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COMMAND PERSPECTIVE

3 **The Malign Influence of the People's Republic of China in International Affairs**

Gen Kenneth S. Wilsbach, Commander, Pacific Air Forces

SENIOR LEADER PERSPECTIVES

18 **The Arctic in an Age of Strategic Competition**

Lt Gen David Krumm, USAF

Col Matthew Nicholson, USAF

28 **Bases, Places, and Faces**

Operational Maneuver and Sustainment in the Indo-Pacific Region

Lt Gen Jon T. Thomas, USAF

FEATURES

33 **The Chinese Communist Party's Insidious Infiltration**

Lt Col Kathleen Hasson, USAF, GSS

48 **Repelling the Dragon**

Prioritizing Taiwan's Capabilities to Repel a PRC Invasion Force

Ralph Bentley

70 **China's Scattered Pearls**

How the Belt and Road Initiative Is Reclaiming the "String of Pearls" and More

Thilini Kahandawaarachchi

COMMENTARY

88 **Prioritizing India in Biden's "America Is Back" Foreign Policy**

Dr. Indu Saxena

DIGITAL-ONLY FEATURES

- 93 **Comparing Civilization-State Models**
China, Russia, India
Anvesh Jain
- 126 **Maritime Great-Power Competition**
Coast Guards in the Indo-Pacific
CDR Stanley P. Fields, USCG
- 157 **Examining America's Treaty and Alliance Structures in the Indo-Pacific**
Lt Col Benjamin D. Youngquist, USAF
- 178 **Unmet Expectations**
China-Pakistan Economic Corridor and the Limits of Chinese Strategic Investment
Lt Col Gregory Barber, USAF
- 201 **Interpreting the Signs**
The Prospects of QR Coding the Battlespace
Dr. Manabrata Guha & Dr. Jai Galliot
- 236 **The Perils of Power Asymmetry in the Indo-Pacific**
What Should New Delhi Do about It?
Dr. Monish Tourangbam & Mr. Pawan Amin
- 258 **Peace and Tranquility Are Insufficient**
A New Command Is Required for Ladakh
Dr. Amarjit Singh
- 279 **Clausewitz's Trinity of War**
India, Nuclear Deterrence, and Strategic Stability in South Asia
Dr. Ghulam Mujaddid
- 293 **The Belt and Road Initiative**
A Lens into China's Energy Security and Maritime Strategy
Mintu Barua

- 308 **The Failure of North Korean Containment**
How Illicit Networks Fund the Nuclear Program—and the Need
for a New Strategy
CPT Michael J. Brodka, USA

DIGITAL-ONLY VIEWS

- 324 **Al-Qaeda's Keys to Success**
Maj Ryan CK Hess, USAF
- 335 **China–South Korea Relations amid the Sino–American Strategic Rivalry**
Anthony V. Rinna
- 349 **Regional Comprehensive Economic Partnership and China's Geopolitical Checkmate in the Indo-Pacific Region**
Furqan Khan
- 362 **A US Response to China's Agression in the South China Sea and Overall Aim of Information Dominance**
Dr. John Hinck; Lt Col Brian Ashburn, USAF; Lt Col Bryan McNaughton, Alabama Air National Guard; Lt Col Thomas Heier, USAF; Lt Col Timothy Liebold, USAF; & Lt Col Robert Pearce, USAF
- 379 **Evaluating Civil Engineer Force Presentation Models for Agile Combat Employment**
Capt Matthew C. Jacobs, USAF
- 393 **Pivot to Power**
US Grand Strategy and the Rise of China
Dr. Indu Saxena, Dr. John Lash, & Sanskruti Yagnik
- 402 **F-35 O-Ring Production Functions versus Mosaic Warfare**
Some Simple Mathematics
Dr. Jörg Schimmelpfennig

DIGITAL-ONLY COMMENTARIES

410 **Our Enduring Advantage**

How Working with Our Allies and Partners Is the Best Way to Compete

Col Joshua “Mule” Koslov, USAF; Kate McIlvaine; Maj Adam “Bumper” Peterson, USAF; & Maj Raymond Zhang, USAF

419 **The Truth about Messaging**

Competition Requires Placing Information Objectives at the Center of All We Do

Col Joshua “Mule” Koslov, USAF & Kate McIlvaine

428 **The Threat**

Chinese Conventional Land Attack Missile Forces—An Update

Lt Col Thomas R. McCabe, USAFR, Retired

DIGITAL-ONLY CADET PERSPECTIVE

434 **Economic Implications and Near-Term Strategic**

Impacts of Military-Civil Fusion for the Next China

MIDN Andrew Song, NROTC

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The Malign Influence of the People's Republic of China in International Affairs

GEN KENNETH S. WILSBACH, COMMANDER, PACIFIC AIR FORCES

The People's Republic of China (PRC) continues to aggressively seek a return to international prominence and has increasingly amplified its presence as a global power. The Chinese Communist Party (CCP) has made it abundantly clear that it has plans to reshape the world order more to Beijing's liking. Within the Indo-Pacific, the PRC has strategically crafted its international policies through its signature Belt and Road Initiative (BRI), designed to gain advantage and leverage Beijing's growing economic and military might. According to the Council on Foreign Relations, President Xi Jinping's vision includes "creating a vast network of railways, energy pipelines, highways, and streamlined border crossings, both westward—through the mountainous former Soviet republics—and southward, to Pakistan, India, and the rest of Southeast Asia."¹ Through this framework, four observable tactics have emerged: the use of debt diplomacy, border disputes with neighboring nations, the general disregard for agreements and international norms, and, more recently, Beijing's undermining actions in response to the COVID-19 pandemic. Arguably, an objective observer could consider the PRC's international policies to be subversive and, at a bare minimum, have the potential to impact the entire Indo-Pacific region.

Debt Diplomacy

One international policy the PRC has made a habit of utilizing is the practice of its debt-trap diplomacy. This occurs when the PRC loans huge sums of money to developing countries, subsequently rendering them vulnerable to the PRC's influence and underlying intentions to gain economic or political collateral. The term *debt-trap diplomacy* was originally coined by Professor Brahma Chellaney in 2017 for the Canberra-based nonpartisan think tank Australian Strategic Policy Institute. The data in figure 1 is from research conducted in June 2019 by the Kiel Institute for the World Economy and depicts countries that are in debt to the PRC.² It is clear that within the Indo-Pacific, countries that are in China's immediate proximity and/or those with weaker economies are the most indebted to the PRC. In Pres. Joe Biden's recently released *Interim National Secu-*

riety Strategic Guidance, he calls out some of the tactics that China applies when he states: “In many areas, China’s leaders seek unfair advantages, behave aggressively and coercively, and undermine the rules and values at the heart of an open and stable international system. When the Chinese government’s behavior directly threatens our interests and values, we will answer Beijing’s challenge.”³ This Chinese behavior has drawn the ire of the international community, as the PRC seeks to subvert the stability of the region, particularly when practicing this diplomacy in nations such as Sri Lanka, Solomon Islands, and Timor-Leste. The fear is that Beijing is taking incremental steps to establish an economic world order dominated by China.

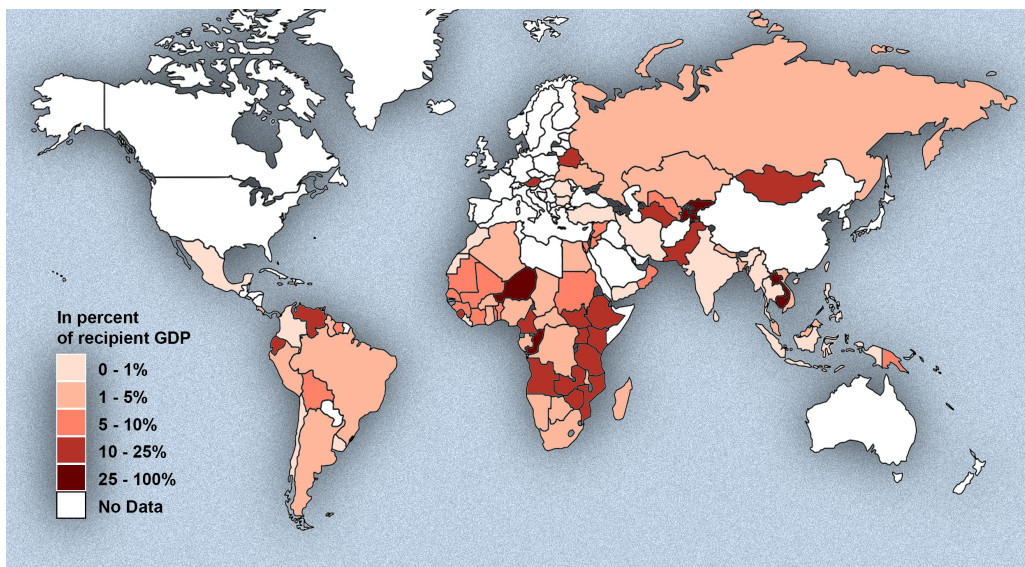


Figure 1. External debt to the PRC

There are numerous examples of the PRC’s debt-trap diplomacy tactics throughout the Indo-Pacific dating to far before the term was coined. The PRC utilized this approach in the aftermath of the Sri Lankan Civil War, which ended in 2009. Beijing saw an opportunity to plant imperialistic roots in South Asia, leveraging Sri Lanka’s need to rebuild and providing the country with loans for “projects in and around the capital of Colombo but also a now-notorious grouping in [then-President Mahinda Rajapaksa’s] hometown of Hambantota. Home to only 40,000 people, Hambantota managed to draw over \$1 billion in loans from China Exim for a new deepwater seaport, airport, and cricket stadium.”⁴ Due to Sri Lanka’s inability to repay these exploitative loans, the government in Colombo was forced to lease the strategic Hambantota Port to Beijing for a period of 99 years, enabling the PRC to operate the port au-

tonomously. While these infrastructure projects do boost the local economy, according to Professor Chellaney, the main motive for the PRC is “not to support the local economy, but to facilitate Chinese access to natural resources, or to open the market for low-cost and shoddy Chinese goods.”⁵

The PRC is not sparing Oceania from its debt-trap diplomacy. The tactic is in its initial stages with the Solomon Islands, as the country recently severed its relationship with Taiwan and established allegiance to the PRC. Shortly thereafter, reports emerged of the PRC actively pursuing a “75-year lease for Tulagi, a small island that was the capital of the Solomon Islands in colonial times, along with the construction of an oil and gas terminal, a fishing harbor, and a “special economic zone.”⁶ If the PRC follows the same blueprint used in Sri Lanka, the Solomon Islands may relinquish control of a major asset to the PRC’s benefit. The Solomon Islands falling into the hands of the PRC is another step toward realizing Beijing’s vision for a “New Silk Road” as part of the BRI, granting the PRC a major presence in Oceania.

The promise of significant funding to help build much-needed infrastructure may prove too tempting an offer for developing nations to turn down. In 2002, the PRC moved quickly to establish diplomatic relations after Timor-Leste gained its independence from Indonesia. Since that time, the PRC has funded several major construction projects in the country, including the Presidential Palace and the Ministry of Foreign Affairs building.⁷ The PRC’s interest in Timor-Leste is noteworthy due to the nearby resource-rich Timor Sea. Should Timor-Leste fall prey to the PRC’s debt-trap diplomacy, Beijing will likely exploit the Timor Sea and its bountiful resources as payment in kind. This would raise alarm bells in Australia and the United States, as both nations were instrumental in restoring the island’s independence. There have even been insinuations that the PRC is seeking to establish a naval base in Vanuatu. The Lowy Institute, an independent, nonpartisan international policy think tank based out of Sydney, Australia, has noted, “The most troubling implication for Australian interests is that a future naval or air base in Vanuatu would give China a foothold for operations to coerce Australia, outflank the US and its base on US territory at Guam, and collect intelligence in a regional security crisis.”⁸

One of the most troubling aspects of these loans is their lack of transparency, coupled with other hidden risks that usually accompany their signing. The *Harvard Business Review* raised this concern, comparing the PRC’s lending practices with those of the International Monetary Fund (IMF): “IMF lending is transparent, and it is usually conditioned on a plan to improve national policies. This is not necessarily the case for Chinese lending, which gives rise to important questions of creditor seniority.”⁹ The loans and debts that the PRC takes on

are part of a sustained effort to further the BRI and expand its global reach, and the lack of transparency in these dealings is a reoccurring theme when it comes to Beijing's policies.

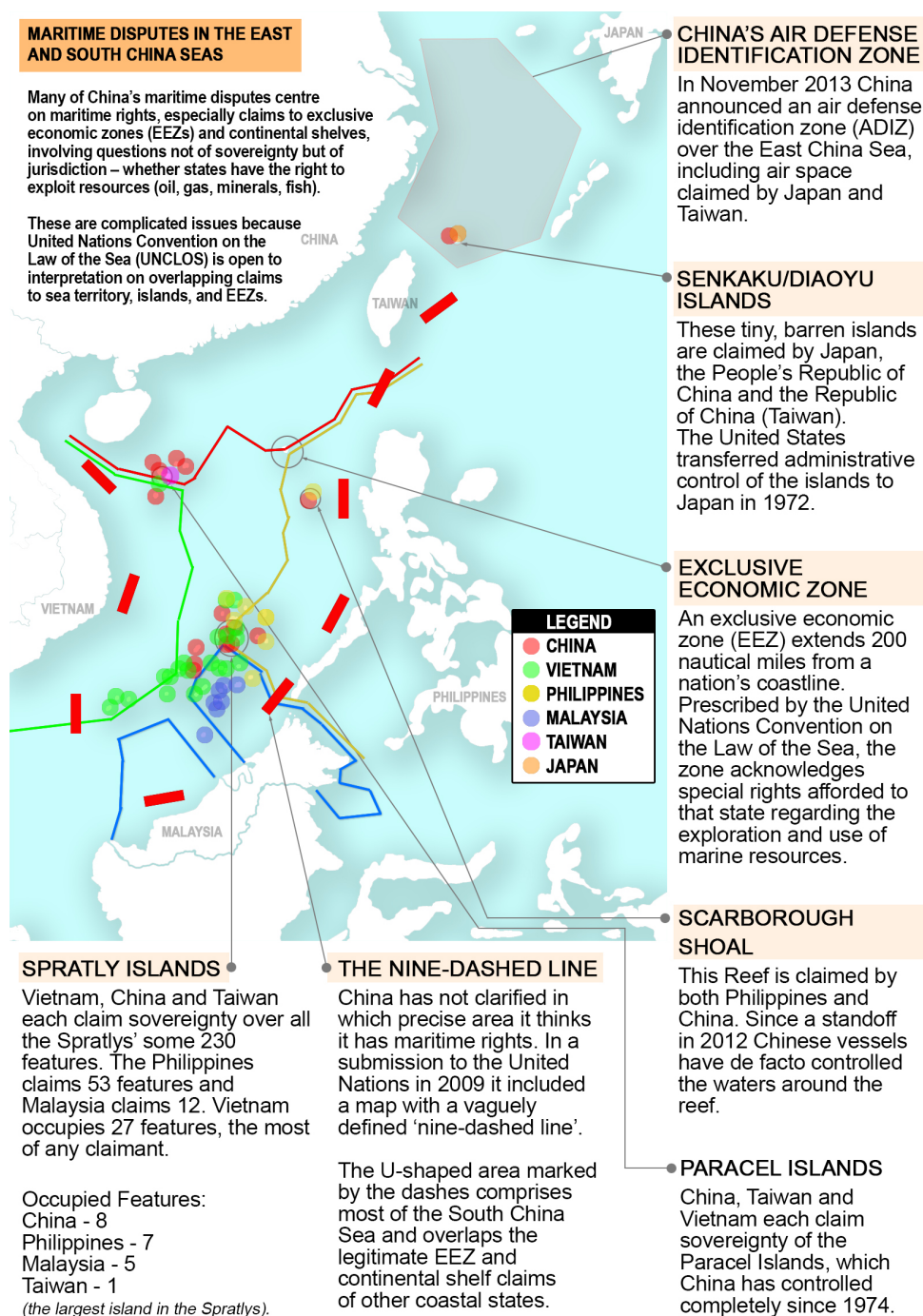
Border Disputes

Another nefarious stratagem the PRC has demonstrated in recent years is its blatant disregard for international law on the matter of borders. The PRC has border disputes with more than 10 countries, but what most frequently grabs global attention is Beijing's disputes in the South China Sea, where its unilateral actions run afoul of multiple claimants. Additionally, China has taken control of some of the territory claimed by India along their shared border, which has become contentious for obvious reasons. These instances further validate the narrative that the PRC seeks to reshape the world into its own image.

The PRC continues to act aggressively and make illegal claims on disputed territory, such as its "Nine-Dash Line" depicted in figure 2. Even after the unanimous ruling of the Permanent Court of Arbitration in the 2016 *Philippines v. China* South China Sea Arbitral Tribunal, China asserts that it has indisputable sovereignty over the ocean, islands, and reefs within this fabricated territorial claim. Rather than adhering to the ruling of the tribunal, which decided against Beijing's designs, the PRC has instead created artificial islands and claimed them as sovereign territory, all while building military outposts and increasing China's coercive activities in the South China Sea.

Figure 2 also depicts the intersecting national maritime claims in the hotly-contested South China Sea.¹⁰ The PRC's claim does not line up with the United Nations Convention on the Law of the Sea (UNCLOS) ruling, but countries such as the Philippines and Vietnam are unable to counter the PRC's activities in the area—mostly because of their reliance on and debt to the PRC. In a press statement from the Honorable Michael R. Pompeo, then-Secretary of State, released in July 2020:

The world will not allow Beijing to treat the South China Sea as its maritime empire. America stands with our Southeast Asian allies and partners in protecting their sovereign rights to offshore resources, consistent with their rights and obligations under international law. We stand with the international community in defense of freedom of the seas and respect for sovereignty and reject any push to impose 'might makes right' in the South China Sea or the wider region.¹¹



(Source: Lowy Institute)

Figure 2. PRC and South China Sea claims

China's false border claims have occurred on land as well as at sea. In South Asia, troops from India and China have clashed due to claims along the undemarcated border known as the Line of Actual Control (LAC). The area near India's Ladakh union territory is not clearly demarcated, hence Beijing and New Delhi have different views on where the border should be. Any change such as a road construction is perceived as a threat to the status quo in the area that can and has led to bloodshed, including clashes in the Galwan Valley in summer 2020. ADM John Aquilino stated before members of the Senate Armed Services Committee that: "The mistrust between China and India is at an all-time high. In addition to the rupture of bilateral relations as a result of the LAC skirmish, India is deeply suspicious of Chinese activities as part of the 'One Belt, One Road' initiative."¹² On the other hand, the relationship between India and the United States has only grown closer and strengthened the Quadrilateral Security Dialogue, or Quad, among the United States, Japan, Australia, and India. Democratic like-minded nations are recognizing the PRC's attempts to intimidate its neighbors as the truly duplicitous behavior that it is.

The examples within the South China Sea and along the Indian border are merely two of many that depict the PRC's general contempt toward dealings with neighboring countries and competing nations alike. The PRC shows its philosophy of "might makes right" in each of these instances. As Arthur Waldron writes for the *ORF Issue Brief*: "Today it is clear that China intends to use extant international laws to serve its own interests when possible, to ignore them otherwise, and ultimately, change them to suit its own norms."¹³ Representatives of the PRC may speak about a desire to share and contribute to the international community, but their actions prove them to be an outlier within that community.

Disregard for Agreements/International Norms

The PRC has relentlessly demonstrated an attitude of disregard, or indifference, which has bled into seemingly every aspect of its global operations. Some of the more egregious offenses include normalizing the theft of technology and intellectual property and the interference with democracy in Hong Kong. In both instances, the PRC shows that its true goal is the perseverance of the CCP at any and all costs.

The United States has witnessed a pattern of intellectual property theft from the PRC in recent years. According to John Demers, the head of the National Security Division at the Department of Justice, "China's typical *modus operandi* is to steal American IP, replicate it, replace the US company originating that IP in the Chinese domestic market, then displace the United States in the global market."¹⁴ The PRC has been getting away with this for years and has been persistent in its efforts to obtain intellectual property and intelligence. One would be

hard pressed to find exact figures on the number of cases of economic espionage, but “China remains the world’s principal IP [intellectual property] infringer across all types of IP theft, according to a spokesman for the IP Commission, which estimates up [to] \$600 billion annually in cost to the U.S. economy from these actions.”¹⁵ The Department of Justice has been forced to increase the number of prosecutors to handle these cases related to economic espionage, and the PRC’s disregard for intellectual property rights has not ceased.

Beijing has also shown complete disregard for the citizens of Hong Kong and the promise to allow Hong Kong its political independence for a period of 50 years, ending only in 2047. The PRC continues to subvert democracy in Hong Kong at every opportunity. The PRC’s meddling in Hong Kong demonstrates a practiced art of contempt for previous agreements and for democracy as a whole. Hong Kong is considered a Special Administrative Region to the PRC, but the established policy was for “one country, two systems.” Under that model, Hong Kong would maintain its capitalist system, political autonomy, and cultural way of life for the 50 years following the return to Chinese rule in 1997. Since that time, US policy has been to promote Hong Kong’s autonomy, prosperity, and way of life. Much of the PRC’s influence and actions in Hong Kong stand in direct opposition to the 1997 agreement, as Beijing has been slowly eroding Hong Kong’s promised freedoms. Reports point to the prosecution of protest leaders, increased media censorship, and human rights violations within Hong Kong. Just last year, the US government determined that there was no longer sufficient evidence Hong Kong was autonomous from the PRC and, thus, “suspended or eliminated special and differential treatment for Hong Kong, including with respect to export controls; imports; immigration; the extradition and transfer of sentenced persons; training for law enforcement and security services; shipping tax; and cultural exchange programs.”¹⁶ The PRC has continued to up the ante by ignoring, if not outright dismissing, Hong Kong’s political autonomy. Very recently the PRC approved a reform of Hong Kong’s electoral system, allowing the CCP to appoint more of Hong Kong’s lawmakers.¹⁷ One can imagine that these pro-Beijing acolytes will further usher in the erosion of any democratic principles or freedoms that remain in the city. This complicated history and ever-evolving policy serves as another example of the PRC “shifting the goal posts” when it comes to its attitude and behavior regarding established rules or norms within the international community.

These cases illustrate the lengths that the PRC is willing to traverse to advance its own unilateral strategic goals. The PRC continues to outright reject international laws relating to intellectual property rights and seeks to gain information and technology by any means necessary. Furthermore, Beijing’s actions in Hong Kong emphasize its concern that “permitting political freedom would jeopardize

the CCP's grasp on power."¹⁸ Each of these issues can be connected to the PRC's intent to establish itself as the predominant global power and the CCP's exhaustive efforts to serve its own authoritative ambitions.

COVID-19

COVID-19 provided the PRC an opportunity to exhibit its disconcerting motivations to the international community once again. In December 2019, reports of an outbreak originating in Wuhan Province surfaced resulting in the World Health Organization (WHO) declaring that the novel coronavirus is "a public health emergency of international concern, WHO's highest level of alarm."¹⁹ The PRC immediately went on a full-blown disinformation and misinformation campaign to win public opinion and shape the narrative. Beijing portrayed the PRC's efforts in handling the pandemic as proven and effective, giving the impression that China is ready to aid countries struggling to contain the virus. However, a closer look at the actions and policies, such as the dispersal of personal protective equipment, apparent human rights violations, and vaccine practices depict rather different underlying motivations.

Coupled with the information operations campaign, at the beginning of the pandemic, the PRC's aggressive approach came in the form of "mask diplomacy," through which Beijing provided much-needed, yet substandard, personal protective equipment (PPE). This was an attempt to influence the information domain by painting Beijing in a positive light. As Helena Legarda, senior analyst for MERICS, a top European think tank on China, writes, "Beijing's donations were meant to change the COVID-19 narrative by garnering positive international media attention and praise for China's handling of the coronavirus outbreak, thus bolstering Beijing's self-styled image as a responsible global power."²⁰ However, countries began to call attention to the poor quality of PRC-made masks and testing kits and even halted shipments. Several nations noted that the masks did not fit, the filters were defective, and the testing kits could not accurately determine if individuals had the virus. To counter the negative press, PRC diplomats stated that these defective supplies were from a company not licensed to sell its products.²¹ This negative attention was only amplified, however, when reports leaked about Uighur labor being used to satisfy the increased domestic and global demands for PPE production.²²

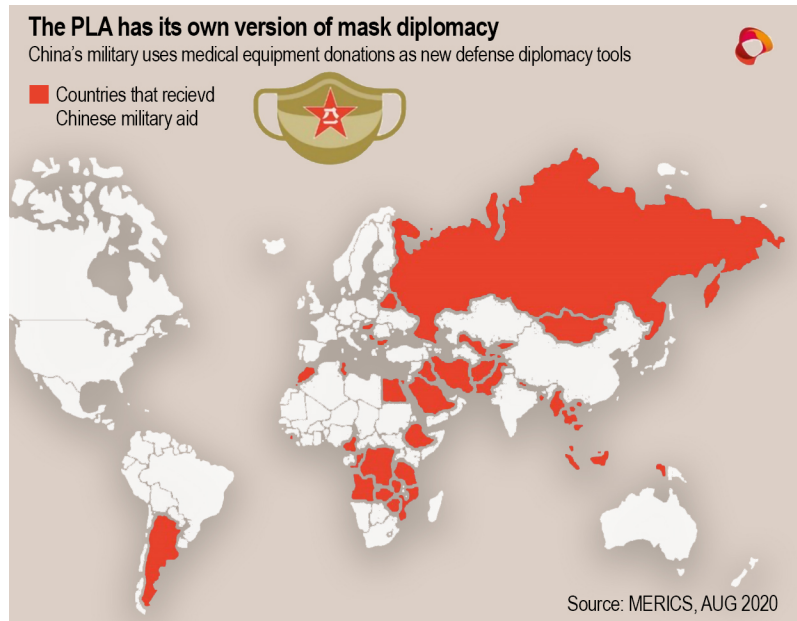


Figure 3. Recipients of People's Liberation Army's mask diplomacy

The PRC has persecuted the Uighurs, a minority Muslim group concentrated in the northwestern portion of the country, for years. Multiple human rights violations have been highlighted: population control, forced labor, internment in government re-education camps, and violations of religious freedom.²³ The PRC claimed that Beijing's policies toward the Uighur minority is part of an overall poverty reduction program. In 2015, President Xi identified risk prevention, pollution control, and antipoverty as the CCP's top priorities for 2017–2020. The antipoverty program targeted poor provinces such as Xinjiang, where Uighurs are considered natives. To ensure the impression of progress on this poverty reduction program, provinces utilized these impoverished citizens as forced labor, decreasing their poverty numbers and reporting the distorted numbers to Beijing.²⁴ Furthermore, the PRC dispatched the People's Liberation Army to strategically export the high-valued and coveted, yet ineffective, PPE via military aircraft to developing countries. Other nations, such as the Philippines²⁵ and Indonesia,²⁶ sent their C-130 aircraft to the PRC to procure medical supplies during the initial response to the pandemic. Alibaba cofounder and former chief executive officer, Jack Ma, donated PPE throughout the year and has so far donated to 150 countries while remaining within the PRC's guidelines.²⁷ His striking absence for a period piqued the interest of news media outlets after he made statements countering the CCP narrative.²⁸ It is unlikely the PRC would reveal where he was for

the nearly three-month span, but the fact that this vanishing act occurred shortly after speaking in contradiction of Beijing's rhetoric is telling, underscoring the continued lack of transparency witnessed from the CCP.

Where Chinese companies are holding vaccine trials

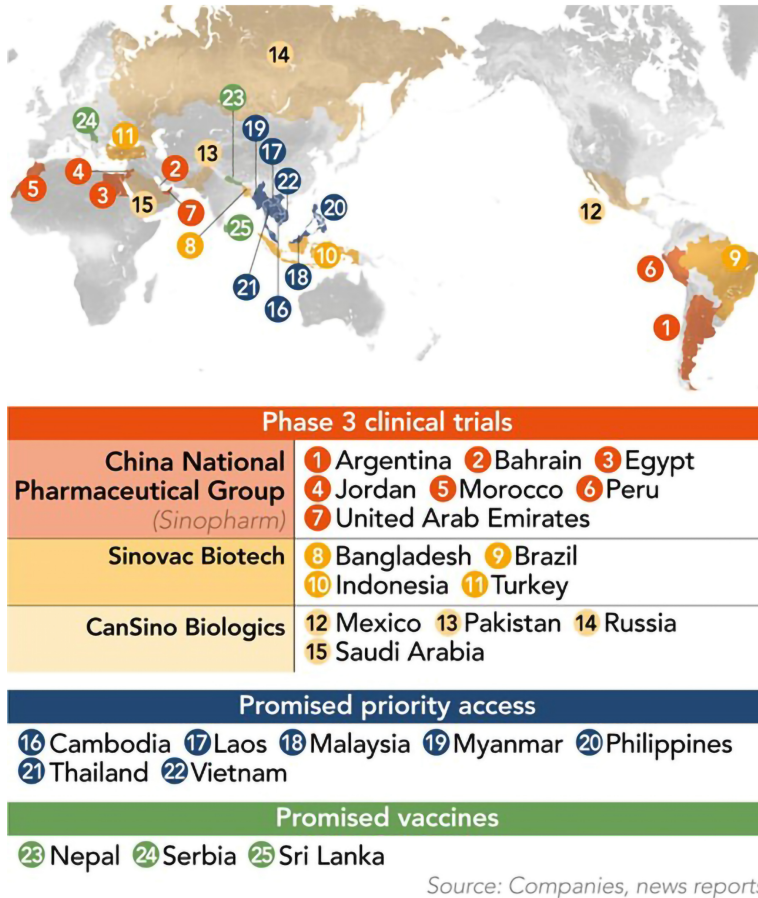


Figure 4. Nations where PRC COVID-19 vaccines are being tested

Fast-forward to the end of 2020: the finish line for a COVID-19 vaccine race was in sight, and the PRC and the United States were in the lead. The PRC began to conduct trials in 15 countries to solidify relationships with historically neutral nations. However, concerns regarding the PRC vaccine began to emerge. The Chinese trials were only conducted outside of the PRC, leading countries to question the rationale behind such testing. Another concern is the long-term reliance on the PRC for additional dosages and the unknown strings attached for obtaining the vaccine. According to the *Indo-Pacific Defense Forum*, this is “raising new

concerns about debt entrapment and medical ethics. Some analysts contend that it's another PRC effort to influence and control countries through unviable infrastructure loans.”²⁹ It is no surprise that the Association of Southeast Asian Nations (ASEAN) is likely to be dependent on the PRC vaccine to curb the virus. More recently, questions arose about the efficacy of the Chinese vaccine, as the PRC continues to withhold information about its vaccine trials. The PRC has a history of producing substandard vaccines that have resulted in mass protests domestically. The company responsible for those earlier vaccines is the same one now producing the Sinopharm COVID-19 vaccine, which is undergoing Phase 3 clinical trials in seven countries.

The PRC's standard lack of transparency has been observed from the outset of the COVID-19 pandemic, as the disinformation campaign sought to conceal vital information and deflect blame. This is highlighted in a report from the US House Committee on Foreign Affairs: “By responding in a transparent and responsible manner, the PRC could have supported the global public health response and shared information with the world about how to handle the virus. It is likely the ongoing pandemic could have been prevented had they done so, saving hundreds of thousands of lives and the world from an economic meltdown.”³⁰ The damages caused by the attempts to hide the outbreak were compounded by the dispersal of ineffective PPE, subsequent human rights violations, and concerns of the vaccine efficacy. The PRC's actions following the COVID-19 outbreak are just additional instances of acting solely out of self-interest, much to the detriment of surrounding nations in the Indo-Pacific and in the international community writ large.

Conclusion

If left unchallenged, the PRC will continue its push for greater influence. In the Indo-Pacific, the threat of the PRC controlling global trade through the South China Sea will likely become a reality in the near future, with nearby countries unable to counter Beijing. Additionally, due to the PRC's control, ports and airfields funded by PRC loans can easily be repurposed for military operations, ultimately destabilizing regional security. In the recently declassified *U.S. Strategic Framework for the Indo-Pacific*, several national objectives are spelled out vis-a-vis the PRC, such as preventing its industrial policies and unfair trading practices, maintaining a US intelligence advantage, and promoting democracy and the rule of law throughout the region. Furthermore, this document spelled out the need to deter the PRC from using military force against the United States and its allies and partners. To best accomplish this objective, the United States must ensure that it enhances “combat-credible U.S. military presence and posture in the Indo-

Pacific region.”³¹ We have witnessed the modernization and advancement of the PRC’s military capabilities at an alarming rate. The United States needs to continue developing capabilities and concepts to maintain its competitive advantage. The Chief of Staff of the Air Force, Gen C.Q. Brown, spelled out the necessity for this in his *Accelerate Change or Lose* white paper. Some long-held assumptions of our military advantages, such as air superiority, are no longer assured. As stated in the 2019 *DOD Indo-Pacific Strategy Report*, “China is investing in a broad range of military programs and weapons, including those designed to improve power projection; modernize its nuclear forces; and conduct increasingly complex operations in domains such as cyberspace, space, and electronic warfare operations. China is also developing a wide array of anti-access/area denial (A2/AD) capabilities, which could be used to prevent countries from operating in areas near China’s periphery, including the maritime and air domains that are open to use by all countries.”³² There are both near-term and long-term implications of the PRC’s actions throughout the region that touch upon all instruments of power. We must be prepared to stand up for US values and ideals when confronting the PRC’s influence diplomatically, informationally, militarily, and economically.

The combination of the PRC’s alarming advancement in military capability and the generally malign nature of Beijing’s policies within the global community highlights the absolute necessity to maintain US competitive advantage against near-peer adversaries. The PRC’s debt-trap diplomacy is a coercive economic practice that can cripple smaller nations. Although at first glance the PRC’s willingness to assist may be perceived as a neighborly act, this assistance habitually comes with strings attached.³³ The PRC continues to challenge and test the agreements and norms that are foundational to the international order. Beijing’s claims within the South China Sea and along the Indian border, the reneging of promised rights in Hong Kong, and China’s outright theft of technology and intellectual property demonstrate a disturbing disregard for the rule of law and international standards. Again, in the aftermath of the COVID pandemic, the CCP showed its self-serving attitude when attempting to deflect responsibility through a global disinformation campaign. Any one of these issues or practices is enough to raise concern, and all the more so when looked upon from a broader scope. As a one-party centralized state, every one of the PRC’s actions is intimately linked with Beijing’s overall goal to create a Sino-centric international order.

A free and open Indo-Pacific is unlikely to prevail if the PRC’s actions are left unchecked. As such, any arrangements with the PRC must be evaluated thoroughly and with these considerations in mind. The goal of a free and open Indo-Pacific is a region free of coercion and predatory practices and open for all nations to operate as dictated by international law. Peace in the Indo-Pacific is made

possible by the willingness of like-minded nations to work together coupled with the military power of allies and partners postured within the region. The United States must continue to work closely with its allies and partners to improve military interoperability and enhance collective deterrence capability. In President Biden's *Interim National Security Strategic Guidance*, he states: "Our democratic alliances enable us to present a common front, produce a unified vision, and pool our strength to promote high standards, establish effective international rules, and hold countries like China to account."³⁴ It is not a coincidence that the United States is already the partner and ally of choice within the region, while the PRC is struggling to gain similar influence; however, the PRC believes global power is a zero-sum game. One country must win, and every other country must lose. The PRC's goal is an Indo-Pacific centered on Beijing and solely based on what is best for the CCP. The debt-trap diplomacy, border disputes, nefarious practices such as the theft of technology and renegeing of agreements, as well as the PRC's actions surrounding COVID demonstrate that the PRC has and will continue to operate outside of the rule of international law and standards to achieve its goals. ★

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Notes

1. Andrew Chatzky and James McBride, "China's Massive Belt and Road Initiative," *Council on Foreign Relations*, 28 January 2020, <https://www.cfr.org/>.
2. Sebastian Horn, Carmen M. Reinhart, and Christoph Trebesch, "China's Overseas Lending," *Kiel Working Paper: Kiel Institute for the World Economy*, 16 April 2020, 17, <https://www.ifw-kiel.de/>.
3. Joseph R. Biden, Jr., *Interim National Security Strategic Guidance* (Washington, DC: White House, March 2021), 20, <https://www.whitehouse.gov/>.
4. Scott Wingo, "Mind the Trap: What Basing Rights in Djibouti and Sri Lanka Reveal About the Limitations of Debt as a Tool of Chinese Military Expansion," *Jamestown Foundation*, 13 April 2020, <https://jamestown.org/>.
5. Brahma Chellaney, "China's Debt-Trap Diplomacy," *Australian Strategic Policy Institute: The Strategist*, 24 January 2017, <https://www.aspistrategist.org.au/>.

6. Wellington, "A Chinese Firm May or May Not Be Leasing One of the Solomon Islands," *The Economist*, 24 October 2019, <https://www.economist.com/>.
7. Jarryd de Haan, "Chinese and Australian Interests in Timor-Leste: At Odds or Mutually Beneficial?," *Future Directions International*, 28 November 2019, <https://www.futuredirections.org.au/>.
8. Rory Medcalf, "The Many Questions About China's Vanuatu Ambition," *The Interpreter*, 10 April 2018, <https://www.lowyinstitute.org/>.
9. Sebastian Horn, Carmen M. Reinhart, and Christoph Trebesch, "How Much Money Does the World Owe China?," *Harvard Business Review*, 26 February 2020, <https://hbr.org/>.
10. "South China Sea," *Lowy Institute*, <https://www.lowyinstitute.org/>.
11. Michael R. Pompeo, "Statement by Secretary Michael R. Pompeo, U.S. Position on Maritime Claims in the South China Sea," *Department of State*, 21 July 2020, <https://la.usembassy.gov/>.
12. "Mistrust Between China, India at All-Time High, Says US Admiral," *Indian Express*, 24 March 2021, <https://indianexpress.com/>.
13. Arthur Waldron, "Examining China's Adherence to International Norms," *ORF Issue Brief* no. 231 (March 2018), <https://www.orfonline.org/>.
14. David H. Laufman, Joseph M. Casino, and Michael J. Casdan, "The Department of Justice's National Security Division Chief Addresses China's Campaign to Steal U.S. Intellectual Property," *National Law Review*, 24 August 2020, <https://www.natlawreview.com/>.
15. Eric Rosenbaum, "1 in 5 Corporations Say China Has Stolen Their IP Within the Last Year: CNBC CFO Survey," *CNBC*, 1 March 2019, <https://www.cnbc.com/>.
16. US Department of State, "U.S. Relations with Hong Kong," 28 August 2020, <https://www.state.gov/>.
17. "China Approves Plan to Reform Hong Kong Electoral System," *DW*, 11 March 2021, <https://www.dw.com/>.
18. "China's Global Threat to Human Rights," *Human Rights Watch*, 2020, <https://www.hrw.org/>.
19. "Timeline: WHO's COVID-19 Response," *World Health Organization*, 24 January 2021, <https://www.who.int/>.
20. "The PLA's Mask Diplomacy: China Global Security Tracker No. 7," *Mercator Institute for China Studies*, 3 August 2020, <https://merics.org/>.
21. "Coronavirus: Countries Reject Chinese-Made Equipment," *BBC*, 30 March 2020, <https://www.bbc.com/>.
22. Muyi Xiao, Haley Willis, Christoph Koettl, Natalie Reneau, and Drew Jordan, "China is Using Uighur Labor to Produce Face Masks," *New York Times*, 13 August 2020, <https://www.nytimes.com/>.
23. Lindsay Maizland, "China's Repression of Uyghurs in Xinjiang," *Council on Foreign Relations*, 1 March 2021, <https://www.cfr.org/>.
24. Fatoumata Diallo, "China's Anti-Poverty Efforts: Problems and Progress," *Institute for Security & Development Policy*, March 2019, <https://isd.eu/>.
25. Priam Nepomuceno, "Air Force Transports PCR Machines, Other Equipment from China," *Philippine News Agency*, 20 May 2020, <https://www.pna.gov.ph/>.
26. Budi Sutrisno and Ghina Ghaliya, "COVID-19: Indonesian Military to Get Medical Equipment from China," *Jakarta Post*, 20 March 2020, <https://www.thejakartapost.com/>.
27. Celia Hatton, "Jack Ma: The Billionaire Trying to Stop Coronavirus (and Fix China's Reputation)," *BBC*, 26 April 2020, <https://www.bbc.com/>.

28. Jeanne Whalen, "Where is Jack Ma? Social Media Buzz About the Famous Billionaire Puts Spotlight on Chinese Tech.," *Washington Post*, 6 2021, <https://www.washingtonpost.com/>.

29. Indo-Pacific Defense Forum Staff, "PRC-Run COVID-19 Vaccine Trials Raise New Debt-Entrapment, Human Rights Concerns," *Indo-Pacific Defense Forum*, 27 August 2020, <https://ipdefenseforum.com/>.

30. One Hundred Sixteenth Congress, "The Origins of the COVID-19 Global Pandemic, Including the Roles of the Chinese Communist Party and the World Health Organization," *House Foreign Affairs Committee Minority Staff Interim Report*, 12 June 2020, <https://gop-foreignaffairs.house.gov/>.

31. *U.S. Strategic Framework for the Indo-Pacific*, 15 January 2021, <https://trumpwhitehouse.archives.gov/>.

32. "The Department of Defense Indo-Pacific Strategy Report: Preparedness, Partnerships, and Promoting a Networked Region," 1 June 2019, <https://media.defense.gov/>.

33. For particulars on such agreements, see: Anna Gelpern, et al., *How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments* (Washington, DC: Center for Global Development, March 2021), <https://www.cgdev.org/>. The research team for this important study provide a dataset of the loans here: <https://www.aiddata.org/>.

34. Joseph R. Biden, Jr., *Interim National Security Strategic Guidance* (Washington, DC: White House, March 2021), 10, <https://www.whitehouse.gov/>.

The Arctic in an Age of Strategic Competition

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In 1850, Robert McClure and the crew of the HMS *Investigator* completed the first recorded transit of the Northwest Passage from the Pacific Ocean to the Atlantic Ocean via the Arctic Ocean. After arriving in the Arctic, the expedition spent three years locked in the ice before abandoning their ship and completing their trip by dragging their gear in sledges on a 14-day march over the ice. Subsequently, a different ship transported them home to England. During the expedition, five men died, and the survivors suffered from starvation and scurvy. After being gone four years, McClure finally returned to England and was knighted, promoted in rank, and given a monetary award by the British Parliament.¹ In August 2016, the tourist ship *Crystal Serenity* sailed from Vancouver, Canada, through the Northwest Passage to New York, taking 32 days. They also stopped along the way for golf, shopping, and hiking. When cruising resumes after COVID-19, anyone can make the trip, provided they can pay the 22,000 USD ticket price.²

The changing climate and advancing technology have created a new environment and resultant impetus for increased activity in the Arctic. The Arctic is warming two times faster than the rest of the world.³ Temperatures in Utqiagvik, the northernmost village in Alaska, have broken records, as the fastest-warming location on the continent.⁴ This warming has led to a historical loss of sea ice, with the October 2020 measurement being the lowest recorded. In 2002, the northern ice pack was measured at 5.83 million km² while the 2020 extent was 3.74 million km² for a loss of 35.8 percent in just 18 years.⁵ Ice thickness has also decreased from an average of 3.64 m in 1980 to as low as 1.89 m in 2008.⁶

Due to these changes, the Arctic is rapidly becoming a new frontier of strategic importance. Once a remote region, sparsely inhabited and impenetrable, the Arctic is quickly becoming an enticing opportunity for faster merchant shipping, expanded exploration for natural resources, increased human habitation and tourism, and military deployments to secure northern borders. Beyond the nations bordering the Arctic, others such as the People's Republic of China (PRC) have increased their physical presence in the Arctic Ocean while investing heavily in

the region. A new period of competition has commenced at the top of the world that will influence the security of the entire planet.

Speaking at the Arctic Council Ministerial meeting in Roveniemi, Finland, in May of 2019, US Secretary of State Mike Pompeo indicated that melting Arctic sea ice is set to unlock new “opportunities for trade” and create a “forefront of opportunity and abundance.”⁷ The Northern Sea Route (NSR), which runs along the north coast of Russia and within its exclusive economic zone (EEZ), is rapidly becoming ice-free for longer times during the year. Although unrecognized by the United States, Russia claims the NSR is within territorial waters and has subsequently imposed fees and various requirements for ships transiting the passage. In 2017, the first ship was able to transit the NSR without an icebreaker,⁸ and in May 2020, the earliest transit within the calendar year was achieved.⁹ By 2040, if current ice loss rates continue, it could be ice-free year-round.¹⁰ Already showing signs of increased traffic, 331 ships used the NSR in 2020, versus 277 in all 2019.¹¹ Ships transiting from Japan to Europe via the NSR shave 11,000 km off their trip.¹² Ships transiting from China to Northern Europe save hundreds of thousands of dollars in fuel costs. Annually, an Arctic shipping route from China to Europe would save the PRC 60–120 billion USD per year. The Chinese refer to this as the “Polar Silk Road” and consider it a key element to their success as a world power.¹³

The Northwest Passage is an alternative route that runs along the northern coast of North America from the Bering Strait to Europe. Like the NSR, the Northwest Passage is becoming economically viable as its sea ice melts. In 2014, the first cargo ship to travel unescorted by icebreakers delivered nickel from Quebec to China. It made the trip in 26 days, beating the timing of the normal route through the Panama Canal by more than two weeks. In all, 27 ships made the full transit through the passage in 2019.¹⁴ With numerous islands but far fewer ports and rescue assets, this route typically has more ice than experienced along the NSR. To make Arctic shipping in North America safer, Senator Lisa Murkowski (R-AK) proposed a new initiative, named The Shipping and Environmental Arctic Leadership Act (SEAL Act). In exchange for a fee, the United States and private fleets would provide icebreaker assistance, harbors of refuge, ice forecasting, oil spill response, and a rescue tug if needed. Funds earned would be used to support construction of deep-water ports in Alaska to support shipping.¹⁵

Retreating sea ice has opened additional on-land and at-sea locations for resource extraction. The US Geological Survey assessed that above the Arctic Circle rests about 13 percent of the world’s undiscovered oil and 30 percent of the world’s undiscovered gas, mostly in depths less than 500 m of water.¹⁶ This equates to 90 billion barrels of oil, 17 trillion ft³ of natural gas, and 44 billion barrels of natural gas liquids.¹⁷ Numerous nations plan to mine rare earth metals, copper, phospho-

rus, and platinum in this vast expanse. Greenland's southern regions hold approximately 25 percent of the world's rare earth metals, critical to the manufacture of modern electronic components.¹⁸ Additionally, Russia constructed a liquid natural gas (LNG) extraction plant on the Yamal Peninsula, where gas reserves estimated to be worth billions of dollars await.¹⁹ In Alaska, the Qilak LNG North Slope Project plans to directly export natural gas to Asia.²⁰ Norway, whose oil industry comprises 18 percent of its gross domestic product (GDP) and is Europe's biggest oil producer, cleared the way for expanded oil exploitation in the Arctic Barents Sea.²¹ While the United States may choose to forego resource extraction due to environmental concerns, the list of projects and investors continues to grow as access to the Arctic increases. Complicating this issue are competing—and potentially contentious—claims by several Arctic nations on declared extended continental shelves. If recognized, the claimants would have exclusive rights to resources on or below the seabed beyond the normal EEZ.

Protein in the form of fish is becoming a high-demand item worldwide. Fishing stocks have declined in areas that are commercially fished, and many nations are scrambling for new locations. As the Arctic warms and ice declines, it exposes new fishing areas to exploit. In addition, some species of fish are migrating north due to rising ocean temperatures.²² In 2017, nine nations and the European Union signed a treaty to ban commercial fishing in 2.8 million km² of the Arctic for 16 years. This area is about the size of the Mediterranean Ocean and encompasses all the area north of the Arctic nations' northern EEZs. The goal is to study the impacts of climate change, research the unique marine ecological system, and establish sensible quotas and rules before fishing resumes. The agreement automatically renews every five years, unless superseded by a set of established rules, or if a single nation objects.²³

Tourism is another commercial venture gaining traction in the Arctic. As ocean routes open to traffic, the cruise industry is exploring new experiences for paying passengers. Beyond concerns over its impact on the environment and an influx of visitors into small, remote communities, the prospect of rescuing a cruise ship in the Arctic is challenging. As mentioned earlier, the Northwest Passage winds through a very remote region of Upper Canada where rescue forces are either scarce or nonexistent.²⁴ In March 2019, the *MV Viking Sky* lost power while cruising between cities in Norway. High seas prevented the use of lifeboats, and six helicopters began an evacuation. In the end, after 19 hours, only 479 of the over 1,300 people on board were evacuated when the engines were restarted. The ship was only 1.5 miles offshore in the Norwegian Sea throughout the evacuation.²⁵ This same scenario hundreds of miles from the nearest rescue forces is much more sobering.

Great-Power Competition in the Arctic

To take advantage of these opportunities, many nations—particularly Russia and China—have initiated a multifaceted national-level campaign to capture resources while securing their territory and interests. Around 20 percent of Russia's GDP originates in the Arctic,²⁶ and the NSR transits the country's northern border—which is a full 50 percent of the total coastline above the Arctic Circle. China, despite not having any territory in the Arctic, is securing trade routes and resources through a campaign of increased presence, both physically and politically, and investment in the Arctic nations. Beijing's and Moscow's efforts are bearing fruit and are paying off economically, militarily, and politically.

Russia, by nature of having one-fifth of its territory located inside the Arctic Circle, has always considered the region of vital national importance. Its most recent Arctic Strategy, "Strategy of Development of the Arctic Zone of the Russian Federation and the Provision of National Security for the Period to 2035," outlined Russia's national interests in the Arctic and what Moscow considers to be threats to Russia's national security.²⁷ When the Soviet Union dissolved, the military bases and other infrastructure in Russia's northern regions were allowed to decay. After decades of quiet, and as tensions between Russia and other nations increased, a new program of rebuilding and reoccupying these bases is under way. Russia has extensively fortified and militarily occupied its once remote, sparsely populated, and thinly guarded northern border. The military buildup seeks to provide defense of the Russian homeland, control of the NSR, and access to the Arctic Ocean.²⁸ Near the Bering Strait, Russia has improved airfields and built radar stations, allowing its forces to monitor the flow of traffic into the region from the Pacific. Along the NSR, a series of coastal defensive systems have been erected to secure territory and defend Russia's Northern Fleet. In 2017, Russia published its naval doctrine, which highlights Moscow's desire to "dominate the high seas, including in the Arctic."²⁹ The Northern Fleet, which includes surface and subsurface vessels, is tasked with ensuring access to not only the Arctic Ocean but also the North Atlantic and the Greenland–Iceland–UK Gap. Russia's fleet of conventional and nuclear missile submarines can access the Atlantic and Pacific Oceans via the Arctic. Supporting Russia's Northern Fleet is the world's largest armada of icebreakers, 46 in service with 11 more planned. Additionally, several of these icebreakers have the capability to carry cruise missiles and electronic warfare systems.³⁰

Without territory that lies within the Arctic, China is focused primarily on access to resources and physical presence for military and merchant vessels. The PRC's Arctic policy, released in January 2018, asserted that as a "Near Arctic State" China will "participate in the exploration for and exploitation of oil, gas,

mineral, and other non-living resources.”³¹ It is estimated that between 2012 and 2017 the Chinese invested over 1.4 trillion USD in the Arctic nations, primarily in the energy and mineral sectors. In Greenland, Chinese investments accounted for 11.6 percent of GDP, and in Iceland it reached 5.7 percent.³² China expressed a desire to open a research station and satellite facilities in Greenland to match those already in operation in Sweden and Finland. The PRC even attempted to buy a former US Navy base in Greenland that would have provided China a port for civilian and military ships.³³ China has also invested in the Russian Yamal Peninsula LNG production, and in 2019, President Xi Jinping visited Russia for the launch of a joint venture to build ice-capable LNG tanker ships.³⁴

Chinese investments in Arctic infrastructure will enable physical access for its commercial and military vessels. China has offered to rebuild airfields in Greenland, oil rigs in Norway, railroads in Russia, and rolling stock in Canada. As noted in the US Coast Guard’s *Arctic Strategic Outlook*, the PRC’s persistent challenges to “the rules-based international order around the globe cause concern of similar infringement to the continued peaceful stability of the Arctic region.”³⁵ China’s malign behavior in the Indo-Pacific region provides insight and is a harbinger of what is to come, as China’s economic, military, and scientific presence grows in the Arctic. One can easily surmise that China will attempt to use its future footholds in the Arctic to further undermine the international rules-based order.

