2015).
 55. Booth, *Navies and Foreign Policy*, 97–98.
 56. Barry R. Posen, “Command of the Commons: The Military Foundation of U.S. Hegemony,” *International Security* 28, no. 1 (2003): 8.
 57. Yaacov Bar-Siman-Tov, “Alliance Strategy: U.S. – Small Allies Relationships,” *Journal of Strategic Studies* 3, no. 2 (1980): 208; and Friedman, “Shaping Naval Power,” 135.
 58. Booth, *Navies and Foreign Policy*, 86; Cable (1994), 101.
 59. Zack Cooper and Jake Douglas, “Successful Signaling at Scarborough Shoal?” *War on the Rocks*, May 2, 2016, <http://warontherocks.com/2016/05/successful-signaling-at-scarborough-shoal/> (accessed November 2, 2016).
 60. Richard Javad Heydarian, “Will America Go to War for the Philippines,” *The National Interest*, January 27, 2016, <https://www.google.no/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=will%20america%20go%20to%20war%20for%20the%20philippines> (accessed November 2, 2016).
 61. Prashanth Parameswaran, “U.S., Vietnam Kick Off First Naval Engagement Activity in Trump Era,” *The Diplomat*, July 6, 2017, <http://thediplomat.com/2017/07/us-vietnam-kick-off-first-naval-engagement-activity-in-trump-era/> (accessed August 10, 2017).
 62. “Vietnam Uses Old Naval Base to Make New Friends,” *The Economist*, April 20, 2017, <https://www.economist.com/news/asia/21721207-cam-ranh-bay-welcoming-american-warships-again-vietnam-uses-old-naval-base-make-new-friends> (accessed August 10, 2017).
 63. Hoang Anh Tuan and Do Thi Thuy, “U.S.-Vietnam Security Cooperation: Catalysts and Constraints,” *Asian Politics and Policy* 8, no. 1 (2016): 188–89.
 64. Andrew Erickson makes the case that China’s access could be denied within the context of the U.S. forces. There is no reason, however, that smaller navies would not have the capacity to complicate Chinese transits in the South China Sea. See: Andrew S. Erickson, “Deterrence by Denial: How to Prevent China from Using Force,” *The National Interest*, December 16, 2013,