In response to the increasing strategic significance of the Arctic, the US Department of Defense, US Navy, US Coast Guard, and US Air Force have each produced an Arctic strategy or outlook. The US Army expects to unveil its own strategy in 2021. These strategies aim to drive America’s actions to maintain a peaceful, rules-based Arctic. These strategies are characterized by respect for national sovereignty and constructive engagement among the Arctic nations, while maintaining America’s own freedom of navigation and ensuring the defense of the homeland. Each strategy calls for an increased and sustained presence, greater cooperation with Arctic allies, additional joint-force training and exercises in the Arctic, and corresponding investment in capacity and capabilities that yield an advantage in the unique environment. Implementing these strategies will be difficult, as the US defense budget is expected to remain relatively flat through 2025—with only a mild 10-percent increase in the following 10 years.³⁶ Further complications include budgetary pressures for substantial investments needed for nuclear modernization and the shift to high-end capabilities to dominate near-peer adversaries.

Eleventh Air Force is leading the efforts to execute the USAF Arctic strategy, using decades of experience in the Far North. Activated as the Alaskan Air Force in January of 1942 to defend the Territory of Alaska during World War II, the unit was redesignated the Alaskan Air Command in 1945 and tasked with man-

aging the air defense of North America. Throughout the Cold War, Alaska-based fighter aircraft sat alert, acting as “Top Cover for America” and ready to react to Soviet bombers around the clock. Today, in support of the North American Aerospace Defense Command, fighters, air-refueling tankers, airborne early warning and control systems (AWACS), and ground-based radar systems integrated with our Canadian allies continue to guard the North American Arctic.³⁷

Eleventh Air Force has seen firsthand the increased activity in the Arctic. Intercepts of Russian aircraft entering the North American Air Defense Identification Zone (ADIZ) set records in 2020. Not only are ADIZ penetrations more common but the geographic range has also increased and the types of aircraft and their associated missions have changed. Tu-142 maritime patrol aircraft have overflown the Aleutian Islands, Il-38 antisubmarine aircraft flew within 50 miles of US territory, and Su-35 fighters have escorted Tu-95 Bear bombers while being provided situational awareness from an A-50 AWACS. In June 2020, two such formations came within 32 miles of the Alaska coastline.³⁸

Eielson AFB (EAFB), in the Alaskan interior, has begun receiving two squadrons of F-35s. Initial testing of all F-35 variants at EAFB proved their ability to operate in the extreme cold weather found there. Winter temperatures routinely reach – 40°F and have required EAFB Airmen to develop techniques and procedures to operate and maintain the USAF’s newest fighter in this most extreme environment.³⁹ Combined with the two F-22 squadrons on Joint Base Elmendorf-Richardson in Anchorage, the State of Alaska will host the largest force of fifth-generation aircraft in the world.

Education is critical to success in the Arctic and in the 2021 National Defense Authorization Act, the US Congress directed the establishment of the Ted Stevens Center for Arctic Security Studies, a new Department of Defense Regional Center. The USAF is inserting Arctic-focused studies into all levels of professional military education and is seeking partnerships with Arctic-focused civilian universities to build educational programs for future leaders. There will be more exercises in the Arctic and more participants will be attending. The exercise schedule will also change from avoiding the winter to actively seeking it out. Finally, increased participation in international organizations, Arctic think tanks, international exercises, and robust partnerships with Arctic indigenous communities will allow the Joint Force to expand its Arctic expertise using tactics, techniques, and procedures developed by other Arctic experts.

Increased US presence in the Arctic will place pressure on already strained capacity. This augmented presence cannot be achieved by only air assets, occasional naval patrols, or sporadic land training; rather, sustained engagement requires air, sea, and land forces to be assigned and operated in the Arctic. Additionally, space-

based assets must be established in proper polar orbits to be effective at high elevations and need to have their limited operating time devoted to Arctic taskings.⁴⁰ The lack of infrastructure in Alaska, which includes roads, ports, and railroads, combined with great distances, requires investment in training and operational infrastructure to support joint forces. The environment, despite warming, will drive research and development in Arctic-capable technologies, building materials, clothing, and other resources that are more expensive than their fair-weather equivalents. Any increased focus on the Arctic drives resource and manning bills that reduce availability and effectiveness in other regions.

Future of the Arctic

The future of the Arctic as a peaceful region open to shipping, responsible resource extraction, and security for its nations is not assured. Its delicate natural environment and climate are affected by activities originating thousands of miles away and creates additional problems that cannot be solved solely within the Arctic. While some nations seek cooperation and mutual benefits, others desire to shape the region in a manner that benefits only their own singular national priorities. The East and South China Seas rapidly developed into hotspots and potential crisis locations based on China's disregard for international laws and norms. The Arctic is now poised to become an area where China and others attempt to exert their economic power and influence. The desire for commerce, natural resources, and fishing will drive increased investments, greater spending on foreign infrastructure, more requests for scientific access, and additional expeditions to the Arctic to exert self-proclaimed rights in the region.

The effort to shape the Arctic's future has grown beyond a NATO, US European Command (EUCOM), US Indo-Pacific Command (INDOPACOM), or US Northern Command problem. The Arctic transects all these geographic commands and requires a combined effort. US joint forces must be shared among the European, Pacific, and North American Arctic regions to balance demands. A new approach can create a balance of presence in the Arctic, while increased INDOPACOM and EUCOM activities in the Far North can increase America's national presence in the region. Efforts within the services to create global multi-domain command and control will optimize the deployment and execution of all joint forces, which subsequently creates efficiencies and reduces resource drain.

The new Arctic has already changed the dynamics of international commerce, the search for raw materials, access to the Far North, and military presence. History has shown that when America is slow to react to global challenges, the nation may find itself in a game of catch-up with the nations that acted quickly. However, the realities of US global commitments make it impossible to focus on the Arctic

without accounting for the other regions of global competition. Only by thoughtfully executing, evaluating, and improving the nation's Arctic security strategies will the nation be able to achieve the allocation and sharing of critical resources that secure US national Arctic interests to better guarantee the Arctic's future as a secure and stable region. ❁

Lt Gen David Krumm, USAF

General Krumm is the Commander, Alaskan Command, United States Northern Command; Commander, Eleventh Air Force, Pacific Air Forces; and Commander, North American Aerospace Defense Command Region, North American Aerospace Defense Command, Joint Base Elmendorf-Richardson, Alaska. He is the senior military officer in Alaska, responsible for the integration of all military activities in the Alaskan joint operations area, synchronizing the activities of more than 21,000 active-duty and reserve forces from all services. As Commander of the Alaskan Region of the North American Aerospace Defense Command, General Krumm directs operations to ensure effective surveillance, monitoring, and defense of the region's airspace. He is also responsible for the planning and execution of all homeland defense operations within the area of responsibility, including security and civil support actions. General Krumm also commands Eleventh Air Force, overseeing the training and readiness of five wings and Air Force installations located in Alaska, Hawaii, and Guam.

General Krumm entered the Air Force as a distinguished graduate of the Air Force ROTC program at Auburn University. He has served in a variety of flying, staff, and command assignments and has commanded at the flight, squadron, and wing levels.

General Krumm is a command pilot with more than 3,000 hours in the T-37, T-38, F-15C and F-22. During his career, he flew combat missions in support of Operation Southern Watch.

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Notes

1. J. N. L. Baker, "McCLURE, Sir ROBERT JOHN LE MESURIER," in *Dictionary of Canadian Biography*, vol. 10, University of Toronto/Université Laval, 2003–, 2020, <http://www.biographi.ca/>.

2. "A Year After Its Historic Voyage, The Crystal Serenity Is Preparing To Sail The Northwest Passage Again," *Arctic Today*, 24 May 2017, <https://www.arctictoday.com/>.

3. "Arctic Program: Arctic Report Card, Update for 2020," *National Oceanic and Atmospheric Administration*, December 2020, <https://arctic.noaa.gov/>.

4. Ned Rozell, "Utqiagvik, where the climate has changed," *University of Alaska – Fairbanks*, January 2018, <https://www.gi.alaska.edu/>.

5. "2020 Arctic sea ice minimum second lowest on record," *National Oceanic and Atmospheric Administration*, September 2020, <https://www.climate.gov/>.

6. "State of the Cryosphere: Sea Ice," *National Snow and Ice Data Center*, November 2020, <https://nsidc.org/>.
7. Michael R. Pompeo, "Looking North: Sharpening America's Arctic Focus." Arctic Council Ministerial Meeting, Rovaniemi, Finland, 6 May 2019.
8. Matt McGrath, "First tanker crosses northern sea route without icebreaker," *BBC*, 24 August 2017, <https://www.bbc.com/>.
9. "Icebreaking LNG Carrier Completes Earliest Northern Sea Route Transit," *The Maritime Executive*, 1 June 2020, <https://www.maritime-executive.com/>.
10. Keith Breene, "The Arctic is now expected to be ice-free by 2040," *World Economic Forum*, 17 May 2017, <https://www.weforum.org/>.
11. Analysis by the Centre for High North Logistics (CHNL) at Norway's Nord University Business School.
12. Malte Humpert, "The Future of the Northern Sea Route – A "Golden Waterway" or a Niche Trade Route," *The Arctic Institute*, 15 September 2011, <https://www.thearcticinstitute.org/>.
13. Humpert, "The Future of the Northern Sea Route."
14. Jessica Murphy, "Is the Arctic set to become a main shipping route," *BBC*, 1 November 2018, <https://www.bbc.com/>.
15. Melody Schreiber, "Two US bills could advance American presence in the Arctic," *Arctic Today*, 28 February 2019, <https://www.arctictoday.com/>.
16. Donald L. Gautier et al., "Assessment of Undiscovered Oil and Gas in the Arctic," *Science*, 29 May 2009, 1175–79.
17. M. E. Brownfield et al., "An Estimate of Undiscovered Conventional Oil and Gas Resources of the World," *U.S. Geological Survey*, USGS Fact Sheet 2012-3024, <http://large.stanford.edu/>.
18. Jackie Northam, "Greenland Is Not for Sale. But It Has Rare Earth Minerals America Wants," *NPR*, 24 November 2019, <https://www.npr.org/>.
19. Charlie Duxbury, "The 5 most important races for the Arctic," *Politico*, 1 January 2020, <https://www.politico.eu/>.
20. "A New Phase in North American LNG Exports," *Qilak LNG*, <https://qilaklng.com/>.
21. Nerijus Adomaitis and Terje Solsvik, "Norway plans big expansion of Arctic oil exploration," *Reuters*, 24 June 2020, <https://www.reuters.com/>.
22. "New Study: Climate Change to Shift Many Fish Species North," *NOAA Fisheries*, 17 May 2018, <https://www.fisheries.noaa.gov/>.
23. Hannah Hoag, "Nations agree to ban fishing in Arctic Ocean for at least 16 years," *Science*, 1 December 2017, <https://www.sciencemag.org/>.
24. Douglas Causey et al., "Arctic-Related Incidents of National Significance Workshop on Maritime Mass Rescue Operation," *Arctic Domain Awareness Center*, 21–22 June 2016: 18–20.
25. Julia Thompson, "Viking Sky cruise ship engines failed because of low oil levels, maritime official says," *USA Today*, 27 March 19, <https://www.usatoday.com/>.
26. Pavel Devyatkin, "Russia's Arctic Strategy: Aimed at Conflict or Cooperation," *The Arctic Institute*, 6 February 2018, <https://www.thearcticinstitute.org/>.
27. Janis Kluge and Michael Paul, "Russia's Arctic Strategy through 2035 Grand Plans and Pragmatic Constraints," *German Institute for International and Security Affairs*, November 2020, <https://www.swp-berlin.org/>.
28. Ekaterina Klimenko, "Russia's new Arctic policy document signals continuity rather than change," *Stockholm International Peace Research Institute*, 6 April 2020, <https://www.sipri.org/>.

29. Dmitry Forenburg, "Russia's New and Unrealistic Naval Doctrine," *War on the Rocks*, 26 July 2017, <https://warontherocks.com/>.
30. Matthew Melino and Heather A. Conley, "The Ice Curtain: Russia's Arctic Military Presence," *Center for Strategic and International Studies*, <https://www.csis.org/>.
31. English translation of China's Arctic Policy, <http://english.www.gov.cn/>.
32. Mark E. Rosen and Cara B. Thuringer, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security," *CNA Analysis Solutions*, November 2017, <https://www.cna.org/>.
33. Erik Matzin, "Denmark spurned Chinese offer for Greenland base over security," *Reuters*, 6 April 2017, <https://www.reuters.com/>.
34. Jonathan Hillman, "China and Russia: Economic Unequals," *Center for Strategic and International Studies*, 15 July 2020, <https://www.csis.org/>.
35. *United States Coast Guard Arctic Strategic Outlook*, April 2019, <https://www.uscg.mil/>.
36. "Long-Term Implications of the 2021 Future Years Defense Program," *Congressional Budget Office*, September 2020, <https://www.cbo.gov/>.
37. "Eleventh Air Force Facts," *Joint Base Elmendorf-Richardson Homepage, Units, Eleventh Air Force*, <https://www.jber.jb.mil/>.
38. Brian W. Everstine, "Close Encounters of a Familiar Kind," *Air Force Magazine*, 1 November 2020, <https://www.airforcemag.com/>.
39. Kent Miller, "Eielson reactivates fighter squadron ahead of F-35's arrival," *Air Force Times*, 12 October 2019, <https://www.airforcetimes.com/>.
40. David B. Larter, "The Arctic is a strategic hot spot, but Western allies lack good intel," *Defense News*, 21 September 2020, <https://www.defensenews.com/>.

Bases, Places, and Faces

Operational Maneuver and Sustainment in the Indo-Pacific Region

LT GEN JON T. THOMAS, USAF

Since the dramatic demonstration of US military power in the 1991 Persian Gulf War, when a then reasonably well-armed Iraq was rapidly ejected from Kuwait and defeated with great losses, potential opponents have studied the US military way of war to determine the most effective means to counter US advantages. Careful observers noted as central to success the ability of the US and coalition forces to build up forces uncontested and then to operate from large, fixed bases with minimal interruption throughout the campaign.¹ In the decades since, potential opponents have adopted strategies and made major investments to limit and constrain the ability of the United States and its allied or partnered forces to assemble forces, conduct operational maneuver, and logistically sustain major combat operations. Known as antiaccess and area-denial (A2/AD) warfare, the goals of such strategies are to deny sanctuary, inhibit maneuver, and attrit forces to the point that insufficient combat power can be brought to bear at decisive points in the battle.²

The People's Republic of China (PRC) has been a particularly astute student of the US way of war, and for the past three decades Beijing has deliberately developed doctrine and capabilities to counter US and allied advantages. Buoyed by a rapidly growing economy over the same period, and unconstrained by prior treaty obligations such as the now defunct Intermediate Nuclear Forces (INF) treaty,³ the PRC continues to assemble significant forces intended to hold targets at risk as far away as the second island chain in the western Pacific. These forces employ a variety of all-domain threats—surface-to-surface, air-to-surface, undersea, space, and cyber—all intended to complicate what is an already difficult maneuver and sustainment challenge in the region simply by virtue of the vast distances of the Indo-Pacific. Lines of communication are long, there is a lot of water, and even under favorable conditions, US and allied military planners find that there are never “enough” assets available to maneuver forces nor “enough” sustainment supplies to meet every need.

Yet the A2/AD strategy pursued by the PRC is no sure path to victory. Those very same US and allied planners understand the challenges of conflict in the Indo-Pacific and have accounted for them in their plans. Put another way, it is one thing to have a bunch of weapons available to shoot. It is another thing entirely to effectively counter an entire system that understands the nature of that threat and

is actively adjusting in recognition of the changing security environment in the Indo-Pacific. These active adjustments are an evolving combination of “bases, places, and faces,” reflecting exactly what the United States, in concert with allies and partners, is doing to ensure operational maneuver and sustainment will continue despite the aggressive offensive arsenal being accumulated by the PRC.

Bases

US overseas basing structure in the western Pacific is largely a result of the enduring outcomes from multiple conflicts, especially World War II, the Korean War, and the Vietnam conflict. While some installations were downsized, or even closed, in the 1990s,⁴ the infrastructure and capacity at the remaining “main operating bases” (MOB) remain significant. The United States relies upon these installations to support daily commitments in support of Alliance obligations to Japan and Korea and to support and sustain global operations as US forces transit the Pacific to other areas. In a conflict with the PRC, the United States will undoubtedly have to rely on these MOB as key locations from which to maneuver; to receive sustainment flow from Hawaii, Alaska, and the continental US; and to further distribute such sustainment deeper into the theater. Not surprisingly, PRC military planners understand this network well and would certainly target the MOB at the beginning of a conflict. Even when actively defended, these MOB are vulnerable and, thus, cannot be the sole means of US and allied maneuver and sustainment in a great-power conflict.

Places

These “places” are what the “bases” are not—alternate locations, sometimes remote, often austere, but with sufficient infrastructure to support maneuver and sustainment should use of these alternative operating locations become necessary. In some cases, these locations will already have some element of US forces present, while in other cases, these will be host-nation military facilities, or even civilian airfields, ports, or other facilities typically not put to military use. The key reason for these places is to permit dispersal of US, allied, and partner forces, reducing the concentration of assets at the MOB and, thereby, increasing survivability and the ability to operate despite the opponent’s A2/AD strategy, which will include attempts at saturation attack.

Agile Combat Employment (ACE) is the USAF method of dispersed operations to survive and operate. The US Marine Corps’ equivalent to ACE is termed Expeditionary Advanced Base Operations (EABO), while the US Navy approach to dispersed operations is contained in the overall Distributed Maritime Operations

(DMO) concept. The US Army, through the development of Multi-Domain Task Forces (MDTF), is also establishing mechanisms to account for the likelihood of saturation attacks. While the various approaches differ in terms of forces and locations, the fundamentals remain the same: decomposition of larger force elements into smaller elements, dispersal at multiple locations, and use of a combination of pre-positioned materials and in-stride resupply—all enabled by a resilient communications network that enables command echelons to remain connected and, even under rare cases of full communications denial, empowered by mission-type orders upon which lower echelon commanders can operate from clearly stated higher command intent. Within the USINDOPACOM area of responsibility, each of these service components are regularly testing, evaluating, and then exercising these approaches to dispersed operations, with the intended end state to be that operating in such a manner becomes standard for the force. To the greatest extent possible, this process is also playing out in concert with allied and partner forces who will play key roles by conducting their own dispersed operations or supporting and enabling US forces that have dispersed to locations within the host country.

Looking at this from the PRC's perspective, the ability of US, allied, and partner forces to successfully execute dispersed operations presents a daunting dilemma. For example, the PRC might have 500 long-range weapons that could reach the 10 MOBs that they have determined must be struck to significantly degrade US, allied, and partner operational maneuver and sustainment. Fifty weapons per location results in a fairly good ratio to ensure that all key targets at, say an airfield, can be struck, ideally early in the conflict to “freeze up” maneuver and sustainment. However, what happens when forces disperse and, instead of 10 MOBs, the target set now expands to 10 MOBs plus 50 alternate operating locations spread widely across the theater? Simple math indicates that the ratio of weapons to targets drops precipitously—and with that ratio, PRC confidence that an operating location can be neutralized decreases correspondingly. In this circumstance, the element of time also matters considerably—with only a very limited number of weapons to possibly align to each operating location, does the PRC shoot early for as much effect as possible, or do they hold weapons in reserve and wait for better understanding of the US, allied, and partner scheme of maneuver? One obvious solution could be to simply buy more weapons, but it is important to realize that it requires nearly an order of magnitude increase in the number of long-range precision-strike weapons to restore the previous 50:1 ratio. The cost of going from 500 to 3,000 such weapons is anything but inconsequential for even an economy the size of the PRC.

So, the decision dilemmas and cost-imposition resulting from dispersed operations in the Indo-Pacific are significant. To be clear, these dispersal activities are

not merely aspirational. Each of the various components of USINDOPACOM are developing and practicing how they will maneuver and sustain dispersed forces. It is complicated work and will require institutional adjustment of the various military services to ensure enduring effect, but this is work in progress today. However, dispersed operations in the Indo-Pacific will always require willing partners to host US forces. This is where the “faces” part of this construct comes into significant importance.

Faces

The *faces* in this discussion are the connections made daily through direct, frequent, and persistent personal interaction within the Indo-Pacific theater among US, allied, and partner nation forces. The actual mechanisms to do so can vary significantly; in some cases, daily interaction in command centers or performing other operational functions is the norm. In other cases, frequent interaction during combined training activities generates the contact. Less frequent, and episodic, engagement through exercise or subject matter expert exchanges are often the primary contact when military-to-military ties are less robust. However, the fundamental positive element of each is some form of direct human contact, or face-to-face interaction.

The consistency of US military engagement with allies and partners is a clear sign of two-way commitment driven by common values and a shared belief in the importance of a free and open Indo-Pacific region. This sense of commitment can be augmented by, but never fully replaced with, virtual means of engagement and communication. Boots on the ground make personal relationships possible. Equally as important, physical presence allows better understanding of potential operating locations, including what is needed to successfully maneuver and employ from those locations. To the benefit of the host location, this familiarity can then lead to infrastructure investments made to the benefit of both military and civilian use at the dispersal location. Finally, the frequent interaction of US, ally, and partner faces across the theater creates opportunities to enhance interoperability. Initially, that could be focused primarily on process interoperability, such as common terminology, frequency use, and basic tactics, techniques, and procedures. More deeply, common investment in similar equipment creates deeper interoperability among systems, resulting in opportunities for shared training, supply, and sustainment activities. Taken together, the benefits of direct, frequent, and persistent personal interaction—trust, understanding of the operating environment, interoperability—all enable operational maneuver and sustainment by contributing to reliable and consistent access to airspace, facilities, and equipment necessary to successfully conduct dispersed operations.

Putting It All Together

The result of this combination of bases, places, and faces amounts to a web of operating locations, none of which are the same in terms of capacity, capability, or location. Some will afford the United States and its allies and partners the full range of options from which to respond to PRC aggression. Others may be limited in which functions may occur and perhaps constrained to activities not directly related to combat but only for support functions. However, most will likely be somewhere in between, with the willingness of the host nation to provide broader support a function of capacity as well as their own interests. The scope and extent of PRC aggression is also a factor, since the more China is perceived as the aggressor, the more likely the web of operating locations available to the United States and its allies and other partners will expand in depth and breadth. Taken collectively, this dispersed network of MOBs and alternative operating locations poses a significant challenge to the A2/AD strategy pursued by the PRC. Dispersed operational maneuver and sustainment enabled by bases, places, and faces ensures PRC decision makers can have little confidence in being able to completely, or even sufficiently, prevent US, ally, and partner forces from remaining viable even during a PRC onslaught. The absence of such confidence helps to avoid armed conflict and supports US, allied, and partner goals for a free and open Indo-Pacific. 🌐

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Notes

1. For an analysis immediately after the Gulf War of the effect on PRC military thought, see: Harlan W. Jencks, “Chinese Evaluations of Desert Storm: Implications for PRC Security,” *Journal of East Asian Affairs* 6, no. 2 (Summer/Fall 1992): 447–77.
2. For a thorough study of this subject, see: Sam J. Tangredi, *Anti-Access Warfare: Countering Anti-Access and Area-Denial Strategies* (Annapolis, MD: Naval Institute Press, 2013).
3. The INF treaty was a 1987 agreement between the United States and the Soviet Union to eliminate all nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometers. The PRC was never a party to this treaty. In 2019, the United States officially withdrew from the treaty after years of assertions of Russian noncompliance.
4. Several circumstances led to the drawdown in US bases in the Pacific in this timeframe. In some cases, the end of the Cold war enabled the United States to pursue efficiencies by concentrating forces at the larger bases and closing smaller installations. However, in other cases, host-nation preferences also came into play. The closure of Subic Bay Naval Base and Clark Air Base in the Philippines occurred as result of multiple factors, including damage from a volcanic event and strong sentiment displayed by the Government of the Philippines to reduce the US presence.

The Chinese Communist Party's Insidious Infiltration

LT COL KATHLEEN HASSON, USAF, GSS

Abstract

Under Xi Jinping's leadership, the People's Republic of China (PRC), directed by the Chinese Communist Party (CCP), is pursuing a grand strategy to achieve national rejuvenation. Its strategy incorporates various malign influence methods to control, persuade, intimidate, and manipulate foreign entities and citizens to support this vision. In its insidious infiltration, the CCP is leveraging economic coercion and interference in domestic affairs in Australia, the United Kingdom, and the United States to implement its national grand strategy of rejuvenation that, if left unchallenged, could have detrimental consequences. The United States should prepare now and implement a united, interagency cooperative posture that also extends across applicable institutions and national governmental echelons to prevent an imbalance in favor of the PRC. Diplomacy is encouraged, but it requires transparency resulting in an overt, legitimate display of intentions and behavior that also includes reciprocity between participating nations. Open, free democracies should not be at a disadvantage because they implement soft power in alignment with their enduring principles, values, and international standards. While this article will not attempt to cover all aspects of the grand strategy pursued by the CCP, it will attempt to explain that its seemingly innocuous and insidious use of malign influence and interference needs to be recognized and countered by the United States and its allies.

Introduction

The unscrupulous aspect of China's rise in power necessitates an immediate and coordinated response from the United States, its allies, and partners. In the words of the last Director of National Intelligence (DNI), John Ratcliffe, "the People's Republic of China poses the greatest threat to America today, and the greatest threat to democracy and freedom worldwide since World War II."¹ The question is how China² will implement its vision of prominence and to what end. Some say China's goals are more regional than global, whereas others, such as former DNI Ratcliffe, clearly think otherwise. It is unlikely that China's president, Xi Jinping, wishes to confront American forces on the traditional battlefield, but there are different methods to defeat an adversary. Chinese guiding principles

on conducting warfare date back to approximately 500 BCE during the Sun Tzu era.³ Through its grand strategy, the Chinese Communist Party has modernized the art of deceiving an adversary through noncombative warfare and achieving victory without engaging in kinetic operations.

The United States' grand strategy is guided by the *National Security Strategy* (NSS), which labels China as a revisionist state expanding its power at the expense of other nation's sovereignty.⁴ The NSS describes a China that gathers and exploits data on an unrivaled scale.⁵ Led by Xi Jinping, the CCP's efforts and associated tensions with the United States and its allies have only increased in the twenty-first century. Regardless of the threat, our nation's enduring security interests, as spelled out in the NSS and guided by the principles enshrined in the US Constitution, remain relatively unaltered. America seeks security for our homeland and citizens, as well as for our allies, economic prosperity, and preservation of universal values.⁶ The pursuit of these interests should be in a rule-based international order, advanced by US leadership with strong global cooperation to confront various challenges.⁷

Battlespace Transformation

China's National Grand Strategy

Although our interests have stayed constant over the decades, the battlespace in which the United States pursues those interests has changed dramatically, with the economy, information, and technology today being just as critical to national security as soldiers with rifles. This intangible battlespace has provided the CCP an opportunity to inconspicuously insert its national agenda into other countries' domestic affairs around the globe, targeting unsuspecting citizens in the hope of remaining undetected. There is concern that the insidious nature of this malign influence may delay detection for an extended period. Regardless, when detected, as it was in Australia, the CCP responds by inflicting economic coercion upon the nation opposing the infiltration. Protecting a nation's interests becomes more complicated when dealing with an adversary that employs a multitiered strategy comprising both the physical, more obvious military threat and a seemingly innocuous and insidious threat emboldened through economic power. In its insidious infiltration, the CCP is leveraging economic coercion and interference in domestic affairs in Australia, the United Kingdom, and the United States to implement its national grand strategy of rejuvenation that, if left unchallenged, could have detrimental (if not dire) consequences.

Directed and led by President and General Secretary Xi Jinping, China's grand strategy strives to fulfill national rejuvenation while reassuring other nations that

China's rise does not pose a threat.⁸ The strategy has the CCP seeking to reform the international system and resisting change that hinders China's advancement of its core interests while simultaneously rebuilding a wealthy and powerful nation.⁹ China's grand strategy aims to protect and promote the CCP's interests, including expanding Chinese influence among its neighbors, assuring China's prosperity, and ensuring that the CCP has a voice in the international arena. One key element is to reassure sovereign and international entities that China's ascendancy presents the opportunity for mutual benefit.¹⁰ This *perception* of opportunity has permitted China to gain a competitive edge by building unbalanced economic relationships in numerous countries and thereby becoming indebted to the economically powerful benefactor nation.¹¹ These relationships have also provided the CCP the means to influence foreign governments, groups, and individuals to offer policy concessions.¹² China continues to build on this approach as it moves toward a more aggressive stance to safeguard and secure its national interests. This strategy demands reform in the international community in ways that allow China to rebuild it to suit its vision of greatness.¹³ In doing so, the CCP resists when other international entities and sovereign nations' efforts do not, at least passively, support its national interests—as we see through its use of malign influence and interference.¹⁴

While diplomacy, or the use of soft power, has been utilized throughout history to solve conflict without military force, *diplomacy* is not the proper term to describe the CCP's covert, manipulative, and at times corrupt influence and interference. Some have used the terms “sharp power” or “political warfare” to describe this element of the CCP's national grand strategy execution. The CCP uses its United Front Work Department to target businesses, universities, think tanks, scholars, government officials, and journalists worldwide to execute their malign influence operations.¹⁵ As Clive Hamilton and Marieke Ohlberg point out in their book *Hidden Hand*: “The CCP seemed to be following a dictum attributed to Stalin: ‘Ideas are more powerful than guns. We would not let our enemies have guns, why should we let them have ideas?’”¹⁶ Thus, part of the interference in other nation's domestic affairs is espionage, monitoring, and nefariously collecting research and development, technology, and design.¹⁷ In analyzing the CCP's malign influence in Australia, Hamilton and Ohlberg describe the CCP's efforts to influence not only that country but also North American and European elites, the Chinese diaspora, media, think tanks, and academia.¹⁸ Hamilton's interest in uncovering malign Chinese influence globally first began with unsettling indications that the CCP was drawing Australia into its sphere of influence.

Australia—Canary in a Coal Mine

More than almost any other nation in modern history, Australia has felt the impact of China's malign influence operations.¹⁹ The CCP's interest in Australia is due partly to its strong partnership with the United States and Australia's economic dependency on China, its largest trade partner.²⁰ The CCP also targeted Australia because of its openness, multicultural composition, and the liberal rights and freedoms enjoyed by its citizens, all of which provided an opportunity for infiltration. Australia has prospered economically for nearly 30 years, thriving with little interruption. As Australia looked for opportunities to ensure this fortuitous trend continued, it seemed natural to satisfy China's healthy appetite for Australian exports of iron ore, coal, and other minerals.²¹ This open-ended opportunity resulted in China purchasing one-third of all Australian exports.²² Numerous Chinese tourists also visit Australia, spending more than AU\$11 billion annually.²³ In addition, more than 260,000 Chinese students account for nearly 17 percent of the country's nine leading universities' total revenue.²⁴ The numerous ethnic Chinese residing in Australia also provided a method for more interpersonal meddling. The CCP took all this into account as it built a mutually beneficial relationship but insidiously created an imbalance in China's favor. China and Australia's relationship continued to appear beneficial for both nations until it became evident that the CCP was interfering in Australia's domestic political and civil affairs.

After years of cooperation between the two trade partners, the relationship hit its first significant obstacle when Australia discovered Chinese meddling in its political affairs and domestic debates.²⁵ These initial unsettling indications of unwelcome and inappropriate interference came in 2017 with the revelation of large political donations from ethnic Chinese linked to the CCP.²⁶ These donations appeared to have the purpose of swaying China policy within Australia's major political parties to support the CCP's interests.²⁷ Suspicions of Chinese influence in Australian universities also surfaced, as well as concern over CCP assimilation in Chinese-language media and civic groups in the Chinese Australian community.²⁸ Australia responded by using former Prime Minister Malcolm Turnbull's "3 C's" framework to determine if they were dealing with malign influence and interference far beyond legitimate diplomacy.²⁹ When the CCP behavior was "covert, coercive, or corrupting," the conduct moved from legitimate influence into the domain of "unacceptable interference."³⁰ Due to Australia's lenient laws regarding political contributions, the CCP was able to infiltrate and influence this sovereign nation beyond acceptable standards. Prime Minister Turnbull recognized this vulnerability and led the effort to develop and implement new legislation to eliminate

foreign interference.³¹ The Australian government then banned Huawei and ZTE from Australia's 5G network in an attempt to further protect itself.³²

Unfortunately, Australia's economic dependency on China enabled the CCP to respond negatively when it perceived that Australia was no longer passively playing into China's national grand strategy. The CCP began by rejecting a small number of Australian exports, but the adverse response soon increased in intensity. Nearly the entire world was affected by the coronavirus in 2020, but Australia would likely have seen a derailment of almost 30 years of economic growth regardless of the pandemic. What started as a boycott of beef has grown to restricting or placing significant tariffs on barley, cotton, timber, wine, and coal.³³ China has progressively escalated its punitive reaction in response to Australia's unwillingness to tolerate the CCP's malign influence and interference, followed by demands for an investigation into the coronavirus's origins.³⁴ Australia recognized and responded to the CCP's infiltration by taking swift action that united internal agencies, capitalizing on an open press and the willingness to be transparent.³⁵ In the decades prior to this, the two nations developed and sustained a mutually beneficial relationship that could have legitimized China's claim—per its grand strategy—that China's rejuvenation could provide opportunity and be considered beneficial for other nations.³⁶ However, given the malign influence, this viewpoint changed and enhanced other nations' awareness of this unacceptable behavior by the CCP.

United Kingdom—2020 Reset

Until recently, the United Kingdom was one of the few allies of the United States that did not appear to have a narrative opposing the CCP's malign influence. To a certain degree, the United Kingdom's narrative supported its mutually beneficial relationship with China as an economic powerhouse.³⁷ However, things began to change in 2020; as with nearly every other nation, the coronavirus's spread did not help the situation, but the draconian security law levied on Hong Kong by the CCP was in clear violation of the handover agreement between the two countries.³⁸ As with Australia, the United Kingdom has been targeted by the CCP because of its ethnic Chinese population, the number of Chinese students enrolled in local universities, as well as its economically significant open markets and technological expertise.³⁹ Like the United States' optimistic viewpoint after normalizing relations with China in 1979, the United Kingdom also worked toward a mutually beneficial relationship.⁴⁰ Reinforced by significant trade between the countries as two strong economic powers, the relationship grew because both were ultimately profiting from the exchange. The United Kingdom also joined the United States by initially striving to include China in the international system and working together to combat global issues such as climate change.⁴¹ The United Kingdom was the

first country in the G7⁴² to become a member of the Asia Infrastructure Investment Bank (founded by China) and went so far as to compliment China's progress in public forums.⁴³ However, again similar to Australia's experience, the United Kingdom saw the CCP take advantage of an open, multicultural society with liberal rights and freedoms of speech and press.⁴⁴ These actions incentivized the Royal United Services Institution for Defense and Security Studies to conduct an inquiry into the CCP interference. It found that targets within the United Kingdom included Cambridge University Press, which was pressured to remove articles relating to controversial topics in China including Taiwan, Tibet, and the 1989 Tiananmen Square protests.⁴⁵ The study recommended continued efforts to determine the extent of the interference, described as a "rigorous, ruthless advancement of China's interests and values at the expense of those of the West."⁴⁶ Revelations such as this are also part of the reason the United Kingdom is removing Huawei from its 5G network and clamping down on Chinese investments.⁴⁷ Characteristics in liberal societies, such as freedom of speech and press, appeal to those seeking a better life. Nations with societies bearing these characteristics—Australia, the United Kingdom, and the United States among them—should not be exploited by others seeking infiltration vulnerabilities.

United States—Awareness and Prevention

The CCP interferes in the United States by targeting Congress, state and local governments, the Chinese American community, universities, think tanks, media, corporations, technology, and research.⁴⁸ In 2018, Peter Navarro, serving as the White House trade advisor, labeled some Wall Street bankers and hedge fund managers as "unregistered foreign agents" acting as part of Beijing's influence operations in Washington.⁴⁹ In their book, Hamilton and Ohlberg assert that American finance powerhouses have guided US policy regarding China, stating that Wall Street titans have used their influence to persuade former American presidents to back off stricter policy toward China. Previously, when the Clinton, Bush, and Obama administrations threatened to stop China's currency manipulation or technology theft, they were convinced to be more tolerant. The authors also claim that pressure from Wall Street proved decisive in the Clinton administration's support of China's admission into the World Trade Organization despite its serial violations of trade rules.⁵⁰ Financial institutions have been the CCP's most influential advocates in Washington. Beijing incentivizes US investors to buy into Chinese-listed companies, thereby giving the CCP leverage within the United States.⁵¹ Revelations of such influence in the US financial arena have made the CCP's insidious infiltration more apparent and disconcerting to other entities as well.

In 2020, *Newsweek* conducted an investigation that exposed CCP interference in a range of US domestic affairs including social media and federal, state, and local government to “foster conditions and connections that will further Beijing’s political and economic interests and ambitions.”⁵² Those conducting the investigation determined that the CCP was not out to destroy the United States but to change or subvert it from within—all while fostering a positive view of China.⁵³ The CCP appears to be in pursuit of not only US technology but also the hearts (or at least the minds and wallets) of American citizens. Anna Puglisi, a senior fellow at Georgetown University’s Center for Security and Emerging Technology and a former national counterintelligence officer for East Asia, stated that the CCP is determined and organized. In her view: “We [in America] don’t think in these ways. It flies in the face of how people in the US see the world.”⁵⁴ The difference in thinking between the two nations makes it that much more critical to alert unsuspecting American citizens and lower-level echelon government officials about the CCP’s insidious infiltration.

It has become clear that the CCP has now adjusted its tactics to attempt to influence unsuspecting private, state, and local political, business, and community interests in the United States.⁵⁵ Former Secretary of State Mike Pompeo warned the National Governors Association that the CCP was identifying and grooming state and local politicians.⁵⁶ The goal of the CCP was to identify local government officials who would support its interests, stating that a Chinese think tank had already graded governors on their “friendliness” toward the CCP.⁵⁷ According to the report, 17 governors were considered friendly, 14 ambiguous, and only six were considered “hardline,” with the other governors labeled as having unclear sentiments toward the CCP.⁵⁸ An example of gubernatorial influence was witnessed when diplomats at the Chinese consulate in Houston wrote to the Mississippi governor, Phil Bryant, threatening to cancel a Chinese investment in his state if he traveled to Taiwan.⁵⁹ Another anecdote included a Chinese diplomat in Chicago who wrote to a Wisconsin lawmaker, Republican Roger Roth, asking him to sponsor a bill that praised China’s response to the coronavirus.⁶⁰ When viewed separately these events seem benign enough, but when viewed as a whole the long-term impact and overall objective of the CCP becomes increasingly troublesome. Ultimately, the *Newsweek* report linked approximately 600 American groups to the CCP system, which is even more disconcerting when associated with Xi Jinping’s statement to top economists and sociologists that China would double down on seeking cooperation with US politicians and business leaders.⁶¹ The influence is targeted at Congress and the presidential administration as well. Former DNI Ratcliffe made clear his concerns over economic espionage, which he described as the CCP robbing US companies of their intellectual property,

replicating that technology, and replacing American firms in the global marketplace. He also stated: “This year [2020], China engaged in a massive influence campaign that included targeting several dozen members of Congress and congressional aides.”⁶² This influence campaign and the other insidious and malign interference in Australia and the United Kingdom are consistent with the CCP’s grand strategy of rejuvenation, utilizing insidious infiltration to bolster the perception that China is wielding only peaceful diplomatic power.

Recommendations

The US Department of State is undoubtedly aware of the insidious infiltration and the CCP’s unconventional methods of influence and interference with America and other nations. Certain entities within China have been using this more aggressive use of sharp power for decades, if not centuries, and have perfected their tactics and methodology. If the CCP’s methodology was true and legitimate diplomacy, it would not be using covert, deceptive, and manipulative methods to infiltrate and influence. Because of the insidious nature of the CCP’s infiltration and the broad spectrum of targets that range from schools, think tanks, Wall Street, and local leaders, the Department of State’s narrative has not made it to all necessary audiences. Neither is there a strong mechanism for sharing information among the many entities on different levels and disciplines. A united approach starts with awareness and builds into interagency cooperation in the United States to counter the CCP’s influence operations. Open communication is also necessary between American and Chinese leaders, not only to avoid miscalculations but also to ensure the message is being received that the United States is not deceived and will not be influenced or intimidated. The message is equally important to be received by US allies: a strong, united alliance of like-minded and free nations should work together to deter and counter the CCP’s malign influence and interference.

On a broader scale, now is the time to use the self-inflicted Chinese impetus to our own advantage and to educate American citizens that contributing to and leading alliances is not only in America’s best interest but also necessary to secure our own freedoms and security at home. The seemingly innocuous and insidious use of influence and interference are real threats that travel in this information age with unprecedented speed, distributed to millions of citizens in almost all nations. The battlespace is no longer a rigid domain in the air, on the ocean, or over the ground; it has transformed, and with it comes a demand for reform in our approach to protect enduring national principles, values, and interests. While former President Donald Trump supported an inward focus on domestic issues over foreign affairs, President Joe Biden’s administration understands the value of international institutions and allies across the globe.⁶³ Now is the time to ensure this

new momentum continues, and the United States should increase alliances, treaties, and partnerships in the Indo-Pacific region as necessary to protect its interests as well as the interests of allies and partners.

In prior years, the CCP's political warfare and use of unacceptable, covert influence operations and inference may have been less apparent to agencies outside the Department of State. However, under President Biden, new National Security Advisor Jake Sullivan is fully aware and ready to counter these less obvious threats.⁶⁴ This interagency willingness to engage provides an opportunity to build awareness and a comprehensive approach first in the United States and then other nations as we lead to counter the malign influence. In an article published prior to beginning his official duties as the National Security Advisor, Sullivan stated in direct reference to the coronavirus pandemic (but with a broader application to malign influence also) that America was ready to once again be engaged in the world:

The American people will understand now, better than they have in a long time, that a threat that emanates from elsewhere can cause massive disruption and catastrophic loss of life. And so being engaged in the world—being out there with our diplomats and our public health professionals and being part of institutions and systems that can help track and prevent threats before they arrive at our shores—that matters profoundly to working families across this country.⁶⁵

The Biden administration has already expressed its intent and viewpoint that alliances are important to ensure American interests are secure. In President Biden's opening statement in the *Interim National Security Strategic Guidance*, he reaffirms his commitment "to engage with the world once again."⁶⁶ The cost will be high to form a strong, competitive, and driven alliance focused on deterring and countering the CCP's malign influence and interference, but it is certainly worth the cost if approached in a prudent, cost-sharing, team-balanced effort with the United States taking the lead.⁶⁷ This viewpoint is even more necessary because there are also indications that the CCP is currently taking steps to increase its malign influence in America with the Biden administration.⁶⁸ According to *BBC News* (quoting counterintelligence official William Evanina prior to his resignation):

Mr. Evanina, chief of the Director of National Intelligence's counter-intelligence branch, said China had been attempting to meddle in the US efforts to develop a coronavirus vaccine and recent American elections. He continued: "We've also seen an uptick, which was planned and we predicted, that China would now re-vector their influence campaigns to the new [Biden] administration. And when I say that, that malign foreign influence, that diplomatic influence plus, or on steroids, we're starting to see that play across the country to not only the folks starting in the new administration, but those who are around those folks in the new administration."⁶⁹

At home, the United States will continue to use the *NSS* as the broad, overarching guide to executing its own grand strategy to secure American values and enduring interests. To protect the American people, homeland, and American way of life, promote domestic prosperity, and preserve peace through strength while advancing American influence, we must develop and implement an appropriate strategy against the insidious threat coming from the CCP.⁷⁰ The approach must incorporate an American response to the full range of threats emanating from the PRC. The challenges include not only the more traditional military threat but also the United States' ability to respond to economic challenges, challenges to our values, and the full range of security challenges that includes malign influence, interference, and political warfare.⁷¹ While government officials are taking action with the consulate closure in Houston in July 2020, and the recent exodus of approximately 1,000 Chinese researchers being investigated for espionage, more needs to be done.⁷²

An element of the US approach requiring better development is making the average American citizen who is not involved in governmental entities aware of potential deceptive tactics. The Policy Planning Staff from the Office of the Secretary of State made this assessment:

The United States must educate American citizens about the scope and implications of the China challenge. Only an informed citizenry can be expected to back the complex mix of demanding policies that will enable the United States to secure freedom. Executive branch officials and members of Congress must address the public regularly and forthrightly about China's conduct and intentions, and about the policies the US government must implement to secure freedom at home and preserve the established international order. In addition, the State Department, Congress, think tanks, and private sector organizations must work together to ensure that government officials as well as the public have access to English-language translations of CCP officials' major speeches and writings along with important publications and broadcasts from China's state-run media, scholarly community, and worldwide propaganda machine.⁷³

The overarching strategy and associated plan need to originate in those US government agencies that hold the expertise, experience, resources, and passion for deterring and countering China, but it requires a much more comprehensive approach. This approach begins with acceptance and willingness to acknowledge and support this concept. This first step is something former senior US National Security Council official Robert Spalding discusses at length in his book *Stealth War: How China Took Over While America's Elite Slept*. He describes his struggle to enlist the private sector and government officials to counter the PRC's malign influence.⁷⁴ This is, however, only where it begins. The whole-of-government ap-

proach must quickly morph into so much more—spreading out across interagency, intergovernmental, and interinstitutional entities.

Some (including the PRC itself) would argue that China is using influence operations to legitimately implement its grand strategy of national rejuvenation. As such, influence is being utilized for communicating its intent of a “peaceful rise,” reassuring other nations that China does not pose a threat but provides an opportunity to build mutually beneficial relationships.⁷⁵ More specifically, the PRC would contend that it is merely trying to use assertive diplomatic means to accomplish economic and political objectives. There are other nations or independent entities that also contend that China is not an immediate threat and that there is no need to pivot resources and attention to the Indo-Pacific. Even with Australia serving as the canary in the coal mine—providing a warning for other democracies—there have been US senior officials arguing this point.⁷⁶ The issue with a strategy that uses seemingly innocuous and insidious malign influence operations is that it is often too late to deter and counter successfully once the threat is fully realized.

Conclusion

Although the United States greatly values the diplomatic instrument of power, it will not tolerate malign influence and interference by one sovereign nation's political entity in another country's domestic affairs. The CCP continues to perfect its tactics and methodology of sharp power in an attempt to claim the use of legitimate diplomacy while using covert, deceptive, and manipulative methods to influence. While some are aware of this unacceptable influence and interference, what remains undeveloped is a robust mechanism for sharing information among the many affected democratic entities to ensure awareness of the CCP's malign intentions. The United States must commit resources to gain in-depth knowledge of this insidious threat and simultaneously provide a transparent narrative to those customarily removed from the battlespace, including universities, bankers, and Wall Street investors. This will require an extensive effort that encompasses governmental agencies on multiple echelons across applicable institutions. It will also require an intergovernmental level of effort among our allies and partners, building awareness and adopting a more substantial and united strategy to deter and prevent the CCP's unscrupulous rise in power and reordering of the international system.

The United States needs to develop its own diplomatic, informational, and economic defense so it is better prepared to lead alliances and partnerships and thereby prevent an imbalance or competitive advantage tipping in China's favor. Transparent and open communication is necessary between the national leaders

to prevent escalation and to ensure that American resolve is understood clearly. Diplomacy requires transparency resulting in an overt, respectable display of intentions and behavior that permits the legitimate influence of another sovereign nation's citizens. It also should involve reciprocity among participating nations. Open, free democracies should not be at a disadvantage because they implement soft power consistent with enduring principles, values, and rules-based international standards. Those less concerned with respecting other nations' sovereignty and established international norms should not take advantage of this freeness. As Sun Tzu surmised: "Subjugating the enemy's army without fighting is the true pinnacle of excellence."⁷⁷ This subjugation is what the CCP strives for and what the United States and its allies must prevent the CCP from achieving. The seemingly innocuous and insidious infiltration by the CCP must be expeditiously identified among all applicable entities to effectively deter and counter the malign influence and interference to ensure that other free, open sovereign nations' principles and values endure. ✪

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Notes

1. John Ratcliffe, "China Is National Security Threat No. 1: Resisting Beijing's Attempt to Reshape and Dominate the World is the Challenge of our Generation," Opinion, *Wall Street Journal*, 3 December 2020, <https://www.wsj.com/>.

2. People's Republic of China is the official name of the country; however, China will be used for simplicity.

3. Kerry K. Gershaneck, *Political Warfare: Strategies for Combating China's Plan to "Win Without Fighting"* (Quantico, Virginia: Marine Corps University Press, 2020), 32.

4. United States, *The National Security Strategy of the United States of America*, (Washington, DC: White House, 2017), 25, <https://www.whitehouse.gov/>.

5. United States, *National Security Strategy*.

6. Joint Chiefs of Staff, *National Military Strategy of the United States of America* (Washington, DC: Joint Chiefs of Staff, 2015), 5, <https://www.jcs.mil/>.

7. Joint Chiefs, *National Military Strategy*.

8. Zhao Yanan, "Chinese Dream' is Xi's Vision," *China Daily*, 18 March 2013, <http://www.china-daily.com.cn/>; and Avery Goldstein, "China's Grand Strategy under Xi Jinping: Reassurance, Reform, and Resistance," *International Security* 45, no. 1 (Summer 2020), 165, <https://direct.mit.edu/>.

9. Goldstein, "China's Grand Strategy."
10. Zheng Bijian, *China's Peaceful Rise: Speeches of Zheng Bijian, 1997–2005*, (Washington, D.C.: Brookings Institution Press, 2005), 9–10, <https://www.jstor.org/>.
11. Elizabeth Rosenberg, Peter E. Harrell, and Ashley Feng, "A New Arsenal for Competition: Coercive Economic Measures in the U.S.-China Relationship," CNAS Report, April 2020, <https://www.cnas.org/>.
12. Rosenberg et al., "A New Arsenal."
13. Goldstein, "China's Grand Strategy," 165.
14. Goldstein, "China's Grand Strategy," 165.
15. Gershaneck, *Political Warfare*, 9.
16. Clive Hamilton and Marieke Ohlberg, *Hidden Hand: Exposing How the Chinese Communist Party is Reshaping the World*, (London, England: Oneworld Publications, 2020), 10.
17. Hamilton and Ohlberg, *Hidden Hand*, 140–41.
18. Hamilton and Ohlberg, *Hidden Hand*, 268–69.
19. Clive Hamilton, *Silent Invasion: China's Influence in Australia*, (London, England: Hardie Grant Books, 2018), 115–16.
20. Amy Searight, "Countering China's Influence Operations: Lessons from Australia," CSIS, 8 May 2020, <https://www.csis.org/>.
21. Searight, "Countering China's Influence Operations."
22. Hamilton and Ohlberg, *Hidden Hand*, 110.
23. Searight, "Countering China's Influence Operations."
24. Australian Government, Department of Education, Skills and Employment, "International Student Data Summary," December 2019, <https://internationaleducation.gov.au/>.
25. Searight, "Countering China's Influence Operations."
26. Searight, "Countering China's Influence Operations."
27. Searight, "Countering China's Influence Operations."
28. Larry Diamond and Orville Schell, *Chinese Influence & American Interests: Promoting Constructive Vigilance* (Stanford, CA: Hoover Institution Press: Stanford University: 2018), 27, <https://www.hoover.org/>.
29. Malcolm Turnbull, "National Security Legislation Amendment (Espionage and Foreign Interference) Bill" 7 December 2017, Speech, <https://www.malcolmturnbull.com.au/>.
30. Turnbull, "National Security Legislation."
31. Turnbull, "National Security Legislation."
32. Searight, "Countering China's Influence Operations."
33. Eleanor Whitehead, "Australia will Rethink Assumptions about Economic Alliances," *The Economist*, The World Ahead, November 17, 2021, <https://www.economist.com/>.
34. Ding Gong, "Expert: What happened to some Australian politicians recently?," *Xinhuanet* (Beijing), 26 June 2020, <http://www.xinhuanet.com/>.
35. Searight, "Countering China's Influence Operations."
36. Goldstein, "China's Grand Strategy," 178.
37. Diamond and Schell, *Chinese Influence & American Interests*, 179.
38. Duncan Bartlett, "Hong Kong and Britain's China Reset," *The Diplomat*, 11 June 2020, <https://thediplomat.com/>.

39. Charles Parton, "China-UK Relations: Where to Draw the Border Between Influence and Interference?" Royal United Services Institute for Defense and Security Studies. RUSI Occasional Paper, February 2019, 13, <https://rusi.org/>.
40. Diamond and Schell, *Chinese Influence & American Interests*, 12.
41. Thomas des Garets Geddes, "UK-China Relations: From Gold to Dust: The Rapid Recent Souring of British Perceptions of China has as much to do with Domestic Factors as American Pressure," *The Diplomat*, 2 October 2020, <https://thediplomat.com/>.
42. G7 is an organization comprised of the seven countries with the world's most advanced economies. See: "What is the G7 summit and what does it do?," *BBC*, 24 August 2019, <https://www.bbc.com/>.
43. Geddes, "UK-China Relations."
44. Parton, "China-UK Relations," 13.
45. Christian Shepherd, "British Publisher Pulls Academic Journals from China after Government Complaint," *Reuters*, 24 December 2018, <https://www.reuters.com/>.
46. Shepherd, "British Publisher," v.
47. Geddes, "UK-China Relations."
48. Diamond and Schell, *Chinese Influence & American Interests*, 1.
49. Zhou Xin, "White House Trade Adviser Peter Navarro Won't Attend Trump-Xi dinner," *Politico*, 18 November 2018, <https://www.politico.com/>.
50. Hamilton and Ohlberg, *Hidden Hand*, 100.
51. Hamilton and Ohlberg, *Hidden Hand*, 100.
52. Didi Kirsten Tatlow, "Exclusive: 600 U.S. Groups Linked to Chinese Communist Party Influence Effort with Ambition Beyond Election," *Newsweek*, 26 October 2020, <https://www.newsweek.com/>.
53. Tatlow, "Exclusive."
54. Tatlow, "Exclusive."
55. Tatlow, "Exclusive."
56. Michael R. Pompeo, "U.S. States and the China Competition" (speech, Washington, DC, 8 February 2020), U.S. Department of State, <https://www.state.gov/>.
57. Pompeo, "U.S. States and the China Competition."
58. Tatlow, "Exclusive."
59. Tatlow, "Exclusive."
60. Melanie Conklin, "Chinese Government Asks Wisconsin Senate for a Commendation," *Wisconsin Examiner*, 10 April 2020, <https://wisconsinexaminer.com/>.
61. Conklin, "Chinese Government."
62. Ratcliffe, "China Is National Security Threat No. 1."
63. United States, *Interim National Security Strategic Guidance* (Washington, DC: White House, 2021), 3, <https://www.whitehouse.gov/>.
64. Natasha Bertrand, "The Inexorable Rise of Jake Sullivan," *Politico*, 27 November 2020, <https://www.politico.com/>.
65. Bertrand, "The Inexorable Rise of Jake Sullivan."
66. United States, *Interim National Security Strategic Guidance*, 3.
67. "The China Strategy America Needs," *The Economist*, 19 November 2020, <https://www.economist.com/>.

68. "Chinese Step Up Attempts to Influence Biden Team - US Official," *BBC*, December 3, 2020, <https://www.bbc.com/>.
69. "Chinese Step Up Attempts to Influence Biden Team," *BBC*.
70. United States, *National Security Strategy*, 4.
71. White House, *United States Strategic Approach to the People's Republic of China*, White House (Washington, DC: White House, 2020) 6, <https://trumpwhitehouse.archives.gov/>.
72. Lucia Binding, "More than 1,000 Chinese Researchers Leave US Amid Tech Theft Crackdown," *Sky News*, 3 December 2020, <https://news.sky.com/>.
73. Policy Planning Staff, Office of the Secretary of State, "The Elements of the China Challenge", November 2020, 48, <https://www.state.gov/>.
74. Robert Spaulding, *Stealth War: How China Took Over While America's Elite Slept* (New York: Portfolio/Penguin, 2019), 72.
75. Goldstein, "China's Grand Strategy," 165.
76. Gershaneck, *Political Warfare*, xiv.
77. Sun Tzu, *The Art of War*, trans. Ralph D. Sawyer (Boulder, CO: Westview Press, 1994), 171.

Repelling the Dragon

Prioritizing Taiwan's Capabilities to Repel a PRC Invasion Force

RALPH BENTLEY

Abstract

The People's Republic of China has consistently claimed sovereignty over Taiwan and desires reunification. Until recently, however, the PRC did not have the means or the will to force reunification. The rejuvenation and strengthening of the People's Liberation Army in the twenty-first century increase the possibility of forced reunification after a military invasion. This article investigates capabilities Taiwan should prioritize to repel such an invasion. Based on an analysis of three stages of a hypothetical PRC invasion (blockade and bombing, amphibious invasion, and island combat operations), Taiwan should maximize its ability to withstand and repel the amphibious invasion phase of any operation by prioritizing mines and minelayers, antiship missiles, and mobile long-range artillery systems.

Introduction

At the end of 1949, Chiang Kai-shek led the remnants of the Republic of China (ROC) to the island of Taiwan. Still claiming legitimacy over all of mainland China, the Republic in reality occupied one island measuring approximately 235 miles by 85 miles, plus a few island groups closer to the mainland. The People's Republic of China (PRC) now ruled the mainland and has since claimed authority over Taiwan. For 70 years, the PRC has dreamed of "reuniting" Taiwan to the Chinese homeland. Until recently, however, the PRC lacked the means and the will to force reunification. Since 2000, there has been a rejuvenation and strengthening of the People's Liberation Army (PLA), especially since 2016 with President Xi Jinping's reorganization and modernization efforts.

Today, Taiwan has grown into a prosperous, free society yet remains under threat of a PRC invasion. This analysis investigates capabilities Taiwan should prioritize to repel such an invasion. Background information summarizes the likelihood of a future conflict by reviewing PRC policies and a brief history of crises occurring since 1949. Policies of the United States follow a review of recent Taiwan government actions concerning independence. A *hypothetical* PRC inva-

sion unfolding over three stages (blockade and bombing, amphibious invasion, and island combat operations) provides a framework for analysis.

The main section of this article provides an analysis of different aspects of each phase of the invasion. After providing assumptions that bound the scenario, a phase-by-phase analysis includes the following: challenges the PLA must overcome; Taiwan's preparations; PLA strengths and weaknesses; and prospects for a Taiwan victory. Finally, this article provides recommendations for capabilities Taiwan should prioritize to avoid PLA strengths and to take advantage of PLA weaknesses or vulnerabilities. Through this investigation, I assert that, to prepare for a future conflict with the People's Republic of China, Taiwan should maximize its ability to withstand and repel the amphibious invasion phase of any operation by prioritizing mines and minelayers, antiship missiles, and mobile long-range artillery systems.

Background

Possibility of a Taiwan Invasion

Understanding the possibility of a PRC invasion of Taiwan requires an understanding of the history between the two actors as well as their policies toward reunification or independence. The possibility of a PRC invasion of Taiwan is not a twenty-first century issue. Congressional Research Service Asian specialists Susan Lawrence and Wayne Morrison state: "The PRC views the issue of Taiwan as unfinished business from the 1945–1949 civil war."¹ On October 1, 1949, the Chinese communists viewed themselves as victors over all of the Republic of China "with no change in territory, meaning that the PRC includes Taiwan."² The PRC planned an invasion of Taiwan and other pockets of resistance but were limited by lack of amphibious transport and air superiority.³ Continual PRC invasion planning and frequent delays due to preparedness followed, along with interruptions by a series of crises with the Republic of China on Taiwan and the United States.

The first of these crises occurred in late 1954, when the PRC began bombing the Dachen Islands, a group of Taiwan-held islands approximately 200 miles north of Taiwan. After a PRC occupation of the northernmost island in early 1955, Chiang Kai-shek unsuccessfully appealed to US president Harry Truman for support against the PRC, but the United States assisted only in the ROC's eventual evacuation and surrender of the islands to the PRC. Amid this crisis, the United States and Taiwan signed a mutual defense treaty ratified by the US Senate in February 1955. The partners tested this mutual defense treaty during a second crisis in August 1958 when the PRC began an artillery bombardment of Kinmen Island, only a few miles from the Chinese coast near Xiamen. Although

the United States did not directly engage Chinese forces, Taiwan was materially supported with artillery, air-to-air missiles, and naval escort of supply convoys to Kinmen. Under heavy losses in the air and on the ground, Mao Tse-tung ordered a cease-fire on October 6, 1958.⁴

It would be almost fifty years before the third (and nominally last) “Taiwan Crisis.” In 1992, the newly elected Taiwan president, Lee Teng-hui, a member of the Chinese Nationalist Party (KMT), announced that the Republic of China would no longer claim sovereignty over mainland China. The PRC saw this as “an indirect declaration of independence.” After Lee visited his alma mater, Cornell University, in 1995, the PRC conducted a series of ballistic missile “tests” near Taiwan territories, as well as amphibious exercises through March 1996. Then-President Bill Clinton responded by sending two carrier strike groups near Taiwan as a show of support. Once again, the PRC backed down. Although resolved successfully, this crisis is important in that China, afterward, “began to sharply ramp up military spending on equipment and training.”⁵ This steady increase in military spending—to include modernization and increased focus on amphibious operations—has continued to the present time.

PRC policy throughout these events remained remarkably consistent. The PRC published the July 2019 PRC Defense White Paper, *China's National Defense in the New Era*, specifically to help “the international community better understand China's national defense.”⁶ A blunt warning is contained in the section titled “China's Security Risks and Challenges Should Not Be Overlooked.” The first security threat discussed is Taiwanese independence, characterized as “the gravest immediate threat to peace and stability.”⁷ The PRC identifies complete reunification of the country as a fundamental interest necessary for Chinese national rejuvenation. To reinforce the warning, the paper explicitly states: “China resolutely opposes any attempts or actions to split the country and any foreign interference to this end. China must be and will be reunited.”⁸ The “6 Any” statement follows: China “will never allow the secession of *any* part of its territory by *anyone*, *any* organization or *any* political party by *any* means at *any* time” (emphasis added).⁹ Finally, the PRC inserts a specific statement that China will not “renounce the use of force” and reserves “the option of taking all necessary measures.”¹⁰ The 2019 white paper leaves no doubt that China intends to reunify Taiwan with the mainland.

Reunification is not a recent policy change accompanying the rise of Xi Jinping. For example, in 1979 Deng Xiaoping emphasized a policy of “peaceful reunification” under the “one country, two systems” concept.¹¹ The 2005 PRC Anti-Secession Law states that Taiwan secession will result in the employment of “non-peaceful means and other necessary measures to protect China's sovereignty and territorial integrity.”¹² The link to “territorial integrity” is important in under-

standing the importance of Taiwan to China's future plans.¹³ China sees Taiwan in the same manner as the United States views Hawaii or Alaska—a geographically separate but intrinsically connected part of the nation.

As stated above, the PRC views Taiwan independence as an existential threat to its territorial integrity; it represents a tripwire to the use of force to compel reunification. Has Taiwan increasingly moved toward or away from a declaration of independence? A review of the two most recent Taiwanese administrations shows that Taiwan is very aware of China's tripwire and has remained disciplined in avoiding any declarations or actions interpreted as declarations of independence.

Taiwanese voters elected the KMT's Ma Ying-jeou president in 2008. Although PRC–Taiwan relations under the Ma administration were complex, they were a general détente with the PRC and a move away from declaring independence. Ma's administration focused on “liberalizing cross-Straits relations.”¹⁴ In 2010, his administration's efforts resulted in the Economic Cooperation Framework Agreement (ECFA) with the PRC. Ma felt that “reducing restrictions would not only bring more opportunity to Taiwan's economy but also persuade China to allow Taiwan to participate in additional regional agreements and become a fuller member of the global economy.”¹⁵ The United States generally supported both the ECFA and President Ma while welcoming a reduction in cross-strait tensions.¹⁶

The Democratic Progressive Party's Tsai Ing-wen's election in 2016 resulted in increased tensions. Following her election, the PRC broke off formal communications until she accepts the 1992 Consensus with which China justifies its “One-China” policy.¹⁷ Tsai has “called for China to respect Taiwan's democracy” without preconditions for negotiations.¹⁸ She has “embraced the cross-strait status quo” but refuses to acknowledge the One-China principle.¹⁹ The PRC has responded with soft-power initiatives and hard-power threats.²⁰ The PRC has increased the number of aircraft flying near Taiwan, as well as naval vessels circumnavigating the island. When added to events in Hong Kong, this pressure likely swayed Taiwanese public opinion contributing to Tsai's reelection as president in January 2020. The terms “centrist” and “pragmatic” characterize the Tsai administration as she stands firm against the PRC without crossing the tripwire.²¹

The United States also stands firm but strives not to cross the tripwire or cause Taiwan itself to cross it. According to the US Department of State, the official US–Taiwan relationship remains “unofficial.”²² The United States “insists on the peaceful resolution of cross-Straits differences, opposes unilateral changes to the status quo by either side, and encourages both sides to continue their constructive dialogue on the basis of dignity and respect.”²³ More explicitly, the United States does not support Taiwan independence.²⁴ Policy toward Taiwan is defined in the 1972, 1979, and 1982 US–PRC joint communiqués, the 1979 Taiwan Relations

Act, and President Ronald Reagan's 1982 "Six Assurances" to Taiwan.²⁵ The specific wording of these documents leaves much room for political maneuver, however.

The United States' policy toward Taiwan is best known as "strategic ambiguity."²⁶ Since 1979, the United States no longer has a mutual defense treaty with Taiwan, and policy is not definitive whether the United States will come to Taiwan's defense.²⁷ The Taiwan Relations Act declares the United States military will "maintain the capacity of the United States to resist any resort to force."²⁸ In addition, the United States retains the authority to conduct foreign military sales to Taiwan.²⁹ In summary, the United States supports the status quo between China and Taiwan; encourages cross-strait, peaceful resolution of issues; maintains a program of supporting Taiwan military forces through the provision of defense equipment; but stops short of categorically stating it will engage in a military confrontation in the Taiwan Strait.

Stages of Hypothetical PRC Invasion

To best formulate recommended Taiwanese preparations for a future conflict with the PRC, the following invasion scenario provides a framework for discussion. The potential conflict could range from actions short of an invasion of Taiwan proper (e.g., an extended air and maritime blockade), to the use of limited force against Taiwan-occupied islands, or to a limited air and missile campaign to coerce change or reunification.³⁰ This article assumes, however, the PRC deciding to execute an all-out invasion of the island to force reunification. The People's Liberation Army's own writings label this the "Joint Island Attack Campaign."³¹ But what would be the objectives, and what form would this conflict take?

In his work *The Chinese Invasion Threat*, Ian Easton states there would be three main objectives of a Taiwan invasion. The first and most important objective is to "rapidly capture Taipei and destroy the government."³² Second, the PLA would need to "capture other major cities and clear out the surviving defenders."³³ Lastly, the PLA would need to "occupy the entire country."³⁴ A campaign to accomplish these objectives would need to be short enough to prevent the United States and other allies from coordinating and deploying a force to the area. More specifically, his research of PLA writings envisions three major phases: blockade and bombing, amphibious landing, and island combat operations.³⁵ The following leverages Easton's framework and analyzes the assumptions, challenges, strengths, and weaknesses of each side during each of these phases before making any recommendations.

Blockade and Bombing. The first phase of a PRC invasion operation aims to "cut the island off from the rest of the world."³⁶ This blockade and bombing phase will see significant cyber and information operations in addition to physical

means. An air and sea blockade are enacted to prevent the resupply of Taiwanese essential needs such as fuel, food, and energy.³⁷ Air superiority and sea control are necessary to enforce the blockades.³⁸ Taiwan will likely resist the imposition of these blockades via similar kinetic and nonkinetic means. Therefore, a bombing campaign to nullify Taiwan's air and sea power is necessary.³⁹

Kinetic strikes in this bombing campaign would likely start with ballistic missile attacks from the PLA Rocket Force. Initially, early-warning radars and infrastructure plus air bases and air defense systems will be targeted.⁴⁰ In addition, cruise missiles, antiship missiles, PLA Air Force-launched air-to-ground missiles, and mainland rocket launchers will join the strikes.⁴¹ Command and control facilities, communications nodes, and supply depots will be targeted.⁴² Government buildings such as the Presidential Office Building and key cabinet and ministry structures will also be targeted. The bombing campaign will continue to "soften up" Taiwan's defenses and "erode political resolve."⁴³

Officials in Beijing will decide if, and when, to proceed with the amphibious phase, so the duration of a blockade and bombing phase would be unknown. The PRC must weigh the chance of Taiwan surrendering to their demands without an invasion against the likelihood of American and other allied intervention.⁴⁴ The likelihood of Taiwan surrendering its sovereignty is low.⁴⁵ The odds of American intervention are unknown but likely to increase with time.⁴⁶ Therefore, this phase is expected to be as short and as intense as possible. Intensive bombing and blockades will continue until an amphibious invasion requires those forces.

Amphibious Invasion. The overall objective of the amphibious invasion phase is to establish multiple bridgeheads on the west coast of Taiwan, then hold them until follow-on reinforcements arrive.⁴⁷ The PRC must reinforce those bridgeheads faster than Taiwanese forces can converge.⁴⁸ Assault formations will assemble at multiple ports along the eastern Chinese mainland and board numerous amphibious assault ships. These ships will then assemble into flotillas for crossing the Taiwan Strait.⁴⁹ Meanwhile, the PRC continues to bombard the Taiwanese coastline while mines and obstacles are cleared near the invasion sites. Finally, the flotillas must approach and anchor near the shore to offload the assault units on the bridgeheads and any captured ports.⁵⁰ An estimated 20,000 troops will be landed the first day followed by 15,000 additional troops the next day.⁵¹ This is the critical phase of the operation for the PRC and Taiwan. The analysis section explores in greater detail many nuances and critical vulnerabilities inherent in the short description above.

Island Combat Operations. The overall objective of island combat operations is occupation of Taipei and final capitulation of the government. This final phase of a PRC invasion begins when one or more landing zones have been secured, Tai-

wan's initial counterattacks have been repelled, and the near continuous stream of supplies begins arriving.⁵² From these bridgeheads, PLA forces would need to break out and capture key targets, such as airfields and ports, and march to and occupy Taipei and, ultimately, the entire island.⁵³ Estimates of the number of PLA troops ferried to Taiwan for this phase range from as few as 300,000 to as many as one million. Once Taipei and the government falls, the PLA can anticipate extensive operations to clear Taiwanese "nests and dens" of holdout resistance in residential districts. Finally, resistance would continue in the central mountain range until supplies are exhausted.⁵⁴

Analysis

A specific scenario bounded by a basic set of assumptions enables an effective analysis of a PRC invasion of Taiwan. Within this bounded scenario, I will analyze each phase of the operation with respect to four main points: (1) the challenges the PLA must overcome; (2) existing Taiwan preparations; (3) PLA strengths; and (4) PLA weaknesses. Based on this analysis, the next section will recommend how the Taiwanese armed forces can best prepare to mitigate PLA strengths while capitalizing on PLA weaknesses.

Scenario Assumptions

The first assumption is the PRC actually decides to execute its Joint Island Attack Campaign to, once and for all, forcibly reunite Taiwan to communist China. The particular events that could cause Beijing's decision to invade is outside the scope of this analysis. The assumption is that China has decided all peaceful means of reunification have been exhausted, it has the means to conduct the operation, and there is a reasonable chance the United States remains out of the conflict.⁵⁵ In this scenario, the PRC believes that other coercive means will not be successful.

The second assumption is the United States does not confront the PRC through direct military intervention. Again, the reason for and likelihood of this decision are outside the scope of this analysis. It could be the United States decides to employ diplomatic, economic, and information pressure to coerce the PRC to stop military action. The United States may use these soft powers to buy time to mobilize its own forces. Conversely, US leaders may gamble that the invasion would ultimately fail even without US military invention. This assumption also implies the PRC does not attack US or allied forces (naval or air bases) on Guam, Japan, or elsewhere. Without a direct attack, US leaders could find it difficult to make the decision to intervene.⁵⁶ Regardless, the United States does not directly confront the PRC militarily.

The third assumption is the United States does support Taiwan with information and intelligence sharing. This is reasonable given the substantial US support in the past for Taiwan. This assumption allows some measure of situational awareness by Taiwanese forces (i.e., the PRC does not completely deny communications, early warning, and targeting information).

Finally, and based on the above assumptions, the conflict does not involve tactical or strategic nuclear attack. In this scenario, the United States does not use any military force and, therefore, does not introduce nuclear weapons. The PRC has consistently stated a policy of no first use of nuclear weapons or use against non-nuclear states.⁵⁷ A newly conquered Taiwan experiencing the aftereffects of nuclear attack would negatively impact the PRC's economy and global legitimacy. Therefore, the scenario rejects this option. Based on these assumptions, the analysis now addresses the PLA challenges, strengths, and weaknesses, in addition to Taiwanese preparations.

Phase 1—Blockade and Bombing

Taiwan is likely to hold out in this phase by preserving its military for follow-on phases and buying time for a hoped-for US intervention.⁵⁸ The main challenges the PLA must overcome during the blockade and bombing phase are to achieve air superiority and sea control.⁵⁹ Air superiority is necessary to enable sea control, as well as to enable adding fighter and bomber aircraft to the bombing effort. Sea control is necessary to prevent resupply of Taiwan and clearing the strait for the invasion phase.⁶⁰

Taiwan's capabilities to contest PRC air superiority lie in its fleet of fighter aircraft and surface-to-air missile (SAM) systems. Taiwan operates approximately 400 combat-capable fighter aircraft.⁶¹ The fleet is a mix of F-16, Mirage 2000-5, and indigenous F-CK types.⁶² The fleet of 144 F-16s are older F-16A/B models but are currently being upgraded with advanced avionics to the F-16V configuration. This upgrade program was expected to complete by 2022.⁶³ In addition, the United States has approved the sale of 66 F-16 Block 70 aircraft with similar avionics to the F-16V via foreign military sales.⁶⁴ Taiwan's SAM systems include approximately nine Patriot batteries and upwards of 12 indigenous Tian Kung (TK II/III) batteries. These systems have the capability to intercept short-range ballistic missiles.⁶⁵ The United States has also approved the sale of 250 Stinger Block I missiles via foreign military sales, giving Taiwan a short-range defense against low-flying aircraft and helicopters.⁶⁶

Taiwan centers its preparations to contest sea control in the Taiwan Strait around a small fleet armed with antiship cruise missiles. Taiwan possesses four destroyers, twenty-two frigates, forty-four coastal patrol ships, and two diesel

submarines.⁶⁷ These ships can employ Hsiung Feng 2 and 3 antiship missiles. Shore-based launchers also fire these missiles.⁶⁸ This current fleet of naval assets is not capable of opposing PRC control of the sea, however.

To support gaining air superiority and achieving sea control, the PRC has strengths in virtually every area compared to Taiwan. China has developed a true *antiaccess, area denial* (the oft-quoted “A2/AD”) environment around Taiwan consisting of precision cruise missiles and rockets and “advanced sensor-shooter networks employing large satellite arrays.”⁶⁹ Counting both PLA Air Force and PLA Navy, the PRC stations approximately 600 fighter aircraft and 250 bombers in the Eastern and Southern Theaters alone. Another 900 fighters and 200 bombers are available from other PLA theaters.⁷⁰ These aircraft could operate from about 40 air bases along the east coast of China and not require aerial refueling.⁷¹ Aircraft types include the J-10, J-11, and Su-30MKK, each equipped with advanced avionics and weapons.⁷² Lastly, the PLA Air Force assigned the first fifth-generation J-20 squadron to the Eastern Theater in March 2019. The PLA Rocket Force can bring to bear more than 1,000 ballistic missiles and more than 300 ground-launched cruise missiles.⁷³

The PLA Navy can similarly put to sea a large armada of warships. Stationed in the Eastern and Southern Theaters are 23 destroyers, 37 frigates, 39 corvettes, 32 diesel attack submarines, and 68 coastal patrol ships. These PLA Navy ships employ a variety of antiship cruise and ballistic missiles as well as surface-to-air missiles.⁷⁴

The PRC does not have major weaknesses concerning the blockade and bombing phase of a Taiwan invasion void of US intervention. Historically, weaknesses in training and joint operations were cited. However, since the reforms initiated by Chairman Xi began in 2016, the PLA has conducted significantly more training, including increasing realism and conducting large-scale joint operations.⁷⁵ The PLA is aware there is still room to improve, especially in the areas of the “Five Incapables” problem: “that some commanders cannot (1) judge situations; (2) understand higher authorities’ intentions; (3) make operational decisions; (4) deploy forces; and, (5) manage unexpected situations.”⁷⁶ Complexity of joint training exercises have also increased. For example, the PLA conducted a large-scale joint coordination exercise in 2019 that involved all five theater commands with all four services plus the Strategic Support Force and the Joint Logistics Support Force.⁷⁷ PRC training and joint employment, while possibly important against the United States, is not a major weakness in a conflict with Taiwan.

At best, Taiwan’s prospects for any measure of victory in the blockade and bombing phase are bleak. Taiwan’s approach to its defense as outlined in the Overall Defense Concept (ODC, akin to the US National Defense Strategy) in essence admits this. The first tenet of the ODC is *force protection* (or often trans-

lated as “force preservation”).⁷⁸ The ODC contains an ominous explanation for force protection: “[S]wift and effective damage control, to contain the initial destruction caused by the enemies, and ensure the integrity of military power, so as to effectively support the follow-on operations.”⁷⁹ It is likely that all of Taiwan’s air bases will be destroyed, or at least rendered inoperable. Taiwan could preserve some of its fighter aircraft by relocating them to mountain shelters at Hualien and Taitung. Relocation would allow these aircraft to survive and participate in following phases but would prevent them from conducting combat operations in this phase. These fighters could be used against PRC fighters and bombers but would be fighting without a technological advantage, and the PRC could be willing to lose aircraft. Defending air bases and other fixed sites also decreases the survivability of Taiwan’s SAM systems while not providing effective protection for the defended sites.⁸⁰ These SAMs should be preserved for use in the next, most critical phase.

Taiwan’s naval forces will fare no better. The fleet will likely put to sea before kinetic strikes trap them in Taiwanese ports.⁸¹ Facing a quantitatively superior PRC fleet, with equal or better antisurface capabilities, the Taiwan navy may achieve individual victories, but this would not cause China to cease attacks. Based on the ODC, Taiwan may choose to preserve these assets to take part in thwarting the amphibious invasion phase.

China would welcome capitulation and reunification at this point, but that is not likely to happen. The anger and passion of the Taiwanese people are likely to “be strengthened by a bloody war of siege and starvation.”⁸² Unfortunately, their resistance will likely spur the PRC to initiate the second phase, amphibious invasion.

Phase 2—Amphibious Invasion

Challenges for the PLA abound in the amphibious invasion phase of a Taiwan conflict. A PRC invasion would be “extremely complex and difficult, especially for a military with limited experience.”⁸³ Michael Beckley notes the flotillas transporting troops across the strait will “be operating within [approximately] 100 miles from Taiwan from the moment they left Chinese ports and would spend substantial time within the range of Taiwan’s artillery.”⁸⁴ He further states that, “unless China destroyed all of Taiwan’s anti-ship missile launchers, Taiwan could ‘thin the herd’ of PLA amphibious ships as they load in Chinese ports or transit the Taiwan Strait.”⁸⁵ Once PRC operations to clear minefields and obstacles begin, they signal to Taiwanese forces those locations vulnerable for landings.⁸⁶ The challenge is to storm those landing areas before Taiwan can reinforce them. Assuming successful landings, the PLA must hold these zones against counterattacks until they can surge reinforcements to relieve the exhausted assault troops.⁸⁷

Taiwan has placed much emphasis on preparing to repel an amphibious invasion. The second and third aspects of Taiwan's ODC are "decisive battle in [the] littoral zone" and "destruction of enemy at [the] landing beach."⁸⁸ Taiwan surveys possible landing zones on a yearly basis. These sites are not unlimited. In fact, the "ideal" landing zone (one that includes enough space to land substantial forces, which is located near a port and airfield, but that is far enough away from Taiwan forces to gain a tactical advantage) does *not* exist. Locations with some of these attributes number only fourteen. Taiwan conducts "coastal engineering" to transform these possible locations into a "planning nightmare" of obstacles and defensive preparations. These coastal defenses are "considered the foremost targeting challenge facing the PLA."⁸⁹

Taiwan has also been making improvements in the armed forces to fight in the littoral zone and on the landing beaches. Taiwan plans to engage in the littoral zone with fighters, precision strike weapons, ship- and shore-based antiship missiles, submarines, and naval mines, all supported with unmanned aerial vehicles (UAVs) providing intelligence, surveillance, and reconnaissance. Similarly, for "destroying the enemy" at the landing beaches, Taiwan plans to acquire combat UAVs, or UCAVs, advanced tanks and attack aviation helicopters, "mobile precision strike firepower" of various types, and improved air defense systems. Although this list is aspirational, Taiwan has increased defense spending from Taiwan \$7.7 billion in 2017 to \$12.2 billion in 2019.⁹⁰

The need for air superiority and sea control remains throughout the operation. Therefore, all of the PLA strengths previously mentioned apply to the amphibious invasion phase. Between the PLA Army and PLA Navy Marine Corps, there are 12 units capable of conducting amphibious operations. These units have been upgraded with the ZBD-05 amphibious infantry fighting vehicle and the PLZ-07B amphibious self-propelled howitzer. The PLA has also made organizational changes to the Airborne Corps and created army air assault units to "seize key terrain and interdict Taiwan counterattacks."⁹¹ The PLA has increased training of these units in amphibious assault to include joint training environments.⁹² These exercises include the new Type 022 stealth missile boats capable of high speed and employing jamming and smoke to protect troop carriers.⁹³

The main challenges facing the PRC involve intelligence, transport, and the nature of the amphibious battlefield. Although the PRC possesses substantial intelligence capabilities, Chinese officers are concerned it is not enough.⁹⁴ Accurately finding effective targets poses a challenge, as even the PRC's considerable munitions stockpiles are limited. The PLA is concerned with Taiwan's investment in camouflage, concealment, and deception techniques that waste munitions while hiding critical assets. The difficulties of moving an enormous invasion force rap-

idly through contested waters requires an “enormous infusion of amphibious vessels.”⁹⁵ Surprisingly, the PRC has underinvested in troop transport vessels,⁹⁶ choosing instead amphibious transport docks and helicopter transports over amphibious landing craft.⁹⁷ Lastly, PLA troops attempting to go ashore will face the “savage nature” of amphibious warfare.⁹⁸ After transiting the Taiwan Strait under attack from Taiwan air, coastal, and naval forces (with some chance of seasickness), these troops will encounter “the life and death test of ferocious bombing, excessive explosions, and bloody killing . . . from start to finish, every moment and throughout the entire landing operations.”⁹⁹ PLA medical professionals are concerned these conditions could create “widespread nervous breakdowns,” causing the troops to become ineffective.¹⁰⁰

Given the seemingly insurmountable odds facing the Taiwanese armed forces, Taiwan still has the potential to stop the operation in this phase. Even more, this is Taiwan’s *best* chance at stopping the operation on favorable terms. The key to victory is to attrit as many transport and assault vessels as possible to prevent significant troops from making it ashore to establish a bridgehead. The ODC established a change in Taiwan’s strategy from contesting the entire Taiwan Strait to focusing on the littoral zone, which extends to approximately 100 kilometers (62 miles). The ODC allows Taiwan to maximize air-, sea-, and shore-launched antiship missiles against massed flotillas closer to Taiwan’s shore.¹⁰¹ This is the essence of the ODC’s “Decisive Battle in Littoral Zone” discussion.¹⁰² Heavy losses at this stage could cause the PRC to reconsider the entire operation. If the PLA continues the operation, the remaining assault force must evade extensive layers of sea mines and additional antiship attacks from smaller Kuang Hwa fast-attack vessels and then survive the harrowing assault of the beaches.¹⁰³ This is the essence of the ODC’s “Destruction of Enemy at Landing Beach” discussion.¹⁰⁴

During the amphibious invasion phase, the ODC realizes advantages from employing an “asymmetric defense strategy, where Taiwan maximizes its defense advantages, and targets an invading force when it is at its weakest.”¹⁰⁵ The “beauty” of the ODC, in the words of Drew Thompson, former director for China, Taiwan, and Mongolia in the Office of the Secretary of Defense, is that Taiwan “does not seek to compete with China’s larger military head-on” but instead “takes a page from guerilla warfare and envisions large numbers of small, affordable, highly mobile units taking advantage of the terrain to defeat a larger enemy.”¹⁰⁶ The ODC’s emphasis on preservation is the key for success in this stage. Air-, sea-, and ground-based assets need to survive the blockade and bombing phase to be available during the “all-or-nothing” amphibious invasion phase. At least some of these assets will survive the initial bombing.¹⁰⁷ Taiwan has the opportunity to stop the operation completely in the amphibious invasion phase. If this fails and one

or more landing zones survive the initial opposition and counterattacks, then the operation transitions to the island combat operations phase. Hope remains, but it is surely diminished.

Phase 3—Island Combat Operations

As stated above, the overall objective of the Island Combat Operations phase is the occupation of Taipei and final capitulation of the government.¹⁰⁸ Ian Easton provides a useful outline to the stages in the Island Combat Operations phase:¹⁰⁹

- Secure footholds on Taiwan
- Build up major landing zones and offload massive army
- Capture strategic terrain and military bases inland
- Capture Taipei and other major cities
- Institute martial law
- Clear defenders out of mountains

The “secure footholds on Taiwan” stage is where the PLA “surges reinforcements to the landing zone faster than the defender.”¹¹⁰ The PLA will begin ferrying as quickly as possible between 300,000 and a million troops to the island. Only troops needed for border defense and internal security are likely to be held back.¹¹¹ The PLA will seek to draw Taiwanese units out of the cities whenever possible. Ground commanders will use artillery to “soften targets” while armor and mechanized infantry attempt to “blitz” into urban centers.¹¹² Helicopter gunships would provide covering fire. The challenge of urban fighting is anticipated to be extremely intense as PLA units “encircle and clear out their ‘nests and dens’ one at a time, slowly and methodically annihilating them.”¹¹³ Last to fall will be holdout units in the central mountain range and along the far eastern coast. Finally, Taiwan will be turned into a “garrison state” with an extensive campaign of “purges.”¹¹⁴

To defend against this onslaught, Taiwan will utilize what remains of its 175,000 active-duty personnel. These are divided mainly among armor, mechanized infantry, motorized infantry, and artillery brigades.¹¹⁵ In addition, once an invasion was certain, Taiwanese leaders will issue an emergency order to mobilize the civilian population. The active-duty units contain mostly older, US-purchased equipment such as the M60 tank, M113 personnel carrier, and 155mm and 203mm artillery. These units are supported by AH-1 and AH-64 attack helicopters.¹¹⁶ The United States has approved sale of 108 M1A2 tanks, which will be a welcome replacement for the M60s.¹¹⁷

Once the PLA successfully executes a breakout of the bridgeheads, the PLA has virtually no weaknesses compared to Taiwanese forces. PLA strengths are numerous during the island combat operations phase. In the Eastern and Southern Theaters alone, the PLA can transport up to 30 Combined Arms Brigades supported by an additional 17 air assault/army aviation, airborne, and artillery brigades.¹¹⁸

Assuming the United States still does not intervene, there remains one last opportunity for Taiwan victory. During what Easton titles the “secure footholds on Taiwan” stage, Taiwan forces must “drive them [PRC] into the sea.”¹¹⁹ This essentially resets the operation to the end of the amphibious phase, in which Taiwan has the greatest chance of stopping the operation. Again, preservation is the key. Theater-level command bunkers and mobile brigade command posts must survive to organize counterattacks. Taiwan forces must clear roads quickly to allow remaining units to converge on the landing sites before Chinese reinforcements arrive.¹²⁰ If unable to converge, remaining units could “fall back onto prepared defensive lines running across cities and mountains.”¹²¹ From there, mobile attack operations could be conducted in a “grueling war of attrition,” but Taiwan would have essentially lost the war.¹²²

Brian Dunn puts forth another possibility worthy of consideration. Dunn states: “To defeat Taiwan and avoid war with America, all China needs to do is get ashore in force and impose a cease-fire prior to significant American intervention.”¹²³ Dunn notes that “much of the world—perhaps America especially—would be relieved to have a cease-fire before American and Chinese forces are openly shooting at each other.”¹²⁴ Dunn claims that China could use the cease-fire to further fortify and supply its bridgeheads, followed by an “overrunning or simply overawing Taiwan into submission . . . at a time of China’s choosing.”¹²⁵ This option may be preferable to China, as reconstruction of Taiwan postcapitulation would be lessened and China’s surely plummeting stock on the world stage halted. Dunn rightly cautions Taiwan to “reject calls for a cease-fire, contain Chinese bridgeheads and airheads into as small a perimeter as possible, and then drive the invaders into the sea.”¹²⁶

Ultimately, if Taiwan does not stop the PLA on the beaches or fails to drive them back into the sea, “the lights of freedom, democracy, and social justice would be extinguished.”¹²⁷ If the PLA breaks out from their bridgeheads, the “long night of terror” would begin. Multiple advances in technology in the near future, such as artificial intelligence, autonomous air, surface, or subsurface systems, and swarm or mesh networks, could help Taiwan avoid this fate. Taiwan does not have time on its side, however. Its very existence is at stake. With so much on the line, Taiwan should leverage three capabilities available today.

Recommendations

Taiwan should prioritize capabilities that give an asymmetric advantage during the phase of the conflict with the highest chance of stopping the operation—the amphibious invasion phase. Taiwan does not have the luxury of an unlimited defense budget. A nominal New Taiwan \$12 billion (about US\$425 million)¹²⁸ will limit the amount of new equipment or upgrades to existing systems. The ODC is correct in focusing on asymmetric capabilities.¹²⁹

As previously shown, the PLA does not have major weaknesses in the blockade and bombing phase of the conflict. During that phase, the large quantitative/qualitative advantage rests with the PLA. Taiwan should avoid confronting PLA strengths directly by following the ODC's tenet of force protection/preservation. Taiwan should relocate fighter assets to mountain shelters while large naval assets sortie away from indefensible ports. The Patriot and Tian Kung air defense batteries should likewise shelter during the rocket and cruise missile attacks to ensure survival until needed against PLA Air Force air-to-ground attacks directly supporting the amphibious assault.¹³⁰ Attempting to protect fixed air bases and ports during this bombardment may have limited success, but the PLA will target these air defense systems in turn.¹³¹ Taiwan should not prioritize capabilities that directly confront the PLA in this phase.

During the final phase, island combat operations, the PLA also has many strengths. Assuming PLA forces have broken out of the bridgeheads, Taiwan is essentially in a land war with China. This is a losing prospect if no intervention takes place. Taiwan should not prioritize capabilities to support protracted combat operations on the Taiwanese mainland. Taiwan should, however, invest in capabilities that enable it to contain and push PLA units into the sea immediately after a breakout.

Taiwan's best hope of survival is victory in the amphibious invasion phase of a conflict with the PRC. In that phase, Taiwan can maximize its strengths against the PLA as it undertakes the most challenging part of the operation. This is the crux of the ODC's asymmetric defense strategy.¹³² Taiwan should prioritize capabilities to withstand and repel the amphibious invasion phase of the operation. Taiwan should prioritize mines and minelayers, antiship missiles, and mobile long-range artillery systems. These capabilities endanger transits across the Taiwan Strait, where the PLA is most vulnerable. These systems provide Taiwan with the "large number of small things" as opposed to "low quantity of high-quality platforms" such as aircraft and large warships.¹³³ The following prioritized recommendations are based on effectiveness in stopping the amphibious fleet.

Mines and minelayers are the top priority. RAND senior engineer Scott Savitz states that “naval mines are consummate disruptors.”¹³⁴ In the ODC, Taiwan already plans to incorporate minefields.¹³⁵ It will create an “interlocking series of minefields and obstacles,” concentrating on likely anchorage sites and avenues of approach to the landing beaches.¹³⁶ Their goal is to “create kill boxes, trapping and sinking landing ships and their escorts,” as well as to create psychological stress on the invaders.¹³⁷ To mitigate this threat, the PLA Navy must employ mine-countermeasure operations to clear safe lanes through these minefields. These clearing operations are conducted in slow, methodical patterns while highlighting where the landings are likely to occur. This places the minesweepers at risk of antiship attack while funneling assault forces into limited lanes where they are vulnerable to antiship missiles. A final benefit is that it slows down the invasion forces, buying Taiwan time for forces to converge on the landing zones.¹³⁸ Of the many shipbuilding programs Taiwan has initiated, development and procurement of high-speed minelayers should be the priority.¹³⁹ Since minefields cannot be put in place during peacetime, Taiwan should procure a relatively large quantity of minelayers with high-speed capability for survivability.

The second priority for Taiwan is antiship missiles, which would attack the PLA transport ships in transit across the Taiwan Strait. The ODC rightly names this the “decisive battle in [the] littoral zone.”¹⁴⁰ This stage holds the highest chance for Taiwan to stop the invasion operation completely. Taiwan is taking decisive action in procuring antiship missiles. The domestically built Hsiung Feng 3 missile should take the highest priority. Being mobile, these systems are easier to disperse and hide during the blockade and bombing phase.¹⁴¹ In addition to domestic missiles, the United States recently approved sale of up to 100 RGM-84L-4 Harpoon Coastal Defense Systems. This system is also mobile, increasing survivability.¹⁴² Although costing a substantial US\$2.37 billion, this is a prudent investment, giving Taiwan a redundant antiship capability.

The third priority is mobile long-range artillery systems such as the US Paladin and High Mobility Artillery Rocket Systems (HIMARS). Paladins placed on Kinmen and HIMARS operating from Taiwan can attack transport ships in Chinese ports while assault troops and equipment are loading. Taiwan can also use Paladins on its own territory to attack the landing beaches. Both systems are mobile, increasing survivability. Both the US Army and US Marine Corps are developing HIMARS with an antiship capability, which Taiwan could possibly procure in the future.¹⁴³ With this last piece to the anti-amphibious invasion defense, Taiwan can range transport shipping in Chinese ports of embarkation, as they transit the Taiwan Strait, and as the flotilla approaches the landing zones.

Taiwan will also be inducing psychological stress on the invaders during every part of their journey. This is Taiwan's best chance at stopping a PRC invasion.

Taiwan should not prioritize investment in expensive conventional capabilities such as fighter aircraft and capital ships. These capabilities should not be retired completely but kept as a "low quantity of high-quality platforms."¹⁴⁴ To fight asymmetrically, Taiwan needs a "large number of small things."¹⁴⁵ Taiwan is currently upgrading or increasing its fleet of 400 fighter aircraft.¹⁴⁶ These aircraft are expensive¹⁴⁷ and will not play a major role in any phase of the operation.¹⁴⁸ Taiwan should reduce this fleet to only the newer F-16 Block 70 and indigenous F-CK squadrons. Taiwan should also curtail its seven shipbuilding programs currently in the prototyping phase.¹⁴⁹ The Indigenous Defense Submarine, large amphibious transport vessels, and advanced defense destroyer are vessels that are realistically not survivable.¹⁵⁰ Taiwan should consider redirecting the funding from canceling these programs to capabilities Taiwan *should* be prioritizing.

Conclusion

If the People's Republic of China decides to force Taiwan's reunification at some time in the future, the conflict will be horrific and devastating regardless of the outcome. The Taiwan people will suffer tremendous casualties, severe psychological scarring, and the loss of their burgeoning Taiwanese identity. Taiwan's economy will also be devastated and take years or decades to rebuild depending on the largesse of their new overlords in the case of defeat or the international community in the case of victory. Globally, the future would be uncertain. Would the new regional hegemon endure due to a weak international response? Would it choose a path of becoming a global hegemon? Future researchers should address these questions.

Even given the tremendous growth and modernization of China's military in equipment, organization, and training, hope for Taiwan remains. Taiwan must prioritize three capabilities consisting of mines and minelayers, antiship missiles, and mobile long-range artillery systems. These are achievable in the near term, and Taiwan is indeed investing in those areas. However, Taiwan continues to pursue expensive, low-quantity systems that are not survivable and merely deplete the limited funding needed for priority systems. Taiwan should remain focused on the *large quantity of small things* and not pursue expensive technology development.

Taiwan has greatly improved its military vision through the ODC. It rightly identifies force protection/preservation for forces to survive until a decisive battle in the littoral zone commences. The ODC also smartly addresses defeating invasion forces at the landing zones. This article does not address all aspects of the ODC, however; such is not the purpose. Many areas of research remain such as

cyberwarfare, electronic warfare, training, logistics, and readiness. Moreover, the ODC addresses only the military instrument of power. Future research into efforts in diplomacy, in spreading positive information to counter China's soft pressure, and in improving the resiliency of the Taiwanese economy are all rich areas for consideration.

Taiwan has blossomed in spite of 70 years of intense PRC animosity, enduring numerous military confrontations and constant soft power pressure. Yet, Taiwan has developed its own identity among a vibrant people. Unfortunately, Taiwan lives in interesting times . . . yet, it survives. The hard choices for preparing for a PRC amphibious invasion will determine if Taiwan continues to do so freely. ☸

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Notes

1. Susan V. Lawrence and Wayne M. Morrison, *Taiwan: Issues for Congress*, CRS Report 44996 (Washington, DC: Congressional Research Service, October 2017), 38, <https://fas.org/>.
2. Lawrence and Morrison, *Taiwan: Issues for Congress*.
3. Ian Easton, *The Chinese Invasion Threat: Taiwan's Defense and American Strategy in Asia*, (United Kingdom: Eastbridge Books, 2019), 24–25.
4. Easton, *Chinese Invasion Threat*, 44–46.
5. Easton, *Chinese Invasion Threat*, 48–49.
6. State Council Information Office of the People's Republic of China, *China's National Defense in the New Era* (Beijing: Foreign Languages Press, 2019), 2–3, <http://english.www.gov.cn/>.
7. State Council Information Office, *China's National Defense*, 5.
8. *State Council Information Office, China's National Defense*, 7.
9. *State Council Information Office, China's National Defense*, 7.
10. *State Council Information Office, China's National Defense*, 7.
11. Lawrence and Morrison, *Taiwan: Issues for Congress*, 38.
12. Anti-Secession Law, People's Republic of China, 10th National People's Congress, 3rd Sess, Art. 8, 14 March 2005, <http://www.china-embassy.org/>.
13. Andrew Scobell et al., *China's Grand Strategy: Trends, Trajectories, and Long-Term Competition*, RAND Report RR-2798-A (Santa Monica, CA: RAND Corporation, 2020), 13, <https://www.rand.org/>.
14. Syaru Shirley Lin, *Taiwan's China Dilemma* (Stanford: Stanford University Press, 2016), 163.
15. Lin, *Taiwan's China Dilemma*, 163.
16. Lin, *Taiwan's China Dilemma*, 174.

17. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020, Annual Report to Congress*, (Washington, DC: Office of the Secretary of Defense, 2020), 96, <https://media.defense.gov/>.
18. Department of Defense, *Military and Security Developments*, 96
19. Kharis Templeman, "China's Military Incursions Around Taiwan Aren't a Sign of Imminent Attack," *The Diplomat*, 22 October 2020, <https://thediplomat.com/>.
20. Templeman, "China's Military Incursions."
21. Susan V. Lawrence, *Taiwan: Select Political and Security Issues*, CRS Report IF10275 (Washington, DC: Congressional Research Service, January 2020, updated September 2020), 1, <https://fas.org/>.
22. Department of State, "Countries & Areas—Taiwan—U.S.-Taiwan Relations—Fact Sheet," 27 September 2020, <https://www.state.gov/>.
23. Department of State, "Countries & Areas—Taiwan."
24. Department of State, "Countries & Areas—Taiwan."
25. Lawrence, *Taiwan: Select Issues*, 1.
26. Lawrence, *Taiwan: Select Issues*, 2.
27. Lawrence and Morrison, *Taiwan: Issues for Congress*, 10.
28. Lawrence and Morrison, *Taiwan: Issues for Congress*, 9.
29. Lawrence and Morrison, *Taiwan: Issues for Congress*, 9.
30. Department of Defense, *Military and Security Developments*, 113.
31. Easton, *Chinese Invasion Threat*, 78.
32. Easton, *Chinese Invasion Threat*, 78.
33. Easton, *Chinese Invasion Threat*, 78.
34. Easton, *Chinese Invasion Threat*, 78.
35. Easton, *Chinese Invasion Threat*, 78–79.
36. Easton, *Chinese Invasion Threat*, 80.
37. Easton, *Chinese Invasion Threat*, 81.
38. Michael Beckley, "The Emerging Military Balance in East Asia: How China's Neighbors Can Check Chinese Naval Expansion," *International Security* 42, no. 2 (Fall 2017), 84, <https://doi.org/>.
39. Easton, *Chinese Invasion Threat*, 83–88.
40. Easton, *Chinese Invasion Threat*, 82–83.
41. Ministry of National Defense Republic of China, *2019 National Defense Report*, (Taipei: Ministry of National Defense, 2019), 48, <https://www.ustaiwandefense.com/>.
42. Easton, *Chinese Invasion Threat*, 83.
43. Easton, *Chinese Invasion Threat*, 90–93.
44. Easton, *Chinese Invasion Threat*, 94.
45. Beckley, "Emerging Military Balance," 92.
46. Easton, *Chinese Invasion Threat*, 94.
47. Easton, *Chinese Invasion Threat*, 110.
48. Beckley, "Emerging Military Balance," 87.
49. Easton, *Chinese Invasion Threat*, 112.
50. Easton, *Chinese Invasion Threat*, 112–13.
51. Beckley, "Emerging Military Balance," 90.
52. Easton, *Chinese Invasion Threat*, 78, 114–15.

53. Department of Defense, *Military and Security Developments*, 114; and Easton, *Chinese Invasion Threat*, 114–15.
54. Easton, *Chinese Invasion Threat*, 119–20, 153.
55. Easton, *Chinese Invasion Threat*, 11.
56. Brian J. Dunn, “Drive Them into the Sea,” *Military Review* 100, no. 5 (September–October 2020), 76.
57. State Council Information Office, *China’s National Defense in the New Era*, 9.
58. Drew Thompson, “Hope on the Horizon: Taiwan’s Radical New Defense Concept,” *War on the Rocks*, 2 October 2018, <https://warontherocks.com/>.
59. Beckley, “Emerging Military Balance,” 84.
60. Easton, *Chinese Invasion Threat*, 87, 95; Beckley, “Emerging Military Balance,” 84.
61. Department of Defense, *Military and Security Developments*, 166.
62. Michael J. Lostumbo et al., *Air Defense Options for Taiwan: An Assessment of Relative Costs and Operational Benefits*, RAND Report RR-1051-OSD (Santa Monica, CA: RAND Corporation, 2016), 10, <https://www.rand.org/>.
63. Mike Yeo, “Taiwan Says F-16 Upgrade Back on Track, as It Seeks Recon Pods That Can Watch China’s Coastline,” *Defense News*, 18 October 2019, <https://www.defensenews.com/>.
64. Defense Security Cooperation Agency, “Taipei Economic and Cultural Representative Office in the United States (TECRO)—F-16C/D Block 70 Aircraft and Related Equipment and Support,” Congressional Notification, Transmittal No. 19-50, 20 August 2019, <https://www.dsca.mil/>.
65. Lostumbo et al., *Air Defense Options*, 4.
66. Defense Security Cooperation Agency, “Taipei Economic and Cultural Representative Office in the United States (TECRO)—Stinger Missiles and Related Equipment and Support,” Congressional Notification, Transmittal No. 19-21, 8 July 2019, <https://www.dsca.mil/>.
67. Department of Defense, *Military and Security Developments*, 165.
68. Michael Mazza, “Taiwan’s High-End and Low-End Defense Capabilities Balance,” American Enterprise Institute (AEI), 23 October 2019, <https://www.aei.org/>.
69. Michael E. O’Hanlon, *The Senkaku Paradox: Risking Great Power War over Limited Stakes* (Washington, DC: Brookings Institution Press, 2019), 58.
70. Department of Defense, *Military and Security Developments*, 166.
71. Eric Heginbotham et al., *The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power, 1996–2017*, RAND Report RR-392-AF (Santa Monica, CA: RAND Corporation, 2015), 72, <https://www.rand.org/>.
72. Lostumbo et al., *Air Defense Options*, 5–9.
73. Department of Defense, *Military and Security Developments*, 95, 166.
74. Department of Defense, *Military and Security Developments*, 46, 165.
75. Department of Defense, *Military and Security Developments*, i, 31.
76. Department of Defense, *Military and Security Developments*, 32.
77. Department of Defense, *Military and Security Developments*, 68.
78. Ministry of National Defense, *2019 National Defense*, 68; Thompson, “Hope on the Horizon”; Admiral Lee Hsi-min and Eric Lee, “Taiwan’s Overall Defense Concept, Explained,” *The Diplomat*, 3 November 2020, <https://thediplomat.com/>.
79. Ministry of National Defense, *2019 National Defense*, 69.
80. Lostumbo et al., *Air Defense Options*, xi, 5, 15–17.