- <http://nationalinterest.org/commentary/war-china-two-can-play-the-area-denial-game-9564> (accessed November 9, 2016).
65. Hayton, *The South China Sea*, 85–89.
 66. “25 Years of Building Marine Platforms in the East Vietnam Sea,” *Tuoi Tre News*, December 7, 2014, <http://tuoitrenews.vn/features/20889/25-years-of-building-marine-platforms-in-the-east-vietnam-sea> (accessed November 9, 2016).
 67. “Vietnam’s Island Building: Double-Standard or Drop in the Bucket,” AMTI, <https://amti.csis.org/vietnams-island-building/> (accessed August 10, 2017).
 68. Julian E. Barnes and Gordon Lubold, “U.S. Surveillance on Island in South China Sea Reveals Chinese Arms,” *The Wall Street Journal*, May 28, 2015, <http://www.wsj.com/articles/u-s-surveillance-on-island-reveals-chinese-arms-1432864632> (accessed February 11, 2017); and Greg Torode, “Vietnam Moves New Rocket Launchers into Disputed South China Sea,” Reuters, August 10, 2016, <http://www.reuters.com/article/us-southchinasea-vietnam-exclusive-idUSKCN10K2NE> (accessed February 11, 2017).
 69. Zulkifli Rahman, “Well Primed to Repel Attacks,” *The Star Online*, December 2, 2007, <http://www.thestar.com.my/letters/2007/12/02/well-primed-to-repel-attacks/> (accessed February 11, 2017).
 70. Annie Hsiu-an Hsiao and Cheng-yi Lin, “Taiwan’s Evolving Policy Toward the South China Sea Dispute,” in *The South China Sea Dispute: Navigating Diplomatic and Strategic Tensions*, eds. Ian Storey and Cheng-yi Lin (Singapore: ISEAS, 2016), 87.
 71. Yann-huei Song, “Taiwan’s Development Work on Taiping Island,” AMTI, February 18, 2015, <https://amti.csis.org/taiwans-development-work-on-taiping-island/> (accessed February 11, 2017); and “Taiping Island Pier to be Completed by End of 2015,” *The China Post*, October 7, 2014, <http://www.chinapost.com.tw/taiwan/2014/10/07/418880/Taiping-Island.htm> (accessed February 11, 2017).
 72. Lo Tien-pin, Johnathan Chin, “Escalation Sees Itu Aba Allocated Howitzers,” *Taipei Times*, July 25, 2017, <http://www.taipetimes.com/News/taiwan/archives/2017/07/25/2003675255> (accessed February 11, 2017).
 73. “No Plans to Deploy Missiles on Taiping: MND,” *The China Post*, May 3, 2016, <http://www.chinapost.com.tw/taiwan/2016/05/03/465011/No-plans.htm> (accessed February 11, 2017).
 74. Hayton, *The South China Sea*, 106.
 75. Felipe Villamor, “Philippines on Duterte’s Order to Occupy Disputed Islands: Never Mind,” *The New York Times*, April 8, 2017, <https://www.nytimes.com/2017/04/08/world/asia/philippines-duterte-spratly-islands.html> (accessed August 10, 2017).
 76. Simon Denyer, “How China’s Fishermen are Fighting a Covert War in the South China Sea,” *The Washington Post*, April 12, 2016, https://www.washingtonpost.com/world/asia_pacific/fishing-fleet-puts-china-on-collision-course-with-neighbors-in-south-china-sea/2016/04/12/8a6a9e3c-fff3-11e5-8bb1-f124a43f84dc_story.html (accessed April 12, 2016).
 77. Alessio Patalano, “Seapower, Maritime Disputes, and the Evolving Security of the East and South China Sea,” *The RUSI Journal* 158, no. 6 (2013): 52.
 78. M. Taylor Fravel, “The PLA and National Security Decision-Making: Insights from China’s Territorial and Maritime Disputes,” in *PLA Influence on China’s National Security Policymaking*, eds. Philip C. Saunders and Andrew Scobell (Stanford, CA: Stanford University Press, 2015), 262.
 79. Christopher D. Yung, “The PLA Navy Lobby and Its Influence over China’s Maritime Sovereignty Policies,” in *PLA Influence on China’s National Security Policymaking*, eds. Philip C. Saunders and Andrew Scobell (Stanford, CA: Stanford University Press, 2015), 274–99.
 80. Christian Le Miere, *Maritime Diplomacy in the 21st Century: Drivers and Challenges* (Oxford: Routledge, 2014), 41.
 81. Karlis Salna, “Indonesia to Sink 71 Foreign Fishing Boats amid South China Sea Tensions,” *Bloomberg*, August 16, 2016, <http://www.bloomberg.com/news/articles/2016-08-15/indonesia-to-destroy-71-boats-in-display-of-maritime-sovereignty> (accessed November 3, 2016).
 82. ROK MND, *2016 Defense White Paper* (Seoul: ROK MND, 2017), 239.

83. Ridzwan Rahmat, "Indonesia Plans to Bolster Natuna Islands with UAVs, Additional Personnel," *IHS Jane's 360*, September 17, 2015, <http://www.janes.com/article/54534/indonesia-plans-to-bolster-natuna-islands-with-uavs-additional-personnel> (accessed November 3, 2016); and Ridzwan Rahmat, "Indonesian Navy Plans for Submarine Base in South China Sea," *IHS Jane's 360*, March 31, 2016, <http://www.janes.com/article/59159/indonesian-navy-plans-for-submarine-base-in-south-china-sea> (accessed November 3, 2016).
84. "Largest Multifunctional Replenishment Oiler Handed over to Vietnam Coast Guard," *Tuoi Tre News*, July 29, 2016, <http://tuoitrenews.vn/politics/36232/largest-multifunctional-replenishment-oiler-handed-over-to-vietnam-coast-guard> (accessed November 10, 2016); and "Vietnam Coast Guard Receives New High-speed Patrol Boat," *Tuoi Tre News*, July 28, 2016, <http://tuoitrenews.vn/politics/29488/vietnam-coast-guard-receives-new-highspeed-patrol-boat> (accessed November 10, 2016).
85. Ridzwan Rahmat, "DSA 2016: Destini Shipbuilding Reveals Design of New MMEA Patrol Craft," *IHS Jane's 360*, April 19, 2016, <http://www.janes.com/article/59608/dsa-2016-destini-shipbuilding-reveals-design-of-new-mmea-patrol-craft> (accessed November 10, 2016).
86. Bill Hayton, "South China Sea: Vietnam Halts Drilling after 'China Threats,'" *BBC News*, July 24, 2017, <http://www.bbc.com/news/world-asia-40701121> (accessed August 10 2017).

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