81. Easton, *Chinese Invasion Threat*, 84.
82. Easton, *Chinese Invasion Threat*, 95.
83. Heginbotham et al., *U.S.-China Military Scorecard*, 224.
84. Beckley, "Emerging Military Balance," 89.
85. Beckley, "Emerging Military Balance," 89.
86. Scott Savitz, "Small States Can Use Naval Mines and Unmanned Vehicles to Deter Maritime Aggression," *RealClear Defense* (blog), 16 July 2018, <https://www.realcleardefense.com/>.
87. Beckley, "Emerging Military Balance," 87.
88. Ministry of National Defense, *2019 National Defense*, 68.
89. Easton, *Chinese Invasion Threat*, 129–31, 142, 166, 248.
90. Ministry of National Defense, *2019 National Defense*, 76, 102.
91. Department of Defense, *Military and Security Developments*, 118.
92. Department of Defense, *Military and Security Developments*, 117.
93. Li Wei, "Live-Fire Drills by Stealth Missile Boats Enhance China's Coastal Combat Capability," *Global Times*, 9 April 2020, <http://english.pladaily.com.cn/>.
94. Easton, *Chinese Invasion Threat*, 164.
95. Easton, *Chinese Invasion Threat*, 165–69.
96. Easton, *Chinese Invasion Threat*, 170.
97. Department of Defense, *Military and Security Developments*, 117.
98. Easton, *Chinese Invasion Threat*, 170.
99. Quoted in Easton, *Chinese Invasion Threat*, 170.
100. Easton, *Chinese Invasion Threat*, 171.
101. Thompson, "Hope on the Horizon."
102. Ministry of National Defense, *2019 National Defense*, 69.
103. Thompson, "Hope on the Horizon."
104. Ministry of National Defense, *2019 National Defense*, 69.
105. Thompson, "Hope on the Horizon."
106. Thompson, "Hope on the Horizon."
107. Beckley, "Emerging Military Balance," 86.
108. Easton, *Chinese Invasion Threat*, 78.
109. Easton, *Chinese Invasion Threat*, 124.
110. Beckley, "Emerging Military Balance," 87.
111. Easton, *Chinese Invasion Threat*, 153.
112. Easton, *Chinese Invasion Threat*, 118, 116.
113. Easton, *Chinese Invasion Threat*, 117–19.
114. Easton, *Chinese Invasion Threat*, 120–21.
115. Department of Defense, *Military and Security Developments*, 119, 164.
116. Easton, *Chinese Invasion Threat*, 195, 283–94.
117. Defense Security Cooperation Agency, "Taipei Economic and Cultural Representative Office in the United States (TECRO)—M1A2T Abrams Tanks and Related Equipment and Support," Congressional Notification, Transmittal No. 19-22, 8 July 2019, <https://www.dsca.mil/>.
118. Department of Defense, *Military and Security Developments*, 164.
119. Dunn, "Drive Them into the Sea," 68.
120. Easton, *Chinese Invasion Threat*, 208–09.
121. Easton, *Chinese Invasion Threat*, 209.

122. Easton, *Chinese Invasion Threat*, 209.
123. Dunn, "Drive Them into the Sea," 70.
124. Dunn, "Drive Them into the Sea," 77.
125. Dunn, "Drive Them into the Sea," 70.
126. Dunn, "Drive Them into the Sea," 70.
127. Easton, *Chinese Invasion Threat*, 120.
128. Ministry of National Defense, *2019 National Defense*, 102. Currency conversion based on US\$1 = NT\$28.54.
129. Ministry of National Defense, *2019 National Defense*, 68.
130. Lostumbo et al., *Air Defense Options*, 18.
131. Lostumbo et al., *Air Defense Options*, 5.
132. Thompson, "Hope on the Horizon."
133. Hsi-min and Lee, "Taiwan's Overall Defense Concept."
134. Savitz, "Small States Can Use Naval Mines."
135. Ministry of National Defense, *2019 National Defense*, 76.
136. Easton, *Chinese Invasion Threat*, 184–85.
137. Easton, *Chinese Invasion Threat*, 185.
138. Savitz, "Small States Can Use Naval Mines."
139. Ministry of National Defense, *2019 National Defense*, 102.
140. Ministry of National Defense, *2019 National Defense*, 68.
141. Thompson, "Hope on the Horizon."
142. Defense Security Cooperation Agency, "Taipei Economic and Cultural Representative Office in the United States (TECRO)—RGM-84L-4 Harpoon Surface Launched Block II Missiles," Congressional Notification, Transmittal No. 20-68, 26 October 2020, <https://www.dsca.mil/>.
143. Mazza, "Taiwan's High-End and Low-End Defense Capabilities Balance."
144. Hsi-min and Lee, "Taiwan's Overall Defense Concept."
145. Hsi-min and Lee, "Taiwan's Overall Defense Concept."
146. Yeo, "Taiwan Says F-16 Upgrade."
147. Defense Security Cooperation Agency, "F-16C/D Block 70 Aircraft." The DSCA Congressional Notification estimates the cost at US\$8B.
148. Thompson, "Hope on the Horizon."
149. Ministry of National Defense, *2019 National Defense*, 107.
150. Thompson, "Hope on the Horizon."

China's Scattered Pearls

How the Belt and Road Initiative Is Reclaiming the “String of Pearls” and More

THILINI KAHANDAWAARACHCHI

In 2004, a report by the US consultancy Firm Booz Allen Hamilton titled “Energy Futures in Asia” coined the term “String of Pearls.”¹ It stated that China will expand its naval presence in South Asia by building maritime infrastructure in friendly countries across the region to ensure an unhindered flow of energy through the Indian Ocean region. In 2013, Chinese president Xi Jinping unveiled the Belt and Road Initiative (BRI), effectively reclaiming the Western narrative of a strategic string of pearls and, thereby, legitimizing China’s global connectivity project of the century. Since then, Beijing has made headlines with its significant investments in maritime infrastructure spanning from the controversial Hambantota Port in Sri Lanka to China’s naval base in Djibouti.

A closer look at China’s increasing ties with Indian Ocean littoral and island states indicates that China has not stopped at investing in the Maritime Silk Route projects in its quest for dominance in the Indian Ocean region. Rather, Beijing has gone a step further by building and financing other key infrastructure in the region through Chinese state-owned enterprises and other Chinese entities. China has also boosted political and economic ties with periodic high-level visits, meetings, and trade agreements. Beijing has adopted a soft-power approach, ranging from extensive development aid, cultural and people-to-people ties, and, most recently, vaccine diplomacy in the strategically significant region.² While the rest of world was debating about China’s debt-trap diplomacy, China has been sending teams of doctors to Madagascar,³ delivering an experimental drug to eliminate malaria in Comoros,⁴ and conducting joint naval drills with Pakistan in the Arabian Sea.⁵ With all these measures and more, Beijing is winning over governments and influencing people to expand China’s presence even beyond what was envisioned as the String of Pearls in the Indian Ocean region.

Western media has focused on the negative perceptions of Chinese expansionism in the Indo-Pacific and has labelled Chinese investments in the Global South as a “debt trap.” By doing so, the Western governments and media often fail to acknowledge the nuance that some Chinese involvements in the Global South have in fact made positive contributions in many Indian Ocean countries. While these narratives influence how the developing world perceives China, it has not

stopped the countries of the Global South from strengthening their ties with China. Until China's nonregional competitors see beyond their own narrative of a China that is engaged in "checkbook diplomacy," the West will be unprepared to counter the rapidly growing Chinese presence in the Indian Ocean region.

The countries that were originally considered to be part of the String of Pearls quite easily fit into the BRI with their strategic naval outposts. When one takes a closer look at Chinese engagement in the Indian Ocean, it is evident that China's involvement in the region is not limited to strategic locations or high-risk investments, but it also extends to securing long-term strategic ties with governments and people of these countries. Therefore, one could argue that, particularly under the BRI, Beijing has gone beyond what was initially perceived as a few strategic outposts in the Indian Ocean to secure China's trade and energy supply routes to a grander vision of being a global power that can project power in countries on the other side of the globe. Therefore, one could argue that China's interest in the Indo-Pacific goes beyond merely securing trade routes or even ensuring a strategic presence. If the West continues with the narrative of a debt trap and fails to take the growing expansionism in China seriously, the developing nations of the Global South will find "an all-weather friend" and "a preferred development partner" in China. What China would get in return ranges from strategic outposts to growing markets and an ever-increasing people-to-people ties, which would pose a threat to the current global order that the West and its allies want to maintain. The following case studies, ranging from Myanmar in Southeast Asia to Djibouti in East Africa, merely skim the surface of growing Chinese involvement in the region to elaborate China's deepening engagement in the Indo-Pacific.

Cambodia

In 2019, a *Wall Street Journal* article raised concerns about a secret agreement between China and Cambodia that allows China to use the strategically located Ream Naval Base in the Gulf of Thailand for 30 years, with automatic renewals every year thereafter.⁶ The Cambodian government has vehemently denied the claims of a secret deal with China, yet claiming to expand the naval base, it has demolished parts of the facility that were previously built with American funding.⁷ The renovations and expansion of the Ream Naval Base are reportedly supported by China.⁸ The Cambodian prime minister has stated that the Cambodian constitution does not allow foreign military basing in the country,⁹ and that China would not have exclusive access to the Ream Naval Base.¹⁰ However, given China's involvement in expanding the military base,¹¹ regional powers fear that Ream has the potential to become a dual-use facility for China, meaning a port that is used for both civilian and military purposes.

Myanmar

In Myanmar, while China significantly stepped up its engagement during the past decade, under the leadership of recently ousted State Counsellor Aung San Suu Kyi, bilateral ties saw a rapid increase, albeit amid challenges.¹² In January 2020, President Xi visited Myanmar to mark 70 years of diplomatic ties between the two countries. It was the first visit by a Chinese president to the southern neighbor in nearly two decades and saw the two sides enter into a record 33 memoranda of understanding (MOU) and agreements on infrastructure development, industrial and power projects, railways, trade, investment, and human resources, among others.¹³

As of March 2020, China has made \$21 billion dollars of foreign direct investments (FDI) in Myanmar.¹⁴ In November 2020, Myanmar also became part of the Regional Comprehensive Economic Partnership (RCEP), which is a free trade agreement (FTA) among 15 Indo-Pacific nations. It is a major geopolitical victory for Beijing, as the RCEP will help China reap the benefits of greater economic integration of the region.¹⁵

One of the most significant agreements entered into between the two countries during the visit of President Xi last year was the agreement for the Kyaukphyu Special Economic Zone and deep seaport project, which is expected to provide China a backdoor to the Indian Ocean. Under the BRI, the China–Myanmar Economic Corridor will connect China’s Yunnan Province to the Indian Ocean through Kyaukphyu deep seaport.¹⁶ In August 2020, the government of Myanmar approved a Chinese joint venture company to implement the Kyaukphyu deep-water port project. With China’s CITIC Myanmar Port Investment Limited holding a 70-percent stake in the joint venture, there are concerns that Kyaukphyu could become a dual-use facility for China in the Bay of Bengal.¹⁷

Bangladesh

Bangladesh established diplomatic ties with China in 1975. Though China refused to recognize Bangladesh as an independent state at first, relations between the two countries have gradually strengthened and “today, there are hardly any anti-Chinese in Bangladesh, which is a remarkable development,” says Prof. Imtiaz Ahmed, an international relations academic from Bangladesh.¹⁸

Like many other countries’ services in the region, Bangladesh’s air force flies Chinese fighter jets, its army uses Chinese tanks, and its navy sails Chinese frigates.¹⁹ China provided two submarines to Bangladesh in 2016. Now China is helping Bangladesh to construct its first submarine base in Cox’s Bazar and to train Bangladeshi personnel to operate the submarines and the base.²⁰ Interest-

ingly, Bangladeshi officials have stated that China does not intend to use the base.²¹ In addition to the increasing naval infrastructure, in 2019, China extended loans to the amount of \$1.7 billion for Bangladesh's power sector alone. China is among Bangladesh's top trading partners, with annual bilateral trade amounting to approximately \$12 billion.

In December 2016, Bangladesh entered into several BRI agreements. A key project among these was the expansion and development of the Payra Port at a cost of \$600 million. In 2020, China State Shipbuilding Corporation secured a project to develop the Payra Port into a major deep seaport at the cost of \$120 million.²² Further, in 2019 Bangladesh prime minister Sheikh Hasina stated that in addition to India, Bangladesh would welcome it if the southwestern provinces of China were interested in using Chittagong and Mongla—the two largest ports in the country.²³ Thus, Bangladesh has effectively opened the doors of all its strategic ports to China.

Sri Lanka

Perhaps no other country has received the kind of global criticism that Sri Lanka has attracted for its deepening ties with China. Contemporary China–Sri Lanka relations date back more than half a century. Sri Lanka was one of the first countries to recognize the Chinese Communist Party's (CCP) government in 1950, and two years later the two countries signed the historic Rubber–Rice Pact.²⁴ This agreement helped break the blockade and embargo that Western nations had imposed on China. Colombo and Beijing have had strong cultural, economic, military, and technical ties for more than 60 years.²⁵ China played a crucial role ending the civil war in Sri Lanka in 2009 by supplying the Sri Lankan government with aircraft, ships, weapons, ammunition, and rockets for money or for soft loans during the war, when many countries had imposed sanctions on supplying military assistance to Sri Lanka.²⁶

When President Xi visited Sri Lanka in 2014, the two countries entered as many as 20 bilateral agreements in the power sector, industry, sea reclamation, and water-supply sectors, among others. China has been Sri Lanka's largest development partner, with projects on highways, roads, airports, ports, and other key infrastructure. By the end of 2018, Chinese FDI in Sri Lanka had surpassed \$7.3 billion.²⁷ China continues to be one of Colombo's key trading partners, annually amounting to approximately \$4 billion in trade, and was the main source of imports of Sri Lanka in 2019.²⁸ In October 2020, in what was considered the first outbound visit by a top Chinese official to South Asia post–COVID-19, Yang Jiechi, a CCP politburo member and a former foreign minister visited Sri Lanka, indicating the

importance China places on Sri Lanka and announcing a \$90 million grant for medical care, education, and water supplies in the country's rural areas.²⁹

In the maritime sphere, just next to the Colombo Port, which is considered to be one of South Asia's best connected ports, China Harbor Engineering Company, which has links to the Chinese state, is building a \$1.4 billion Port City on 269 hectares of reclaimed land in return for rights to share some of the land.³⁰ It will expand Sri Lanka's commercial capital, Colombo, and will be under a separate legal framework, including attractive tax concessions that are said to be conducive for investments and commercial activities.³¹ Further, at the Colombo Port, one of its most successful terminals—Colombo International Container Terminal (CICT)—is controlled by China Merchants Port Holdings Company, with an 85-percent stake.³² With a draft of 18 meters, it is the only deepwater terminal in South Asia that is capable of handling the largest ships in the world.³³ In 2019, CICT handled up to 40 percent of the total volume of the Colombo Port.³⁴

Sri Lanka's Hambantota Port, which was originally rejected by India and the United States, was later built with Chinese financing.³⁵ It was widely criticized both locally and internationally as one of former Pres. Mahinda Rajapaksa's white elephant projects³⁶ and as the poster child of China's debt-trap diplomacy.³⁷ The port was built with staggering Chinese loans. A 15-year commercial loan for \$306 million³⁸ at 6.3-percent interest financed the first phase, while the Exim Bank of China provided a loan of \$600 million and a Chinese Government Concessional Loan of Renminbi Yuan 1 billion financed the second phase of the project.³⁹ When the port failed to provide the expected return on investments and Sri Lanka could no longer service the debt, in 2017, the port was leased to China Merchants Port Holdings Company for \$1.1 billion with a 70-percent stake for 99 years.⁴⁰

For China, Hambantota is of strategic interest. Sri Lanka is equidistant from the eastern coast of Africa to Indonesia.⁴¹ Hambantota Port is less than 20 nautical miles away from one of the world's busiest shipping routes, with approximately 275 ships passing by on a daily basis.⁴² China also transports large amounts of bulk energy and other supplies from Africa to China; thus, the need to secure China's sea lanes of communication (SLOC) is of paramount importance, and Hambantota is a linchpin in that equation.

Former Sri Lankan prime minister Ranil Wickremesinghe, under whose government Sri Lanka leased the Hambantota Port to a Chinese company, has reiterated that operations and security of the Hambantota Port is controlled by Sri Lanka and that there is no possibility for it to become a Chinese forward military base.⁴³ To allay the concerns raised by India, the United States, and Japan, in 2018, the Sri Lankan government shifted a Sri Lanka Navy contingent to the Hambantota Port.⁴⁴ Despite these assurances from the Sri Lankan government,

the 2014 incident of the People's Liberation Army Navy (PLAN) warship *Chang Xing Dao* and Han-class submarine *Changzheng-2*'s visit to the Colombo Port left India and other regional powers fearing for future potential for Sri Lankan ports being used for Chinese military purposes.⁴⁵ A Chinese-controlled strategic port in the south of the island and a highly successful terminal in Colombo Port have amplified those concerns.

Maldives

In the archipelagic islands of the Maldives, which used to be better known as a honeymoon destination than a strategic location, President Xi became the first Chinese head of state to visit the country in 2014, soon after announcing the BRI a year earlier. Since then, China's involvement in the Maldives has seen a rapid increase and resulted in significant Chinese infrastructure investments such as the expansion of the Velana International Airport and the prominent China Maldives Friendship Bridge, also known as the Sinamale Bridge, built at a cost of \$200 million. It was the first cross-sea bridge in the archipelagic country and connects the islands of Hulhulé and Hulhumalé to the capital city of Malé.

There are also reports that in Maldives' southern Laamu atoll, the inhabitants of its Gaadhoo island were resettled to the nearby Fonadhoo island to make way for China to build the Gaadhoo Port,⁴⁶ located next to what is known as the "One and Half Degree Channel," which separates the northern and central atolls of Maldives from the southern atolls and is situated in close proximity to the SLOCs between Africa and Asia. In 2014, the PLAN ship *Chang Xing Dao* called on the port of Malé, bringing fresh water during a plant collapse, and in 2017, three Chinese warships conducted a five-day goodwill visit to the Maldives.⁴⁷

In 2020, China completed a social housing construction project of 16 residential buildings with as many as 7,000 apartment units in Maldives, providing housing for nearly 30,000 people of the country's 540,000 population.⁴⁸ Last year, China also agreed to erase \$25 million from the \$100 million in official debt the Maldives had to settle to China. Further, several Chinese companies have leased Maldivian islands to build resorts, as Maldives receives around 300,000 Chinese tourists every year.⁴⁹

Irrespective of whether China manages to create a physical foothold in the Maldives in the form of a port, with Beijing's increasing engagement with the Maldives, it will not be a challenge for the PLAN to find a port of call in Maldives if the need arises.

Pakistan

Pakistan recognized the People's Republic of China in 1951, and ever since, the two countries consider their strong relationship to an "iron brotherhood."⁵⁰ China has provided Pakistan with considerable economic, military, and technical assistance, which has resulted in a strategic partnership between the two countries.

In January 2020, the Pakistani and Chinese navies completed a nine-day joint naval drill in the Arabian Sea. It was the sixth such joint exercise. In December 2020, China's defense minister, General Wei Fenghe, visited Pakistan, during which the two parties signed an MOU to deepen cooperation.⁵¹ For the past decade, China has been Pakistan's largest defense supplier.⁵²

Similar to Myanmar, which connects southern China to the Indian Ocean, Pakistan is geographically important to connect the western Chinese regions through Xinjiang to the oil-rich Middle East through Gwadar Port, which can cut transportation costs and distance for shipping commodities overland through Pakistan. In the long term, there are also plans to connect Gwadar Port to the Central Asian states, which possess vast energy and gas resources.⁵³

Located near the Strait of Hormuz, Pakistan's Gwadar Port, in the remote Balochistan region, is yet another strategic pearl for China. Though the port is owned by Pakistan's government-owned *Gwadar Port Authority*, it is operated by Chinese Overseas Port Holdings Limited. China financed more than 80 percent of the \$248 million development cost of the Gwadar Port, which forms an integral part of the \$62 billion China–Pakistan Economic Corridor (CPEC) that links Pakistan to Xinjiang. The CPEC also includes plans to create road, rail, and oil pipeline links to improve connectivity between China and the Middle East.

While China's increasing ties with Southeast and South Asian countries such as Cambodia, Myanmar, Pakistan, Bangladesh, Sri Lanka, and Maldives are often highlighted in Western media in particular, scant attention is paid to China's growing presence in the Indian Ocean island nations off the East African coast. These islands are strategically important for China to secure the SLOCs not only between Africa and Asia but also in the narrow Hormuz Strait and Bab-el-Mandeb strait, despite China's presence in Djibouti. Especially in the past decade, China has been aggressively expanding its ties with these Indian Ocean islands.

Seychelles

China–Seychelles diplomatic ties go back 45 years, and the two countries have seen a growth in bilateral relations on economic, trade, education, and cultural issues.⁵⁴ China has provided financing and grants to build many infrastructure projects in the country, such as the National Swimming Pool, the National As-

sembly Building, Palais de Justice, the Anse Royale Hospital, and the Glacis Primary School and Crèche, among others.⁵⁵

Among China's key projects in the country are the La Gogue Dam Project, which is constructed by Sinohydro Group Limited and aims to improve water security in the country, and the Seychelles Broadcasting Corporation building, *which is* financed by a grant from the Chinese government.⁵⁶ In January, during the visit of the Chinese state councilor and foreign minister Wang Yi, he reiterated China's willingness to jointly promote the construction of BRI projects with Seychelles.⁵⁷ During the visit, the Chinese foreign minister announced grants amounting to \$11 million, which included \$4.6 million for a renewable energy project. During the COVID-19 pandemic, China also provided several batches of anti-epidemic materials to Seychelles, which played an important role in Seychelles' fight against the pandemic.

China has trained Seychelles' People's Defence Forces soldiers, and Chinese naval vessels have a history of calling on Seychelle's Victoria Port. Additionally, PLAN personnel even participated in Seychelle's national parade in 2013, which was a first for the PLAN.⁵⁸ As far back as 2011, the then foreign affairs minister, Jean-Paul Adam, stated that his country had invited China to set up a military base in Mahé to fight against piracy.⁵⁹ Though China did not accept the offer, the Chinese Ministry of Defense has decided to seek supply facilities at appropriate harbors in the Seychelles according to escort needs and the needs of other long-range missions.⁶⁰ Thus, ports in Seychelles need not be Chinese military bases for China to gain dual-use of them.⁶¹

Mauritius

Since 1972, China has made significant investments in Mauritius, mainly for infrastructure development. As early as 2009, during his historic first official visit to Mauritius, former Chinese president Hu Jintao proposed the modernization of Port Louis airport and the creation of a special economic zone, which resulted in the Jin Fei Smart City project and special economic zone.⁶² China also built the Bagatelle Dam, located south of Port Louis, at a cost of \$188 million, and is expected to help Port Louis and its surrounding areas to meet their long-term water needs.⁶³ In 2019, China helped the Mauritian government build a multisports complex in St. Pierre for the Indian Ocean Islands Games.⁶⁴

On 1 January 2021 China's FTA with Mauritius came into effect, representing the first Chinese FTA with an African country.⁶⁵ With this FTA, Mauritius aims to become the middleman between China and mainland Africa. For China, Mauritius could be the strategic entry point to the vast African continent.⁶⁶ China is also the largest importer for Mauritius, accounting for 16.7 percent of imports to

the country in 2019.⁶⁷ While the trade balance is in favor of China, what is even more important for Beijing is the strategic foothold China gains by closer economic ties with the Indian Ocean island nation of Mauritius.⁶⁸

Comoros

In Comoros, China's involvement is relatively different compared to other Indian Ocean states. In this island nation, malaria is the number one cause of death across all populations. In 2007, China began the implementation of the first phase of the Fast Elimination of Malaria by Source Eradication (FEMSE) project, providing an experimental malaria drug to the whole country. Today, the project is considered as China's most successful health project in Africa.⁶⁹

China is also involved in building hospitals and a proposed airport and, among other things, provided a duty-free market of 1.4 billion people for goods made in Comoros.⁷⁰ Most recently, in January 2021, China sent 48 doctors, virologists, and specialists to Comoros and Niger for an 18-month period to handle the rising COVID-19 situation, and China has also assigned 139 Guangxi hospital services staff to Comoros.⁷¹

China was the first country to recognize the independence of Comoros and establish diplomatic relations in 1975. Since then, China's investments in everything from Comoros' schools, hospitals, and mosques to large-scale infrastructure projects such as airports have made significant effects on the everyday lives of the Comorians.⁷² With a nation that is so grateful for what China has provided them, Comoros is effectively a strategic pearl for China.

Madagascar

China also enjoys historical people-to-people ties with Madagascar, dating back to the mid-1800s, when Chinese immigrants arrived in Madagascar as laborers in French colonial projects.⁷³ As a result, there have been intermarriages, and there is a significant Sino-Malagasy population in the country.

China-Madagascar diplomatic relations started in 1972, and from the beginning China has sent several medical delegations to Madagascar. However, in the 1980s and 1990s China expanded its involvement in the largest island off the African continent to infrastructure development.

In 2017, during former Malagasy president Hery Rajaonarimampianina's state visit to Beijing, the two countries signed several agreements to accelerate Chinese investment in energy, aviation, transportation, ports, and airport construction.⁷⁴ Madagascar was among the first group of African countries to enter an MOU on the BRI, and the two countries established a comprehensive partner-

ship. China has been Madagascar's largest source of imports, its biggest trading partner, and the fourth-largest export destination for years.⁷⁵

China is funding the construction of 240-kilometer-long highway between Antananarivo and the country's eastern coast port Toamasina (Tamatave), which is the country's gateway to the Indian Ocean.⁷⁶ China has also announced the construction of the Narinda Bay deepwater port on the eastern coast of Madagascar.⁷⁷ China is also involved in various renovation projects in Ambodifotatra Port.⁷⁸

Djibouti

In 2017, China opened its first overseas military base in Djibouti which Beijing dubs a facility to provide "logistical support" during counterpiracy and escorting activities in the region.⁷⁹ Though a number of other countries such as the United States and France also have a military presence in the Horn of Africa, for China, having a naval presence in the region is crucial for several reasons: China's increasing trade, investment, and aid in Africa; the vital trade and energy supply routes connecting Africa, Europe, and the Middle East that pass through the narrow Bab-el-Mandeb strait; the maritime and security challenges in the region such as piracy off the coast of Somalia; and the political instability in Yemen.

Like China's investments in other strategic locations across the Indian Ocean, in Djibouti too China's strategic investments are massive. It has funded the Dolareh Port, which is an extension of the Port of Djibouti, located at the intersection of global shipping lines that connect Asia, Africa, and Europe. However, much like China's large investments in ports elsewhere, this multipurpose port is also located in a sparsely populated, less commercially active, yet strategically important location with potential.⁸⁰ Another significant Chinese investment in Djibouti is the modernization of the 756-kilometre-long Ethiopia–Djibouti Railway, which was constructed by China Railway Group and China Civil Engineering Construction China Railway Group and China Civil Engineering Construction Corporation and has received as much as 70 percent of financing from China for landlocked Ethiopia's part of the railway.⁸¹

China's strategic partnership with Djibouti has been growing since the early 2000s, and in addition to ports, railways, and free trade zones, the countries share close commercial and diplomatic ties.⁸² Djiboutian president Ismail Omar Guelleh has visited China three times in the past three years, and Chinese foreign minister Wang Yi visited most recently in 2020.

With an expansive naval base in Djibouti that would have the capacity to accommodate large warships and China's new aircraft carriers, China has easy ac-

cess to the Red Sea, the Suez Canal, the Persian Gulf, the Arabian Sea, and the farthest corner of the Indian Ocean.⁸³

Conclusion

China has adopted a proactive foreign policy and constantly engages with all these Indian Ocean states with high-profile political visits and diplomatic engagements, generous grants, and donations including COVID-19 medical assistance and vaccinations.⁸⁴ To bridge the language and the cultural gap China has set up Confucius Institutes or classrooms in all these countries. While Confucius Institutes are a controversial subject in the West, in some African countries in particular, these centers provide Mandarin and martial arts classes—quite similar to what the American Centers, British Councils, or *Alliance Française* do with English and French and aspects of Western culture. In some cases, such as Comoros, they also have other skill development courses including engineering and information technology. Thousands of students from these countries have received scholarships to study at leading Chinese universities, creating goodwill⁸⁵ for China and a next generation of Sinophiles.⁸⁶

Infrastructure projects do not merely mean building ports, roads, airports, and other facilities but also connecting people, improving their lives, and facilitating livelihoods. Though the media focus has often been on the less successful projects or the problems concerning Chinese investments, there are also many successful Chinese investments across the Indian Ocean region such as the Sinamale Bridge⁸⁷ in the Maldives, the Colombo International Container Terminal, or the Southern Expressway that has connected Colombo to southern Sri Lanka,⁸⁸ and millions of people who are grateful and whose governments and leaders consider China an all-weather friend.⁸⁹

The above discussion is not intended to deny that there are significant concerns regarding China's growing political, economic, and sociocultural relations in these countries from Cambodia to Madagascar. Nor is it a comprehensive study of bilateral relations between China and any of these countries. Moreover, in none of these countries has Chinese presence been without protest or criticism. There are allegations against China for human and labor rights violations,⁹⁰ excessive natural resource extraction,⁹¹ environmental degradation,⁹² supporting corrupt officials,⁹³ manipulating local politics in other countries,⁹⁴ and giving kickbacks to politicians.⁹⁵ In Madagascar, despite China being the country's largest trading partner, there have been violent protests against many Chinese investments such as a gold mining operation in Soamahamanina⁹⁶ and a sugar plant in Morondava.⁹⁷ In Pakistan, as recently as December 2020, Balochistan's provincial govern-

ment started to fence off 24 square kilometers of the city, which is at the center of the CPEC project as Chinese presence is opposed by Baloch separatist groups.⁹⁸

Notwithstanding these criticisms, many Indian Ocean states perceive China, as a reliable friend and a development partner for several reasons. Beijing's no-strings-attached policy toward loans does not require changes in governance structures, democratization, or other international best practices that are often preconditions for traditional donors.⁹⁹ As a result, China has become the partner of choice for countries in South Asia and Africa.¹⁰⁰ These countries reach out for Chinese financing mainly to achieve local development goals¹⁰¹ and regional power balancing.¹⁰² Years of strong relations based on friendship and equality¹⁰³ and China's trademark policy of non-interference,¹⁰⁴ which is rather the norm though there have been exceptions make China a preferred partner for many of these governments.¹⁰⁵ Flush with cash and hungry for strategic assets,¹⁰⁶ China is ever willing to extend assistance in numerous forms, ranging from grants and loans to joint ventures, to friendly countries in geopolitically important locations.

While its rivals were criticizing China for its unconventional diplomacy, with its BRI, and many other projects outside the BRI, China has gone above and beyond what the authors of the Booz Allen Hamilton report propounded. China has not stopped at building a naval base in Djibouti but is also in the process of developing maritime facilities such as Ream in Cambodia, Kyaukphyu in Myanmar, Hambantota in Sri Lanka, and Gwadar in Pakistan—all of which have the potential to become dual-use facilities in the future. Further, China has considerably increased its presence in strategically significant island nations across the Indian Ocean region such as Comoros, Madagascar, Maldives, Mauritius, and Seychelles. The close commercial and diplomatic ties with host countries have the potential to translate into secret agreements to allow PLAN access to these facilities in a conflict.¹⁰⁷ Rather than harping on about China's "debt-trap diplomacy" narrative, the United States and its allies must step up their engagements with the small but strategically significant Indian Ocean states as a matter of priority to have an effective control over the Indo-Pacific. While it is only Djibouti that has actually become a Chinese military base so far, with growing ties and deepening relations whether any of these other naval facilities would eventually become a Chinese military base or a dual-use facility is anybody's guess. They are China's scattered pearls in the Indian Ocean, carefully harvested over many decades. The actions, or rather the inactions of the West and its allies will determine whether China's scattered pearls will one day be strung into China's String of Pearls. ❀

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Notes

1. Juli A. MacDonald, Amy Donahue, and Bethany Danyluk, *Energy Futures in Asia: Final Report* (McLean, VA: Booz Allen & Hamilton, 2004).
2. Yanzhong Huang, "Vaccine Diplomacy Is Paying Off for China", *Foreign Affairs*, 11 March 2021, <https://www.foreignaffairs.com/>.
3. "Chinese doctors dedicated to aid in Madagascar," *Xinhuanet*, 17 February 2018, <http://www.xinhuanet.com/>.
4. Ismaël Chakir, Ali Ibrahim Said, Bacar Affane, and Ronan Jambou, "Control of Malaria in the Comoro Islands over the Past Century," *Malaria Journal* 387 (2017), <https://malariajournal.biomedcentral.com/>.
5. Rajeswari Pillai Rajagopalan, "China-Pakistan Naval Drills: More than Just Symbolism," *ORF Online*, 11 January 2020, <https://www.orfonline.org/>.
6. Jeremy Page, Gordon Lubold, and Rob Taylor, "Deal for Naval Outpost in Cambodia Furthers China's Quest for Military Network," *Wall Street Journal*, 22 July 2019, <https://www.wsj.com/>.
7. Prak Chan Thul, "Cambodia Says It Razes U.S.-built Naval Facility to Move It," *Reuters*, 4 October 2020, <https://www.reuters.com/>.
8. Shaun Turton and Mech Dara, "Cambodia Naval Base Set to Undergo China-led Expansion," *Asia Nikkei*, 3 October 2020, <https://asia.nikkei.com/>.
9. Update: Another U.S.-Built Facility at Ream Bites the Dust, *Asia Maritime Transparency Initiative*, 9 November 2020, <https://amti.csis.org/>.
10. Luke Hunt, "Cambodia Says Naval Base Open for All, Not Just China," *The Diplomat*, 8 October 2020, <https://thediplomat.com/>.
11. Heimkhemra Suy, "No simple solution to China's dominance in Cambodia," *East Asia Forum*, 20 December 2020, <https://www.eastasiaforum.org/>.
12. Kyaw Ye Lynn, "Myanmar wary of China's Belt and Road investments," *Anadolou Agency*, 23 August 2020, <https://www.aa.com.tr/>.
13. Nan Lwin, "Myanmar-China Relations: 2020 Review," *The Irrawaddy*, 29 December 2020, <https://www.irrawaddy.com/>.
14. Foreign Investment of permitted enterprises as of (31/3/2020) (By country), <https://www.dica.gov.mm/>.
15. Robert Ward, "RCEP trade deal: a geopolitical win for China," *International Institute for Strategic Studies*, 25 November 2020, <https://www.iiss.org/>.
16. The Irrawaddy, "Myanmar: Government-backed committee says deep-sea port project in western Rakhine State can start upon completion of environmental and social impact assessment

report," *Business and human Rights Resource Centre*, 25 August 2020, <https://www.business-humanrights.org/>.

17. "China Moves Closer to Control of Deep-Water Port Project at Kyaukphyu, Myanmar," *RWR Advisory*, 12 August 2020, <https://www.rwradvisory.com/>.

18. Thilini Kahandawaarachchi, "Politics of Ports: China's investments in Pakistan, Sri Lanka and Bangladesh" (MA thesis, University of Washington, 2015), <https://digital.lib.washington.edu/>.

19. Kamran Reza Chowdhury, "China Can Use Bangladesh's Largest Seaports, PM Hasina Says," *Benar News*, 13 November 2019, <https://www.benarnews.org/>.

20. "China fast-tracks key defence projects in Bangladesh," *South Asia Monitor*, 23 July 2020, <https://southasiamonitor.org/>.

21. Kamran Reza Chowdhury, "China to Help Bangladesh Build Submarine Base, Senior Official Says," *Benar News*, 12 September 2019, <https://www.benarnews.org/>.

22. "CSSC secures \$120m Payra Port contract," *Maritime Gateway*, 7 July 2020, <https://www.maritimegateway.com/>.

23. Chowdhury, "China Can Use Bangladesh's Largest Seaports."

24. Ananda Kannangara, "Rubber-Rice Pact an 'agreement of friendship,'" *Daily News*, 29 December 2017, <http://www.dailynews.lk/>.

25. Saman Kelegama, "China-Sri Lanka Economic Relations: An Overview," *China Report* 50, no. 2 (May 2014): 131-49.

26. Thomas Wheeler, *China and conflict affected States- Between principle and pragmatism- Sri Lanka* (London: Saferworld, January 2012), <https://assets.publishing.service.gov.uk/>.

27. Devan Daniel, "Chinese loans and FDI to Sri Lanka cross \$7 billion: IMF," *Echelon*, 18 June 2019, <https://www.echelon.lk/>.

28. Central Bank of Sri Lanka, *Annual Report 2019*, <https://www.cbsl.gov.lk/>.

29. Bharatha Mallawarachchi, "China grants \$90M to Sri Lanka after visit by top official," *AP News*, 11 October 2020, <https://apnews.com/>.

30. Karthik Sivaram, "Locked-In to China: The Colombo Port City Project," *Stanford*, <https://fsi.stanford.edu/>.

31. "Legal framework of Colombo Port City to Parliament in January," *Daily Mirror*, 19 November 2020, <http://www.dailymirror.lk/>.

32. Colombo International Container Terminal, "About our company," <https://www.cict.lk/>.

33. "Biggest ship yet for CICT," *Maritime Standard*, 4 October 2016, <https://www.themaritimestandard.com/>.

34. "China terminal handles 40-pct of Sri Lanka's Colombo port box volume," *Economy Next*, 31 December 2019, <https://economynext.com/>.

35. Deborah Brautigam and Meg Rithmire, "The Chinese 'Debt Trap' Is a Myth," *The Atlantic*, 6 February 2021, <https://www.theatlantic.com/>.

36. Ariyaratne Ganegoda, "Rajapaksa's white elephant projects engulfed country in debt trap," *Daily News*, 31 October 2019, <http://www.dailynews.lk/>.

37. Ankit Panda, "Will Gotabaya Revisit Sri Lanka's Hambantota 'Debt Trap' with China?," *The Diplomat*, 19 November 2019, <https://thediplomat.com/>.

38. Bandula Sirimanna, "Chinese project loans at high interest rates," *Sunday Times*, 19 June 2011, <http://www.sundaytimes.lk/>.

39. "Rs. 100 b Chinese loans for Hambantota Port Phase 2," *Daily FT*, 24 August 2012, <http://www.ft.lk/>.

40. Ranga Sirilal and Shihar Aneez, "Sri Lanka signs \$1.1 billion China port deal amid local, foreign concerns," *Reuters*, 29 July 2017, <https://www.reuters.com/>.
41. Kahandawaarachchi, Politics of Ports."
42. Kahandawaarachchi, Politics of Ports."
43. "Sri Lanka rejects US claims, says no Chinese military base at port," *Economic Times*, 11 October 2018, <https://economictimes.indiatimes.com/>.
44. "Sri Lanka to shift naval base to China-controlled port city," *Reuters*, 2 July 2018, <https://www.reuters.com/>.
45. Wasantha Rupasinghe, "India criticises Chinese submarine visits to Colombo," *World Socialist Web Site*, 10 November 2014, <https://www.wsws.org/>.
46. Aishath Azfa, et al., "We didn't want to leave our island': stories of involuntary resettlement from Gaadhoo Island, Maldives," *Territory, Politics, Governance* (2020): DOI: 10.1080/21622671.2020.1768139.
47. Suhasini Haidar, "Ex-president flags presence of Chinese warships in Male," *The Hindu*, 30 August 2017, <https://www.thehindu.com/>.
48. "CSCEC delivers Maldives' largest social housing project ahead of schedule," *China.org.cn*, 7 April 2020, <http://www.china.org.cn/>.
49. "Chinese investment in the Maldives: appraising the string of pearls," *Asia Maritime Transparency Initiative*, 4 September 2020, <https://amti.csis.org/>.
50. Chih-yu Shih, "Identities in Sino-Pakistani 'Iron Brotherhood': Theoretical Implications beyond the Economic Corridor," *Chinese Journal of International Politics* 11, no. 2 (Summer 2018):131–52.
51. "China justifies its military exercise with Pakistan amid apprehensions about India's Malabar exercise," *DD News*, 21 December 2020, <http://ddnews.gov.in/>.
52. Monika Chansoria, "China's arms sales to Pakistan unsettling South Asian security," *Indian Defence Review*, 19 April 2013, <http://www.indiandefencereview.com/>.
53. Zahid Anwar, "Gwadar Deep Sea Port's Emergence as Regional Trade and Transportation Hub: Prospects and Problems," *Journal of Political Studies* 1, no. 2 (2011) 97–112.
54. "Chinese FM holds talks with Seychellois counterpart," *Embassy of the People's Republic of China in the Republic of Seychelles*, 12 January 2021, <http://sc.chineseembassy.org/>.
55. "Chinese Ambassador to Seychelles H.E. Mrs. Guo Wei takes an interview with the Nation regarding Seychelles Presidential and Legislative election and China-Seychelles relations," *Embassy of the PRC in Seychelles*, 19 November 2020, <http://sc.china-embassy.org/>.
56. "Work on SBC House progressing well," *Seychelles Nation*, 18 August 2020, <http://www.nation.sc/>.
57. "Seychelles president meets with Chinese FM on bilateral ties," *Xinhua*, 10 January 2021, <http://www.xinhuanet.com/>.
58. "Chinese Navy Ship Harbin arrives in Seychelles for a five-day visit," *Embassy of the PRC in Seychelles*, 17 June 2013, <http://sc.china-embassy.org/>.
59. "Ports & Power in the Indian Ocean," *Asia Maritime Transparency Initiative*, <https://amti.csis.org/>.
60. Li Xiaokun and Li Lianxing, "Navy looks at offer from Seychelles," *China Daily*, 13 December 2011, <https://www.chinadaily.com.cn/>.

61. Christopher D. Yung, Ross Rustici, Scott Devary, and Jenny Lin, “*Not an Idea We Have to Shun*”: *Chinese Overseas Basing Requirements in the 21st Century* (Washington, DC: National Defense University Press, 2014), <https://inss.ndu.edu/>.
62. Laurent Amelot, “La stratégie chinoise du ‘collier de perles’,” *Outre-Terre*, 2010/2-3 (n° 25-26), 187-98., <https://www.cairn.info/>.
63. “Fin de la pénurie d’eau à Port-Louis,” *Chine Magazine*, 2 August 2018, <https://www.chine-magazine.com/>.
64. “Le complexe sportif de Côte-d’Or, l’éléphant blanc au coût de Rs 4,7 milliards est enfin inauguré !,” *Zinfos Moris*, 16 July 2019, <https://www.zinfos-moris.com/>.
65. Lauren Johnston and Marc Lanteigne, “Here’s why China’s trade deal with Mauritius matters,” *World Economic Forum*, 15 February 2021, <https://www.weforum.org/>.
66. Amelot, “La stratégie chinoise du ‘collier de perles’,” 187-98.
67. Mauritius: Trade Profile, <http://www.mauritiustrade.mu/>.
68. Katarina Welborn, “China-Mauritius: A Strengthening Economic Partnership,” *Future Directions*, 15 August 2018, <https://www.futuredirections.org.au/>.
69. Esther Ejiroghene Ajari, “Combating Malaria in the Comoros Islands: How China Almost Got It Right,” *China Africa Project*, 18 September 2020, <https://chinaafricaproject.com/>.
70. “En une année, vous avez pu envoyer des signaux intéressants d’un changement de ce pays,” *Habriaza Comores*, 10 April 2017, <https://www.habarizacomores.com/>.
71. Fabrice Floch, “Les Comores accueillent l’aide de la Chine et refusent celle de la France,” *FranceInfo*, 13 January 2021, <https://la1ere.francetvinfo.fr/>.
72. Shannon Van Sant, “Why is China investing in the Comoros?,” *CBS News*, 12 November 2014, <https://www.cbsnews.com/>.
73. Gregory Veeck and Sokhna H. A. Diop, “Chinese Engagement with Africa: The Case of Madagascar,” *Eurasian Geography and Economics* 53, no. 3 (2012): 400-18.
74. “For ‘One Belt, One Road,’ China Casts Madagascar as a ‘Bridge’ to Africa,” *World Politics Review*, 2 May 2017, <https://www.worldpoliticsreview.com/>.
75. Yang Xiaorong, “Madagascar epitome of China’s foreign aid,” *China Daily*, 27 September 2019, <http://www.chinadaily.com.cn/>.
76. “Partnership with the republic of china: a Toamasina-Antananarivo highway to be built soon,” *Malagasya*, <https://malagasya.com/>.
77. “For ‘One Belt, One Road,’” *World Politics Review*.
78. Judd Devermont, Amelia Cheatham, and Catherine Chiang, “Assessing the Risks of Chinese Investments in Sub-Saharan African Ports,” *Center for Strategic & International Studies*, June 2019, <https://csis-website-prod.s3.amazonaws.com/>.
79. “Foreign Ministry Spokesperson Hong Lei’s Regular Press Conference on November 26, 2015,” *Ministry of foreign Affairs of the People’s Republic of China*, <https://www.fmprc.gov.cn/>.
80. Mary-Ann Russon, “Djibouti: Building Africa’s shipping centre,” *BBC*, 5 April 2019, <https://www.bbc.com/>.
81. “Ethiopia-Djibouti Railway Line Modernisation,” *Railway-Technology*, <https://www.railway-technology.com/>.
82. “Djibouti President Guelleh Meets Wang Yi,” *Ministry of foreign Affairs of the People’s Republic of China*, 9 January 2020, <https://www.fmprc.gov.cn/>.
83. H.I Sutton, “Satellite Images Show That Chinese Navy Is Expanding Overseas Base,” *Forbes*, 10 May 2020, <https://www.forbes.com/>.

84. Baohui Zhang, "Chinese Foreign Policy in Transition: Trends and Implications," *Journal of Current Chinese Affairs* 39, no. 2 (2010): 39–68, <https://doi.org/>.
85. Lili Dong and David W. Chapman "China's Scholarship Program as a Form of Foreign Assistance," in *Crossing Borders in East Asian Higher Education*, CERC Studies in Comparative Education, ed. David W. Chapman, William K. Cummings, and Gerard A. Postiglione (Dordrecht: Springer, 2010), 27.
86. Rashid Latief and Lin Lefen, "Analysis of Chinese Government Scholarship for International Students Using Analytical Hierarchy Process (AHP)," *Sustainability* 10, no. 7 (2018), 2112, <https://www.mdpi.com/>.
87. Nectar Gan, "A tale of two bridges: India and China vying for influence in the Maldives," *CNN*, 26 November 2020, <https://edition.cnn.com/>.
88. Ganesan Wignaraja, Dinusha Panditaratne, Pabasara Kannangara, and Divya Hundlani, "Chinese Investment and the BRI in Sri Lanka," *Chatham House*, 24 March 2020, <https://www.chathamhouse.org/>.
89. Huma Sattar, "China and Pakistan's All-Weather Friendship," *The Diplomat*, 12 March 2015, <https://thediplomat.com/>.
90. William Nee, "China should take action against human rights abuses for Belt and Road projects, analyst says," *Business and Human Rights Resource Centre*, 6 November 2019, <https://www.business-humanrights.org/>.
91. "3rd Yale Symposium on Chinese Overseas Investment Impacts," *Yale School of Forestry and Environmental Studies*, 2019, <https://china-symposium.yale.edu/>.
92. Hoong Chen Teo, et al., "Environmental Impacts of Infrastructure Development under the Belt and Road Initiative," *Environments* 6, no. 6 (2019), 72.
93. Simon Mundy and Kathrin Hille, "The Maldives counts the cost of its debts to China," *Financial Times*, 11 February 2019, <https://www.ft.com/>.
94. Azeem Ibrahim, "Myanmar & China's Strategic Interests in the Indian Ocean Basin," *Newlines Institute*, 7 November 2020, <https://newlinesinstitute.org/>.
95. Maria Abi-Habib, "How China Got Sri Lanka to Cough Up a Port," *New York Times*, 25 June 2018, <https://www.nytimes.com/>.
96. "Anti-Chinese sentiment rising in Madagascar," *The Newspaper*, 19 December 2016, <https://www.tnp.sg/>.
97. "China Shocked by Violence at Madagascar Sugar Plant," *VOA News*, December 14, 2014, <https://www.voanews.com/>.
98. S. Khan, "Gwadar: Why is Pakistan fencing China's Belt and Road port?," *Deutsche Welle*, 22 December 2020, <https://www.dw.com/>.
99. Xiaojun Li, "China is offering 'no strings attached aid' to Africa. Here's what that means," *Washington Post*, 27 September 2018, <https://www.washingtonpost.com/>.
100. Stellah Kwasi, "High cost of having China as Africa's partner of choice," *Institute for Security Studies*, 13 March 2019, <https://issafrica.org/>.
101. China, Comoros to promote ties to higher level," *China Global Television Network*, 01 September 2018, <https://news.cgtn.com/>.
102. Mubashar Hasan Arild Engelsen Ruud, "Bangladesh's balancing act between great powers," *The Interpreter*, 9 October 2020, <https://www.lowyinstitute.org/>.
103. "Chinese Government Issues African Policy Paper," *Embassy of the People's Republic of China in the Republic of Ghana*, <http://gh.china-embassy.org/>.

104. Ruben Gonzalez-Vicente, "The limits to China's non-interference foreign policy: pro-state interventionism and the rescaling of economic governance," *Australian Journal of International Affairs* 69, no. 2 (2014): 205–23.
105. Sigli M. Mumuni, China's non-intervention policy in Africa: Principle versus pragmatism, *African Journal of Political Science and International Relations* 11, no. 9 (2017): 258–73.
106. Ping Deng, "Why do Chinese firms tend to acquire strategic assets in international expansion?," *Journal of World Business* 44, no. 1 (2009): 74–84.
107. Christopher D. Yung, Rustici, Devary, and Lin, "*Not an Idea We Have to Shun.*"

Prioritizing India in Biden's "America Is Back" Foreign Policy

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The time has now arrived to recalibrate India's rise as a geopolitical and strategic power for the liberal international order. How can India's policy choices fit in President Joe Biden's "America Is Back" foreign policy?

Speech Matters

President Biden gave his first foreign policy speech at the Munich Security Conference on 19 February 2021.¹ The phrase "America is back" resonated with and was celebrated among US allies and partners. Biden pointed to the urgent need for multilateral actions to tackle the pandemic, global economic issues, and climate crisis. India could best align its approach to Biden's America Is Back policy in three ways: shared values, shared interests, and managing China.

Shared Values

India and the United States have common ideals and share strong democratic values as enshrined in their constitutions. Both countries have progressive open societies. India has always shown a deep commitment to democratic values in the region: for example, in the reinstatement of the democratic process in Bangladesh, fighting against insurgent groups with Sri Lanka, shouldering with Nepal, supporting Bhutan in Doklam, and more recently, resolving to stop expansionist China in eastern Ladakh through a six months-long stand-off. India and the United States have, since their respective inceptions of independence, committed themselves to democracy and have developed competitive and educated workforces that actively engage in and appreciate these civil rights. Both countries are ideal models of democracy and are always at the forefront of dealing with crises democratically, be they humanitarian, political, geographical, or environmental.

In his Munich speech, Biden called on "fellow democracies" to work together because of their deep-rooted democratic values and their faith in the rule of law. In his remarks, Biden showed his commitment to defend and fight for democracy. Additionally, a call between India's and America's national security advisors, Ajit Doval and Jake Sullivan, underscored the importance of shared values between the two countries, particularly being "leading democracies" and possessing firm beliefs in "an open and inclusive world order."²

Shared Interest

In his speech, Biden spoke about securing peace and defending the shared values across the Indo-Pacific and particularly mentioned the region, where China poses a serious threat to US interests and stability and peace. He explicitly mentioned the preparedness for the “long-term strategic competition with China” and stressed preserving the global system in the Indo-Pacific.³ To make this happen, the Biden administration is collaborating very closely with Quad partners. Recently USINDOPACOM commander, ADM Philip S. Davidson, proposed 27 billion USD to strengthen the defense missile system and establish a Fusion Information Center in America’s “priority theater.”

The US-India Counterterrorism Joint Working Group is another shared interest where both countries could strengthen their ties and work more robustly on the war on terror. Apart from the 2+2 ministerial dialogue, the Strategic Energy and Nuclear Energy Partnerships are powerful platforms that could make the world’s two largest democracies the future model for new security arrangements. Indian External Affairs Minister, S. Jaishankar, articulates this point well in his book, *The India Way*, stating, “a shared interest in securing the global commons and contributing to global goods has brought about a convergence between very different polities.”⁴

Managing China

It appears the Biden administration views China as America’s chief near-term threat. There are several reasons for US resentment: Beijing’s nontransparency and disinformation regarding the coronavirus; China’s aggressive behavior in South Asia, Southeast Asia, and the South China Sea; the rise of China’s economic clout in the Indo-Pacific; Beijing’s crackdown on Hong Kong’s special status; and China’s oppression of its Uyghur minority.

All these irritants are more than enough to glue US and India relations and create a robust shield to control China. The growing synergy in the US–India strategic partnership could accelerate due to China’s growing assertiveness in the region and Beijing’s efforts to counter US hegemony. America’s recently released *Interim National Security Strategic Guidance* showed concern for China’s increasing aggression and Beijing’s challenge to a “stable and open international system.”⁵

The United States considers India a vital partner. However, what India must do is preserve and nurture the democratic values within the country and foster a more resilient India, which could silence the anti-India voices globally. India needs to mitigate Washington’s fear of Russian influence in New Delhi. It is not time to take refuge in the old framework of nonalignment. India needs to pro-

mote its broader interests. India–US ties need more visibility and steadiness to keep the interest high from both sides. That is the real “Indian Way” of recalibrating its statecraft.

Policy Recommendations

In this changed security nomenclature, India needs to reorient its policy toward its vital and long-term interests. When America and China appear to be in a new Cold War situation, due to the reasons mentioned above (and America’s distrust of Pakistan), India could conquer the case in its favor and for the region’s peace and stability.

First, as the major South Asian defense partner with the United States since 2016, India needs to be more open and audacious regarding defense trade, military interoperability, and other defense collaborative programs. There needs to be more joint exercise series like Malabar, Yudh Abhyas, and Cope India that would lead to converging strategic interest that include China’s threat and the Indo-Pacific’s security as well. However, Russia plays a great role in India’s defense trade, with New Delhi being Moscow’s second-largest importer of arms and primary buyer of Russian arms (25 percent).⁶ India needs to extend this relationship with the United States by focusing its interest and promoting democracy in the region—ultimately connected to like-minded democracies.

Second, the trajectory of the Indian economy is predicted upwardly. The Organization for Economic Cooperation and Development has projected 12.6 percent of India’s growth domestic product (GDP) for FY22.⁷ Also, by 2025, India will surpass China in population.⁸ India will thus be a major market for import and export and an attractive foreign investment destination for the United States. However, despite the strained relations and trade war with China, the United States Census Bureau statistics show that China is still the topmost trading partner of America with \$39.1 billion in imports and \$12.9 billion in exports, while India is not even in America’s top five.⁹ The demographic dividend of India can be transposed to be a major market opportunity. India’s skilled workforce can be trained for a long-term association with the United States and the growing economies of South Asia, which would also work to repulse China economically.

Third, the Indo-Pacific has become a new flashpoint for great powers. In his recent testimony to the Senate Armed Services Committee, Admiral Davidson expressed his concerns about China’s growing prowess and the “erosion of conventional deterrence” across the Indo-Pacific region. The growing strategic and economic importance of this region needs a rules-based international order, and India could be the linchpin. India’s geographical size and geopolitical reach in the entire Indian Ocean region favors India to be a dominant actor with Quad partners to

promote a free, open, and inclusive Indo-Pacific. In the first-ever state leaders-level summit of the Quad on 12 March 2021, all four heads of state recognized the Quad as a “force of global good” and reaffirmed commitment to a free, open, and inclusive Indo-Pacific, based on international law and universal values. Australia’s prime minister, Scott Morrison, stated that based on “common hope and shared values” the Indo-Pacific will shape the destiny of the world in the 21st century.” Besides, India is already in active engagement in the region with its “Act East Policy” and “Extended Neighborhood” Policy. The United States must invest more and support the economic and regional independence of Southeast Asian countries to promote a rules-based regional architecture and ASEAN centrality.

Notably, India has shown immense competence in responding to the COVID-19 pandemic and championed the new normal. The World Health Organization has applauded India for effectively handling the situation, which shows India’s resolve to fight against the humanitarian crisis given the geography, demography, and population density. In addition, India has risen its stature through “Vaccine Maitri” by supplying vaccines to countries worldwide and applauded by the United Nations Secretary for its vital role in combating the global health crisis. These humanitarian efforts show India stands by its founding principle of universal brotherhood and peaceful coexistence (Sabka Saath, Sabka Vikas, and Sabka Vishwas).

Finally, India aspires to be a permanent member of the United Nations Security Council. That aspiration could be materialized by America’s bold and vehement support inside and outside the United Nations.

Apart from geopolitical factors, the United States and India have numerous areas to cooperate and collaborate, such as space discovery, technology transfer and knowledge sharing, intellectual property, and the wealthy and educated Indian diaspora.

Conclusion

In summary, India is an epitome of democratic values, a trailblazer in establishing peace and stability in the region since its inception—and this is not limited to US–India bilateral relations. Asserting India’s role as an emerging global leader in the international arena and actively pursuing India’s capability to collaborate with like-minded partners for peace and stability could magnify the Indo–US ties under the Biden administration. Also, India needs to augment its claim to be a leading global power with vigorous action, not merely rhetoric. Now is the time to build upon New Delhi’s narrative of being a strategic and geopolitical power in the region and the most vibrant democracy in the world. In essence, there exists tremendous opportunities for the United States and India to

work together in the changing security dynamics—opportunities that can only be realized via “deep engagement” in Indo-Pacific. ★

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Notes

1. The White House Briefing Room, Remarks by President Biden at the 2021 Virtual Munich Security Conference, 19 February 2021, <https://www.whitehouse.gov/>.
2. Ministry of External Affairs, Government of India, Media Center, Telephonic Conversation between National Security Adviser and Mr. Jake Sullivan, US National Security Advisor, 27 January 2021, <https://mea.gov.in/>.
3. White House Briefing Room, Remarks by President Biden at the 2021 Virtual Munich Security Conference.
4. S. Jaishankar, *The India Way: Strategies for an Uncertain World* (New Delhi: Harper Collins India, 2020).
5. Pres. Joe Biden, *Interim National Security Guidance* (Washington, DC: White House, 3 March 2021), 8, <https://www.whitehouse.gov/>.
6. SIPRI Fact Sheet, March 2020, Trends in International Arms Transfer, 2019. <https://www.sipri.org/>.
7. Organization of Economic Cooperation Development (OECD) Outlook, <http://www.oecd.org/>.
8. Hannah Ritchie, “India Will Soon Overtake China to Become the Most Populous Country in the World,” *Our World in Data*, 16 April 2019, <https://ourworldindata.org/>.
9. US Census Bureau, “Foreign Trade Statistics,” <https://www.census.gov/>.

Comparing Civilization-State Models

China, Russia, India

ANVESH JAIN

Abstract

The collapse of the Soviet Union in 1991 paved the way for Western-style liberalism to become the prevailing ideological orthodoxy of the post–Cold War international system, particularly on the back of the United States’ moment of hegemonic unipolarity and economic ascendance. In the 30 years since then, a new class of indigenous thinkers from a diverse range of states, including China, Russia, and India, among others, pushed back against this perceived imposition of Western norms, turning instead to cultural models of governance and organization in the forging of their own unique “civilizational” thesis. This article compares the roots and perspectives of civilizational thinking in three cases to chart the complex interplay between the rise of domestic “civilizational factions” among a state’s intelligentsia and non-Western elites and the subsequent effects of this thinking on each state’s behavior and strategic posture in the realm of its external affairs. Through rigorous cross-comparative examination and process-tracing along the defined parameters, this case study seeks to contribute to the nascent scholarly literature on the emerging civilization-state phenomena, offering some conclusions on how the emic repackaging of ancient historical epistemologies under hypermodern frameworks may go on to redefine plurilateral order throughout the dynamic twenty-first century and beyond.

Introduction

As the ravages of the COVID-19 pandemic intersected with the disruptive presidency of Donald Trump to devastating effect, it became evident that the era of uncontested American leadership is coming to a close. The shift from a unipolar to a plurilateral concept of world order has left all major actors scrambling to articulate a new vision of the international structure, as well as new formulations of their place within that structure. In countries such as China, Russia, India, Turkey, Iran, and others, profound and deeply rooted intellectual and cultural currents have combined to stymie the forward march of Western hegemony. Instead, a new class of indigenous thinkers used the period since the fall of the Soviet Union to advance and take solace in the notion of the “civilization-state.”

In the conventional understanding of events, the deposition of 1991 removed the last potential resistance to the universalizing impositions of the Western powers, evincing the clear superiority of the liberal-democratic system of politics and economic governance. Yet as gloating intellectuals reveled in the ideological triumphs of the “end of history”¹ and the Pizza Hut-ization of their vanquished foes,² a wave of discontent churned among a rising global middle class alienated by the insistent encroachment of Western norms and values. From this discontent emerged a return to an ancient model repackaged in hype-modern terms and designed to reject the constraints of the nation-state supposition arising from the European continental experience. For these historical agents, there is a more primal identification with an older conception of political organization, one that predates the Pandora’s box of Westphalia that was let loose in 1648.

Thus, the so-called civilizational turn is undertaken, espousing the supremacy of the civilization-state as the major principle of supranational organization. Such a polity is conceived by the memory of a primordial civilization with a continuous identity and a contiguous sense of territorial and cultural geography that is then preserved and defended under the edifices of the modern state. Across the world, the vernacular of civilization has seen renewed urgency and currency in political discourse, undergirded by an incredible proliferation of thought related to the subject. This is doubly so with the etic assessment of the West as “a political civilisation that represents the forward march of history towards a single normative order” but is now crumbling under its own cultural baggage due to a perceived tendency toward “cartel capitalism, bureaucratic overreach, and rampant individualism.”³

A non-Westernized elite has developed these ideas to contest Western thinkers abroad as well as the Westernized class of elites with foreign education that exists as a corrupting influence at home. These civilizational thinkers constitute a civilizational faction that advances their ideas across a number of channels: think tanks, scholarship, foreign ministries, and the popular press. Civilizations serve a narrative and a discursive function, and the language of the civilizational faction pushes for the global recentering of power through the dual lenses of decolonization and revivalism.

Theory and Hypothesis

The model of the civilization-state presents a seismic shift in the way various societies recognize and conceive global power relations organized under the 1945–2016 liberalist paradigm or by the internationalization of the European states system during the preceding two centuries. The contemporary and grassroots functions of the civilization-state ideal must be studied, defined, and factored into

strategic calculations. Through the comparison of high-profile, recognized examples where indigenous agents have proposed trajectories toward civilizational reclamationism, scholars may be able to better deduce a general theory of the civilization-state, observing uniform characteristics that can be extended to other cases in the future. A world lurching toward intercivilizational dialogue will necessitate such inquiry.

Indeed, as each civilization-state seeks to define itself through unique, immutable, and essential characteristics, it is only through stringent comparison that scholars can begin to explain the manners in which civilizational thinking in a polity impacts its foreign conduct or approach to grand strategy. This article will examine the penetration of civilizational thinking among the upper echelons of policy-making and intellectual circles in China, Russia, and India, with a particular view to the 30 years of percolation since the formal dissolution of the Soviet Union. As theories of the civilization-state and civilizationalism strike a chord among the emerging civilizational faction of the domestic foreign policy intelligentsia, it is expected that a process of dissemination will occur to popularize such thought among the public as well as in the highest halls of state power.

The hypothesis is this: the creation of civilizational coalitions within a nation's intelligentsia will in turn exert pressure on the foreign policy apparatus of the state to adopt a unique posture, working to undermine the liberal international world order and to create alternative modes of conceptualizing global power relations. These alternative visions may be framed as *decolonial*, *revanchist*, *revivalist*, or *revisionist* depending on the perspective of the commentator. The ideology of civilization will recast the notion of actions befitting a civilization-state, with a greater emphasis on reorienting the global power space in the wake of the United States' relative positional decline. Emerging civilization-states (in this instance China, Russia, and India) will be expected to act more forcefully and aggressively in their near-abroad as they seek to reconstitute their strategic and mental geographies along civilizational fault lines.

Research Design

Civilizational thinking manifests in idiosyncratic ways, fully dependent on the individual culture and history of the entity in question. Civilization-states cannot be generalized based on similarities in outcome, meaning that the ultimate goal of different civilization-states will not be the same or be carried out via similar methods. Each civilization-state may have a distinct conception of world order or multipolar harmony or the hierarchy of international affairs. Therefore, the study of civilization-states ought to focus on the procedure of thought and percolation that leads to the rise of civilizational coalitions and the emergence of civilizational

outcomes. Civilizationalism is not only an end-state but also a process, because “civilizations [can] be defined as a set of culturally distinct values that are reproduced across time and space.”⁴ While civilizational end-states will necessarily vary as nonuniversal suppositions (a Turkic civilization-state may trend toward neo-Ottomanism, the Iranian may trend toward a Persianate ideation, and so on), tracing the institutionalization of civilizational thought is an eminently more actionable mandate in cross-comparative perspective.

Research Method and Case Selection Strategy

The wider goal of the civilization-state coalition is the reassertion of cultural rights and the undermining of the hegemonic American liberal world order, making space for civilizational ideas and actions to flourish over the course of the next century and beyond. This article will compare the proliferation of civilizationalism in China, Russia, and India since 1991, process-tracing each case to examine the manner in which civilizational ideation emanating from the domestic intelligentsia class (think tanks, prominent writers, members of the foreign affairs apparatus) manifests in the eventual policy conduct and strategic posture of the state.

The cases were determined via cross-case factors and will be studied over time of typical cases, that is, from the end of the Cold War in 1991 to the present day. The three cases (China, Russia, India) were selected due to the depth and strength of the civilizational claims made within each, in addition to the body of existing literature already dedicated to deconstructing the phenomena of their respective emergences as distinctive civilization-states. Indeed, China has been identified as “unavoidably . . . the purest incarnation of the civilisational state,”⁵ and Russia has also been pointed to as an “eminent example of [an entity] . . . pitting themselves culturally in opposition to ‘the West.’”⁶ For these states, “culture has become a currency of power,” driven by the purposeful reassertion and reinstatement of “cultural particularities [that] were once ‘airbrushed’ out of history, as the dominant Western-led liberal order sought to homogenise the world.”⁷ Indian thinkers have presented their arguments as existing beyond the imported left-right dyadic binary, instead finding affirmation of their beliefs in the letter of the secular Constitution, pointing to Article 1, which begins: “India, that is *Bharat*,” to “[presume] within the bounds of reasonableness that the framers of the Constitution saw India as the modern successor state to its civilisational ancient, making India a civilisational state.”⁸

Each of the cases selected display different institutional features, allowing the exercise of process-tracing to interpret the impact of civilizational thought as it pertains to states of diverse domestic characteristics (one-party communist rule in China, illiberal democracy in Russia, and multiparty parliamentary democracy in

India). These states measure within the top ten worldwide by metrics of national population⁹ and have been assessed as top-five global military powers.¹⁰ In any case, these three states are almost unanimously considered to hold great power status and are better suited for comparison than are smaller potential civilization-states such as Israel or Greece.¹¹ These factors, as presented in the respective case studies, will strengthen the analysis and facilitate a generalizable review of the civilization-state phenomenon.

Independent and Dependent Variables

The independent variables to be examined will measure the proliferation of civilizational thinking and the coalescing of relevant civilizational factions within the intellectual apparatus of the state. These may include the rise and prominence of new think tanks dedicated to espousing the tenets of a civilizational framework in viewing world affairs. These may also include an analysis of top thinkers, academics, public intellectuals, and authors, as well as the impact that their perspectives seem to have made in penetrating the thought of the state's decision-making classes.

There are quantitative and qualitative ways to approach this question—for example, by examining whether the word “civilization” or its derivatives have been used increasingly by the state's leadership or by those in their political periphery. One might also look at media coverage around key incidents, such as the state's courtship of religious authority that is uniquely aligned with its civilizational identity (e.g., the Orthodox Church in Russia, Dharmic faith leaders in India, Buddhist or Confucian institutions in China). A final measurement could be the teaching of a particular civilizational dimension of history in public school curricula. Thus, there are numerous angles and methods by which civilizational thinking can be measured. However, to truly capture its penetration into societal dialogue may require the use of much larger data banks and digital algorithmic systems to quickly parse through that data, which remain beyond the scope of this analysis.

The dependent variable will be the state's posture in global and strategic affairs, as the hypothesis asserts that the state's conduct will become more aggressive and activist in the realm of foreign policy. Again, examining force projection and postures here is a task complicated by the many ways in which power is articulated through state behavior. Potential measurements may include measures of military spending, types of military spending, and the deployment of force abroad. Others include the handling of territorial and diplomatic disputes with neighboring nations and key strategic rivals. A forceful posture may even suggest simply more activist as opposed to lethargic diplomatic structures, meaning the number of

trade deals signed or the aggressive courtship of foreign companies and more consistent economic outreach to other countries.

Another critical component of the civilizational model will be the relationship between the host civilizations and their diaspora populations. The data can be aggregated and spliced in a multitude of ways and will, in large part, vary according to the actual indigenous conceptualization of the civilization in the selected cases. A civilizational thought structure for India might emphasize the idea of *Akband Bharat* (“United India”) that espouses the consolidation of the Indian cultural sphere, as compared to a more tributary Chinese notion of civilization such as *Tianxia* (“All Under Heaven Is Chinese”). This article will attempt to understand how these differing notions of civilization—as cultivated by the distinguishing features of each state—might influence the final analysis of dependent variables in each unique case.

Literature Review

Civilizations are projects centuries in the making, but the civilization-state is a modern thesis. The body of literature that civilizational thinkers can draw on is vast, deriving from fields as varied as geopolitics, history, aesthetics, religion, sociology, canonical works, and more. Emic sources can (and often do) reference spiritual corpuses such as the *Vedas*, the *Mahabharata*, and the *Ramayana*, in the case of defining Indian civilization, or epic texts including *Romance of the Three Kingdoms* and *Journey to the West* in the Chinese example. Yet, the scholarly focus on the civilization as a living entity and a basis of political organization has emerged as a thoroughly modern concept. The end of the Cold War rendered the bipolar ideological struggle an outdated historiographical model; in the search for novel definition, no recent thinker has done more to iterate the *primat der zivilisation* than Samuel P. Huntington, whose views have permeated the subsequent scholarship in a seminal and fundamental capacity.

Huntington’s 1993 “Clash of Civilizations” thesis serves as an astute prefatory text for the explication of the civilization-state concept.¹² With the exception of a few modern scholars, there has been little concerted effort to study the civilization-state as an all-encompassing entity or to engage seriously with the historicity of the idea. So far, the majority of attempts appear to be concerned with the application of the civilization-state concept in individual countries, such as the compelling analyses of Andrei Tsygankov¹³ and Fabian Linde¹⁴ with regard to Putinist ideology in Russia, or Guang Xia¹⁵ and Alison Kaufman’s¹⁶ vivisections of China under the Chinese Communist Party (CCP). Similar efforts have also glanced at Europe¹⁷ and the Islamic world¹⁸ under a civilizational frame of reference.

In any case, some engagement with Huntington's ideas are necessary. And though he does not utilize the exact terminology of the civilization-state, Huntington does provide scholars with a perfectly workable definition of civilizations in today's planetary state of affairs—"the highest cultural grouping of people and the broadest level of cultural identity people have short of that which distinguishes humans from other species."¹⁹ He argues that the collapse of ideology alongside the USSR signaled the return of cultural or religious identities as a basis for world conflict. Part of this shift comes with the rise of non-Western civilizations as important actors in shaping global norms, as well as the concomitant rise of non-Western methods of self-conceptualization. The interactions among peoples will not mitigate but will in fact exacerbate the development of "civilizational consciousness" as a form of this revisionist trend.²⁰ Finally, Huntington concludes that these shifts will produce a conflict configuration of the "West vs. The Rest," as revisionist civilizations such as the "Sinic" civilization and "Islamic" civilizations bandwagon together to usurp Western hegemony, effectively to "modernize but not to Westernize."²¹ While Huntington's prescriptions can be rudimentary at times, his stark analysis remains potent and highly influential among civilizational thinkers the world over.

Since Huntington's foundational thesis dropped into the milieu of global affairs, some broad strands of theorization have emerged regarding the study of the civilization-state. There are scholars who hold that the civilization-state constitutes a relatively new phenomenon and that it will overtake the nation-state and the American world order as the dominant organizing paradigm of the twenty-first century and beyond. These scholars are often found outside formal academic circles, and their works are better situated in policy reports produced by government departments or think tanks or in discourses published in various national media. Indeed, the civilization-state phenomena writ large must be considered as a reaction against Westernized elites, many of whom are represented by university departments and the traditional liberal internationalist establishment. It is sensible that civilizationalist discourses will be most forcefully articulated outside of those contexts.

Others find that the notion of the civilization-state is simply a reframing of older ideas and continuities in the grander scope of the civilizational narrative. In this view, the civilization-state is merely a rhetorical device, unable to escape from the essential paradigms of realism or liberalism or constructivism; as such, civilizationalism represents a development of thought but not necessarily a development of substance. Finally, and more critically still, are those scholars who are dismissive or harshly skeptical of the abiding power of the civilization-state idea in the twenty-first century, likening it to either a political flavor-of-the-day or

nonpermanent phenomenon. At most, they might consider civilizationalism to be a repackaging of anticolonial discourses used by nationalist movements in the twentieth century.

Professor Amitav Acharya, recognized for his theory of the multiplex world order,²² falls into the last camp. In a 2020 article “The Myth of the ‘Civilization State,’” he provides one of the few existing examples of cross-comparative exegesis of the civilization-state idea.²³ He points to Indian prime minister Jawaharlal Nehru’s appeal to civilization in the early years after independence, as well as the language of Mustafa Kemal Atatürk and Sun-Yat Sen, stressing the past anticolonial credentials of civilizationalism. Acharya finds that, “like Huntington’s thesis, the civilization state also oversimplifies the world’s cultural and strategic fault lines and realities”²⁴ and that, in its current form, “the civilization state discourse does more to obfuscate than illuminate.”²⁵ Still, he engages the framework with some nuance, noting that today’s advocates of the civilizational standard, such as Modi, Xi, and Erdoğan, are not necessarily isolationists or cultural chauvinists and that “a civilizational identity does not imply resistance to integration with the rest of the world.”²⁶ Ultimately, he cautions that Western analysts must study the civilization-state carefully: “[W]e should not allow this discourse to create an analytical straitjacket that overemphasizes the negative role of culture and demonizes the rise of non-Western nations.”²⁷

This article will now seek to further develop the nascent cross-comparative tradition in the study of the civilization-state through a more pronounced analysis of the Chinese, Russian, and Indian cases. The methods employed may be similarly applied in the study of other potential civilization-states. The analysis begins with the civilizational concept and the percolation thereof in China, with special attention given to the CCP’s adoption of such rhetoric from the Deng Xiaoping era onward.

China: Tianxia and the Middle Kingdom

China’s geological structure is that of a civilization-state; the nation-state accounts for little more than the top soil.

—Martin Jacques, author and political commentator

Western analysts have struggled to define and understand the Chinese state or contend with the seemingly erratic behavior of its doyens. This is because, as Lucian W. Pye identified in 1990, China is “not just another nation-state in the family of nations” but also a “civilization pretending to be a state.”²⁸ As it stands, China is the product of an arbitrary mission to “squeeze a civilization into the constraining framework of the modern state, an institutional invention that came out of the fragmentation of the West’s own civilization.”²⁹ China has been identi-

fied as the original civilization-state, a claim undergirded by two millennia as a consolidated entity founded on contiguous cultural conceptions of the relationship between the state and society, the role of the family, ancestral worship, Confucian values, legalist philosophy, *Shanrang* ideals, the network of personal relationships known as *Guanxi*, Chinese food, and the Chinese language in spoken and written form.³⁰

Core Concepts of the Chinese Civilization-State

The modern reframing of the civilization-state is rooted intimately in the historical and present-day Chinese encounter with the West, particularly the Qing Dynasty's "Century of Humiliation" in which China was balkanized into semicolonial protectorates for purposes of trade and resource extractivism. In a 2014 speech on "core socialist values," Chinese president Xi Jinping spelled out his definition of success in the realm of international politics: "China has stood up. It will never tolerate being bullied by any nation. . . . Today's China forms a sharp contrast to China in the 19th century when the country was humiliated, its sovereignty was infringed upon, and its people were bullied by foreigners."³¹ Regaining lost confidence in the aftermath of the debilitating experience of Western hegemony forms a recurrent and foundational theme in the study of the civilization-state, both in China and elsewhere. China's material and political success is seen as a return to the natural path of historical prosperity, and the state has been given an exceptional mandate to prevent such an occurrence from ever happening again—even at the risk of provoking ire internally or externally.

The civilization-state project features not only an airing of past grievances but also the wholesale remaking of society along traditional concepts and models. In the CCP's China, this manifests as a neo-Confucian ideal with Marxist-Leninist ideological infusions. In his book *The China Wave: Rise of a Civilizational State*, the progovernment intellectual Zhang Weiwei of Fudan University argues that China has succeeded by rejecting Western political norms, instead pursuing self-sufficiency through Confucian culture and exam-based meritocratic traditions.³² In the Confucian system of familism, the family formed the center and prototype of social dynamics, institutionalizing a set of values and conventions that applied between husband and wife, brother and sister, parents and children; these were then extrapolated to the whole society as an enlarged ideation of the family.³³ In the civilization-state, the state exists at the head of the civilizational family, a position held now by the CCP apparatus and its leader, Xi. The civilization-state is a constant project, and in the context of modernity, "existing civilizations or cultures can only sustain themselves by reinventing themselves."³⁴ Therefore, Chinese

civilization can be faithfully reconciled only in the astute study of its historical transformations and reinventive propositions.

Other traditional Chinese governance philosophies include the spirit of *Shanrang* and the Mandate of Heaven. The former is understood to convey a Chinese ideal of virtuous rulership, represented as an “abdication and succession system under which the current ruler would voluntarily relinquish the throne in due time, and the new ruler was selected by the current one on the basis of the candidate’s merits rather than blood.”³⁵ *Shanrang* has been depicted in various popular legends and, regardless of their veracity, has been conceptually eulogized repeatedly in Chinese history. In terms of the succession of CCP one-party leadership and the state, there exists a possibility of *Shanrang* in guiding future party governance; conversely, the Mandate of Heaven no longer acts as a guarantor of legitimacy. The legitimacy of the state in premodern China was based on the human world and the relationships between ruler and ruled. Heaven in the Chinese sense refers to that which “is transcendent, imminent or intrinsic to humanity,” making sense “only in its unity with humanity, achieved in this world via human beings’ self-cultivation and self-perfection.”³⁶

The last major concept that has seen dedicated traction in Chinese intellectual circles is the explication of the *Tianxia* 天下 system (literally: “All Under Heaven”). *Tianxia* stratifies the external and internal governance of the Chinese civilizational world, and some Chinese academics have proposed it as an alternative to the Westphalian model of global relations. While Westphalianism assumes anarchy as the natural basis of international competition, *Tianxia* is presented “as an ‘all inclusive world’ and a more cooperative order, if not a world government under Chinese rule.”³⁷ Xu Jilin has defined *Tianxia* as “an ideal civilizational order, and a world spatial imaginary with China’s central plains at the core,” embodying the Chinese system at its best and justifying the set of principles formulated under imperial Confucian rule.³⁸

The traditional model of *Tianxia* was organized into three concentric circles, the inner ruled directly by the emperor and their bureaucracy; the middle constituting the border regions indirectly ruled through the system of hereditary titles, vassal states, and tribal headmen; and the third engendering a tributary system that established an international hierarchy bringing other countries to China’s imperial court.³⁹ In the *Tianxia* imaginary, barbarian peoples were to submit to Chinese central authority and recognize the superiority of Chinese civilization.⁴⁰ Jilin has proposed an updated *Tianxia 2.0* as the guiding philosophy of Chinese international policy, where, “in the core regions of China, ‘one system, different models’ should be implemented; in the border regions, ‘one nation, different cultures’ should be realized; in Hong Kong, Macau, and Taiwan, ‘one civilization,

different systems,' should be experimented with; in East Asian society, 'one region, different interests' should be recognized; in international society, 'one world, different civilizations,' should be constructed."⁴¹

The Civilizational Faction and Percolation to Official Paradigms

The CCP's embrace of traditional Chinese culture today represents a sea change from the Maoist years and the Cultural Revolution and from earlier scholars such as Liang Qichao, who concluded that "ancient Chinese philosophies that valued harmony and quiescence had resulted in a passive [and] ossified culture."⁴² Even during the decaying years of imperial rule, East Asian leaders did not feel the need to take up "wholesale Westernization" but rather to deploy a policy of selective learning from the West. In the post-Mao era, China can be described as both "globalized" and "Sinicized": "globalized, as a result of economic reforms and open-door policy, and Sinicized, because of the conscious and unconscious reconstruction of its traditional culture."⁴³

Some basic features of the premodern Chinese state have been introduced, revived, or reinvented, such as the resumption of meritocratic selection with the National Higher Education Entrance Examination in 1977 and the reinstitutionalization of the National Civil Service Examination in 1989.⁴⁴ Civilization has come to be developed in different ways by the modern state, with the rehabilitation of the civilizational concept finding legislative support from the CCP Central Committee under Jiang Zemin in 1996, when it issued "Resolutions Concerning a Certain Number of Important Questions Regarding the Strengthening of the Building of Socialist Spiritual Civilization." These resolutions reified China's "fine national culture" (*youliang guojia wenhua*) as well as the "revolutionary culture" (*geming wenhua*) in constructing a Chinese "socialist civilization."⁴⁵ The CCP found a new synthesis in its introduction of a Chinese socialist modernity that draws from the vast wells of deeply rooted national cultural instincts.

Another advent of the civilizational concept in post-1949 China has manifested through governmental reform campaigns, creating "ideological and moral imperatives" presented to the Chinese people as mechanisms of modernization. Jiang Zemin introduced several "Socialist Spiritual Civilization campaigns" that emphasized the need for coordinating "'civilizing' activities at all levels of society."⁴⁶ These campaigns have continued under subsequent leadership, such as promotional endeavors to educate the Chinese people on littering and cleanliness in the run-up to the 2008 Beijing Summer Olympics. The rhetoric of civilization has percolated through CCP and popular discourses in the post-Deng era of reforms and now finds its most forceful articulation at the highest level of Chinese leadership.

Chinese president Xi Jinping has frequently advocated for the civilizational concept in endogenous and exogenous fora, calling on Asian civilizations to “strengthen cultural confidence” and to “use the foundation of the brilliant achievements obtained by our ancestors” to reach a “new glory of Asian civilisations.”⁴⁷ He has exhorted the country’s elites to “inject new vitality into the Chinese civilisation by energising all cultural elements that transcend time, space, and national borders and that possess both perpetual appeal and current value.”⁴⁸ President Xi’s rise since 2012 has solidified the place of the civilization (*wenming*) in domestic political discourses, and the Chinese concept of civilizational leadership has gained ground in the quest to replace the United States as the foremost global hegemon. He has not hesitated, as demonstrated in his 2014 speech at the College of Europe in Bruges, to place Chinese and Western civilizations on equal terms,⁴⁹ and Chinese leadership as a whole is confident that through the great project of “national rejuvenation” the country might regain the position it lost 170 years ago.

In China, the civilizational faction emerged from within the ranks of the CCP in the years after Mao’s death, finding full resonance by the 1990s with the implementation of Deng-era reforms and the extinguishing of the Soviet model. Under this new framework, the ideological tenets of socialism need not be compromised by the harmonious reintroduction of Chinese civilizational concepts, thereby producing a civilization-state that draws on neo-Confucian as well as Marxist-Leninist schools of thought (perhaps aptly classified as a “socialist civilization-state with Chinese characteristics”). This ideological and cultural merger has begun to profoundly impact China’s approach to foreign policy, as demonstrated by actions in its near-abroad and elsewhere.

Recent Foreign Policy Decisions in Context

The effects of civilizational thinking have changed the way in which China conducts and frames its foreign policy decision-making, with an intensification of such rhetoric accompanying the rise of President Xi in the 2010s. Civilizationalists have laid the building blocks for their values and their vision in the form of multilateral bodies such as the Shanghai Cooperation Organization (SCO), which ties China and Russia to the Central Asian nations of Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. The grouping stresses the principle of noninterference in sovereign affairs, and the SCO’s internal security coordination apparatus has adopted China’s definition of the “three evils”—terrorism, extremism, and separatism—used to justify its crackdown on ethnic Uyghurs in Xinjiang Province.⁵⁰

China's signature Belt and Road Initiative has been similarly framed in civilizational terms, hailed as the "New Silk Road" that connects East Asia to Europe via infrastructure projects across the land and seas. The Beijing Consensus (referring generally to China's political and economic policies) is being pushed across Central Asia, evinced by the historical patterns of Han majoritarian persecution against minorities in Xinjiang and Tibet⁵¹; it is now being applied forcefully in Hong Kong with an eye toward Taiwan as well.⁵² Some proponents of the Chinese civilizational concept have in the past stated that Taiwan could be swayed to accept Chinese suzerainty in the near future,⁵³ and Chinese claims in the South China Sea and along the border with India have often relied on imperial-era "documentation" in the bid to provide historical authenticity to the state's military advances.⁵⁴ Modern international law, and the judgments of the International Criminal Court, are seen as recent inventions rising from Western conventions, whereas the claims of the CCP rest on more ancient stipulations of the historical Sinosphere and the eminence of the Chinese state therein.

Another prominent dimension of China's civilizational foreign policy has been a renewed, and perhaps neurotic, aim to develop coercive influence over Chinese diaspora populations abroad.⁵⁵ This is coupled with the strategic implanting of Chinese agents in sensitive national structures abroad, including universities and medical institutes, to target Western nations such as Canada and Australia.⁵⁶ The glory of Chinese civilization is extolled by more than 500 Confucius Institutes, amplified by the Chinese domestic film industry and state media such as the official *China Daily* newspaper and China Central Television's multilingual programs.⁵⁷ It is evident that China is engaging in a global psychological and diplomatic mission to establish the primacy of its civilization-state abroad while simultaneously implementing domestication measures and "campaigns of civilization" at home to reshape the ur-formations of civil society. The manipulation of diaspora populations is a common tactic in the foreign ideation of civilization-states and has been used by the Russian Federation in its own emergence as a distinct civilizational polity.

Russia: A Bicontinental Eurasian Power

Russia should embrace its identity as "a civilisation that has absorbed both east and west" with a "hybrid mentality, intercontinental territory and bipolar history. It is charismatic, talented, beautiful, and lonely. Just as a half-breed should be.

—Vladislav Surkov, advisor to the Russian president

In the aftermath of the Soviet collapse, Russians searched for new meaning and new ways to manifest their national destiny. A class of thinkers—inspired by Huntington's ideas and those prevalent in earlier native literatures—resented the

imposition of Western economics that “shocked” the Russian system and the subsequent prostrate status of the Federation in global affairs. Russia was impotent as NATO expanded closer to its borders and subsumed the Soviet satellite states, and Russian leaders found themselves unable to stop the West’s military campaign against Serbia in the late 1990s despite virulent opposition. With the elevation of Vladimir Putin as the head of state, Russia sought replenishment and differentiation through the conceptualization of the civilization-stat (*gosudarstvo-tsivilizatsiia*) as a means to restore strength and self-confidence. In the Russian example, the unique medley of spirituality and hard power achieved through conservative governance, the guidance of the Orthodox Church, neo-Tsarist impulses, and a Slavophilic agenda would come together as Russia takes its rightful place at the head of *Russkiy Mir*—the Russian cultural universe.

Core Concepts of the Russian Civilization-State

As in the other cases, resentment against Western incursion fueled the rise of civilizational inquiry in post-Soviet Russia, with the West “[failing] to understand the depth of the resentment in post-Soviet Russia about what had happened with the collapse of the Soviet Union.”⁵⁸ Indeed, Putin himself has deemed the Soviet collapse the great geopolitical catastrophe of the twentieth century. There exists a line of historical discourse in Russia that seeks to explain these disintegrations of state authority in cyclical terms, articulated through the notion of *smuty*, or “times of trouble.” Such cyclical models of viewing the past aim to explain state collapse and periods of breakdown in Russia’s history, and in its “civilizational approach” (*tsivilizatsionnyi podkhod*) Russia is said to possess its own historical logic and ability to recover from chaos.⁵⁹ Today, that ability to recover is engendered by the presence of a strong central authority to restore adequate political and military power to the Russian state.⁶⁰

To this end, a number of clubs and groups have sprung up with the goal of formulating a Russia-centric notion of world order, often through the promotion of imperial ideologies such as *Pax Russica* and *Russkiy Mir*. The latter refers to the historical Russian and Russophone space, encompassing previous imperial boundaries and areas under Soviet influence, including Ukraine, Belarus, and other nations that have “adopted Russian culture, language, and the Great-Russian ideology.”⁶¹ Since 1991, geopolitics in Russia developed beyond the constraints of scientific analysis, becoming somewhat of an exercise in ideology and aesthetics, giving it a Russia-centric literary character and adopting messianic and Promethean aspects.⁶² Moreover, the Russian school of geopolitics has likewise been deemed “geosophy,” concerned with the sacred geography of the homeland, as well as a discursive practice that intends to find an appropriate interpretation of

the Russian historical identity, taking on the essence of geopoetics.⁶³ Lastly, as is fundamental to civilizational theory, there exists a strong emphasis on cultural distinctiveness (*samobytnost*) or self-standing that highlights local values and moral norms as they differ from the vicissitudes of the outside world.⁶⁴

Russia sees itself as the rightful heir to the title of the “Third Rome,” following the original fall of Rome and then Byzantium, leaving the seat of Orthodox power with Moscow. Russian Christendom is perceived as the last bastion of conservative values, with its fealty to ancient times and unchanging tradition, as opposed to a Western Christianity that has “perished under the onslaught of immoral liberal [iconoclasm].”⁶⁵ In 2015, the Russian foreign ministry’s press center hosted a constituent assembly of the Byzantine Club, whose founders claim Russia as the successor of the great Byzantine civilization.⁶⁶ The recentering of power under a strong authoritative figure, personified by Vladimir Putin (who could potentially hold office until 2036),⁶⁷ means that the neo-Tsarist/neoimperial configuration acts as the baseline for the future Russian civilization-state. Indeed, without the centripetal values of empire and geography, it is believed that Russia will lose its unique identity and cease to exist as a civilizational phenomenon altogether.⁶⁸

In the new conservative orthopraxy, the civilization-state exists to protect the country from “dissolving in this diverse world.”⁶⁹ Valery Gergiev, a Russian conductor with links to Putin, performed a concert in 2016 at the recaptured Roman Theatre in Palmyra, Syria, where Putin addressed the audience via video link to celebrate the West’s decline and assert Russia as a force for moral good and order.⁷⁰ Such theatrics mask a deeper inculcation of Enlightenment principles in the construction of Russia’s civilizational discourse, as the themes of Rousseau’s General Will that unifies society and demands absolute obeisance, as well as Hegel’s notion that the state embodies the spirit of the people, have found prominence in the religious philosophies of thinkers such as Ivan Ilyin and Aleksandr Dugin, both of whom have been cited by Putin in the past.⁷¹ In Russia, much intellectual space has been dedicated to the study and proliferation of the civilizational concept, and such discourses have garnered a salvific reputation at even the highest official levels of the Kremlin’s statecraft and strategy.

The Civilizational Faction and Percolation to Official Paradigms

Numerous Russian intellectuals have stepped forward since the Soviet collapse to offer some explanation of the condition of the Russian state and people and to envision a path forward from the murk of post-Soviet confusion. In Russia’s hour of duress, elites have played an integral role in “responding to the situation of ontological insecurity by mobilizing so-called civilizational values.”⁷² One such group of elites, formed in 2012, branded itself as the “Izborsk Club” after the city

of its founding and consolidated traditional, conservative, and ultranationalist voices to act as a civilizational umbrella organization for the Russian center-right and far right. These elites represent a major front of the civilizational faction in Russia, and their works “contribute to creating a renewed public-oriented policy in all spheres of national life.”⁷³

The papers and reports produced by the Izborsk Club are designed to create a reservoir of intellectual thought for the civilizational project that can then later be drawn on to justify state policy. Members of the club include prominent politicians such as Sergei Glazyev, Putin’s presidential advisor on Eurasian integration; the Nobel-laureate scientist Zhores Alferov; writers and thinkers such as Zakhar Prilepin, Aleksandr Prokhanov, and Aleksandr Dugin; historians Natalia Narochinskaya and Nikolai Starikov; and journalists Maxim Shevchenko and Mikhail Leontyev.⁷⁴ The Russian Orthodox Church is represented by Bishop (Archimandrite) Tikhon (Georgiy Shevkunov), supervisor of the Moscow Monastery of the Vladimir Icon of the Mother of God; the attitude of the Church toward the Izborsk Club is overall quite favorable.⁷⁵ The goals of the club are, through their para-scientific theories, to prepare Russian society—materially, intellectually, and psychologically—for the new civilizational dawn, facilitating an atmosphere conducive to revisionism in the realm of foreign affairs.

Izborists believe that Russia’s military power must be reflected in forceful territorial expansion and the regaining of areas lost in 1989, blaming the state of contemporary Russia on “traitors” such as Mikhail Gorbachev, Boris Yeltsin, Alexander Yakovlev, and Eduard Shevardnadze.⁷⁶ Their betrayal and decisions to work with the West represent the “third *smuta*” in Russian history, and only through overcoming this period of turmoil can Russia again derive meaning and energy in its national life. *Smutas* dramatize the historical condition, without which Russian society would be interminably static; the task for Izborist Russia is to once again become “one and indivisible.”⁷⁷ The Izborists have produced maps and recommendations for reshaping the international status quo, proposing boundary changes and the creation of new territories across Europe and Central Asia. Their vision is fundamentally revanchist.

Although the influence of the Izborists on the Kremlin is subject to debate, despite their significant contacts, there are a number of other government-affiliated and -funded think tanks that also constitute the civilizational faction in modern Russia. Since the mid-2000s, United Russia, the ruling party, has established a number of think tanks, including the Foundation for Effective Politics, the Russian Project, the Center for Social Conservative Policy, the Institute for Social Forecasting, and the Institute of National Strategy, dedicated to promoting Russian values across the former Soviet space. All of them possess strong ties to

the current Putin administration, holding potent influence over the Kremlin's vision of Russia's domestic and international priorities.⁷⁸ The civilizational agenda has worked its way up through the halls of Russian power, eventually gaining support in the official governing superstructure itself.

In 2008, Russian foreign minister Sergey Lavrov frequently advanced thinking in civilizational terms, arguing that "competition is becoming truly global and acquiring a civilizational dimension."⁷⁹ In his address to the Federal Assembly in 2012, President Vladimir Putin stated that "in the twenty-first century amid a new balance of economic, civilizational, and military forces, Russia must be a sovereign and influential country . . . we must be and remain Russia."⁸⁰ Putin's notion of the civilization-state stresses this essentially Russian element, and he has in the past recognized ethnic Russians as "the core [*sterzhen*] that binds the fabric" of Russia's state and cultural polity.⁸¹ Campaign articles from 2012 refer to the Russian *ethnos* as the "cultural genome" of the nation and that the abiding civilizational identity of Russia is founded on a common (*edinyi*) cultural code undergirded by quintessentially Russian values.⁸² Still, it is necessary to note that Putin has on a number of occasions rejected outright the notion of a mono-ethnic state as the basis of the Russian civilizational entity; instead, the Russian civilization-state must reflect the country's rich diversity of customs, languages, and traditions.

By 2013, the government's "Concept of the Foreign Policy of the Russian Federation" established that "global competition takes place on a civilizational level" and that the "cultural and civilizational diversity of the world becomes more and more manifest."⁸³ It further emphasizes that "global development . . . requires collective leadership by the major states of the world, which, in turn, should be representative in geographical and civilizational terms."⁸⁴ The 2010s marked a time when the language of civilizationalism percolated from think tanks and academia to become the formal policy of the Russian state, with discernable impacts on its foreign policy and diplomatic rhetoric that continue to the present day.

Recent Foreign Policy Decisions in Context

Russia's conservative elite herald President Putin as a vanquisher of woes and the savior of the erstwhile Tsarist endeavor, elevating him as a natural successor to the Byzantine and Russian emperors of yore. Putin's 2016 visit to Mount Athos in Greece—a site of great holy significance in the Orthodox faith—invoked special symbolic reverence from Russia's religious population.⁸⁵ He was admired for his preservation of Syria and his machinations in Ukraine, representing a willingness to rewrite the unipolar world order in terms more favorable to Russia.⁸⁶ Certainly, he has inspired much awe and adulation amid the nation's civilizational factions, especially among the denizens of the Izborsk Club.

Putin's rejection of the West and his call for confidence in the construction of a bicontinental, pan-Eurasian civilizational-state has found resonance in the Kremlin's policies toward the former Soviet space, Crimea, and Central Asia, as well as among outposts of the Orthodox spiritual universe. In June 2014, for example, more than two dozen members of the Izborsk Club gathered at Livadia Palace (a former summer retreat of the Russian tsars) on the coast of Crimea, kneeling to kiss Crimean soil and tour one of the battleships of Russia's Black Sea Fleet.⁸⁷ Beyond contrivances of symbolic import, members of the Izborsk Club such as Aleksandr Dugin in his 1997 *Foundations of Geopolitics* have articulated a ruthlessly classical binary view of geopolitics, contesting the Atlanticist thalassocratic civilization of the United States and the United Kingdom against the Eurasian tellurocratic land powers, ruled by Russia.⁸⁸

The more maximalist members of the Izborsk Club have called for a return to the European boundaries established in 1945 at Yalta and Potsdam, and even moderate ones aim for the unification of *Russkiy Mir* along famed writer Aleksandr Solzhenitsyn's concept consolidating Russia, Ukraine, Belarus, and Kazakhstan into one monolithic state.⁸⁹ As an "intellectual engine room for Vladimir Putin's Kremlin," the Izborists have also expressed a particular concern for the threat of so-called color revolutions in Russia, referring to the various popular revolts that have toppled governments in some former Soviet states and elsewhere.⁹⁰

The Putinist postulation of the civilization-state—much like its Chinese counterpart—also envisions a prominent role for the Russian diaspora and Russian-language speakers (Russophones) in the conduct of state policy in the civilization's cultural periphery. The Russian diaspora has played an opaque role in the annexation of Crimea, where the Russian military was "considered a tool to protect the dignity of the diaspora,"⁹¹ as well as in Donetsk and Luhansk in eastern Ukraine, where Ukrainian authorities are currently waging a bloody battle against Russian paramilitaries and sustained cyber disinformation campaigns directed at inciting Ukrainian Russophones to take up arms against the state.⁹² In Russia's 2008 invasion of Georgia, 2014 annexation of Crimea, and ongoing disinformation efforts aimed at the Baltic States and the West writ large, there are contours of Russia's civilizational turn toward a polity embodied by archconservative virtues, neo-Tsarist convictions, and a Eurasianist imperial outlook.

India: Rendering Bharatvarsha

The fact remains that the Indic civilization's religious traditions venerate the land itself. Further, it is this sub-continent, this landmass, that has been associated by indigenous history and tradition with the civilization of the Aryans, which gave it the name Bharat.

—J. Sai Deepak, advocate before the Supreme Court of India

The civilization-state concept has roared to the front of modern Indian political discourse, reviving a rhetorical thread line inherited from the original nationalists who agitated against British Raj in the nineteenth and twentieth centuries, while further attending the deconstruction of the Nehruvian framework of state-society relations that dominated the first five decades after independence in 1947. India's liberalization reforms of 1991 coincided with the failure of Soviet-style socialism, making ground for new contact with the global economy and the simultaneous re-rendering of the role of the indigene in constructing the postcolonial nation.

The notion of Indian civilization is entwined and enmeshed with the spiritual fabric of the land and its people; the sacrality of Indic texts and the patrimony of faith as realized in the major *Dharmic* traditions of the subcontinent, being Hinduism or *Sanatan Dharma* (the Eternal Way), Buddhism, Jainism, and Sikhism. In the language of decoloniality, Indic thinkers have traced the sacred geography of the land as mentioned in the river-hymns of the ancient *Rig Veda*, namely “Ganga, Yamuna, Saraswati, Sutudri (Sutlej), Parusni (Ravi), Asikni (Chenab), Vitasta (Jhelum), Arjikiya (Vipasha/Beas), and Susoma (Indus).”⁹³ The expansion of *Bharatvarsha* (the Land of the Descendants of King Bharata) to the Narmada, Godavari, and Cauvery Rivers, as noted in later *Puranic* (a genre of mythopoeic epics) adaptations of the Vedic hymns, constitutes “indigenous sources of Indic identity as well as the repository of indigenous epistemology which cannot and must not be ignored or dismissed.”⁹⁴ The underlying fundamental unity of India, the “symbiotic relationship” between geography and civilization,⁹⁵ has also been noted by Western historians through observation of ancient pilgrimage routes (*āirthas*) and the proliferation of traditions that pay homage to the land of India itself.⁹⁶ Again and again, the basic consecration of the Indian civilization-state is explicitly defined by its mission of spiritual enlightenment and its search for heavenly emancipation.

Core Concepts of the Indian Civilization-State

Prototypical nineteenth-century figures such as Swami Vivekananda and Sri Aurobindo used civilizational registers to articulate a national identity for the subjugated Indian population, describing “Bharatavarsha i.e. India [as] a nation in the distinctly Indic sense as well as a civilization from long before the concepts of nation-state and Westphalian sovereignty came into existence.”⁹⁷ Today, history serves as a fertile battleground for making and remaking the civilizational imaginary, that is to say, in the ability of historiography to “make or break a people's relationship with their past, which, in turn, affects their sense of self.”⁹⁸ Avid de-

colonialists must therefore concern themselves with the id or the ego of their people, demanding “the political utility of history” as well as crafting an imperative to “pay attention to the ebb and flow of politics and power structures surrounding a work of history.”⁹⁹

In the case of post-1991 discourses on Indian civilization, an interesting process of diffusion has taken place in the manner that intellectual crosscurrents, such as those that emanated from Huntington and the Chinese civilizationalists, have propagated and repropagated the civilizational philosophy elsewhere. While some authors such as Christopher Coker believe India to be “too diverse” and too encumbered by “legacies from its colonial past, including social and judicial liberalism,” to ever truly be a civilization-state, this kind of analysis fails to recognize how each civilization-state intends to construct its own categorization of itself.¹⁰⁰ A recent novel by Rajeev Mantri and Harsh Madhusudan titled *A New Idea of India: Individual Rights in a Civilisational State* garnered the attention of Prime Minister Narendra Modi himself¹⁰¹ for its articulation of a “civilisational republic” as the surest guarantor of “individual freedom.”¹⁰²

Indian thinkers demonstrate the variety inherent to the civilizational project and the inability to simply equivocate across cases; indeed, “a civilisation can give rise to several types of political units over millennia, from kingdoms to empires to republics,” and “several political formations can also co-exist within civilisational boundaries with different territorial boundaries at the same time, as has been evident in India where belonging to different kingdoms didn’t preclude belonging to Bharatvarsha.”¹⁰³ This can be likened to the current function of the European Union, with some arguing the existence of a greater European civilization beyond the confines of individual territorial or political delineations. The current structure of the Indian Republic is perceived merely to be built atop the eternal foundation of a pluralistic Indian civilization.

From the experience of British colonialism emerged the notion of *Swaraj* (self-rule) as essential to the formulation of an Indic political modernity, and in today’s civilizational concept the state must act as defender of Indian sovereignty and guardian of the subcontinent’s sacred soil. Indigenous ideas of international relations stretch back into antiquity with the Kautilya *Arthashastra*, and updated works include a 1919 article by Benoy Kumar Sarkar in the *American Political Science Review* on the “Hindu Theory of International Relations” that weaves the teachings of ancient scholars including Kautilya and Kamandakiya Nitisara “into a rearticulation of the doctrine of *rajamandala* [the circular balance of power between kings].”¹⁰⁴ The reinterpretation of Vedic texts and concepts comes through in the article’s description of *sarvabhauma* (the whole world), a “Hindu variant on Kantian notions of ‘permanent peace,’ and contemporary ideas of imperial federa-

tions and the League of Nations.”¹⁰⁵ Civilizationalism will increasingly engender such alternative perspectives on international theory, drawing from works such as Chanakya’s *Arthashastra* or Sun Tzu’s *Art of War* as sources for emic strategic doctrines.

The civilizational faction in India—a young republic but an ancient civilization—has envisioned a distinct cultural mandate for the Indic civilization-state. The purpose of the civilization—its calling—must be realized through its continuing existence, as the “civilization lives as long as that mandate is undelivered, and it dies after that mandate has been accomplished.”¹⁰⁶ In the case of India, this mandate must “organically integrate all these Indian provinces into a vibrant nation” in its pursuit of the “deepest core of Truth” that can be reached only by “exploring the inner universe of Man.”¹⁰⁷ The memory of Partition continues to sting the Indian civilizationalist, and though “wounded due to loss of vital territory,” the Indian civilization is said to remain alive and persist because its mandate “is yet to be delivered.”¹⁰⁸

The other calling of the civilization-state is to achieve numinous, economic, and social self-sufficiency or, as Prime Minister Modi has dictated, self-reliance (*ātmanirbhartā*). This concept can be recognized as a direct rebuke of the overreach of the socialist Nehruvian state in matters of economic and political governance against the wider backdrop of the 1947–1991 system’s roots in Western liberal dogmas. This would be *ātmanirbhartā* in the “true sense of the term, when the *samāja* (society) would not have to look up to the state for each and every essential service it would need.”¹⁰⁹ A contemporary Dharmic polity has been theorized along several models, and Indic civilizationalists admit that its precepts require further intellectual development before deployment. Some of these developments might expound a societal structure aligned with the cosmic *Ṛta* (natural order), or an economic dimension based on the realization of the four *puruṣārthas* (objects of human pursuit) in a globalized world. Those are: *Dharma* (righteousness, moral values), *Artha* (prosperity), *Kama* (pleasure, love, psychological fulfillment), and *Mokṣha* (liberatory and spiritual values).¹¹⁰

In any case, it is recognized that the creation of an Indic civilizational-state will necessitate “an original vocabulary and the flowering of an Indic episteme,”¹¹¹ and currently there are a number of official and para-official organizations dedicated to the advancement of such a civilizational ideal in eminently achievable terms. There is an appetite for centralizing policies and the aim of achieving “self-confidence [that] begets self-reliance” through a “nationalism in the true spirit [that] should withhold us from continuously seeking to feed our inner beasts.”¹¹² These nationalizing and civilizing impulses are finding greater and greater reso-

nance at the highest levels of the Indian political imaginary, sustained simultaneously by civilizational discourses articulated in the growing civil society sector.

The Civilizational Faction and Percolation to Official Paradigms

An emerging Indic intellectual class has arisen to challenge the traditional societal dominance of the Western-educated Nehruvian elites, producing a tension that is realized in the contestation and advancement of the civilizational paradigm. Oftentimes, this Indic class stems not from Tier 1 cities like Delhi or Mumbai but instead from Tier 2 and Tier 3 parts of the rapidly developing Indian hinterland or from the newly prosperous middle class that grew out of the seismic 1991 economic reforms. They are still globalized, studying abroad and working in the Londons and New Yorks of the world, but much like civilizational factions elsewhere they envision their globalization as plausible without adherence to Westernization. Harsh Madhusudan and Rajeiv Mantri represent one aspect of this Indic intellectualism that has arisen outside the context of the formal university sector, particularly in their idea of the “civilisational republic as a democratic polity based on the rule of law that in turn is rooted in India’s millennia-old pluralistic ethos,”¹¹³ as well as their arguments advancing a *Bhāratīya* culture as the bedrock of the civilization-state.

Jayant Sinha, a minister in the Modi government, is a former McKinsey consultant with an MBA degree from Harvard, and he also decries the choice of the early Nehruvians in embracing Western ideas such as scientific socialism under the mistaken assumption of their universal applicability. Instead, Sinha believes that the nation ought to have developed a system of postcolonial governance rooted in its cultural particularism, stating that “in our view, heritage precedes the state [and] people feel their heritage is under siege,” and that Indians possess a “faith-based” view of the world.¹¹⁴ The globalization of the 1990s failed to homogenize the next generation of indigenous civilizationalists but instead instilled in them a fierce desire to preserve and protect their native values in the face of Western decommmodification and deculturation. Elements of India’s growing think-tank scene have tapped into this resentment, now producing a body of civilizational ideation that can be drawn on in any future remaking of the state.

While India’s think-tank sector was traditionally underdeveloped, consisting mostly of organizations devoted to studying economic development along socialist or liberal models, in recent years a new crop of right-wing think tanks have been commissioned with ties to the ruling Bharatiya Janata Party and its ideological parent organization, the Rashtriya Swayamsevak Sangh. In June 2014, Prime Minister Modi indicated that “the input of intellectual think tanks” should be substantially enhanced for the creation of better policy frameworks, and new

opportunities for government funding have since been made available on an ad hoc basis to various organizations.¹¹⁵ Prominent among these are the Vivekananda International Foundation (VIF), which claims that “universities and institutions of higher learning have not been able to fulfill these objectives that fall under a broad head called nation-building.”¹¹⁶ National Security Advisor Ajit Doval, principal secretary to the PM Nripendra Mishra, additional principal secretary to the PM P. K. Mishra, and NITI Aayog members Bibek Debroy and V. K. Saraswat have been handpicked for choice government positions due to their involvement in the creation and management of the VIF.¹¹⁷

Other think tanks enjoying influence on the current government include the India Foundation, which “strives to bring out the Indian nationalistic perspective” as a “premier think tank that can help understand the Indian civilisational influence on our contemporary society”; as well as the Center for Policy Studies, which aims to “[comprehend] and [cherish] the essential civilisational genius of India, and to help formulate a polity that would allow the Indian genius to flourish and assert itself in the present day world.”¹¹⁸ These organizations provide the cerebral barracks for the civilizational vanguard to supply their mission of reshaping government and society, and several Union ministers serve on the boards of these foundations. Civilizationalism has found a rapt audience in this new generation of Indian politicians and strategic thinkers, and those political entities that fail to adopt the civilizational vernacular will be rendered outdated in the consciousness of both the public and the intelligentsia.

In popular media and the legal field as well, civilizational rhetoric has found new utility vis-à-vis its legitimation in the Indian constitution and in framing India’s foreign affairs. J. Sai Deepak is a practicing attorney before the Supreme Court of India and the Delhi High Court, and in his newspaper column “Indic Views” he often stresses a civilizational line with regard to religious, diplomatic, legal, and political philosophy. He has denigrated both the left and the right who “have a turbulent and complicated relationship with India’s past—the former views the past through the prism of the present, and the latter struggles to reconcile the present with the past.”¹¹⁹ Congruent with the Russian example of *smuty*, Deepak likens the “sweep and nature of a civilisational journey” to a procedure of “cyclical evolution.”¹²⁰ His columns reify the sanctity of India’s borders and critique the Western notion of patriotism as “jingoism or toxic nationalism,” which “marginalises it as a trait of the unwashed, unevolved, savage, and hence sub-human ‘native.’”¹²¹ In this worldview, an unmitigated proliferation of free-market outcomes end up “[loosening] civilizational moorings,” thereby preserving the hegemony of the Westernized business elite.¹²² Deepak’s “civilization first” approach has found rhetorical invocation and camaraderie among major Indian

political figures such as Minister of External Affairs Subrahmanyam Jaishankar, who has expressed similar inclinations in the past.

At a forum in autumn 2019, months after his government's decision to revoke the special status of Kashmir under Article 370 of the Indian Constitution, Minister Jaishankar lampooned those Western critics who denigrated the nationalist credentials of the Modi government, saying "in Asia, nationalism is a positive word. . . . [N]ationalists have stood up against colonization, against the domination of the West."¹²³ He further noted that "there is much to be done with the restoration of identity, of cultural trust," and that, unlike in the Western connotation, a "good [Indian] nationalist is an internationalist, it is not contradictory."¹²⁴ He explicitly conceives India as a civilization-state with a "natural linguistic, ethnic, and religious diversity . . . [where] uniformity [has never been considered] as a necessity or an aspiration."¹²⁵

Jaishankar attributes this sentiment to increasing education and the progress of democracy, elevating the voices of those who had previously been left out of high politics: "[T]oday, politics in India is less westernized, less elitist. We are moving more towards what India really is, towards a style more rooted in Indian culture. That's a good thing."¹²⁶ Finally, he stresses that "you [the West] see us through your prism, you attribute to us a behaviour that you practice yourself . . . but we are not you!"¹²⁷ This exchange highlights a practitioner's own thesis of the civilization-state model and demonstrates the differentiated nature of dialogue and self-constitution between such entities. Each civilization-state must be approached on its own terms, and its actions need to be contextualized using an appropriate construction of its autochthonous habitus and its historical strategic culture.

Recent Foreign Policy Decisions in Context

The Union government's revocation of Article 370 was a major geopolitical event, affecting the strategic calculus in the Himalayan trijunction between three nuclear-armed powers, each with a long and tendentious history operating in the volatile region. Arguments surrounding the decision have been framed in civilizational terms either to justify the government's maneuver or to condemn it. A retired Pakistani ambassador framed the decision in a stark civilizational manner, opining that the "rise of Hindu extremism in India will make the search for a peaceful settlement of the Kashmir dispute even more difficult than in the past" and that there exists a "potential of turning Kashmir into a civilizational dispute at the fault-line of Islamic and Hindu civilizations as predicted by Professor Huntington in his widely acclaimed book."¹²⁸ The ripples of Huntington's language

have reverberated across spatial and temporal conflict dimensions, finding an audience here in subcontinental civilizationalists.

Likewise, Indian commentators have brought up the long history of Hinduism in Kashmir and the persecution of the Hindu minority there that has resulted in ethnic cleansing and an exodus of the population. A Kashmiri writer points to the Hindu Pandits, “reported to be the original inhabitants of the Kashmir Valley,” whose presence there can be “traced to that time when civilization began in the valley.”¹²⁹ He references the continuous 5,000 years of inhabitation by Hindus in the valley, as substantiated by historical texts including the *Nilamat Purana*.¹³⁰ In this sense, Kashmir is a part of the sacred geography of India and constitutes an integral part of its civilizational core; “all manners of cultural markers display unequivocally a Kashmir that was intensively integrated with the rest of India.”¹³¹ Article 370 was thus an “anomaly,” and its revocation is justified as a consolidatory policy designed to better infuse and integrate Kashmir within the Indian body politic.

The dyadic relationship between India and China has been conceptualized using civilizational frames, particularly with regard to the history of border disputes and strategic competition therein. The Indian construction of its civilization-state has been shaped in response to Chinese rhetoric since the 1990s, with Indian civilizationalists asserting that “*Bharat* has a better claim to being a civilization state than China given its longevity and diversity.”¹³² Civilizational consciousness begets consciousness transnationally, and though Indic commentators maintain the parity of the two civilizations, they lament that “China is much more aware of its history and status as a civilization state and is certainly more committed to preserving and furthering that character than *Bharat*.”¹³³ The border disputes represent a clash of civilizations, one that can be resolved only through a complete overhaul of India’s mental fabric regarding its civilizational character. According to the civilizationalists, this may be accomplished by adopting policy (no China on Indian borders or, preferably, no anti-Indic state on Indian borders) through the creation of a “sphere of *Bharatiya* influence without undermining the sovereignty of other States.”¹³⁴ Even earlier in the historical relationship, there has been a comprehension of the civilizational other, both in India and China, which has influenced their mutual bilateral conduct.

Before their emergence as modern states, India and China had experienced contact between their two civilizations for millennia and had already developed certain impressions of the other. For its part, Indian commentary on China in the early twentieth century was benevolent, juxtaposing China and India as “sister civilizations” that faced joint hurdles of imperialism and that shared aspirations of reviving their ancient civilization-states.¹³⁵ Concurrent Chinese discourses dif-

ferred significantly, harboring extremely negative perceptions of India as a colonized nation or “lost country (*wangguo*),” which can also be interpreted as a “failed” or “enslaved” state lacking in national spirit.¹³⁶ Civilizational animosities and appraisals colored the first major diplomatic crisis between communist China and independent India during the former’s annexation of Tibet in the 1950s, when India provided sanctuary to the fleeing Dalai Lama and his government. The Chinese suspected India of contesting Tibet’s sovereignty or its status under the CCP, misconstruing the nonpolitical “depth of reverence” for the Dalai Lama in India, given that the spiritual-religious foundation[] of Indian civilization “considers Tibetan Buddhism as a part of [its] own heritage.”¹³⁷ In a world of civilization-states, such patterns of interaction and miscalculation may become a regular feature should the Huntingtonian prediction of global order prove true in coming decades or centuries.

Conclusion

In light of the differences and peculiarities among China, Russia, and India, several commonalities emerge from the comparative study of civilizationalism. The great Indo-Trinidadian writer and Nobel Laureate V. S. Naipaul once deemed India a “wounded civilization”; it is apparent that, to some degree, all nations preoccupied by the project of remaking themselves along civilizational lines have been, in some immeasurable way, wounded.¹³⁸ These wounds have, in each instance, arisen from the encounter with the West and with the general condition of modernity and globalization, refocusing the lens on the particularities innate to each culture and locale.

Everywhere, a civilizational intelligentsia composed of domestic elites felt the need to coalesce and provide a cogent defense of their culture in the face of Western unipolarity. In China, this coalition arose from within the CCP after the reforms of Deng Xiaoping; in Russia, from the admixture of writers, thinkers, intellectuals, journalists, and moralists searching for meaning in the aftermath of the Soviet collapse; and in India, from an emerging think-tank sector bolstered by a growing non-Nehruvian middle class. Together, they assert the moral superiority of their native cultural epistemologies, achieving globalization through indigenization (not Westernization), even as they each seek to recover and reinvent ancient traditions in a plurilateral derivation of global power relations.

In the creation of these autochthonous modernities, the civilizational faction concerns itself with both modernization *and* preservation. Traditions are updated in a manner consistent with the historical understanding of the civilization, as is the case with the reintroduction of meritocratic examinations in China and the increasing usage of Vedic concepts in the articulation of Indian strategic policy. By

and large, these inchoate civilization-states lay few claims to universality, unconcerned with the ability of their models to be exported (or not) to other nations. While the three nations' ideas of global order differ in the medium and long terms, for now each seeks to undo aspects of the liberal international order while maintaining supremacy in its own geo-civilizational sphere.

Thus, civilizations truly are a phenomenon of historical production and reproduction. How a modern society relates to its own history and constructs its sense of identity will intimately inform the nature of the relationship between the civilization and the state and to the population that it comprises. China has represented a truly astounding continuity of Confucian and Legalist thought structures over the course of millennia, whereas the histories of the Indian and Russian civilization-states profess a kind of cyclical thinking in their ideation, reflected in *Dharmic* religious philosophies and the Russian concept of turbulent times, or *smuty*, therefore providing narrative substance to the cause of popular struggle. This article has concentrated mainly on articulations of civilizationalism in the realm of the state's foreign policies and the makeup of its external posture; civilization-states, however, are projects of endogenous and exogenous reconceptualization. Profound changes are under way domestically in each of the countries examined. These changes will irrevocably alter the makeup of the world in the next several decades and centuries of Western decline and global multipolarity.

President Xi Jinping, President Vladimir Putin, and Prime Minister Narendra Modi will certainly go down as epochal figures in their national canons as the first of the official civilizationalists—but there is no doubt that others will succeed them. Each leader makes the deliberate choice to speak in their native tongues and to elevate indigenous intellectual and cultural traditions in their interactions with the exogeny, to much popular acclaim. The ideas and theories espoused by civilizationalist doctrines may be chimerical or salvific, depending on the view of the commentator, but such philosophies currently are set to only gain in power and prestige moving forward. It is necessary that we do not retreat from these ideations or dismiss them as the preserve of two-bit dictators and dogmatic imperialists. This is doubly so as such language has found reverberation in Western circles, as espoused by French president Emmanuel Macron or former American president Donald Trump, who in a 2017 speech queried the Polish people: “Do we have the desire and the courage to preserve our civilization in the face of those who would subvert and destroy it?”¹³⁹

In the cases examined throughout this article, the domestic civilizational faction draws its intellectual strength from principles elaborated in earlier philosophical texts and religious traditions, reframing them in ways consistent with the modern paradigmatic experience. Through a process of percolation and dissemi-

nation, these civilizational concepts are diffused into the general population while simultaneously becoming situated in official policy speech and documentation. These findings are consistent with the initial hypothesis, although they must be examined with special attention given to the unique civilizational conditions of each case. The methods used here can be employed in the study of other civilization-states, particularly in cross-comparative perspective, to elucidate the manner in which such thinking ingratiates itself within an indigenous elite as well as the impacts it then has on the state's conduct of foreign affairs.

These findings may be generalizable across great powers, and future studies may wish to interpret the civilizational condition in polities such as Japan, Turkey, Iran, and the European Union. While some New World societies including the United States, Mexico, and Brazil have been proposed as potential civilization-state candidates, the history and characteristics of societies produced from European contact with the North/South American continents may not have the same claim to an ancient and contiguous cultural civilization that stretches back into classical antiquity—a foundation that constitutes one of the basic features of any civilization-state's reproduced memory. There may be grounds for legitimate comparison among smaller civilization-states, and future scholars might be interested in examining the applicability of these foundational features to polities such as Israel, Greece, Tibet, and Ethiopia, among other plausible cases.

The results and findings of these academic endeavors may very well aid practitioners and policy makers in better comprehending the changing nature of the oncoming world order. A return to civilizational thinking will be fraught with critical questions of savagery, anarchy, violence, harmony, hegemony, particularism, and noncomprehension among peoples. The global community may have to contend with the resurgence of the Hobbesian condition in an essentially Huntingtonian landscape. Or, perhaps, the astute study of civilizational order can result in a new, more delicate balance of power with its own mechanisms of engagement and negotiation for managing disagreements among states of different philosophical and political orientations. The clash of civilization-states is not an inevitable proposition; to avoid it will require objective study of the civilizational phenomenon and the fostering of a genuine desire for dialogue and community among civilizations in the twenty-first century and beyond. ✪

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Notes

1. Francis Fukuyama, "The End of History?," *National Interest*, no. 16 (1989): 3–18.
2. Paul Musgrave, "Mikhail Gorbachev's Pizza Hut Thanksgiving Miracle," *Foreign Policy*, 28 November 2019, <https://foreignpolicy.com/>.
3. Adrian Pabst, "China, Russia, and the Return of the Civilisational State," *New Statesman*, 8 May 2019, <https://www.newstatesman.com/>.
4. Andrei Tsygankov, "Crafting the State-Civilization: Vladimir Putin's Turn to Distinct Values," *Problems of Post-Communism* 63, no. 3 (2016), 148.
5. Alex Massie, "States of Civilisation," *Charlotte Street Partners: Beyond the Street*, 20 August 2020, <https://charlottestpartners.co.uk/>.
6. "'The Rise of the Civilisational State: China, Russia and Islamic Caliphate and the Challenge to the Liberal World Order' with Christopher Coker," *DOC Research Institute*, 8 November 2019, <https://doc-research.org/>.
7. "'The Rise of the Civilisational State," *DOC Research Institute*.
8. J. Sai Deepak, "Reclaiming a Civilisational Approach to the Constitution," *Daily Guardian: Indic Views*, 8 May 2020, <https://thedailyguardian.com/>.
9. "Population, Total", *World Bank*, accessed 18 December 2020, <https://data.worldbank.org/>.
10. "2020 Military Strength Ranking," *Global Fire Power*, accessed 18 December 2020, <https://www.globalfirepower.com/>.
11. Mark N. Katz, "Great Powers in the Twenty-First Century," *Horizons: Journal of International Relations and Sustainable Development*, no. 10 (Winter 2018), 122.
12. Samuel P. Huntington, "The Clash of Civilizations?," *Foreign Affairs* 72, no. 3 (1993): 22–49.
13. Tsygankov, "Crafting the State-Civilization."
14. Fabian Linde, "The Civilizational Turn in Russian Political Discourse: From Pan-Europeanism to Civilizational Distinctiveness," *Russian Review* 75, no. 4 (1 October 2016): 604–25.
15. Guang Xia, "China as a 'Civilization-State': A Historical and Comparative Interpretation," *Procedia—Social and Behavioral Sciences* 140 (2014): 43–47.
16. Alison Kaufman, "China's Discourses of 'Civilization': Visions of Past, Present, and Future," *Asian Forum*, 19 February 2018, <http://www.theasanforum.org/>.
17. "Huntington's Disease and the Clash of Civilisation-States," *The Economist*, 2 January 2020, <https://www.economist.com/>.
18. Jeffrey Haynes, "Introduction: The 'Clash of Civilizations' and Relations between the West and the Muslim World," *Review of Faith & International Affairs* 17, no. 1 (2019): 1–10.
19. Huntington, "Clash of Civilizations?," 24.
20. Huntington, "Clash of Civilizations?," 26.
21. Huntington, "Clash of Civilizations?," 41.
22. Amitav Acharya, "After Liberal Hegemony: The Advent of a Multiplex World Order," *Ethics & International Affairs* 31, no. 3 (2017): 271–85.

23. Amitav Acharya, "The Myth of the 'Civilization State': Rising Powers and the Cultural Challenge to the World Order," *Ethics & International Affairs* 34, no. 2 (2020): 139–56.
24. Acharya, "The Myth of the 'Civilization State'," 141.
25. Acharya, "The Myth of the 'Civilization State'," 153.
26. Acharya, "The Myth of the 'Civilization State'," 148.
27. Acharya, "The Myth of the 'Civilization State'," 153.
28. Lucian W. Pye, "China: Erratic State, Frustrated Society," *Foreign Affairs* 69, no. 4 (1990), 58.
29. Pye, "China: Erratic State, Frustrated Society," 58.
30. Martin Jacques, "Civilization State versus Nation-State," *Süddeutsche Zeitung*, 15 January 2011, <http://www.martinjacques.com/>.
31. Kaufman, "China's Discourses of 'Civilization.'"
32. Gideon Rachman, "China, India, and the Rise of the 'Civilisation State,'" *Financial Times*, 4 March 2019, <https://www.ft.com/>.
33. Xia, "China as a 'Civilization-State,'" 45.
34. Xia, "China as a 'Civilization-State,'" 47.
35. Xia, "China as a 'Civilization-State,'" 44–45.
36. Xia, "China as a 'Civilization-State,'" 44.
37. Acharya, "The Myth of the 'Civilization State,'" 145.
38. Xu Jilin, "The New Tianxia: Rebuilding China's Internal and External Order," translated by Mark McConaghy, Tang Xioabing, and David Ownby, *Reading the China Dream*, accessed 17 December 2020, <https://www.readingthechinadream.com/>.
39. Xu, "The New Tianxia."
40. Xu, "The New Tianxia."
41. Xu, "The New Tianxia."
42. Kaufman, "China's Discourses of 'Civilization.'"
43. Xia, "China as a 'Civilization-State,'" 46.
44. Xia, "China as a 'Civilization-State,'" 46.
45. Kaufman, "China's Discourses of 'Civilization.'"
46. Kaufman, "China's Discourses of 'Civilization.'"
47. Acharya, "The Myth of the 'Civilization State,'" 146.
48. Pabst, "China, Russia, and the Return of the Civilisational State."
49. Kaufman, "China's Discourses of 'Civilization.'"
50. James M. Dorsey, "Civilizationism vs. the Nation State," *The Turbulent World of Middle East Soccer*, 24 March 2019, <https://mideastsoccer.blogspot.com/>.
51. Ellen J. Kennedy, "China, Tibet, and the Uighurs: A Pattern of Genocide," *MinnPost*, 9 September 2020, <https://www.minnpost.com/>.
52. "Hong Kong Security Law: What Is It and Is It Worrying?," *BBC News*, 30 June 2020, <https://www.bbc.com/>.
53. "Jacques even claimed that Taiwan, in the near future, could be swayed to accept Chinese sovereignty: '[The Chinese] may say, in principle, 'as long as you accept Chinese sovereignty over Taiwan, you can keep multi-party system, universal suffrage, even some autonomy for your armed force,' because what matters to China is the question of sovereignty—but their conception of sovereignty is separate from the Western nation-state perception of sovereignty. For the Chinese,

sovereignty is separate from system.” Harold Sheffery, “Understanding China and Its Rise: The ‘Civilization-State,’” *Asia Society*, 31 July 2012, <https://asiasociety.org/>.

54. Mohan Malik, “HISTORICAL FICTION: China’s South China Sea Claims,” *World Affairs* 176, no. 1 (2013): 83–90.

55. Timothy Heath, “Beijing’s Influence Operations Target Chinese Diaspora,” *War on the Rocks*, 1 March 2018, <https://warontherocks.com/>.

56. Evan Dyer, “What an Australian-style Push against Chinese Interference Might Look Like,” *CBC News*, 24 November 2020, <https://www.cbc.ca/>.

57. Pabst, “China, Russia, and the Return of the Civilisational State.”

58. Angela Stent, “Putin’s Plan to Restore Russia: The Disruptive Power of Moscow,” *WBUR*, 25 February 2019, <https://www.wbur.org/>.

59. Kare Johan Mjør, “Smuta: Cyclical Visions of History in Contemporary Russian Thought and the Question Of hegemony,” *Institute for Russian and Eurasian Studies*, 22 January 2018, <https://uu.diva-portal.org/>.

60. Piotr Eberhardt, “The Izborsk Club and Their Geopolitical Phantasmagorias,” *Studia Polityczne* 3 (2018), 135.

61. Eberhardt, “The Izborsk Club and Their Geopolitical Phantasmagorias,” 134–35.

62. Konrad Świder, “Russian Neo-Eurasian Geopolitics as a Total Ideology on the Example of Aleksandr Dugin’s Concept,” *Civitas Studia z filozofii polityki* 25 (December 2019): 62.

63. Świder, “Russian Neo-Eurasian Geopolitics as a Total Ideology,” 63.

64. Tsygankov, “Crafting the State-Civilization,” 149.

65. Areg Galstyan, “Third Rome Rising: The Ideologues Calling for a New Russian Empire,” *National Interest*, 27 June 2016, <https://nationalinterest.org/>.

66. Galstyan, “Third Rome Rising,”

67. Andrew Osborn and Anton Zverev, “Putin Granted Chance for Presidential Powers until 2036 in Landslide Russian Vote,” *GlobalNews*, 2 July 2020, <https://globalnews.ca/>.

68. Świder, “Russian Neo-Eurasian Geopolitics,” 72.

69. “Huntington’s Disease and the Clash of Civilisation-States,” *The Economist*.

70. Pabst, “China, Russia, and the Return of the Civilisational State.”

71. Pabst, “China, Russia, and the Return of the Civilisational State.”

72. Tsygankov, “Crafting the State-Civilization,” 148.

73. Galstyan, “Third Rome Rising.”

74. Galstyan, “Third Rome Rising.”

75. Eberhardt, “The Izborsk Club and Their Geopolitical Phantasmagorias,” 135.

76. Eberhardt, “The Izborsk Club and Their Geopolitical Phantasmagorias,” 134.

77. Mjør, “Smuta: Cyclical Visions of History.”

78. Tsygankov, “Crafting the State-Civilization,” 152–53.

79. Tsygankov, “Crafting the State-Civilization,” 151.

80. Tsygankov, “Crafting the State-Civilization,” 151.

81. Tsygankov, “Crafting the State-Civilization,” 151.

82. Linde, “The Civilizational Turn in Russian Political Discourse,” 622.

83. Linde, “The Civilizational Turn in Russian Political Discourse,” 604.

84. Linde, “The Civilizational Turn in Russian Political Discourse,” 604.

85. “Vladimir Putin Visits Mount Athos, All-male Orthodox Enclave,” *BBC News*, 28 May 2016, <https://www.bbc.com/>.

86. Galstyan, "Third Rome Rising."
87. Natasha Bluth, "The Club That Wants Russia to Take over the World," *Coda Story*, 7 February 2018, <https://www.codastory.com/>.
88. Świder, "Russian Neo-Eurasian Geopolitics," 76.
89. Eberhardt, "The Izborsk Club and Their Geopolitical Phantasmagorias," 133.
90. Bluth, "The Club That Wants Russia to Take Over the World."
91. "The Rise of the Civilisational State," *DOC Research Institute*.
92. Ivan D. Loshkariov and Andrey A. Sushentsov, "Radicalization of Russians in Ukraine: From 'Accidental' Diaspora to Rebel Movement," *Southeast European and Black Sea Studies*, 16, no. 1 (2016): 1–20.
93. J. Sai Deepak, "Bharat: An Indic Civilisation State," *Daily Guardian: Indic Views*, 5 June 2020, <https://thedailyguardian.com/>.
94. Deepak, "Bharat: An Indic Civilisation State."
95. Deepak, "Bharat: An Indic Civilisation State."
96. "India's Sacred Geography," *Harvard Magazine*, March–April 2012, <https://harvardmagazine.com/>.
97. Raghava Krishna and Sreejit Datta, "Book Review of *A New Idea of India*: Individual Rights in a Civilisational State," *Swatantra Magazine*, 26 November 2020, <https://swatantramag.com/>.
98. Deepak, "Bharat: An Indic Civilisation State."
99. Deepak, "Bharat: An Indic Civilisation State."
100. Hindol Sengupta, "India and the Rise of the 'Civilisational State,'" *Fortune India*, 22 March 2019, <https://www.fortuneindia.com/>.
101. "PM Modi Praises Book by Young Authors, Ends up Crashing Their Website Due to High Traffic," *OpIndia*, 19 November 2020, <https://www.opindia.com/>.
102. Krishna and Datta, "Book Review of *A New Idea of India*."
103. Abhinav Prakash, "India Is Not a Nation-State, or a State-Nation. It Is a Civilisational-State," *Hindustan Times*, 19 December 2019, <https://www.hindustantimes.com/>.
104. Sengupta, "India and the Rise of the 'Civilisational State.'"
105. Sengupta, "India and the Rise of the 'Civilisational State.'"
106. Krishna and Datta, "Book Review of *A New Idea of India*."
107. Krishna and Datta, "Book Review of *A New Idea of India*."
108. Krishna and Datta, "Book Review of *A New Idea of India*."
109. Krishna and Datta, "Book Review of *A New Idea of India*."
110. Krishna and Datta, "Book Review of *A New Idea of India*."
111. Krishna and Datta, "Book Review of *A New Idea of India*."
112. Ishteyaque Amjad, "What It Will Take for India to Be Truly 'Atmanirbhar,'" *LiveMint*, 9 September 2020, <https://www.livemint.com/>.
113. Krishna and Datta, "Book Review of *A New Idea of India*."
114. Rachman, "China, India, and the Rise of the 'Civilisation State.'"
115. Raphaëlle Khan and Patrick Köllner, "Foreign Policy Think Tanks in India: New Actors, Divergent Profiles," *GIGA German Institute of Global and Area Studies*, February 2018, <https://www.giga-hamburg.de/>.

116. Charu Kartikeya, "8 RSS Think Tanks That Are Competing for Intellectual Space in Delhi," *CatchNews*, 13 February 2017, <http://www.catchnews.com/india-news/eight-rss-think-tanks-that-are-competing-for-the-intellectual-space-1440703010.html>.
117. Kartikeya, "8 RSS Think Tanks."
118. Kartikeya, "8 RSS Think Tanks."
119. Deepak, "Reclaiming a Civilisational Approach to the Constitution."
120. Deepak, "Reclaiming a Civilisational Approach to the Constitution."
121. J. Sai Deepak, "Protecting a Civilisation in the Age of Mercantilism and Global Citizenship," *Daily Guardian: Indic Views*, 3 July 2020, <https://thedailyguardian.com/>.
122. Deepak, "Protecting a Civilisation in the Age of Mercantilism and Global Citizenship."
123. "India's Reputation Not Decided by 'a Newspaper in New York,' Says MEA S Jaishankar," *National Herald India*, 16 November 2019, <https://www.nationalheraldindia.com/>.
124. "India's Reputation Not Decided by 'a Newspaper in New York,'" *National Herald India*.
125. "India's Reputation Not Decided by 'a Newspaper in New York,'" *National Herald India*.
126. "India's Reputation Not Decided by 'a Newspaper in New York,'" *National Herald India*.
127. "India's Reputation Not Decided by 'a Newspaper in New York,'" *National Herald India*.
128. Javid Husain, "Kashmir: A Civilizational Dispute?," *The Nation* [Pakistan], 6 August 2019, <https://nation.com.pk/>.
129. Jeevan Zutshi, "Article 370: A Way Forward for India and Pakistan," *India Currents*, 19 August 2019, <https://indiacurrents.com/>.
130. Zutshi, "Article 370."
131. Zutshi, "Article 370."
132. J. Sai Deepak, "Bharat, China, and Civilisational Conviction," *Daily Guardian: Indic Views*, 26 June 2020, <https://thedailyguardian.com/>.
133. Deepak, "Bharat, China, and Civilisational Conviction."
134. Deepak, "Bharat, China, and Civilisational Conviction."
135. Antara Ghosal Singh, "India, China, and the Elusive Pursuit of an Asian Century," *South Asian Voices*, 4 June 2020, <https://southasianvoices.org/>.
136. Singh, "India, China, and the Elusive Pursuit of an Asian Century."
137. Ravi Dutt Bajpai, "Civilizational Perspectives in International Relations and Contemporary India-China Relations," *E-International Relations*, 26 April 2018, <https://www.e-ir.info/>.
138. "India: A Wounded Civilization," *Penguin Random House Canada*, accessed 20 December 2020, <https://www.penguinrandomhouse.ca/>.
139. "Here's the Full Text of Donald Trump's Speech in Poland," *NBC News*, 6 July 2017, <https://www.nbcnews.com/>.

Maritime Great-Power Competition

Coast Guards in the Indo-Pacific

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Abstract

While China has historically been a land power, it has shifted focus to the maritime domain and has undertaken a grand shipbuilding effort. Moreover, People's Republic of China (PRC) is now using its navy and other maritime forces to challenge the United States and the current world order in great-power competition (GPC). Consequently, the maritime domain has become a contested environment, especially in the Indo-Pacific. The PRC is using its Coast Guard and maritime militia to exert sovereignty and keep adversaries off balance as it employs gray-zone operations at a threshold below armed conflict, while still engaging in aggressive actions that violate the sovereignty of other nations and international norms. The United States must become more active in counterbalancing the PRC's actions with not only diplomacy and freedom of navigation operations (FONOP) but also sovereignty patrols conducted with partner nations in the South China Sea. While most commentators focus solely on high-end warfare capabilities and assets, the nature of GPC is different from the nature of armed conflict and requires more flexibility politically, legally, and operationally. The US Coast Guard possesses a unique set of authorities and operational capabilities that make it particularly effective in gray-zone operations, which could allow the United States to exert a less escalatory military presence that bridges gaps between the high-intensity warfighting capabilities of other armed services and the diplomatic arm of the Department of State. Consequently, the US Coast Guard should be employed as a key cog for aligning US efforts with other armed services and partner nations in the region to provide more flexibility and capability in the gray zone of GPC.

Injustice anywhere is a threat to justice everywhere.

—Martin Luther King, Jr.

Introduction

China has historically been a continental or land-centric power; however, in the 1990s Beijing began shifting its focus to the maritime domain, and in the 2000s

China started transitioning its focus from its near seas to the far seas.¹ This change of focus is largely due to a growing economy that is more dependent on maritime trade and China's increasing need for natural resources from the maritime domain.² The People's Republic of China's (PRC) modern maritime strategy is to establish dominance in the near seas, where it has claimed territorial sovereignty over a vast majority of the features in the South China Sea (SCS) and the Senkaku/Diaoyu islands in the East China Sea (ECS).³ After establishing dominance in the near seas, the PRC's 2015 and 2019 military strategy documents indicate that it will transition to projecting influence onto the far seas.⁴

As the PRC's economy has grown, its other instruments of power have grown as well, allowing Beijing to engage in great-power competition (GPC) with the United States for global influence. As part of this GPC, the PRC is conducting gray-zone operations in multiple domains that are aggressive in nature but are below the threshold of armed attack.⁵ A major component of the PRC's strategy is projecting power in the maritime domain through the employment of a robust China Coast Guard (CCG) that effectively asserts maritime governance and provides low-intensity war-fighting capabilities in disputed areas of the SCS and ECS.⁶ The PRC's forward-leaning use of the CCG as an instrument of power is particularly advantageous due to the multifaceted purposes of coast guard organizations, which include maritime safety, law enforcement, maritime security, and low-intensity combat capabilities.⁷ This strategy places competing states in the awkward position of responding to coercive territorial challenges by armed, white-hulled CCG ships. In many cases, CCG operations are conducted in concert with the quasi-military maritime militia, which is increasingly referenced as the People's Armed Forces Maritime Militia (PAFMM), and the People's Liberation Army Navy (PLAN). In general, PLAN vessels patrol within a detectable distance of CCG and PAFMM vessels to deter adversarial high-end naval assets from taking action.

This article will provide background on the growing emphasis that the PRC places on its maritime power and then focus on the current operational framework it uses to implement China's maritime strategy. Specifically, the article will examine how the PRC uses the CCG to project sovereignty and low-intensity combat capabilities in disputed areas of the SCS and ECS, allowing PLAN vessels to provide overwatch and project power to the far seas.⁸ This article concludes with recommendations about the crucial role the US Coast Guard (USCG) can perform to help the United States form an international counterbalance to the PRC's current maritime strategy. The USCG is unique in that it is the only armed service imbued with the authorities, core competencies, and experience to unite partner nations, establish rule of law, and bolster maritime security and law en-

forcement capacity, while simultaneously projecting low-intensity combat capabilities.⁹ Accordingly, the USCG should be further integrated into Indo-Pacific operations to help the joint force and partner nations achieve national and common international objectives. Doing so will provide a new and effective solution to the gray-zone wrinkle that the PRC's strategy presents in the maritime portion of GPC.¹⁰ The result of the gray-zone competition in the SCS will likely have strategic effects on the overall GPC between the United States and the PRC and, ultimately, the entire world.¹¹

Background

The PRC's Maritime Strategy: Dominate Near Seas and Expand Influence and Deterrence to the Far Seas

China is no longer limited solely to being a continental power, and the PRC has clearly shifted its focus to maritime power projection. While the PRC's specific maritime strategy is not crystal clear, its general strategy guidance, administrative actions, and operations express a coherent national strategy.¹² One of the PRC's overarching goals is to achieve dominance in the SCS to control the sea lanes and natural resources located therein.¹³ The SCS has significant natural resources in the form of fisheries, natural gas, and petroleum products.¹⁴ One of the primary weaknesses of the PRC's economic growth is its scant supply of natural resources.¹⁵ Therefore, the PRC prioritizes access to natural resources for achieving greater economic success.¹⁶ Notably, the PRC is the world's largest importer of oil and perceives itself as having the greatest need for resources in the SCS and securing sea lanes in the Indo-Pacific.¹⁷ The PRC views the United States as its primary obstacle to achieving control over these resources and, ultimately, global economic primacy.¹⁸

With an eye toward claiming nearly all the SCS for itself, the PRC began asserting unique legal theories to justify its claims.¹⁹ If successful, the PRC would be afforded internationally recognized legal rights throughout the SCS, as depicted in its Nine-Dash Line, which stretches hundreds of miles from the Chinese coast.²⁰ However, in 2016, an Arbitral Tribunal found the PRC's maritime claims to the SCS inconsistent with the United Nations Convention on the Law of the Sea (UNCLOS), effectively rejecting the legal theories upon which the PRC based its claims.²¹ Nonetheless, the PRC disputed the authority of the Tribunal's decision and has continued to assert its territorial and maritime claims unabated, as the UNCLOS lacks enforcement mechanisms to implement the decision and the international community has not demonstrated sufficient will-

power and cohesion to hold the PRC accountable for its noncompliance with international law.²²

In the context of national security, the PRC recognizes that adversaries can not only threaten its mainland from the near seas but also from hundreds of miles away.²³ Consequently, the PRC strategy is to establish a decisive military deterrent beyond its near seas to the far seas by implementing extensive antiaccess/area-denial (A2/AD) capabilities.²⁴ As part of this strategy, the PRC has vastly expanded its overseas presence by obtaining agreements for base or port access in Myanmar, Sri Lanka, Bangladesh, Yemen, Oman, Seychelles, Djibouti, and Pakistan.²⁵ Furthermore, the PRC has undertaken a remarkable island-building campaign in the SCS that has created thousands of acres of land, which China has militarized by establishing airfields, bunkers, port facilities, radar sites, and air defense facilities.²⁶ These artificial islands provide the ability to maintain a continuous and permanent forward presence that allows the PRC to simultaneously assert maritime claims and project military power hundreds of miles away from the Chinese mainland.²⁷

As would be expected with its renewed focus on maritime power, the PRC has invested heavily in modernizing and growing the size and capability of the PLAN.²⁸ Accordingly, there has been greater investment in the PLAN's capability to establish dominance within the first island chain and project power further out into the far seas.²⁹ For example, before 2012, the PRC did not have any aircraft carriers but now has two operational aircraft carriers, with another under construction and expected to be delivered in 2021.³⁰ While not a focus of this assessment, the PRC has also invested heavily in upgrading the quantity and quality of air and space assets that will also provide military deterrence far from the Chinese mainland.³¹ Additionally, one of the primary efforts has been improving the PLAN's submarine assets and capabilities.³² Such actions are similar to strategies in previous world wars, for example when Germany was presented with more dominant sea powers, it invested in submarines in hopes of neutralizing more powerful adversarial fleets.³³ The PLAN has also increased naval exercises with Russia in contested areas, including the SCS and ECS, presenting an international force that combines two great powers to bolster the appearance of naval dominance and international cooperation in disputed areas.³⁴

The PRC's disregard for the rules-based order by building artificial islands and military outposts and exercising sovereignty in violation of other nations' interests and international law by patrolling the waters of other nations is an assault on national sovereignty and international maritime security. These destabilizing actions require a firm, united response from the international community. Unfortu-

nately, the international community has been unable to establish such a united front.

In the face of the PRC's diplomatic, information, military, and economic maneuvering, the Association of Southeast Asian Nations (ASEAN) has been equivocal in its response to the PRC's aggressive pursuit of territorial and maritime claims in the SCS.³⁵ This is largely due to the complex economic relationships between the PRC and individual ASEAN nations, which provides the PRC with substantial economic leverage over other nations in the region. For instance, the PRC can entice developing nations with promises of economic development loans and investments or threaten to exclude nations from economic initiatives if they officially oppose China's territorial and maritime claims.³⁶ Although ASEAN nations have been vague within that international body, individual member nations have increasingly expressed willingness to enter into agreements with the United States for maritime security and naval presence.³⁷

Nonetheless, the United States has largely decided not to conduct joint patrols or other multinational operations designed to protect the territorial sovereignty or maritime resource rights of its allies.³⁸ In fact, so long as there is no direct use or threat of armed attack, inaction by the United States has largely afforded the PRC freedom of action.³⁹ Consequently, the PRC's use of joint gray-zone operations has mostly been successful, achieving dominance in the SCS, complete control of the Scarborough Reef, significantly increasing patrols in waters surrounding the Diaoyu/Senkaku Islands, creating large manmade islands throughout the SCS, and constructing military bases on many of those artificial islands.⁴⁰ It should be noted that the PRC has successfully assumed exclusive or partial control over disputed islands and features that are claimed by nations with which the United States has defense treaties, thereby eroding US credibility with allies and adversaries.⁴¹ Independently, many Southeast Asian nations and Japan have begun to increase defense spending to build up their naval forces to counter PRC dominance.⁴²

The PRC's success at establishing maritime dominance by projecting the appearance of legitimate governance and low-intensity combat capability far from its shores has changed the nature of the competition in the Indo-Pacific.⁴³ Effective joint operations between the PLAN, CCG, and maritime militia could be instructive for effective joint-United States and international operations in the Indo-Pacific. The joint operational approach of the PLAN, CCG, and PAFMM overwhelms other nations in the SCS and ECS.⁴⁴ Consequently, the United States should provide a cornerstone patrol force to create a nucleus around which other nations in the SCS can form to protect their territorial integrity from an increasingly powerful and assertive PRC. The USCG is the most reasonable and

operationally agile instrument for gray-zone competition with the PRC and should be further incorporated into Indo-Pacific operations to assist partner nations in projecting maritime security and low-intensity war-fighting capabilities. The USCG has the authorities and competencies to unite partner nations in the Pacific with the goal of maintaining rule of law and enhancing maritime security, while simultaneously projecting low-intensity war-fighting capabilities and a low risk of escalation.⁴⁵

It is vital that the international community establish a legitimate and dynamic counterbalance to the PRC's increasingly assertive actions. Such a counterbalance will promote stability and reduce the risk of conflict in the face of the PRC's destabilizing actions in the Indo-Pacific. If the international community does not act, such challenges will extend to other locations around the globe, further undermining confidence in the current rules-based order and increasing the likelihood of conflict.⁴⁶ At least one commentator has specifically articulated that using force to resist or confound the PRC's destabilizing actions is more effective than international diplomacy and legal options.⁴⁷ Indeed, diplomacy on its own has yielded mixed results at best.⁴⁸

The CCG's Role in the PRC's Modern Maritime Strategy

The CCG is a key component of the PRC's strategy to assert jurisdiction throughout the SCS and ECS and to allow the PLAN to project power on the high seas.⁴⁹ The CCG is primarily used to physically assert and buttress territorial claims to various features in the SCS to control the maritime areas surrounding them.⁵⁰ The PLAN is never far away and always at a distance that is detectable to adversaries, providing overwatch and protecting CCG vessels and personnel.⁵¹ The PLAN has indicated that the PRC's territorial claims in the SCS are "core national interests."⁵² Accordingly, there has been vigorous concentration and investment in CCG and PAFMM capabilities to exert dominance within the SCS to allow the PLAN to begin transitioning its efforts further from the Chinese mainland to the open seas.⁵³ As part of this strategy the PRC has vastly expanded the size and capabilities of the CCG and PAFMM, enabling them to assert jurisdiction and authority throughout the disputed SCS region.⁵⁴

PRC representatives have characterized the CCG as a "law enforcement force that is militarizing and has the attributes of a police force."⁵⁵ The emphasis on using the CCG in this manner serves to assert sovereignty within the near seas constituting the SCS and ECS by using law enforcement, policing, and military power from the CCG.⁵⁶ According to the PRC's strategy, using the CCG to essentially "hold down the fort" in the near seas allows the PLAN to present military deterrence to the far seas together with the People's Liberation Army Air

Force (PLAAF) and People's Liberation Army Rocket Force (PLARF), thereby establishing an integrated A2/AD capability as far from the Chinese mainland as possible.⁵⁷

The CCG is a relatively new organization, being formed in 2013 from the integration of four other maritime law enforcement agencies to reduce redundancies and inefficiencies and to standardize operations.⁵⁸ As part of the Chinese military reorganization in 2018, the CCG was transferred to the People's Armed Police under the Central Military Commission (CMC), which is the PRC's equivalent to the US Department of Defense.⁵⁹ During this time, the CCG has rapidly grown in size and has been optimized to conduct gray-zone operations in coordination with the PLAN and the PAFMM.⁶⁰ The growth in the CCG is not just a quantitative expansion in vessel numbers but also includes qualitative improvements as well. These qualitative improvements include data-link communications, improved sea-going and sea-keeping capabilities, greater ranges, faster speeds, and improved lethal and nonlethal weapon systems.⁶¹ While the CCG's organic military capabilities and size have been greatly improved, its ability to communicate and coordinate with the PLAN has also been drastically improved following the transfer of the CCG to the CMC.⁶²

Recently, the CCG has been recognized as the largest coast guard service in the world, and the PRC is aggressively deploying it to establish maritime governance and project power in disputed regions of the Indo-Pacific.⁶³ The PRC has invested significant amounts of personnel, funding, and assets over the past eight years to substantially boost the capabilities of the CCG. As a result, the PRC now boasts a coast guard with the most vessels over 500 tons and the largest coast guard vessels in the world.⁶⁴ In fact, the two Zhaotou-class CCG vessels are larger than the US Navy's Arleigh-Burke destroyers and Ticonderoga cruisers.⁶⁵ Consequently, if these CCG vessels ever engage in shouldering maneuvers, they could simply push the US Navy vessels out of the way. Moreover, CCG vessels are increasingly armed with 30- and 76-millimeter weapon systems.⁶⁶ The extraordinarily rapid growth in size and capability of the CCG to the world's largest in less than eight years of existence is astounding. Moreover, the CCG's increased coordination with the PLAN, now the world's largest navy, and PAFMM have resulted in a far more cohesive approach to maritime operations. This growth and coordination have allowed the PRC to become much more assertive in expanding maritime claims because there is no regional nation or alliance that can match the CCG's quantitative and qualitative advantage.⁶⁷

The use of the CCG, even if it is more heavily armed and larger than other coast guards, reduces the likelihood of armed conflict and allows the PRC to project effective governance while limiting response options available to adversar-

ies.⁶⁸ This presents an asymmetric approach due to the dual humanitarian and military aspects of the CCG, which dissuades regional adversaries from responding with the only maritime forces capable of outnumbering or outgunning today's CCG, high-end war-fighting naval forces. At the same time, it allows the CCG to employ the use of weapons up to and including 76-millimeter cannons under the claim of law enforcement authority, not military force.⁶⁹

The PRC has begun to consistently employ the CCG in a manner that asserts sovereignty and projects low-intensity combat power in disputed maritime areas.⁷⁰ The use of the CCG to assert sovereignty in disputed areas is a unique use of the coast guard in power competition because it presents an appearance of maritime governance and legitimacy by using it for law enforcement and to project military power. All the while, the PRC puts maritime forces in place and intimidates neighboring nations but avoids the appearance of a military invasion that a traditional navy such as the PLAN would present.⁷¹

CCG Operations and Joint Operations with the PLAN and PAFMM

The CCG has been increasingly deployed to patrol and establish a presence within the SCS, ECS, and along the periphery of the Nine-Dash Line to establish governance and authority off the coasts of Vietnam, Malaysia, Indonesia, the Philippines, and other nations in the SCS.⁷² In some instances, the CCG has deployed 800 miles from the Chinese mainland to assert territorial jurisdiction in disputed areas within the exclusive economic zones of other nations.⁷³ From the perspective of other Southeast Asian nations, "The Chinese are not doing this under any commercial logic, they are doing it as an act of [asserting] sovereignty backed up by the Chinese government."⁷⁴

The CCG is also increasingly used in joint operations with the PLAN and the PAFMM.⁷⁵ The use of militia for defense operations and civil support is not a new concept for the PRC. Ever since the "Everyone a Soldier" initiative in 1958, the PRC has been developing locally based militia units with varying degrees of success.⁷⁶ Nonetheless, as the focus on the maritime domain has grown, so has the PRC's interest in employing maritime militia assets to help secure the near seas. To that end, vessels used by PAFMM units, which are also often used for fishing activities, have received upgrades to communication capabilities that enhance its effectiveness as a reconnaissance element that often operates under the People's Liberation Army's (PLA) chain of command.⁷⁷ The PLA has also started to standardize training programs and provide better compensation to PAFMM personnel to reduce the risks caused by poor order and discipline.⁷⁸ Some PAFMM units, such as the Sansha City maritime militia unit, primarily focus on military duties and engage in little or no fishing activities.⁷⁹ On the other hand, some

PAFMM units regularly engage in fishing activities, which adds to confusion about the status of these units and whether they are acting of their own volition or under orders of the PLA.

Adding to the confusion is the PRC's apparent lack of a single, standardized strategy for utilizing the PAFMM.⁸⁰ The use of the PAFMM appears to differ based on the particular location and operation being conducted, which creates confusion for other nations' militaries and law enforcement agencies that respond to actions by PRC fishing vessels because it is unknown whether they are acting under official orders from the PLA, or if they are acting in a civilian capacity. In the SCS, however, operations appear to be more standardized and entail a three-pronged joint operational strategy that employs the PAFMM on the first tier, the CCG on the second tier, and the PLAN on the third tier.⁸¹

Since the PAFMM switch back and forth between civilian and military status, it is usually relied upon to execute operations that would be too provocative for official PLAN or CCG units to undertake.⁸² For instance, the PAFMM will engage in aggressive surveillance operations and will also harass foreign military and civilian vessels in disputed areas.⁸³ Nonetheless, given the PAFMM has stronger connections with the PLA and regularly operates under the PLA chain of command, the PRC is very likely responsible for the actions conducted by the PAFMM, especially when under orders or the command and control of the PLA.⁸⁴ Consequently, the real question is whether the international community has the will and determination to hold the PRC accountable for the actions of the PAFMM.⁸⁵ Given the actions fall below the threshold of an armed attack, there appears to be little desire to confront the PRC over PAFMM activity due to the military, diplomatic, and economic risks to the nations in the SCS.⁸⁶

One prime example of the coordinated use of PLAN, CCG, and PAFMM assets occurred in 2014. In disputed waters between the PRC and Vietnam, the PRC employed more than 100 PAFMM, CCG, and PLAN vessels to cordon off an area around the exploratory drill rig Hai Yang Shi You 981 so that Vietnamese vessels could not penetrate the cordoned area around the drill rig.⁸⁷ The Vietnamese responded by sending dozens of vessels to the area in an attempt to breach the cordoned area and force the drill rig to leave.⁸⁸ Although no shots were fired, some vessels collided, resulting in the death of one Vietnamese civilian and the sinking of two vessels.⁸⁹ Vietnam's response imposed large financial costs to the PRC because it required more than 100 PRC vessels to protect the drill rig, but it also significantly increased the risk of escalation to armed conflict.⁹⁰

Additionally, the CCG has deployed to the disputed waters surrounding the Senkaku/Diaoyu Islands to conduct patrols in the territorial sea and escort Chinese fishing vessels operating in the territorial sea.⁹¹ At times, the number of

CCG vessels and their escorted fishing vessels overwhelms the capabilities of the Japan Coast Guard, which is internationally recognized as one of the best coast guard services in the world.⁹² Interestingly, PLAN vessels do not conduct such patrols, indicating the PRC's calculated use of the CCG to assert jurisdiction in the territorial sea while keeping the risk of escalation to armed conflict low. Nonetheless, PLAN vessels are often stationed near the CCG patrols to deter action by Japan's high-end naval assets.⁹³ Such actions demonstrate that the PRC will escalate its maritime claims with gray-zone operations backed by conventional military capabilities in disputed areas. The CCG has proven to be a critical feature in the PRC's assertion of maritime governance and military power to underwrite its expansionist maritime claims over disputed waters, all while avoiding the impression of a hostile military invasion.⁹⁴ Since 2016, the CCG has maintained a nearly continuous, rotating presence of increasingly capable, armed CCG vessels to assert sovereignty in the territorial seas of the Senkaku/Diaoyu Islands.⁹⁵

One reason for the PRC's actions is that territorial sovereignty requires a state to continuously and effectively exercise authority and jurisdiction of the territory to the exclusion of other nations.⁹⁶ The PRC regularly uses its three naval forces, with the CCG as the coordinating mechanism between the PLAN and PAFMM, to demonstrate authority and jurisdiction over the territory surrounding man-made islands and features to the exclusion of other nations.⁹⁷ Even if this display of authority and jurisdiction is not to the exclusion of all others, the presence of the PRC's maritime forces undermines the territorial claims of other nations.⁹⁸

One factor of a territorial claim is whether the exercise of exclusive authority and jurisdiction existed at the time the territorial dispute arose.⁹⁹ This date has been called the "critical date," and some have posited that the PRC's exercise of authority and jurisdiction has no effect on territorial claims because the disputes arose before the PRC assumed control or exclusion via the CCG.¹⁰⁰ Unfortunately, this hypothesis fails to account for the long-term strategy of the PRC. The PRC's strategy is not based on quick, decisive action but upon gradual shifts in the political, economic, and operational environments at the international and regional levels.¹⁰¹ If the PRC retains the initiative by continuing to build islands, conducting regular patrols, and excluding other nations from the area,¹⁰² determining the critical date that a territorial dispute arose can get murky. This hypothesis becomes even less reliable if the territorial claims are adjudicated many decades into the future. Moreover, the 2016 Tribunal decision demonstrates that counting on an international tribunal decision is not a reliable course of action. Five years after the tribunal issued its decision, the PRC continues to claim the maritime territory of other nations and increasingly uses the presence of over-

whelming maritime forces to exclude others and assert sovereignty throughout the SCS and ECS.¹⁰³

The PRC is imposing a methodical campaign of “quasi-aggression”¹⁰⁴ that overwhelms its opponents but does not rise to the level of an armed attack, allowing China to avoid international condemnation and reciprocal armed response.¹⁰⁵ On the continuum where peace is at one extreme and war is at the other, the PRC has chosen the middle of the continuum by engaging in offensive gray-zone operations within the conflict continuum to assert dominance and authority.¹⁰⁶ The PRC is shrewdly employing an increasingly powerful collection of diplomatic, information, military, and economic instruments to exploit gaps in the traditional margins between these instruments of power.¹⁰⁷ On the front lines of the disputes over sovereign territory, the combined operations of its sea services effectively implement an aggressive, expansionist foreign policy that employs force below the threshold of an armed attack.¹⁰⁸ The effect is a cohesive foreign policy that incrementally achieves national strategic goals while forgoing decisive operations, thereby complicating the international community’s response.¹⁰⁹ Given the significant hesitancy for nuclear powers to engage in high-intensity armed conflict, the volume of gray-zone operations is likely to increase.¹¹⁰ Therefore, although the United States must continue to enhance its ability to execute high-end warfare, it must also become more adept at conducting operations in a highly competitive operating environment below the threshold of high-intensity armed conflict.¹¹¹

The United States can establish a counterweight to the PRC’s strategy in the SCS by demonstrating resolve and leading a multinational response that provides allies in the region with the ability to secure their sovereign rights in the maritime domain. First and foremost, the United States should bring all its instruments of power to bear in the GPC unfolding through gray-zone operations in the SCS. This includes not only high-end war-fighting capabilities but also gray-zone capabilities that specialize in security, law enforcement, and rule of law. The USCG is the armed force designed for maritime gray-zone operations and should be further incorporated into operations in the SCS. The USCG has unique authorities, core competencies, and experience that make it the ideal instrument for uniting partner nations and bolstering the rule of law.¹¹²

The USCG’s Role as an International Counterweight to the PRC’s Modern Maritime Strategy

The United States’ approach has largely relied on diplomacy, international legal pressure, and unilateral freedom of navigation operations (FONOP) to curtail or slow the PRC’s expansion in the maritime domain of the Indo-Pacific.¹¹³ These

efforts have received mixed results, leading some to suggest the United States has lost credibility throughout the world for its failure to work with its allies to stop the PRC's infringements upon the national sovereignty of neighboring nations.¹¹⁴ Many have begun to call for the United States to not only utilize diplomacy and targeted economic instruments of power to contain the PRC's aggressive maritime expansion but also to employ the military instrument of power by utilizing seapower on the front lines with our allies.¹¹⁵ As Pres. John F. Kennedy explained so eloquently in 1961, "Diplomacy and defense are not substitutes for one another. Either alone would fail."¹¹⁶ Indeed, this advice is applicable to the GPC of today.

While most agree that more US military support to allies in the Indo-Pacific is needed to shore up the other instruments of power already in play, the US Navy should not be the only means of employing the military instrument of power. Even the commentators who advocate for additional US Navy assets concede it risks escalating the situation and giving the appearance of US Navy combatants "bullying" fisherman and coast guard forces.¹¹⁷ Accordingly, a better approach would be to adopt portions of the PRC's operational framework and couple them with US and international strengths and values.

To keep pace in the GPC underway in the maritime domain, the USCG should be the fulcrum for maritime gray-zone operations. The USCG regularly partners with allied nations' navies, coast guards, and law enforcement agencies to train, advise, assist, and conduct joint patrols.¹¹⁸ These joint patrols can also include shipriders from partner nations. Moreover, given recent indications that the CCG is training for amphibious assaults,¹¹⁹ the USCG should be incorporated into planning, training, and exercises for such scenarios to prepare for joint operations with US Navy task forces and US Marine Corps (USMC) littoral regiments.¹²⁰ This approach achieves the US Navy, USMC, and USCG Triservice "Advantage at Sea" strategy's stated goal of delivering and generating "Integrated All-domain Naval Power" from all three US sea services with partner nations to prevail.¹²¹

While the new "Advantage at Sea" is a great start for addressing the PRC's skillful use of gray-zone operations to exploit gaps between traditional instruments of power, it falls short by failing to "tightly integrate" the USCG into planning, exercising, and experimentation.¹²² This is a significant shortcoming given the nature of GPC and that the PRC has already achieved a *fait accompli* with many of its expansionist activities in the SCS. The United States has failed to adequately design and plan for joint operations in the maritime gray zone, and simply doing more of the same will not alter the outcome of gray-zone operations within the current GPC. Specifically, the joint force should include forces that are better designed and purposed for gray-zone operations. As stated by the Commandant of the Coast Guard, "Our niche is operating in that threshold below the

level of armed conflict, the gray zone. . . . Our broad unique authorities and our people and partnerships are a tremendous asset.”¹²³ Accordingly, the USCG must be properly resourced and prepared for greater focus on defense operations in the Indo-Pacific, otherwise the PRC’s strategic gray-zone victories will continue.¹²⁴

The USCG’s unique authorities and competencies include law enforcement, maritime security, search-and-rescue, and low-intensity military capabilities.¹²⁵ Some commentators have suggested that the US Navy needs to develop new commands, create new platforms, and establish new training programs so that it can develop competencies in maritime security and gray-zone operations.¹²⁶ This would create a costly and redundant scenario, as the commands, platforms, and training programs already exist in the USCG, which is the US agency with primary responsibility for these competencies.¹²⁷

The USCG also provides superior operational latitude because the USCG enjoys greater authority and international recognition as a global force for safety and security, not high-intensity warfare operations. Consequently, the USCG provides a more appropriate approach and legitimizes the US goal of establishing a unified international response to the PRC’s derogation of international norms, as opposed to utilizing the US Navy, which would likely increase the risk of escalation from gray-zone operations to armed conflict.¹²⁸ For example, the USCG has established relationships with partner nations around the world to enhance maritime security, including nations within the Indo-Pacific region, and regularly conducts FONOPs in the region.¹²⁹ Increasing the USCG’s capacity to conduct this mission is far more effective, both operationally and financially, while also keeping the risk of escalation to armed conflict low.¹³⁰ The costs of growing USCG capacity and incorporating it more thoroughly into Indo-Pacific operations would simply require additional hulls and personnel for the USCG, but the improved authorities, capabilities, capacities, and partnerships leveraged would be invaluable to Indo-Pacific Command in gray-zone competition.¹³¹ Like PLAN and CCG operations, increasing interoperability in the joint environment, and possibly transferring the USCG to the Department of Defense, would allow for increased operational and fiscal efficiency.¹³²

Recommendations

General/Overall Recommendations: Bring All Your Players to the Big Game

Just like football teams do not leave their specialty players, such as slot receivers and dime defenders, at home when they go to the playoffs, the United States must

incorporate all national instruments of power into competing in the new era of GPC. The international community must issue a united and unequivocal renunciation of the PRC's disregard for international law governing the maritime domain and work together to counterbalance the PRC's claims and actions that are clearly outside the scope of its authority. To accomplish this goal, the United States should provide a surface force to assist and coordinate with our international allies in defending their sovereignty.¹³³ While some have recommended developing new US Navy capabilities and competencies to provide maritime security and low-intensity combat capabilities to address the PRC's operations in the Indo-Pacific, such an approach fails to account for the coordinated use of the PRC's three sea forces.¹³⁴ The first line is the PAFMM, the second line is the CCG, and the third line is the PLAN. The PRC's joint operational approach risks US Navy gray hulls engaging PAFMM or white-hull CCG vessels, which would allow the PRC to gain the moral high ground and risk further escalating the situation to one that would permit use of PRC gray hulls.¹³⁵ Additionally, it is inefficient to employ high-end military capabilities, and possibly ordnance, on low-end combat assets while high-end PLAN assets are waiting in the wings for just such an opportunity.¹³⁶

Solely employing additional US Navy assets simply provides more of the same options that the United States already possesses in relative abundance—pronounced military capabilities that would only serve to escalate the power competition and significantly increase the risk of armed conflict.¹³⁷ In fact, the US Navy already has approximately 60 percent of its fleet deployed to the Indo-Pacific.¹³⁸ What the United States truly needs is additional means of pursuing national objectives in gray-zone operations of GPC.¹³⁹ Consequently, the United States should invest in a capability that projects international legitimacy, diplomacy, maritime security and governance, low-intensity war-fighting capabilities, and has a superb international reputation as a lifesaving institution dedicated to rule of law.

The USCG is the United States instrument that already encapsulates these factors as core competencies. These competencies are most effectively and efficiently exercised by the armed service with the statutory authority and experience executing these missions.¹⁴⁰ Consequently, it is more efficient to invest in the USCG so it can assume growing mission sets aligned with its core authorities and competencies.

Recommendations for Leveraging USCG Authorities, Competencies, Capabilities, and Partnerships

The United States should increase the capacity of the USCG by expanding the number of assets and crews for executing maritime security and low-intensity power projection in coordination with partner nations in the Indo-Pacific. The USCG has already signed bilateral and shiprider agreements with many other nations, including the PRC, for conducting law enforcement and maritime security operations.¹⁴¹ While many of the agreements and operations have been in South and Central America, they could easily include nations in the SCS so long as adequate forces and platforms are provided.¹⁴²

Growing the capacity of the USCG and integrating it more closely with the US Navy and USMC allows for greater authorities, presence, and functional US involvement at more levels of the conflict continuum, which is a requisite for gray-zone operations.¹⁴³ Indeed, as recently recognized by all three US sea services, gray-zone victories can achieve strategic-level effects.¹⁴⁴ To leverage these additional authorities and competencies for gray-zone competition, the USCG should have a command incorporated into the US Navy's Seventh Fleet in support of US Indo-Pacific Command to increase coordination in the joint operational environment. This can be modeled after Patrol Forces Southwest Asia (PATFORSWA), where a USCG patrol boat squadron is assigned to the US Navy's Fifth Fleet in support of US Central Command.¹⁴⁵ For example, emulating the success of PATFORSWA by establishing a Patrol Forces Indo-Pacific (PATFORIPAC) with National Security Cutters, Offshore Patrol Cutters, and Fast Response Cutters would be simpler and would further legitimize the US effort to counterbalance the PRC's growing maritime pressure throughout the Indo-Pacific. Subic Bay, or Guam in the alternative, would be an ideal location to homeport a command with the mission to provide linchpin US support for helping to train, advise, and assist international partners in the SCS and to conduct joint operations with the US Navy and USMC.¹⁴⁶

Due to its unique authorities as a law enforcement agency and armed service, the USCG has suffered from redundancies built into its framework. The USCG employs acquisition, maintenance, financial, travel, and other management systems that mirror systems maintained by the Department of Defense but which are funded and operated independently.¹⁴⁷ The redundancy of these systems leads to inefficiencies that can be remedied by incorporation into Department of Defense systems, since the USCG maintains the capability to coordinate and augment the US Navy. A study should be conducted to determine what efficiencies could be achieved by transferring the USCG into the Department of Defense as

an independent service.¹⁴⁸ Transferring the USCG to the Department of Defense would increase the effectiveness of joint operations, similar to what the CCG and PLAN have achieved, and the likelihood of achieving the goal for Integrated All-Domain Naval Power as set forth of the “Advantage at Sea” Triservice strategy.¹⁴⁹ Additionally, transferring the USCG to the Department of Defense could provide fiscal and operational efficiencies as acquisitions, logistics and other frameworks are merged and synchronized.¹⁵⁰

Such a move can be expected to prove financially advantageous after initial adjustments are completed. For instance, the cost of each hull for a ship or airframe for an aircraft could be reduced as the redundancies are disposed with and logistics supply lines are merged. This is particularly applicable for vessels and aircraft that have similar operating requirements, such as Sikorsky H-60 helicopters, the US Navy’s Littoral Combat Ship, and the USCG’s National Security Cutter.¹⁵¹ Moreover, both domestic and expeditionary operations, such as maritime force protection within US territorial seas¹⁵² and joint operations in the Indo-Pacific, would be improved due to tighter integration among the sea services. Nonetheless, care should be taken to ensure the USCG remains an independent entity within the Department of Defense to properly insulate it from military services that are specifically precluded from conducting law enforcement operations.¹⁵³ Moreover, the USCG’s missions should remain consistent, and care should be taken to avoid mission creep to protect and maintain the USCG’s reputation domestically and with the international community.

Conclusion

The PRC’s gray-zone operations are beginning to look very much like a “war without gun smoke,” as it continues to incrementally occupy ever-increasing portions of the Indo-Pacific maritime domain.¹⁵⁴ The PRC is employing the CCG in a manner designed to legitimize China’s claims to disputed maritime areas within the SCS and ECS and overwhelm nations with competing maritime claims. The PRC has grown its coast guard to the largest in the world and is deploying it to fill a unique niche that conveys sovereignty, law enforcement, maritime security, and low-intensity conflict capabilities, thereby successfully executing low-risk gray-zone operations.

The PRC’s approach essentially uses the coast guard’s international recognition as law enforcement entity and lifesaver to project legitimate and even-handed governance, while simultaneously leveraging the military capabilities of the CCG and nearby PLAN support to intimidate its regional neighbors. The PRC’s new joint approach to maritime disputes can only be offset by a united international

response that establishes strong maritime governance capabilities, especially by those nations in the Indo-Pacific.

The USCG has the experience, authorities, and competencies for uniting the joint and international response to counterbalance the PRC's assertion of authority and governance in these disputed regions. Research should be undertaken to determine how significantly the USCG should be integrated with the US Navy for purposes of improving economic and operational efficiency. A joint team of military and civilian representatives from the US Navy, USMC, USCG, and Department of Defense, with input from combatant commands, should assess the operational and fiscal efficiencies that would likely result from eliminating redundant acquisition, finance, travel, and personnel systems and the degree to which operational synergy could be enhanced among the three maritime services.

Although the proposition to use the USCG as a primary instrument in the ongoing maritime competition in the Indo-Pacific might seem optimistic, it provides the opportunity for a new approach. As the adage goes, simply doing the same things and expecting a different result is illogical. The change in US presidential administration in 2021, together with the 2020 change in US policy regarding the SCS, provides a great opportunity for a new approach that makes the United States and its allies more competitive while keeping the risk of escalation low.¹⁵⁵ If nothing is done to stem the growth and exercise of the PRC's projection of maritime authority and military capabilities in disputed maritime areas, the PRC and other great-power competitors are likely to further derogate international norms and pressure other nations into compromising their sovereignty and maritime resources.¹⁵⁶ In contrast to creating new commands, competencies, and assets for the US Navy that would risk escalating to armed conflict,¹⁵⁷ growing the capacity of the USCG would be a more effective and legitimate course of action. As discussed above, emulating the success of PATFORSWA in the Indo-Pacific would provide more options and operational flexibility. As stated by Admiral Tomohisa Takei, the previous Chief of Staff for the Japan Maritime Self-Defense Force, "China should not be the only party with flexible, finely calibrated options."¹⁵⁸ The USCG provides much more flexibility given its "niche is operating in that threshold below the level of armed conflict, the gray zone."¹⁵⁹ The USCG is the US agency designed to conduct maritime gray-zone operations and has been doing so for more than 230 years. 🌀

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Notes

1. Peter A. Dutton, "Conceptualizing China's Maritime Gray Zone Operations," in *China's Maritime Gray Zone Operations*, ed. Andrew S. Erickson and Ryan D. Martinson (Annapolis, MD: Naval Institute Press, 2019), 31; Andrew S. Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships," *National Interest*, 26 February 2018, <https://nationalinterest.org/>; Daniel M. Hartnett and Frederic Velluci, "Toward a Maritime Strategy: An Analysis of Chinese Views Since the Early 1990s," in *The Chinese Navy, Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders et al. (Washington, DC: NDU Press, 2011), 81; and Nan Li, "The Evolution of China's Naval Strategy and Capabilities: From 'Near Coast' and 'Near Seas' to 'Far Seas'," in *The Chinese Navy, Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders et al. (Washington, DC: NDU Press, 2011), 109–10.
2. Geoffrey F. Gresh, "The New Great Game at Sea," *War on the Rocks*, 8 December 2020, <https://warontherocks.com/>; and Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 32; Hartnett and Vellucci, "Toward a Maritime Strategy," 81.
3. People's Republic of China, The State Council Information Office, "Chapter IV," in *China's National Defense in the New Era* (Beijing: Foreign Languages Press, 2019), <http://www.xinhuanet.com/>; and M. Taylor Fravel and Alexander Lieberman, "Beyond the Moat: The PLAN's Evolving Interests and Potential Influence," in *The Chinese Navy, Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders et al. (Washington, DC: NDU Press, 2011), 51.
4. Andrew Latham, "Mahan, Corbett, and China's Maritime Grand Strategy," *The Diplomat*, 24 August 2020, <https://thediplomat.com/>; Thomas R. McCabe, "Air and Space Power with Chinese Characteristics, China's Military Revolution," *Air & Space Power Journal* 34, no. 1 (Spring 2020), 32–33, <https://www.airuniversity.af.edu/>; People's Republic of China, *China's National Defense in the New Era*, Ch. IV; Zhang, "The South China Sea, A Chinese Perspective," 230; Lim, "China's naval strategy," 22.
5. Goure, "New United States Maritime Strategy Makes Case for More Coast Guard Cutters"; Tallis, "Maritime Security and Great Power Competition: Maintaining the US-led International Order," 21–22; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."
6. Granados, "The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty," 53; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 180; Morris, "Organizing for the Gray Zone: Assessing the Rights Protection Capabilities of the New China Coast Guard," 82–84; US Department of Defense, *Asia-Pacific Maritime Security Strategy 2015*, 14.

7. Morris, "Organizing for the Gray Zone: Assessing the Rights Protection Capabilities of the New China Coast Guard," 81-84.
8. Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."
9. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 7; Sinclair and McHaty, "The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific"; see e.g., US Department of Homeland Security, *Counter Drug Operations*; Wright, "Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific."
10. Goure, "New United States Maritime Strategy Makes Case for More Coast Guard Cutters."
11. Gresh, "The New Great Game at Sea"; Wiegand, "How Biden should Handle the South China Sea Disputes"; McCabe, "Air and Space Power with Chinese Characteristics, China's Military Revolution," 33.
12. Glaser and Funaiolo, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 202; Dowdy, "The United States and security issues in the IO-WestPac maritime region," 16.
13. Gresh, "The New Great Game at Sea"; US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 3; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 32.
14. Zhang, "The South China Sea, A Chinese Perspective," 228-229; Bitzinger, "Recent Developments in Naval and Maritime Modernization in the Asia-Pacific," 25.
15. Lukin, *China and Russia: The New Rapprochement*, 19-20.
16. Ibid.
17. US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 3; Zhang, "The South China Sea, A Chinese Perspective," 229.
18. Lukin, *China and Russia: The New Rapprochement*, 19-20.
19. Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 33; Fravel and Lieberman, "Beyond the Moat: The PLAN's Evolving Interests and Potential Influence," 51; US Department of State, *Limits in the Seas, No. 143, China, Maritime Claims in the South China Sea*.
20. US Department of State, *Limits in the Seas, No. 143, China, Maritime Claims in the South China Sea*.
21. Dowdy, "The United States and security issues in the IO-WestPac maritime region," 11; Lukin, *China and Russia: The New Rapprochement*, 35; Zhang, "The South China Sea, A Chinese Perspective," 226.
22. Wiegand, "How Biden should Handle the South China Sea Disputes"; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 32; Zhang, "The South China Sea, A Chinese Perspective," 226, 234, 237.
23. Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 31; Lim, "China's naval strategy," 23-24.
24. McCabe, "Air and Space Power with Chinese Characteristics, China's Military Revolution," 20-21; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships"; Lim, "China's naval strategy," 23-24.
25. Dowdy, "The United States and security issues in the IO-WestPac maritime region," 14-15; Lim, "China's naval strategy," 28.

26. Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition"; US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 101-102; Zhang, "The South China Sea, A Chinese Perspective," 232-233, 235.

27. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 101-102; Glaser and Funaiole, "South China Sea: Assessing Chinese Parana-val Behavior within the Nine-Dash Line," 201; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 21; US Department of Defense, *Asia-Pacific Maritime Security Strategy 2015*, 16-17.

28. US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 2-4; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 97-108.

29. People's Republic of China, *China's National Defense in the New Era*, Ch. IV; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 31; Dowdy, "The United States and security issues in the IO-WestPac maritime region," 14-15.

30. US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 11-16; McCabe, "Air and Space Power with Chinese Characteristics, China's Military Revolution," 32-33; Rupold, *Superpower China – Understanding the Chinese world power from Asia*, 171; Lim, "China's naval strategy," 27-28.

31. *See generally*, McCabe, "Air and Space Power with Chinese Characteristics, China's Military Revolution."

32. Lim, "China's naval strategy," 24-25; O'Rourke, "PLAN Force Structure: Submarines, Ships, and Aircraft," 144, 147; Bitzinger, "Recent Developments in Naval and Maritime Modernization in the Asia-Pacific," 24.

33. US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 8-11; Rupold, *Superpower China – Understanding the Chinese world power from Asia*, 171; Lim, "China's naval strategy," 24-25.

34. Gresh, "The New Great Game at Sea"; Schwartz, "The Military Dimension in Sino-Russian Relations," 97-98; Lukin, *China and Russia: The New Rapprochement*, 158; *see also* US Department of Defense, *Summary of the 2018 National Defense Strategy*, 2.

35. Zhang, "The South China Sea, A Chinese Perspective," 234-235.

36. Wiegand, "How Biden should Handle the South China Sea Disputes"; *see, e.g.*, Eisenman and Heginbotham, "China's Relations with Africa, Latin America, and the Middle East," 294-295, 300, 305-306; US Department of Defense, *Summary of the 2018 National Defense Strategy*, 1; Zhang, "The South China Sea, A Chinese Perspective," 235-236; US Office of the President, *2017 National Security Strategy*, 46.

37. Dowdy, "The United States and security issues in the IO-WestPac maritime region," 15.

38. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 292, 296.

39. Mazarr, "The Role of Deterrence in Responding to Chinese Gray Zone Campaigns," 260.

40. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 3; Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Mazarr, "The Role of Deterrence in Responding to Chinese Gray Zone Campaigns," 259-260; Glaser and Funaiole, "South China Sea: Assessing Chinese Parana-val Behavior within the Nine-Dash Line," 189, 192,

199; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 171; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 94-97; Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 58; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 35; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us"; US Department of Defense, *Asia-Pacific Maritime Security Strategy 2015*, 14.

41. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 5; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 291; Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 286-289; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 209-211.

42. Granados, "The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty," 51; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 220-223; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us"; US Department of Defense, *Asia-Pacific Maritime Security Strategy 2015*, 11; Bitzinger, "Recent Developments in Naval and Maritime Modernization in the Asia-Pacific," 34-36.

43. Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 101-104.

44. Mazarr, "The Role of Deterrence in Responding to Chinese Gray Zone Campaigns," 259; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 213-215, 225-226; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 170-176; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 35; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships"; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

45. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 12; US Department of Homeland Security, *Counter Drug Operations*; Wright, "Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific"; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 298; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

46. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 291-292; Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 281, 286-289; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 209-210, 220-223; Bitzinger, "Recent Developments in Naval and Maritime Modernization in the Asia-Pacific," 34-36.

47. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 295-296; Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 286-289, 285.

48. Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 286-289; Takei, "The Time Factor in Maritime Gray Zone Operations," 250.

49. US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 4; Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Takei, "The Time Factor in Maritime Gray Zone Operations," 250; Yamamoto, "The East China Sea: Future Trends, Responses, and Scenarios," 234; Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 202; Kennedy, "Gray Forces in Blue Territory: The Grammar of

Chinese Maritime Militia Gray Zone Operations,” 180; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 8.

50. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 29, 69-71; US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 4; Kennedy, “Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations,” 180; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 92; Dutton, “Conceptualizing China's Maritime Gray Zone Operations,” 33-34.

51. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 70-71; Dutton, “Conceptualizing China's Maritime Gray Zone Operations,” 34.

52. Zhang, “The South China Sea, A Chinese Perspective,” 237.

53. People's Republic of China, *China's National Defense in the New Era*, Ch. IV; Dutton, “Conceptualizing China's Maritime Gray Zone Operations,” 31; Dowdy, “The United States and security issues in the IO-WestPac maritime region,” 14-15.

54. Goure, “New United States Maritime Strategy Makes Case for More Coast Guard Cutters”; Glaser and Funaiolo, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 201-202; Hickey, Erickson, and Holst, “Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends,” 108-109; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 96-97; Dowdy, “The United States and security issues in the IO-WestPac maritime region,” 14-15; Lim, “China's naval strategy,” 28.

55. Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 101; *see also* Liff, “China's Maritime Gray Zone Operations in the East China Sea and Japan's Response,” 218, 225-226.

56. Dutton, “Conceptualizing China's Maritime Gray Zone Operations,” 31; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us”; Lim, “China's naval strategy,” 23-24.

57. McCabe, “Air and Space Power with Chinese Characteristics, China's Military Revolution,” 20-21; Erickson, “Numbers Matter: China's Three ‘Navies’ Each Have the World's Most Ships”; Lim, “China's naval strategy,” 23-24.

58. Hickey, Erickson, and Holst, “Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends,” 112; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 93; Morris, “Organizing for the Gray Zone: Assessing the Rights Protection Capabilities of the New China Coast Guard,” 77, 80; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 5; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

59. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 29, 69-71; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 101; Morris, “Organizing for the Gray Zone: Assessing the Rights Protection Capabilities of the New China Coast Guard,” 77; Wuthnow, *China's Other Army: The People's Armed Police in an Era of Reform*, 15.

60. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 70-71; Liff, “China's Maritime Gray Zone Operations in the East China Sea and Japan's Response,” 217-218; Glaser and Funaiolo, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 202; Hickey, Erickson, and Holst, “Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends,” 108-110;

Erickson and Martinson, *China's Maritime Gray Zone Operations*, 4-5; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 20.

61. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 71; Takei, "The Time Factor in Maritime Gray Zone Operations," 250-251; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 217-218; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 108-110, 115-126, 128-129; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

62. Erickson and Martinson, *China's Maritime Gray Zone Operations*, 7.

63. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 70-71; US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 4; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 108-109; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 4-5; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

64. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 71; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 108-109; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 5; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 21; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

65. Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 201; Erickson, "Maritime Numbers Game: Understanding and Responding to China's Three Sea Forces"; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

66. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 71; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 109-110, 123-124; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 97-99; Erickson, "Maritime Numbers Game: Understanding and Responding to China's Three Sea Forces"; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships"; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

67. Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 218; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 108-109; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 93-97; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships"; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

68. Takei, "The Time Factor in Maritime Gray Zone Operations," 250-251; Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 190-191.

69. Takei, "The Time Factor in Maritime Gray Zone Operations," 250-251.

70. Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 101-104; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

71. Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 16.

72. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 100; Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 190-193, 197; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 7.

73. Massola and Rosa, "Natuna: an idyll on the front line between Indonesia and China"; Dowdy, "The United States and security issues in the IO-WestPac maritime region," 11-12; Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 190-193.

74. Massola and Rosa, "Natuna: an idyll on the front line between Indonesia and China."

75. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 29, 69-71, 100; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 294; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 218; Glaser and Funaiole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 192, 197; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 171-176, 180; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 34; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 20; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

76. Gittings, "China's Militia," 103-104, 107-110, 113-116.

77. Granados, "The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty," 53; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 294; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 169, 177-179; Stokes, "China's Maritime Militia and Reconnaissance-Strike Operations," 156-157, 160; Hickey, Erickson, and Holst, "Chinese Maritime Law Enforcement Surface Platforms: Order of Battle, Capabilities, and Trends," 109; Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 56-57; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 6; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 21.

78. US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 71-72; Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 56-57; Rielage and Strange, "Is the Maritime Militia Prosecuting a People's War at Sea?" 45; Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 25-26.

79. Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 171; Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 54; Rielage and Strange, "Is the Maritime Militia Prosecuting a People's War at Sea?" 45; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

80. Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Rielage and Strange, "Is the Maritime Militia Prosecuting a People's War at Sea?" 47.

81. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 3; US Department of Defense, *Military and Security Developments Involving the People's Republic of China 2020*, 71-72; Granados, "The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty," 48; Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Rielage and Strange, "Is the Maritime Militia Prosecuting a People's War at Sea?" 47.

82. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 3; Granados, "The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty," 48; Stokes, "China's Maritime Militia and Reconnaissance-Strike Operations," 157.

83. Erickson and Martinson, *China's Maritime Gray Zone Operations*, 6-7; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

84. Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 57.

85. *Ibid.*, 68.

86. Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 211, 220; Glaser and Funairole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 189, 191, 202; *see e.g.*, Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 60-66.

87. Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 282-283; Glaser and Funairole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 192; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 176; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 96-97; Odom, "When Gray Zone Meets Black Letter: China's Paranaul Strategy and International Law," 58; Erickson and Martinson, *China's Maritime Gray Zone Operations*, 9.

88. Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 283-284; Glaser and Funairole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 192.

89. Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 283; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 96-97; Erickson, "Numbers Matter: China's Three 'Navies' Each Have the World's Most Ships."

90. Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 282-284; Glaser and Funairole, "South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line," 192.

91. Dominguez, "Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands"; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 207; Kennedy, "Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations," 172; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 94-95; Erickson and Martinson, *China's Mari-*

time Gray Zone Operations, 7; Dowdy, “The United States and security issues in the IO-WestPac maritime region,” 9.

92. Liff, “China’s Maritime Gray Zone Operations in the East China Sea and Japan’s Response,” 207–209, 213–215, 226; Erickson, “Maritime Numbers Game: Understanding and Responding to China’s Three Sea Forces.”

93. Takei, “The Time Factor in Maritime Gray Zone Operations,” 250; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 23.

94. Dowdy, “The United States and security issues in the IO-WestPac maritime region,” 12–13; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

95. US Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2020*, 97; Dominguez, “Update: China Coast Guard despatching Zhaotou-class cutters to waters around disputed Senkaku/Diaoyu Islands”; Takei, “The Time Factor in Maritime Gray Zone Operations,” 245; Liff, “China’s Maritime Gray Zone Operations in the East China Sea and Japan’s Response,” 207, 210, 212–213; Kennedy, “Gray Forces in Blue Territory: The Grammar of Chinese Maritime Militia Gray Zone Operations,” 171; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 94–95.

96. Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 57–58.

97. US Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2020*, 29, 69–71; Glaser and Funaiole, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 201–202; Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 57–58.

98. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 3; Glaser and Funaiole, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 189; Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 58, 67.

99. Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 58, 67.

100. *See, e.g.*, Ibid., 58–59, 67.

101. *See, e.g.*, Eisenman and Heginbotham, “China’s Relations with Africa, Latin America, and the Middle East,” 294–295, 300, 305–306; Mazarr, “The Role of Deterrence in Responding to Chinese Gray Zone Campaigns,” 260.

102. Mazarr, “The Role of Deterrence in Responding to Chinese Gray Zone Campaigns,” 259–260; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 97; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 34; Erickson, “Numbers Matter: China’s Three ‘Navies’ Each Have the World’s Most Ships.”

103. Liff, “China’s Maritime Gray Zone Operations in the East China Sea and Japan’s Response,” 213–215, 225–226; Glaser and Funaiole, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 201–202; Erickson, “Numbers Matter: China’s Three ‘Navies’ Each Have the World’s Most Ships”; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

104. Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 33–34, 36.

105. Liff, “China’s Maritime Gray Zone Operations in the East China Sea and Japan’s Response,” 211, 213–215, 225–226; Glaser and Funaiole, “South China Sea: Assessing Chinese Pa-

ranaval Behavior within the Nine-Dash Line,” 189-191; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 92-93; Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 65-66; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 36; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 18-19; Erickson, “Numbers Matter: China’s Three ‘Navies’ Each Have the World’s Most Ships”; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

106. Goure, “New United States Maritime Strategy Makes Case for More Coast Guard Cutters”; Takei, “The Time Factor in Maritime Gray Zone Operations,” 245-247; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 30-31; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 16.

107. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 3; Harkins, “No, China Did Not ‘Expel’ a US Warship from its Territory, Navy Says”; Sorace, “Chinese Military calls US ‘Destroyer of World Peace’ following critical DOD report”; Eisenman and Heginbotham, “China’s Relations with Africa, Latin America, and the Middle East,” 294-307; Moreland, “Vietnam and the Philippines as Case Studies in Dispute Management with China,” 285; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 18-19, 26; US Department of Defense, *Summary of the 2018 National Defense Strategy*, 2.

108. Moreland, “Vietnam and the Philippines as Case Studies in Dispute Management with China,” 281-289; Liff, “China’s Maritime Gray Zone Operations in the East China Sea and Japan’s Response,” 211, 218, 220; Glaser and Funaiolo, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 189, 191, 202; Martinson, “Militarizing Coast Guard Operations in the Maritime Gray Zone,” 92-93; Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 63-66; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 30-31, 36; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 18.

109. Moreland, “Vietnam and the Philippines as Case Studies in Dispute Management with China,” 281-289; Mazarr, “The Role of Deterrence in Responding to Chinese Gray Zone Campaigns,” 260.

110. Grynkewich, “An Operational Imperative: The Future of Air Superiority,” 16-17.

111. Ibid.

112. Goure, “New United States Maritime Strategy Makes Case for More Coast Guard Cutters”; US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 12; Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; US Department of Homeland Security, *Counter Drug Operations*; Wright, “Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific”; Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 298; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

113. Pedrozo, “U.S. Policy on the South China Sea,” 77-79; Granados, “The China Coast Guard, Shifting from Civilian to Military Control in the Era of Regional Uncertainty,” 49-50; Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 292-296.

114. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 291-292; Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 286-289; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 209-211.

115. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 6, 10; Tallis, "How Good Order at Sea is Central to Winning Strategic Competition"; Tallis, "Maritime Security and Great Power Competition: Maintaining the US-led International Order," iv-vi, 1-2; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 292, 296; Moreland, "Vietnam and the Philippines as Case Studies in Dispute Management with China," 287-289.

116. Kennedy, "Address at University of Washington."

117. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 297-298; Dutton, "Conceptualizing China's Maritime Gray Zone Operations," 36.

118. Goure, "New United States Maritime Strategy Makes Case for More Coast Guard Cutters"; Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition"; US Department of Homeland Security, *Counter Drug Operations*; Wright, "Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific"; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 298.

119. Panda, "China Conducts Naval Drills in South China Sea, The China Coast Guard appears to be involved as well"; Liff, "China's Maritime Gray Zone Operations in the East China Sea and Japan's Response," 217-218; Martinson, "Militarizing Coast Guard Operations in the Maritime Gray Zone," 104.

120. See Sinclair and McHaty, "The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific."

121. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 1-2, 7, 15-16.

122. *Ibid.*, 19.

123. Schultz, "National Defense University President's Lecture Series."

124. Sinclair and McHaty, "The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific"; Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition."

125. Establishment of the Coast Guard, *US Code* 14 (2018), §§101 et seq. (The Coast Guard, established January 28, 1915, shall be a military service and a branch of the armed forces of the United States at all times.); Law Enforcement, *US Code* 14 (2018) §§ 522 et seq.; Maritime Security and Drug Enforcement, *US Code* 46 (2008), Subtitle VII et seq.; see also Goure, "New United States Maritime Strategy Makes Case for More Coast Guard Cutters"; Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition."

126. Tallis, "How Good Order at Sea is Central to Winning Strategic Competition"; Tallis, "Maritime Security and Great Power Competition: Maintaining the US-led International Order," iv-vi, 1-2; Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 295-298.

127. Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition."

128. Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; Takei, “The Time Factor in Maritime Gray Zone Operations,” 251-252; Lukin, *China and Russia: The New Rapprochement*, 189.

129. US Department of Homeland Security, *Counter Drug Operations*; Wright, “Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific”; Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 298; Harkins, “Coast Guard Cutter Joins Navy Destroyer in Freedom-of-Navigation Op in Pacific”; US Department of Defense, *Freedom of Navigation Program, Fact Sheet*, 2.

130. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 12; See Sinclair and McHaty, “The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific”; Gaudio, “The Coast Guard and Stability Operations”; Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; Morris, “The Era of Coast Guards in the Asia-Pacific Is Upon Us.”

131. Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition.”

132. Wuthnow, *China's Other Army: The People's Armed Police in an Era of Reform*, 23-24; Dolbow and Howe, “Shift the Coast Guard to DoD, Transferring the United States Coast Guard to the Department of Defense would enhance the service’s capabilities and the nation’s defense.”

133. Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 296-299; Moreland, “Vietnam and the Philippines as Case Studies in Dispute Management with China,” 288-289.

134. Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 294; Odom, “When Gray Zone Meets Black Letter: China’s Paranaul Strategy and International Law,” 57-58; Rielage and Strange, “Is the Maritime Militia Prosecuting a People’s War at Sea?” 47.

135. Takei, “The Time Factor in Maritime Gray Zone Operations,” 251-252; Glaser and Funaiolo, “South China Sea: Assessing Chinese Paranaul Behavior within the Nine-Dash Line,” 199; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 25.

136. Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; Petersen, “The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations,” 25.

137. Takei, “The Time Factor in Maritime Gray Zone Operations,” 251-252; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 36.

138. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” Foreword; US Congressional Research Service, *China Naval Modernization: Implications for United States Navy Capabilities*, 30-31.

139. Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; Tallis, “How Good Order at Sea is Central to Winning Strategic Competition”; Dutton, “Conceptualizing China’s Maritime Gray Zone Operations,” 36.

140. Establishment of the Coast Guard, *US Code* 14 (2018), §§101 et seq. (The Coast Guard, established January 28, 1915, shall be a military service and a branch of the armed forces of the United States at all times.); Law Enforcement, *US Code* 14 (2018) §§ 522 et seq.; Maritime Se-

curity and Drug Enforcement, *US Code 46* (2008), Subtitle VII et seq.; see also Sinclair and McHaty, “The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific”; Gaudio, “The Coast Guard and Stability Operations”; United States Coast Guard Patrol Forces Southwest Asia, *Mission Statement* (The Mission of PATFORSWA is to train, organize, equip, support and deploy combat-ready Coast Guard Forces in support of CENTCOM and national security objectives. PATFORSWA works with Naval Forces Central Command (NAVCENT) in furthering their goals to conduct persistent maritime operations to forward United States interests, deter and counter disruptive countries, defeat violent extremism and strengthen partner nations’ maritime capabilities in order to promote a secure maritime environment in the CENTCOM area of responsibility.); Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition.”

141. See US Department of Homeland Security, *Counter Drug Operations*; Wright, “Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific”; Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 298.

142. See US Department of Homeland Security, *Counter Drug Operations*; Wright, “Shiprider Program: The United States Coast Guard Promotes Theater Security Cooperation for a Free and Open Indo-Pacific”; Martinson and Erickson, “Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone,” 298.

143. Goure, “New United States Maritime Strategy Makes Case for More Coast Guard Cutters”; US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 1-2, 7, 11.

144. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 6.

145. United States Coast Guard Patrol Forces Southwest Asia, *Mission Statement* (The Mission of PATFORSWA is to train, organize, equip, support and deploy combat-ready Coast Guard Forces in support of CENTCOM and national security objectives. PATFORSWA works with Naval Forces Central Command (NAVCENT) in furthering their goals to conduct persistent maritime operations to forward United States interests, deter and counter disruptive countries, defeat violent extremism and strengthen partner nations’ maritime capabilities in order to promote a secure maritime environment in the CENTCOM area of responsibility.); see also Michael Sinclair and Ford, “Stuck in the middle with you: Resourcing the Coast Guard for global competition”; Magowan, “Create ‘Patrol Forces Indo-Pacific?’”

146. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 1-2, 7, 10; Sinclair and McHaty, “The Coast Guard and Marines should work together to enhance deterrence in the Western Pacific”; Wiltshire, “Send in the Coast Guard...With the Marines”; Buzzell, “The Navy’s Golden Chance to Return to Subic Bay”; US Department of Defense, *Summary of the 2018 National Defense Strategy*, 9.

147. US Navy, US Marine Corps, and US Coast Guard, “Advantage at Sea, Prevailing with Integrated All-Domain Naval Power,” 22; see e.g., The USCG follows pay, allowance, and personnel requirements issued to the Department of Defense. The Department of Defense manages pay and allowances through the Defense Finance Accounting Service (DFAS), while the USCG maintains a separate and independent system through the Pay and Personnel Center (PPC). Moreover, the USCG follows Department of Defense travel and per diem guidance as well. However, while the Department of Defense manages its travel through the Defense Travel System

(DTS) and utilizes its own contracted services, the USCG uses the Travel Preparation and Examination System (TPAX), together with separate and redundant contract services. These systems execute nearly identical purposes under identical authorities, yielding inefficient redundancies. Author's personal observations.

148. Dolbow and Howe, "Shift the Coast Guard to DoD, Transferring the United States Coast Guard to the Department of Defense would enhance the service's capabilities and the nation's defense."

149. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 1-2, 7, 19-20; Tallis, "How Good Order at Sea is Central to Winning Strategic Competition"; Dolbow and Howe, "Shift the Coast Guard to DoD, Transferring the United States Coast Guard to the Department of Defense would enhance the service's capabilities and the nation's defense."

150. *See* US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 19-20; Dolbow and Howe, "Shift the Coast Guard to DoD, Transferring the United States Coast Guard to the Department of Defense would enhance the service's capabilities and the nation's defense."

151. *See, e.g.*, US Department of the Navy, *Resources, Fact Files: Littoral Combat Ship – LCS*; US Department of Homeland Security, United States Coast Guard, *National Security Cutter*.

152. United States Coast Guard Maritime Force Protection Unit Bangor. *Unit Information Sheet*.

153. Use of Army and Air Force as Posse Comitatus, *US Code* 18 (1994), §1385 (Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both.); Restriction on direct participation by military personnel, *US Code* 10 (2016), §275 (The Secretary of Defense shall prescribe such regulations as may be necessary to ensure that any activity (including the provision of any equipment or facility or the assignment or detail of any personnel) under this chapter does not include or permit direct participation by a member of the Army, Navy, Air Force, or Marine Corps in a search, seizure, arrest, or other similar activity unless participation in such activity by such member is otherwise authorized by law.).

154. Martinson and Erickson, "Conclusion. Options for the Definitive Use of United States Sea Power in the Gray Zone," 291.

155. *See, e.g.*, Pedrozo, "U.S. Policy on the South China Sea," 77-79; Wiegand, "How Biden should Handle the South China Sea Disputes."

156. Petersen, "The Chinese Maritime Gray Zone: Definitions, Dangers, and the Complications of Rights Protection Operations," 19; Morris, "The Era of Coast Guards in the Asia-Pacific Is Upon Us."

157. US Navy, US Marine Corps, and US Coast Guard, "Advantage at Sea, Prevailing with Integrated All-Domain Naval Power," 12; Takei, "The Time Factor in Maritime Gray Zone Operations," 251-252; Lukin, *China and Russia: The New Rapprochement*, 189.

158. Takei, "The Time Factor in Maritime Gray Zone Operations," 252; *see, e.g.*, Magowan, "Create 'Patrol Forces Indo-Pacific'?"

159. Schultz, "National Defense University President's Lecture Series"; *see also* Sinclair and Ford, "Stuck in the middle with you: Resourcing the Coast Guard for global competition."

Examining America's Treaty and Alliance Structure in the Indo-Pacific

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Abstract

This article examines the political, military, and economic dynamics of the great-power competition between the United States and the People's Republic of China in the Indo-Pacific and how it has impacted the American alliance structure since the beginning of the Cold War. The author reviews the rise of ASEAN (the Association of South East Asian Nations) following the demise of the American-sponsored Southeast Asian Treaty Organization, and the challenges facing the United States in establishing a new multilateral defense treaty organization to confront growing Chinese military assertiveness in the region. The author then compares three potential alliances structures to advance American interests in the region with an eye toward current and emerging strategic landscapes.

Introduction

The *National Security Strategy of the United States of America* issued in December 2017 stated that America is entering a period of great-power competition and calls for seeking, “areas of cooperation with competitors from a position of strength, foremost by ensuring our military power is second to none and fully integrated with our allies and all of our instruments of power.”¹ That same year, the National Security Council through its *U.S. Strategic Framework for the Indo-Pacific* sought to create a whole-of-government approach to “advance American influence” in the region while “advancing American prosperity” and protecting American citizens at home and abroad, “preserving peace through strength.”²

Nearly three years later in its analysis of the “China Challenge,” the State Department’s Policy Planning Staff asserted, “The Chinese Communist Party (CCP) aims not merely at preeminence within the established world order...but to fundamentally revise world order, placing the People’s Republic of China (PRC) at the center and serving Beijing’s authoritarian goals and hegemonic ambitions.”³

US President Biden’s *Interim National Security Strategy* unveiled in March claims that China, “is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system,” and calls the United States to, “reinvigorate and modernize our alliances and partnerships around the world,”

to “hold countries like China to account.”⁴ As the United States reenergizes quadrilateral discussions with Australia, India, and Japan and maintains a close engagement with the Association of Southeast Asian Nations) to balance China’s growing influence in the Indo-Pacific region, it is critical to evaluate what alliance structure best serves American interests. Is America’s current system of bilateral treaties coupled with cooperation with ASEAN sufficient to further its national security interests in the Indo-Pacific? If not, what adjustments to the current treaty and alliance structure will best secure those interests? Reviewing the progression of American alliances from World War II to the present and the interests of the major powers in the Indo-Pacific provide a firm foundation for weighing the relative pros and cons for different alliance structures to maximize America’s ability to protect its interests in the region.

Of the courses of action the United States could pursue, this article will compare three: maintaining current bilateral defense treaties while continuing to increase military engagements under the auspices of ASEAN; working with existing treaty partners to establish a multilateral defense treaty organization open to broader regional membership; and working with the major powers of the Indo-Pacific to establish a “Concert of Asia” to maintain regional stability in a time of growing great-power competition. Increasing the quantity and quality of military exercises with existing treaty allies while simultaneously expanding military cooperation with other Indo-Pacific nations under the auspices of ASEAN currently provides the best option to protect American interests and to expand its regional influence without dramatically escalating regional tensions. However, continued PRC military overreach may change the calculus of regional partners, providing greater support for the United States to establish a flexible multilateral military alliance structure centered on the nations with which America already enjoys bilateral defense treaties.

American Treaty and Alliance Structures in the Indo-Pacific—Key Context

US–Sino Relations

Though the United States and the CCP cooperated to drive Imperial Japanese forces from mainland China during World War II, leaders from both nations began to view each other as rival competitors after Mao Zedong’s People’s Liberation Army (PLA) drove Chiang Kai-shek’s Kuomintang (KMT) Nationalist forces from mainland China to the island of Formosa and established the PRC in 1949.⁵ The United States enjoyed the world’s largest economy, technologically

advanced forces, and posed a clear threat to the PRC's grip on power as General Douglas MacArthur's forces began to push communist Korean forces north of the 38th parallel. As United Nations forces advanced toward the Yalu River that divided the Korean Peninsula from the Chinese mainland, Mao Zedong deployed the PLA to the Peninsula to halt the advance.⁶

Relations between the United States and China did not thaw significantly until President Nixon sought rapprochement by approving the Shanghai Communique, culminating in President Carter signing the Taiwan Relations Act in 1979, and two more joint communiques between the two nations; these actions transferred formal diplomatic relations from the Republic of China (ROC or commonly known as Taiwan) to the PRC, resting, "upon the expectation that the future of Taiwan will be determined by peaceful means."⁷ American and Chinese relations warmed until the PRC cracked down on pro-democracy protests in Tiananmen Square in 1989. Following the Cold War, the United States sought to encourage the CCP-led government to resume liberalization through economic investment, and to influence the regime to become a responsible stakeholder in regional and international affairs; however, CCP leaders sought to avoid the Soviet Union's mistakes in opening too swiftly to outside influence to preserve the party's power in mainland China. Beijing continues to view the United States as a rival intent on regime change and supportive of transforming the government on Chinese mainland into the image of the democratic government on Taiwan.⁸

RAND Corporation in its analysis of "what competition between the United States and China might entail out to 2050," lays out three broad enduring core interests the PRC uses to guide its grand strategy: preserving the political system and CCP rule; "protecting national sovereignty, territorial integrity, and national unification"; and maintaining conditions for China's continued economic growth and development. PRC public strategy documents and statements clearly view the independence movements in Taiwan, Hong Kong, Tibet, and Xinjiang as threats to their core interests. Whereas, the PRC maintains ambiguity over whether the East China Sea, Senkaku Islands, and South China Sea (SCS) meet the core interest red line. CCP General Secretary Xi Jinping's "China Dream" vision to achieve "national rejuvenation" and overcome two centuries of perceived Western exploitation and interference, prioritizes securing social stability to preserve CCP political control, maintaining and increasing PRC economic development, particularly in science and technology sectors, and modernizing the national defense apparatus to deter and repulse Western interference in core interests.⁹

The seven distinguished authors of the RAND study claim the PRC views its security periphery through four concentric circles and applies different instruments of power to influence the different rings. The inner ring extends from Bei-

ing and encompasses all the territory controlled or claimed by the PRC. Domestic instability is the greatest concern within this ring, but independence movements in Hong Kong and Taiwan would also fall into this ring. The second circle includes the 14 adjacent countries and waterways, including the East China Sea, the Yellow Sea, the Taiwan Strait, and the SCS. The third ring includes the Asia-Pacific region, and the fourth ring encompasses the world beyond the Asia-Pacific. From the PRC perspective, the United States is the nation with the most power to influence its interests across all four rings.¹⁰

The authors of the RAND study also claim the PRC focuses most of its security resources on the inner circle creating a “Stability Management System,” where the government uses its growing technological capabilities to, “supervise and coordinate a bewildering and overlapping range of agencies—including police, surveillance, and propaganda organizations—dedicated to preserving social stability.”¹¹ Within the second ring, the PRC focuses on coercive diplomacy, applying economic and military instruments to change conditions on the ground to legitimize its territorial claims. The PRC pursues “friendly neighbor” diplomacy within the third ring through favorable trade agreements and infrastructure investments. Finally, within the fourth ring, the PRC pursues a “win-win” posture, extending economic opportunities and fostering cultural exchanges to build governmental and popular goodwill to convince the global community that the PRC is a responsible stakeholder while simultaneously expanding the PRC’s economic influence and internal development.¹²

While these various approaches to different rings initially succeeded in the post-Cold War era, increased international scrutiny of human rights abuses within the first ring and the increased use of coercive diplomacy outside the second ring undermines the PRC’s previous friendly neighbor and win-win postures, creating backlash in the international community and providing opportunities for the United States to contest the PRC’s expanding influence.

US Bilateral Treaty Alliances in the Indo-Pacific

Stephen Brooks and William Wohlforth, two of the United States’ leading international relations scholars, claim that the United States has pursued a grand strategy of “Deep Engagement” since the end of World War II.¹³ They claim Deep Engagement is based on three overlapping objectives: reducing national security threats by promoting security in key regions, particularly Asia, Europe, and the Middle East; increasing prosperity at home by upholding a liberal economic order to expand the global economy; and building and maintaining international institutions to coordinate interstate cooperation in ways that protect US interests. While the United States added to this strategy at times to also promote

democracy abroad, expand human rights protections, and conduct humanitarian interventions, for the most part, Brooks and Wohlforth claim the US Grand Strategy has been consistent for the past 75 years.¹⁴

Guided by this Deep Engagement strategy, the United States helped to establish international institutions such as the United Nations, the General Agreement on Tariffs and Trade (now World Trade Organization), World Bank, and International Monetary Fund to stabilize war-torn nations and rehabilitate the global economy. As a Cold War emerged between the Soviet Union and the United States following World War II, the Truman and Eisenhower Administrations established a set of mutual defense treaties with 45 nations, starting with the Organization of American States to secure the Western Hemisphere in 1947 and the North Atlantic Treaty Organization to bolster Europe in 1949. The United States sought to secure the Indo-Pacific region through separate mutual defense treaties with Australia, New Zealand, Japan, and the Philippines in 1951; the Republic of Korea in 1953; Thailand and Pakistan through the South East Asia Treaty Organization (SEATO) in 1955; and with Taiwan in 1955.¹⁵ Though the SEATO and Taiwan Defense Treaties were abrogated in the 1970s, Thailand and Pakistan remained Major Non-NATO Allies (MNNA), and the United States still supports defense commitments with more than 60 nations with the inclusion of MNNA's.¹⁶

To evaluate the optimal alliance structure in the Indo-Pacific region, it is useful to first look at the evolution of the regional security commitments in greater depth. America established its first mutual defense treaty in the region with the Republic of the Philippines on 30 August 1951. The Treaty sought to:

declare publicly and formally their sense of unity and their common determination to defend themselves against external armed attack, so that no potential aggressor could be under the illusion that either of them stands alone in the Pacific Area, and to strengthen their present efforts for collective defense for the preservation of peace and security pending the development of a more comprehensive system of regional security in the Pacific Area.¹⁷

The treaty recognized an armed attack on either party in the Pacific Area as an attack on both and called each nation to, "act to meet the common dangers in accordance with its constitutional processes," until such time as the UN Security Council could take action to restore peace and security.¹⁸ The Truman Administration also signed the Security Treaty Between the United States, Australia, and New Zealand (ANZUS) on 1 September 1951 with identical language to publicly declare unity and strengthen collective defense efforts as well as identical language

on how to respond to an armed attack in the Pacific Area on any of the signatories.¹⁹

America signed a security treaty with Japan on 8 September 1951 that authorized US forces to remain on and around the island nation to deter attack as it rebuilt its defenses following disarmament, but acknowledged that it would start to take a larger role in its self-defense over time.²⁰ In January 1960, the United States and Japan replaced the agreement with a treaty of mutual cooperation and security that recognized, “an armed attack against either Party in the territories under the administration of Japan,” as an attack on both, and followed the same language as the previous Philippine and ANZUS mutual defense treaties for meeting the danger in accordance with constitutional measures until the UN Security Council could restore peace.²¹

Following the armistice agreement that halted the Korean War, the Republic of Korea and the United States signed a mutual defense treaty following the same pattern as the Philippine and ANZUS treaties, but like the 1960 mutual security treaty with Japan, authorized the United States to station troops on the Korean Peninsula. However, since the armistice did not end the state of war with the Democratic People’s Republic of Korea, the United States added a stipulation that it was not obligated to come to the aid of the Republic of Korea, “except in case of an external armed attack,” on territory the United States recognized as, “lawfully brought under the administrative control of the Republic of Korea.”²²

The United States entered its final bilateral mutual defense treaty in the Indo-Pacific region with the Republic of China (ROC or official name for Taiwan) on 2 December 1954. Though including the same language as the Philippine and ANZUS treaties for taking appropriate constitutional means to respond to an armed attack until the UN Security Council could restore peace, Article II of the treaty also calls both parties to lend assistance to resist, “communist subversive activities directed from without against their territorial integrity and political stability.”²³ Though the *U.S. Taiwan Relations Act* (TRA) of 1979 abrogated the treaty in the expectation that Taiwan and the PRC would determine the future of Taiwan peacefully, and removed official recognition of the ROC government, it maintained that the United States would provide sufficient “defense articles and defense services,” for the island to defend itself. Congress provided Taiwan with the same privileges as other MNNA for foreign military sales and reiterated that PRC efforts to resolve the status of Taiwan through nonpeaceful means, including, “boycotts or embargoes” would be a grave concern to the United States and committed America to, “resist any resort to force or other forms of coercion that would jeopardize the security, or social or economic system, of the people of Taiwan.”²⁴

The Trump Administration declassified President Reagan's 1982 Six Assurances to Taiwan leaders, reducing strategic ambiguity concerning the status of Taiwan and reiterating to international and domestic audiences America's commitment not to: revise the TRA; set an end date on arms sales to Taiwan; consult with the PRC prior to selling arms to Taiwan; pressure Taiwan to negotiate peace with the PRC; take a position on the sovereignty of Taiwan; and act as a mediator between Taiwan and the PRC.^{25, 26} Though the released information did not reinstitute a mutual defense pact with Taiwan, or declare that the United States would militarily support a declaration of independence by the Taiwan government, it underscored that the United States acknowledged, but did not recognize the PRC's version of the "One-China" policy. This declaration also raised PRC suspicions that the United States might still support a return of ROC rule over the Chinese mainland.

Multilateral Treaty Alliances in the Indo-Pacific

SEATO: The only multilateral mutual defense treaty the United States concluded in the region was the Southeast Asia Collective Defense Treaty of 1954 that established SEATO and committed Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom, and the United States to "coordinate their efforts for collective defense for the preservation of peace and security."²⁷ However, as French and British colonies gained their independence in the region and the United States fought a protracted war in Vietnam without securing SEATO support. Ultimately the members of SEATO voted in September 1975 to disband and closed the Secretariat Headquarters in Bangkok in June 1977..²⁸ SEATO succeeded in deterring direct Soviet or PRC military attack against treaty members; however, the collective defense treaty did not prevent covert communist antagonism throughout the region.²⁹ Though the United States concluded separate security agreements with Thailand and Pakistan, establishing them as MNNA's for foreign military sales and security cooperation, it did not draft bilateral mutual defense treaties following SEATO's dissolution in 1977.³⁰

ASEAN: Following Indo-Pacific anticolonial movements and the formal disbanding of SEATO, ASEAN filled an important regional security vacuum. India and Indonesia, as nonaligned powers during the Cold War, opposed SEATO from its foundation and feared that it would lead to destabilizing brinkmanship between the great powers.³¹ Indonesia led efforts to solidify regional resiliency and autonomy working with the nations of Singapore, Malaysia, Thailand, Indonesia, and the Philippines to sign a joint declaration in August 1967 to form ASEAN, committing members to, "strengthening the economic and social stability of the region," and ensuring, "their stability and security from external interfer-

ence in any form or manifestation in order to preserve their national identities.”³² The declaration reiterated that existing foreign military bases in member states were temporary.³³

Since ASEAN’s founding, Brunei, Myanmar, Laos, Cambodia, and Vietnam have also joined the organization, and affirm its 1976 Treaty of Amity and Cooperation in Southeast Asia (TAC), which commits parties to:

1. Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations;
2. The right of every State to lead its national existence free from external interference, subversion or coercion;
3. Noninterference in the internal affairs of one another;
4. Settlement of differences or disputes by peaceful manner;
5. Renunciation of the threat or use of force; and
6. Effective cooperation among themselves.³⁴

To date, 28 nations beyond the ten ASEAN members have also committed to abide by the TAC, including the PRC, Russia, India, Pakistan, Bangladesh, Japan, Australia, New Zealand, the Republic of Korea, and the United States; additionally, in 2016 signatory states agreed that the TAC was, “a key instrument governing relations between States to maintain regional peace and stability,” and that they would, “explore a legally binding instrument building upon the TAC for the wider region.”³⁵

The ASEAN uses several institutions to coordinate TAC party efforts to promote security in the Indo-Pacific. The ASEAN Foreign Minister Meeting (AMM) convenes annually to coordinate efforts on addressing the challenges outlined in the charter, and in 1994 designated the ASEAN Regional Forum (ARF) as the venue for ASEAN partners, “to bring about a more predictable and constructive pattern of relations in the Asia Pacific.”³⁶ Additionally, the ASEAN Security Community (ASC) committed to Annual ASEAN Defense Minister Meetings (ADMM) in 2006 and began ADMM-Plus engagements in 2010, which now include the nations of Australia, PRC, India, Japan, New Zealand, the Republic of Korea, Russia and the United States. ASEAN core members view the ADMM-Plus engagements as opportunities to build mutual trust, confidence and transparency between nations, focusing on the seven key transnational security issues of: maritime security; counterterrorism; humanitarian assistance and disaster management; peacekeeping operations; military medicine; humanitarian mine action; and cyber security.³⁷ Outside the ASC and ADMM-Plus, the ASEAN established separate dialogues with Japan, the Republic of Korea, and the PRC which it terms ASEAN Plus Three (APT), and maintains a strategic partnership with the United States.

While ASEAN provides many opportunities to cooperate and collaborate on many transregional security issues, its strong focus on the independence of its core members limits the ability of outside global powers, whether Russia, the PRC, or the United States, from individually exercising outsized influence to drive the organization in any specific direction. However, the PRC's recent reef islands building operations, coupled with its continued refusal to recognize the UN Convention on the Law of the Seas tribunal's authority to rule on its economic exclusion zone disputes with the Philippines and Vietnam, encouraged ASEAN members to cooperate more closely with the United States on maritime security. One example included ASEAN's first ten-member maritime exercise with the United States in September 2019. The ASEAN-US Maritime Exercise (AUMX) was first proposed at the ADMM-Plus meeting in 2017 and approved during the ADMM in 2018.³⁸ This first successful AUMX provides a steppingstone to increase the quantity and quality of US military exercises and engagements to address the seven key transnational security issues under the auspices of ASEAN.

The Quad: Beyond ASEAN, the United States recently reenergized quadrilateral security cooperation discussions with India, Australia, and Japan. The "Quad" originated in 2004 out of continued discussions following their coordinated humanitarian relief for the Indian Ocean tsunami. Though the nations held a joint naval exercise in 2007, increased PRC economic cooperation and changing administrations across the Quad members in 2008 decreased the impetus to expand the scope of collaboration. Following increased PRC aggression in the East and South China Seas, Quad members resumed official meetings in November 2017, and resumed combined naval exercises in 2018.³⁹ In October 2020, all members committed to cooperate on: connectivity; infrastructure development; security including counterterrorism; cyber and maritime security; health cooperation; and the stability and prosperity of the region. The Quad also reiterated the central role ASEAN played in settling regional disputes.⁴⁰ However, each of the Quad nations independently follow their own national interests as evidenced by India's joint naval exercise with Russia in December 2020—a month after the Quad's Malabar naval exercise.⁴¹

The United States also increased its combined exercises and operations with treaty allies outside the Quad through 2020–21 to include increased combined US Navy freedom of navigation patrols with the Royal Australian Navy in the SCS.⁴² In January, the US Navy, Japanese Maritime Self-Defense Force, Royal Australian Navy, Royal Canadian Navy, and Indian Navy all took part in the "Sea Dragon 2021" antisubmarine maritime exercise at Guam.⁴³ The following month, the US Air Force, Japanese Air Self-Defense Force, and Royal Australia Air Force expanded their annual "Cope North" humanitarian assistance, disaster relief, and

large force employment exercise at Guam by integrating F-35 stealth fighters for the first time and expanding the exercise area to include Palau.⁴⁴ The United Kingdom's HMS *Elizabeth* also departed early this year for its first Pacific voyage, deploying F-35 fighter aircraft. The United Kingdom also coordinated joint exercises with Japan in the East China Sea and with the United States in the SCS during this Pacific voyage.⁴⁵ Expanding the quantity and quality of multilateral military exercises and operations with bilateral treaty partners in the Indo-Pacific provides the United States with greater flexibility as it considers strengthening its regional alliance structure.

Economic Dominance

The United States has a range of bilateral defense treaties, security agreements, and multilateral strategic partnerships at its disposal to address the threat posed by an ascendant CCP-ruled China. However, with the collapse of SEATO, and ASEAN efforts to deter great-power competition in the region, the current hub-and-spoke US alliance structure hinders coordinated collective defense in conjunction with all its treaty partners. To determine the optimum alliance structure to maintain security and stability in the region to protect US national interests, it is important to look closer at the interests of the potentially friendly or adversarial nations in the region.

As part of a separate RAND study, Project AIR FORCE researchers in late 2018 and early 2019 interviewed more than one hundred government officials and academic experts from nine Indo-Pacific nations (Singapore, Thailand, Indonesia, Malaysia, Burma, Vietnam, India, Japan, and Australia) to assess whether the United States or China was winning the competition for influence in the region. Key findings highlight how interviewees from each nation viewed the PRC as having more economic influence and the United States as having more diplomatic and military security influence; however, only Australia particularly prioritized security concerns over economic concerns.⁴⁶

Overall, Southeast Asian nations did not want to be drawn into a bipolar competition between the United States and China, enjoying the economic benefits of association with China, and the security assurances of the liberal-minded United States. However, Southeast Asian nations claimed that Chinese economic influence, through both incentives and coercion, was better able to reduce American diplomatic and military influence rather than the other way around; interviewees from Indonesia, Thailand, Malaysia, and Vietnam said they were particularly vulnerable to being pulled more closely into the PRC sphere of influence.⁴⁷ Looking more closely at the economic and security postures of these Southeast Asian na-

tions in relation to China and the United States sheds more light on these findings.

In 2019 US Dollars, the United States has the world's largest economy (\$21.3 trillion) followed by China (\$14.3 Trillion) and Japan (\$5.1 trillion). Other large Indo-Pacific economies include India (\$2.9 trillion), Russia (\$1.7 trillion), the Republic of Korea (\$1.6 trillion), Australia (\$1.4 trillion), and Indonesia (\$1.1 trillion).⁴⁸ However, China has the world's largest economy in terms of purchasing power parity (\$25.36 trillion). The PRC is a net exporter (\$2.49 trillion) and the top four nations with which it traded the most in 2019 included the United States (19.2 percent), Hong Kong (12.2 percent), Japan (5.9 percent), and the Republic of Korea (4. percent). The PRC imported \$2.14 trillion of goods in 2018 primarily from the Republic of Korea (9.7 percent), Japan (8.6 percent), the United States (7.3 percent), Germany (5 percent), and Australia (4.9 percent).⁴⁹

As a service economy, the United States is a net importer of manufactured goods with \$1.553 trillion of imports in 2017, primarily from Canada (18.3 percent), Mexico (15.7 percent), China (8.4 percent), and Japan (4.4 percent). By 2019 the balance shifted more dramatically in China's favor, with the United States receiving \$2.361 trillion in imports from China (21.6 percent), Mexico (13.4 percent), Canada (12.8 percent), Japan (5.8 percent), and Germany (5 percent).⁵⁰ This shift provides the PRC with additional leverage over the United States.

In the Indo-Pacific region, the PRC is the top exporter to Burma with 31.4 percent of imports; Singapore 13.9 percent; Thailand 20 percent of imports), Indonesia (23.2 percent of imports), Malaysia (19.9 percent of imports), the Philippines (18.1percent of imports), Vietnam (25.8 percent of imports), India (16.3 percent of imports), Japan (24.5 percent of imports), Australia (22.9 percent of imports), and New Zealand (19 percent of imports). It is also the top market for Burma (36.5 percent of exports), Singapore (14.7 percent of exports), Thailand (12.4 percent of exports), Indonesia (13.6 percent of exports), Australia (33.5 percent of exports), and New Zealand (22.4 percent of exports), and a secondary market for Vietnam (14.5 percent of exports), Malaysia (12.6 percent of exports) and Japan (19 percent of exports).⁵¹

The United States is the top market for Vietnam (20.1 percent of exports), Japan (19.4 percent of exports), and India (15.6 percent of exports) and secondary market for the Philippines (14.6 percent of exports), Thailand (11.2 percent of exports), and Indonesia (10.6 percent of exports).⁵² While the United States also exports to other nations in the region, the volume does not approach China's level of exports to the Indo-Pacific.

The sheer volume of trade China conducts with the United States and its partners provides a powerful tool in influencing how effectively America can apply its diplomatic and military instruments of power to maintain security and stability in the region and protect its national interests. The American alliance structure is an important backstop to achieve both its own Indo-Pacific Vision and the ASEAN Indo-Pacific vision of protecting the territorial sovereignty of individual nations, while maintaining open access to the global trade routes through the region. However, military security is not the only factor influencing US relations in the region. The ten ASEAN nations and 28 additional TAC signatories have interests in prioritizing diplomatic solutions to resolve conflict in the Indo-Pacific region to continue to enjoy the economic benefits of trade with the PRC, deter the PRC from coercing them economically, and deter the United States from escalating to a military conflict with the PRC. These nations have a vested interest in not choosing sides, if they do not have too, but the PRC's economic influence is stronger than US diplomatic and military assurances in their day-to-day calculus.

American Treaty and Alliance Structures for the Indo-Pacific Reimagined

Having reviewed the various interests of key players in the Indo-Pacific region, faculty and professionals with regional and national security strategy expertise from across the Air University Campus gathered to brainstorm different alliance structures along with specific criteria to evaluate the pros and cons of each alliance option.⁵³ Through a moderated discussion, experts generated multiple possible alliance structures ranging from full retrenchment to “Fortress America” and abandoning all overseas commitments, to signing nonaggression pacts with adversarial regional powers, to establishing a comprehensive multilateral defense treaty organization like NATO. Though it is beyond the scope of this article to evaluate each treaty alliance in detail, three courses of action merit greater attention. In the terms of the *Interim National Security Strategy*, each provides the nation with options to:

- protect the security of the American people and expand economic prosperity and opportunity;
- unite the world's democracies to combat threats to free societies; and
- promote a favorable distribution of power to deter and prevent adversaries from directly threatening the United States and our allies, inhibiting access to the global commons, or dominating key regions.⁵⁴

Three Potential Courses of Action

The first course of action is to continue recent efforts to improve upon the status quo which I will define as strengthening existing bilateral mutual defense treaties with Australia, New Zealand, the Philippines, Japan, and the Republic of Korea, strengthening the MNNA partnerships with Pakistan, Thailand, and Taiwan, and expanding collaboration with ASEAN in general and the Quad nations in particular on the seven key transnational security issues of maritime security, counterterrorism, humanitarian assistance and disaster management, peacekeeping operations, military medicine, humanitarian mine action, and cybersecurity. This course of action will build on the successes of the 2019 ASEAN–US Maritime Exercise, *Malabar 2020*, *Cope North 2021*, and *Sea Dragon 2021* to deliberately improve the quantity and quality of multilateral military exercises and engagements in the Indo-Pacific.

A second course of action would be to seek to combine the existing mutual defense treaties with Australia, New Zealand, the Philippines, Japan, and the Republic of Korea, to establish a SEATO 2.0 with open membership for MNNA nations (Thailand, Pakistan, and Taiwan), India, and any other interested Indo-Pacific nation to deter PRC aggression. Like the first, this course of action also builds on the success of the 2020 Malabar Exercise and provides options to integrate the Quad nations into other US security agreements. Though historical differences between Pakistan and India, or Japan and the Republic of Korea will prevent the United States from swiftly establishing a comprehensive SEATO 2.0, senior leaders can integrate all the instruments of national power to deliberately expand the alliance with time.

A third, final course of action would be to maintain the current bilateral alliance structure, but to directly engage with the major regional powers, including the PRC and Russia to establish a “Concert of Asia” to solidify norms for regional international behavior and reduce tensions.⁵⁵ While the TAC commits members to respect the sovereignty, and territorial integrity of signatory nations, not to interfere in the internal affairs of other nations and to settle differences peacefully without resorting to force, the treaty is administered under the auspices of ASEAN. A Concert of Asia would provide a recurring forum outside ASEAN’s AMM or the UN Security Council for the major powers, including the PRC and Russia, to resolve territorial disputes and reinforce shared commitments to peace and maintaining the status quo.

Weighing the Pros and Cons

The *Interim National Security Strategy* and the US Strategic Framework for the Indo-Pacific offer criteria to evaluate the potential for each course of action to maximize America's abilities to safeguard its national interests in the region. These criteria include which course action:

- provides the greatest defense for the American people at home and abroad in the region;
- provides the greatest US access and influence to apply all instruments of national power;
- is most likely to garner sustained domestic support;
- is most likely to advance US prosperity;
- prevents the most Indo-Pacific nations from choosing to align against the US or PRC;
- provides the most coordinated response to PRC coercive actions; and/or
- best deters overt PRC military aggression?⁵⁶

Course of Action 1: Expanding on the status quo by increasing the quantity and quality of military exercises and engagements with existing defense treaty allies and MNNA nations while working more closely with ASEAN nations on key transnational security issues, provides future opportunities to improve American defense of the homeland and its citizens in the region. Eventually this option will also help the United States to expand its access and influence to apply all instruments of national power. This course of action's limited increase in additional defense spending is likely to garner long-term domestic support and not compete with other domestic spending priorities that might encumber American prosperity. As a continuation of the status quo trend to gradually increase military engagement with nations across the region, this course of action is not likely to force nations to choose to align against either the United States or China. Additionally, this approach does not dramatically improve America's ability to broadly coordinate a response to coercive PRC activities. As American interoperability with treaty and regional powers expands, its ability to deter PRC regional military aggression eventually will also expand. While this course of action meets all the criteria, it will take a greater amount of time to build a wide, coordinated response to deter and counteract Chinese military aggression and coercive activities.

Course of Action 2: Seeking to combine the existing mutual defense treaties to establish a SEATO 2.0 with open membership to MNNA nations, India, and

other interested Indo-Pacific nations, will increase America's ability to protect its citizens at home and abroad and increase its access and influence to apply its instruments of national power to support treaty nations. As with American commitments to NATO, domestic support for establishing SEATO 2.0 will have to be nurtured, especially if allies are perceived not to be paying their "fair share" of defense costs. The increased defense spending associated with this course of action will compete with other domestic spending, impacting long-term American prosperity, but would be a smaller burden than unilaterally confronting the PRC militarily in the Indo-Pacific. This necessarily causes nations to choose to align against the United States or China in a way the first course of action does not but provides a greater deterrence against PRC aggression and provides greater opportunities to coordinate responses to other forms of coercion. While this option meets most of the criteria, it forces bipolar alignment. China's outsized economic influence, coupled with baggage from Japan's historical imperial aggression across the region, will make it difficult for America to pursue this option in the short term, barring PRC overreach by dramatically increasing military hostilities within the Indo-Pacific.

Course of Action 3: Maintaining the current bilateral alliance structure, while directly engaging with major regional powers, including China and Russia, to establish a "Concert of Asia," could reduce the likelihood of a major, great-power conflict. This could provide for the defense of American citizens at home and abroad while maintaining a justification for the United States to apply its instruments of national power in the region to maintain stability. The Concert of Asia would discourage the United States from expanding its military presence in the region beyond the status quo, driving it to rely more heavily on other instruments of national power. This course of action may enjoy domestic support by decreasing American commitments abroad but diminishing its confrontation of human rights abuses in China or other Concert Powers may lead to decreased domestic support over time. However, the stability could drive decreased defense expenditures, reducing competition for other domestic spending requirements, thus advancing long-term prosperity. If a Concert of Asia functions like the historical Concert of Europe,⁵⁷ balance of power relationships could drive alignment against the United States or China, but the alliances could be more temporary based on the relative power of each member nation. While a Concert of Asia would provide the United States with greater ability to coordinate responses to PRC coercion with its allies, as the Indo-Pacific transforms into spheres of influence among the great powers, the nations that the United States can effectively coordinate with could be limited. A Concert of Asia would create deterrence among the great

powers as they seek balancing relationships but may still encourage minor conflicts as the major powers test the commitments of the alliances within the region.

Recommendations

Based on these results, the first course of action—expanding its participation and leadership through ASEAN institutions while simultaneously expanding the quantity and quality of its military engagements with existing treaty partners—provides the best option to meet the criteria set forth in the *U.S. Interim National Security Strategy*.⁵⁸ As the United States increases the number of freedom of navigation operations with treaty partners and conducts more frequent large-scale force employment exercises, joint forces will gain greater interoperability and confidence in their abilities to deter PRC military aggression and provide confidence to the wider ASEAN community of America's commitment to its allies. Increased exercises and engagements with ASEAN members on all the key transnational security issues will also increase US military interoperability with non-treaty partners in nonkinetic areas that can build the confidence of regional powers in America's commitment and easily translate to greater integration during future crises.

If the PRC escalates its military and economic coercion to coopt ASEAN institutions, and a bipolar alignment of Indo-Pacific nations against either the PRC or United States becomes unavoidable, conditions may become favorable for establishing SEATO 2.0 to better coordinate efforts to counter PRC aggression. While the Biden administration recently secured joint statements from Quad members to cooperate more closely to maintain a free and open Indo-Pacific,⁵⁹ and initiated trilateral discussions with South Korean and Japanese leaders to jointly work with the United States to maintain regional security,⁶⁰ establishing a multilateral security organization will still take more effort and investment. The investments in exercises and engagements made up-front will make this transition easier; operating simultaneously under the auspices of ASEAN and existing treaty alliances prior to PRC military overreach will likely increase the number of potential nations that will be willing to align with the United States. However, many hurdles will continue to make this a long-term endeavor for the United States. The PRC's predominant use of economic power to coerce its neighbors, combined with the misgivings many Indo-Pacific nations have with giving up the economic benefits of trading with the PRC to join a formal military alliance with the United States make it very difficult for the United States to move forward with creating a broad multilateral military alliance in the Indo-Pacific in the near-term. India's long history of nonalignment, coupled with its demonstrated willingness to conduct combined exercises with both Russia and the United States,

reveal that it will be difficult to push the Quad forward as the nucleus of a multi-lateral military alliance in the short term, barring PRC military overreach. Additionally, the PRC effectively exploits regional concerns about joining a military alliance with Japan due to its imperial past. Pushing too quickly with the Quad to the exclusion of treaty allies, such as the Republic of Korea and the Philippines, may push these nations closer into the PRC's orbit if it appears that the United States is aligning too closely with Japan. For all its deterrent value, this option will be difficult in the near-term.

The Concert of Asia has many benefits for maintaining stability and reducing long-term defense expenditures, but it conflicts with US cultural commitments to advancing human rights in a free and open global community, and it relinquishes American leadership in the Indo-Pacific to allow spheres of influence to emerge. Years of US deficit spending and a growing PRC economy if combined with a future economic crisis could force America to dramatically scale its overseas security commitments, making this option more tenable in the future. However, as with the SEATO 2.0 alliance option, it will be difficult for the United States to move forward with implementing a Concert of Asia, barring major changes in both the domestic and international environments.

Conclusion

The United States is entering a period of great-power competition requiring it to “revitalize America’s unmatched network of alliances and partnerships” to “meet today’s challenges from a position of strength.”⁶¹ The US State Department’s warning in November provides added urgency to integrate instruments of national power and to work with allies to prevail in a strategic competition with China in-line with our *Interim National Security Strategy*: “The Chinese Communist Party (CCP) aims not merely at preeminence within the established world order...but to fundamentally revise world order, placing the People’s Republic of China (PRC) at the center and serving Beijing’s authoritarian goals and hegemonic ambitions.”⁶²

The progression of US alliances from World War II to the present and the interests of the major powers in the Indo-Pacific provide a useful context for weighing the relative pros and cons for three different alliance structures to maximize America’s ability to protect its own interests in the region:

- maintaining current bilateral defense treaties while continuing to increase military engagements under the auspices of ASEAN;
- leveraging existing treaties to establish a multilateral defense treaty organization open to wider regional membership; and

- working with the major powers of the Indo-Pacific to establish a “Concert of Asia” to maintain regional stability in a time of growing great-power competition.

While continued military cooperation under the auspices of ASEAN provides opportunities to protect American interests and to expand its regional influence without dramatically escalating regional tensions, PRC military overreach may change the calculus of regional partners, providing greater support for the United States to establish a flexible multilateral military alliance structure centered on the nations with which America already enjoys bilateral defense treaties.

The United States’ current system of bilateral treaties and cooperation with ASEAN provides a strong starting point to confront the Chinese threat. However, American interests in the Indo-Pacific region would be best served by pursuing a more active role in bolstering ASEAN, expanding on the success of the 2019 ASEAN–US Maritime Exercise to pull in Quad members and other TAC signatories to more closely collaborate on maritime security and the other key transnational security issues through existing ASEAN institutions. Should this course of action fail to expand American influence in the region or to deter coercive PRC economic and military action, a graduated course of expanding Quad cooperation to coordinate a response to PRC aggression could be more effective, followed by reestablishing a modern Southeast Asian Treaty Organization construct centered on current US bilateral and MNNA. The dramatic asymmetry between PRC and US economic influence in the region is the most important factor for determining between courses of action going forward in the near-term, making current and potential allies reluctant to have to align directly with either nation in open hostility. As the United States continues its course working through ASEAN institutions, its nations will advance further down the road to self-reliance and become more resilient to PRC coercion, helping America to achieve its national interests of a free and open Indo-Pacific. 🌟

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Notes

1. Donald J. Trump, *National Security Strategy of the United States of America*. (Washington, DC: White House, December 2017), 26.
2. The National Security Council, *The US Strategic Framework for the Indo-Pacific*. (Washington, DC, 2017), 1. As of 5 January 2021, document is now declassified, <https://trumpwhitehouse.archives.gov/>.
3. Office of the Secretary of State, Policy Planning Staff, *The Elements of the China Challenge* (Washington, DC: November 2020), 1.
4. Joseph R. Biden, Jr., *Interim National Security Strategy of the United States of America*. (Washington, DC: White House, 2021), 8, 10, <https://www.whitehouse.gov/>.
5. Andrew Scobell, et al., *China's Grand Strategy: Trends, Trajectories, and Long-Term Competition*. (Santa Monica, CA: RAND Corporation, 2020), 7.
6. Richard Ned Lebow, *Between Peace and War: The Nature of International Crisis* (Baltimore, MD: The Johns Hopkins University Press, 1981), 172.
7. United States Congress, "House Resolution 2479–Taiwan Relations Act," 1979, <https://www.congress.gov/>.
8. Scobell et al., *China's Grand Strategy*, 8.
9. Scobell et al., *China's Grand Strategy*, 12–13, 18.
10. Scobell et al., *China's Grand Strategy*²⁷.
11. Scobell et al., *China's Grand Strategy*, 32.
12. Scobell et al., *China's Grand Strategy*, 40–42.
13. Stephen G. Brooks and William Wohlforth, *America Abroad: The United States' Global Role in the 21st Century* (New York: Oxford University Press: 2016), 73.
14. Brooks and Wohlforth, *America Abroad*, 73–75.
15. John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy*. Revised and Expanded Edition (Oxford: Oxford University Press, 2005), 150.
16. Stephen M. Walt, *The Hell of Good Intentions: America's Foreign Policy Elite and the Decline of U.S. Primacy* (New York: Farrar, Straus and Giroux: 2018), 38.
17. "Mutual Defense Treaty Between the United States and the Republic of the Philippines," August 30, 1951, <https://avalon.law.yale.edu/>.
18. "Mutual Defense Treaty Between the United States and the Republic of the Philippines."
19. "Security Treaty Between the United States, Australia, and New Zealand (ANZUS)," August 30, 1951, <https://avalon.law.yale.edu/>.
20. "Security Treaty Between the United States and Japan; September 8, 1951," <https://avalon.law.yale.edu/>.
21. "Treaty of Mutual Cooperation and Security Between Japan and the United States of America," <https://www.mofa.go.jp/>.
22. "Mutual Defense Treaty Between the United States and the Republic of Korea; October 1, 1953," <https://avalon.law.yale.edu/>.
23. "Mutual Defense Treaty Between the United States and the Republic of China; December 2, 1954," <https://avalon.law.yale.edu/>.
24. United States Congress, "House Resolution 2479 - Taiwan Relations Act," 1979, <https://www.congress.gov/>.

25. David Brunnstrom and Humeyra Pamuk, "U.S. Increases Support for Taiwan, Says to Counter Rising China Pressure," *Reuters*, 31 August 2020, <https://www.reuters.com/>.
26. The Congressional Research Service, "President Reagan's Six Assurances to Taiwan," <https://crsreports.congress.gov/>.
27. "Southeast Asia Collective Defense Treaty (Manila Pact); September 8, 1954," <https://avalon.law.yale.edu/>.
28. Damien Fenton, *To Cage the Red Dragon: SEATO and the Defense of Southeast Asia, 1955-1965*, (Singapore: National University of Singapore Press, 2012), 229.
29. Fenton, *To Cage the Red Dragon*, 230.
30. Bureau of Political-Military Affairs, US State Department, "Major Non-NATO Ally Status," <https://www.state.gov/>.
31. Robert Yates, *Understanding ASEAN's Role in Asia-Pacific Order* (Cham, Switzerland: Springer Nature Switzerland AG, 2019), 60.
32. Association of South East Asian Nations, "The ASEAN Declaration (Bangkok Declaration) Bangkok, 8 August 1967," <https://asean.org/>.
33. The ASEAN Declaration (Bangkok Declaration).
34. Association of South East Asian Nations, "About ASEAN," <https://asean.org/>.
35. Association of South East Asian Nations, "ASEAN Foreign Ministers' Statement on the Occasion of the 40th Anniversary of the Treaty of Amity and Cooperation in Southeast Asia (TAC)," <https://asean.org/>.
36. Association of South East Asian Nations, "ASEAN Regional Forum (ARF)," <https://asean.org/>.
37. Association of South East Asian Nations, "ASEAN Defense Ministers Meeting (ADMM)," <https://asean.org/>.
38. Commander, Logistics Group Western Pacific Public Affairs Office, "First ASEAN-US Maritime Exercise Successfully Concludes," <https://www.c7f.navy.mil/>.
39. Tanvi Madan, "What You Need to Know About the 'Quad,' in Charts," *Order from Chaos* (blog), 6 October 2020, <https://www.brookings.edu/>.
40. Secretary of State Michael Pompeo, "Secretary Michael R. Pompeo Opening Remarks at Quad Ministerial," 6 October 2020, <https://www.state.gov/>.
41. Rajat Pandit, "Striking a balance after Malabar, India holds exercise with Russia," *Times of India*, 4 December 2020, <https://timesofindia.indiatimes.com/india/striking-a-balance-after-malabar-india-holds-exercise-with-russia/articleshow/79568352.cms>.
42. Daniel Hurst, "Australian Military to Continue Patrolling South China Sea as Beijing Warns Taiwan Independence 'Means War'," *The Guardian*, 29 January 2021, <https://www.theguardian.com/>.
43. Petty Officer 1st Class Glenn Slaughter, "CTF-72 Concludes Sea Dragon 2021," *Seventh Fleet*, 28 January 2021, <https://www.c7f.navy.mil/>.
44. Joint Base Pearl Harbor-Hickam Public Affairs, "US, Japan, Australia converge on Guam for Cope North 21," *Pacific Air Forces*, 2 February 2021, <https://www.pacaf.af.mil/>.
45. Dominic Nicholls, "HMS Queen Elizabeth to be joined on maiden deployment by US Destroyer as Navy faces 'biggest test for a generation'," *The Telegraph*, 18 January 2021, <https://news.yahoo.com/>.

46. Bonny Lin, et al., *U.S. Versus Chinese Powers of Persuasion: Does the United States or China Have More Influence in the Indo-Pacific Region?* (Santa Monica, CA: RAND Corporation, 2020), 4, <https://www.rand.org/>.
47. Lin et al., *U.S. Versus Chinese Powers of Persuasion*, 3.
48. World Bank, "GDP (current US\$) - United States, China, Japan, India, Indonesia, Australia, Singapore, Philippines, Thailand, Vietnam, Russian Federation, Republic of Korea," <https://data.worldbank.org/>.
49. Central Intelligence Agency, *The World Factbook*, <https://www.cia.gov/>.
50. CIA, *World Factbook*.
51. CIA, *World Factbook*.
52. CIA, *World Factbook*.
53. On 3 February 2021, I moderated a two-hour online discussion with faculty from the Air War College, the Air Command and Staff College, and Air University's *Journal of Indo-Pacific Affairs*, which had regional and national security studies expertise.
54. *Interim National Security Strategy of the United States of America*, 9.
55. Hal Brands and Charles Edel, *The Lessons of Tragedy: Statecraft and World Order* (New Haven, CT: Yale University Press, 2020), 49.
56. *Interim National Security Strategy of the United States of America*, 9.
57. Brands and Edel, *The Lessons of Tragedy*, 48. Following Napoleon's defeat in 1815, Austria, France, Prussia, Russia, and the United Kingdom established a "Concert" or "Congress of Europe" system, pledging to meet regularly to resolve disputes. Over time, the meetings became intermittent and could not stem nationalist sentiments that drove the forceful unification of Germany and then Italy through the mid-nineteenth century. However, after the wars of unification concluded in 1870, the Concert System prevented major conflicts among the major powers of Austria-Hungary, France, Italy, Russia, Germany, and the United Kingdom until the outbreak of World War I in 1914.
58. *Interim National Security Strategy of the United States of America*, 9.
59. Ned Price, US State Department, "Department Press Briefing," 22 February 2021, <https://www.state.gov/>.
60. White House, "Background Press Call on the Upcoming Trilateral Meeting with Japan and the Republic of Korea," 1 April 2021, <https://www.whitehouse.gov/>.
61. *Interim National Security Strategy of the United States of America*, ii.
62. Office of the Secretary of State, Policy Planning Staff, *The Elements of the China Challenge* (Washington, DC, November 2020), 1; and *Interim National Security Strategy of the United States of America*, 20.

Unmet Expectations

China–Pakistan Economic Corridor and the Limits of Chinese Strategic Investment

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Abstract

The China–Pakistan Economic Corridor has been billed as the “flagship” project of China’s vast Belt and Road Initiative. Beginning in 2014, Pakistan and China have formulated a plan to invest 62 billion USD on improvements to the Gwadar Port complex near the Iranian border, upgrades to Pakistan’s energy and transportation infrastructure, and a series of special economic zones throughout the country. There have been some early modest successes; however, Pakistan has been unable to provide further security for these improvements and the workers building them. This, in addition to the pervasive corruption in the country, means that the project is unlikely result in the dramatic economic growth necessary to prevent Pakistan from incurring the debt complications that other nations have faced after accepting Chinese credit in hopes of bettering their economies. Consequently, the project is unlikely to either result in Pakistan achieving many of its ambitious goals or in forging the kind of strategic relationship between China and Pakistan the United States and the West fear most.

Introduction

On 7 September 2013 at Kazakhstan’s Nazarbayev University, People’s Republic of China President Xi Jinping gave a speech announcing his intention to establish a “Silk Road economic belt” for the purpose of “good-neighbourly and friendly cooperation toward countries in Central Asia.” Xi referenced the Han Dynasty’s exchanges between China and Europe and the subsequent effect they had over 2,100 years in developing “cooperation between different nationalities and cultures” in China, Central Asia, and Europe. Fundamentally, the effort aims to: (1) develop closer financial ties by establishing formal “economic development strategies” between China and its neighbors, (2) building a vast infrastructure project that would “form a transportation network that connects East Asia, West Asia, and South Asia”, (3) and negotiating formal trade agreements and currency exchange rules.¹ Less than four years later, in 2017, President Xi presided over a gathering of more than 100 nations and international organizations that were

involved in the project and stated that Chinese investment had already exceeded 50 billion USD.²

Pakistan's involvement in the project began almost immediately, evolving from a bilateral economic corridor proposed by Chinese Premier Li Keqiang during a visit to Pakistan in May 2013 and formally signed only two months later on 5 July 2013 during then-Prime Minister Nawaz Sharif's visit to China.³ By April 2015, China and Pakistan agreed to terms on the newly named China–Pakistan Economic Corridor (CPEC), with President Xi traveling to Pakistan to announce China's intention to invest 46 billion USD by 2030 (later increased to 62 billion USD) to aid in the development of transportation, information, and energy projects as well as “investments in vocational education and social infrastructure.”⁴ The potential implications for Pakistan were enormous. In the face of declining relations with the United States, China was offering Islamabad a new strategic relationship, promising to revitalize Pakistan's economy and improve some of Pakistan's poorest and least developed regions.⁵ Additionally, China's offer of BRI financing was backed by its policy of the “Three No's,” in which Beijing promises to: (1) respect the sovereignty of the Belt and Road Initiative (BRI) participants by never interfering in their internal affairs, (2) never seek to increase its so-called “sphere of influence,” and (3) never strive for hegemony or dominance.⁶ These assertions must have been highly appealing to Pakistan considering a growing belief that US foreign aid came with unacceptable security and governance conditions.

One does not have to look far, however, to find potential downsides for participating in the BRI. Unlike most US foreign aid, which comes in the form of grants, China is financing much of the project by enticing participating countries to take on “public debt”⁷ in the form of loans from China or by providing financial incentives to firms that participate, such as tax relief or guarantees of return. Generally, the terms of these agreements are much less favorable than those offered by the International Monetary Fund (IMF) or the World Bank. Many of the participating nations have turned to China, however, because these global institutions have denied them funding, either because of credit concerns or because the questionable financial underpinnings of the proposed efforts.

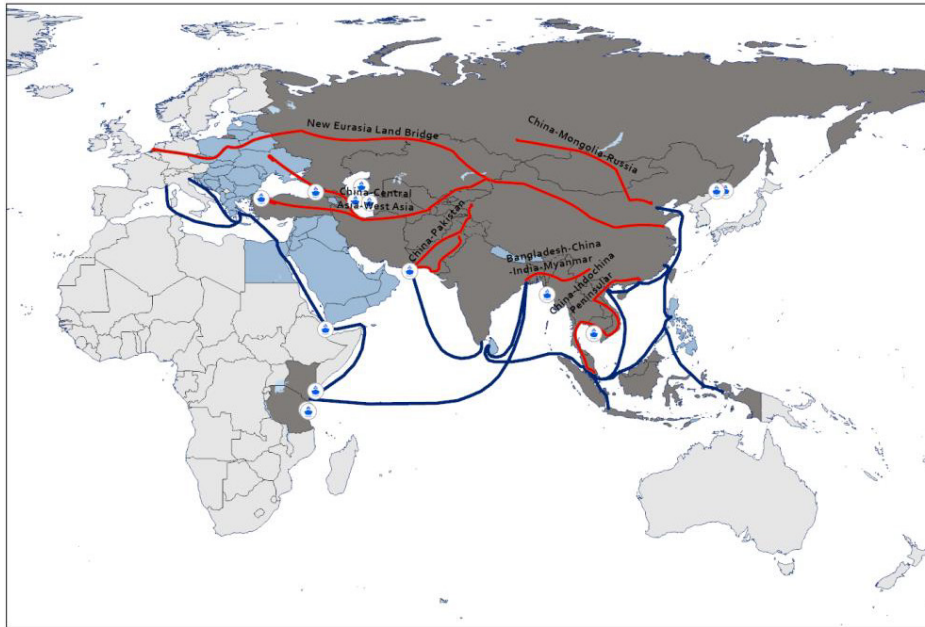
Already, there is evidence that the relationship is not going as well as either country is willing to admit publicly. Of the 62 billion USD in projects agreed between Pakistan and China, only 51 efforts totaling 28 billion USD have reached the formal contracting phase.⁸ In January 2019, Pakistan withdrew support for a planned 2 billion USD coal power project due to cost, and Prime Minister Imran Khan, who assumed power in August 2018, has reportedly sought to significantly reduce CPEC's overall scope.⁹ Questions about Pakistan's ability to control do-

mestic political infighting and corruption cause skeptics to wonder whether Islamabad can successfully execute a project of this magnitude. Additionally, Pakistan has yet to demonstrate its ability to provide the necessary security to the new infrastructure, the Chinese workforce that is building it, or the individuals and businesses who will occupy the newly established special economic zones. Finally, the prospect of a dramatic shift in the tenuous balance of power between India and Pakistan creates a new regional instability—one that could conceivably spill over into military conflict.

It is too early to say definitively whether CPEC will achieve many of its strategic objectives. One can, however, look to Africa, where China has been making similar investments since the early 2000s. In dozens of countries, economic return falling short of expectations, the use of Chinese firms and workers for much of the effort, and the poor quality of many of the projects have led many to believe that the “honeymoon is over” between the local populace and China.¹⁰ Evidence is mounting that these negative practices are occurring within Pakistan as well. Consequently, it is unlikely that CPEC will cause Pakistan to break relations with the United States and become a reliable strategic partner to China. The United States should continue to exercise strategic patience and not over-react to the “worst case” scenario.

Fundamentals of the Belt and Road Initiative

The BRI, also known as One Belt, One Road, was publicly introduced by President Xi in 2013 and is “an ambitious effort to improve regional cooperation and connectivity on a trans-continental scale.”¹¹ It represents a new strategic vision for China’s economic expansion, with the goal of providing more direct access to the markets of South Asia, the Middle East, Africa, and Europe. In terms of cost and geographic coverage, it is a vast undertaking, with total investment in infrastructure improvements expected to exceed 1 trillion USD across three continents.¹² As depicted in figure 1, the project consists of the land economic corridors of the Silk Road Economic Belt—the “belt”—(shown as red lines) and the sea routes of the New Maritime Silk Road—the “road”—(shown as blue lines). The geographic scope is apparent as well, with more than 70 nations identified by the World Bank as being “core” members of the project (dark gray) or receiving some manner of transportation infrastructure improvement support through the effort (light blue).



(Source: World Bank Group: Macroeconomics, Trade and Investment)

Figure 1. BRI transportation routes and “core” BRI economies

The BRI effort, however, is about more than infrastructure improvements and market access. China views it as a key component of broader efforts aimed at restructuring “the modern global management system, which has been created by other countries” and as a means of contesting the economic dominance of the United States and Europe.¹³ Furthermore, as evidenced by the name of the project, China has made considerable effort to tie the project to the glories of the ancient Great Silk Road and associated Chinese influence. These efforts seek to cast the BRI as much more than a financial undertaking but rather part of larger Chinese efforts to further the nation’s “significant contribution to the history of human civilization.”¹⁴ Indeed, China goes so far as to use the terminology of the project as representative of much larger strategic relationships, as in “One Belt One Road Era” and “One Belt One Road Economy.”¹⁵

Fundamentals of the China–Pakistan Economic Corridor

Originally valued at 46 billion USD, the total value of the CPEC initiative has subsequently been adjusted upward to 62 billion USD upon bilateral agreement

of the “Long Term Plan for China–Pakistan Economic Corridor (2017–2030)” in November 2017. The plan outlines the broad objectives of the project, highlighting the goal of “cementing China–Pakistan economic relations, promoting friendly cooperation and establishing the shared destiny of the two countries.”¹⁶ The overarching framework is frequently described as the “1+4,” with CPEC as the centerpiece and four investment priorities, “namely the Gwadar Port, Energy, Transportation Infrastructure and Industrial Cooperation.”¹⁷

The first of these priorities is the effort to improve and expand the deep-water port and surrounding infrastructure at Gwadar in the western province of Balochistan. Located approximately 50 miles from the border with Iran, Pakistan has done much to sell the strategic value of the Gwadar Port, referring to it as the “intersection of three economically emerging regions . . . the Middle East, Central Asia and South Asia.”¹⁸ In 2016, Islamabad stated that developing Gwadar is the “‘jewel project’ of the entire CPEC, with its own power generation, road, rail and air- links and would serve as a model smart port city.”¹⁹ Despite its valuable location, however, little infrastructure existed at the port prior to 2002, when China began investing in the region. The port ultimately opening to shipping traffic in 2008, principally as an import center for bringing goods into Pakistan.²⁰ CPEC aims to radically expand the capacity and surrounding infrastructure of the port, with the “Phase 2” contract awarded to a Chinese state-owned company for 1.02 billion USD in 2015. In addition to expanding the port’s capacity to service approximately 200,000 tons of large shipping,²¹ the project is adding a new 230 million international airport, the construction of a desalination plant, and a large expressway connecting the port with the Makran Coastal Highway.

The second component of the “1+4” strategy is transportation infrastructure and is the most widely reported outside of Pakistan. Media coverage in both China and Pakistan consistently refer to CPEC as the “flagship” project of BRI. It will serve as the “essential link between the belt and road”²² in that it offers China the shortest land route to the Strait of Hormuz and the Arabian Sea. Given that as much of China’s strategic vision focuses upon expanding their economic and diplomatic access to the Middle East and Africa as it does to Europe, CPEC is a vital element in the overall project’s success. CPEC represents the “Southern Corridor” of the Silk Road Economic Belt, connecting the industrial city of Guangzhou with the Gwadar port in southwestern Pakistan.²³ The most significant investment necessary is in developing sufficient transportation capacity between the Chinese city of Kashgar and the Gwadar port.

While Pakistan and China have a long trade history, the physical connection between the two countries, the Karakorum Highway, was only completed in 1992 and not made passable “year-round” until the 2000s.²⁴ CPEC envisions signifi-

cant improvements to large portions of Pakistan's infrastructure, particularly through the Khunjarab pass in Kashmir, which exceeds 15,000 feet in elevation at part of the crossing, as well as through the Balochistan province in western Pakistan, where little infrastructure currently exists. This is a massive undertaking, with estimated costs exceeding 12 billion USD, including the construction of more than 2,000 miles of railway, the expansion of existing highways (including the Karakorum), and the construction of more than 125 miles of tunnels through the Himalayas.²⁵

While the Gwadar Port and the transportation connections between it and China receive the largest degree of international attention, Pakistan believes the third leg of the "1+4" strategy, improvements to its energy infrastructure, to be vital for long-term growth. As recently as 2013, the "poor conditions of its energy facilities" were a key "bottleneck for Pakistan's economic growth. Power shortages which could last as long as 18 to 20 hours a day were a routine matter."²⁶ In fact, of the initial 46 billion USD agreement between China and Pakistan, 33.8 billion USD were earmarked for energy-related projects. These included 21 total projects "aiming to increase cooperation on gas, coal, and solar projects to provide 16,400MW of electricity—roughly equivalent to Pakistan's current capacity."²⁷ For a country beset by brownouts and electricity rationing, these improvements offer the promise of energy stability that are necessary for long-term industrial growth.

The final element of the "1+4" strategy is the concept of industrial cooperation, generally in the development of special economic zones. Overall, the project envisions the creation of nine economic zones throughout Pakistan, which are intended as the designated locations for foreign business to establish manufacturing locations for products ranging from home appliances to defense articles. These zones will total more than 10,000 acres spread across each of Pakistan's provinces.²⁸ The concept largely comes from China's experience in diversifying its economy in the 1980s and offers "free-market and export-oriented policies and measures such as tax benefits and preferential treatment of foreign investment."²⁹ While receiving little international fanfare, some outside observers believe these zones offer the best opportunity for long-term economic growth in Pakistan. There is real optimism that the combination of low labor costs and easier access to the European market, combined with tax incentives, could entice Chinese companies to invest in Pakistan. The first of these zones, the Gwadar Free Zone operated by the China Overseas Port Holding Company, which also operates the port, was opened by then-Prime Minister Shahid Khaqan Abbasi in January 2018.³⁰

Chinese Expectations

Within the “Long Term Plan” China formally declared its vision for the project as one “to further advance the western development strategy, promote economic and social development in Western China, accelerate the Belt and Road construction, give play to China’s advantages in capital, technology, production capacity and engineering operation, and promote the formation of a new open economic system.”³¹ President Xi has frequently stated that the Chinese government is undertaking the effort to achieve “mutual benefit,” seeking “win-win cooperation with partners and neighboring countries, ensuring they are also benefitting from China’s economic growth to assure their ‘mutual and equal pace of development’.”³² Already, the project has had some success in moving Pakistan out of the US sphere of influence and into China’s. The term “all-weather friendship” when discussing Sino-Pakistan relations appears frequently in Pakistani media.

One of Beijing’s key objectives with CPEC effort is to further the “western development strategy.” Stabilizing the province of Xinjiang, where “since 2017, authorities have detained more than a million Uighurs and members of other ethnic and religious minority groups in indoctrination camps,”³³ is one of the Chinese Communist Party’s top domestic priorities. China expects CPEC to improve the lagging economy of western China, which Beijing believes “will bring socio-political stability and subsequently help undermine the ‘three evils’: separatism, terrorism, and religious fundamentalism.”³⁴ Additionally, Beijing has stated that it believes that improving Pakistan’s economy will decrease the propensity for that country to export Islamic fundamentalist unrest to its neighbors, particularly Xinjiang.³⁵ China’s expectation appears to be that improved economic prospects in the region will make the province less restive, decreasing the need, in Beijing’s view, for more authoritarian measures.

One of the most important aspects of CPEC, particularly the development of the Gwadar Port, is that it provides an answer to China’s dependence upon imports, particularly oil, shipped through the Strait of Malacca. China refers to its reliance upon this narrow shipping passage as the “Malacca dilemma.” Currently, as much as 85 percent of Chinese oil imports pass through this vital artery, a key vulnerability in the event of hostilities with either the United States or India.³⁶ China has recognized strategic moves by both countries, including the United States renaming of the “Asian-Pacific” theater to the “Indo-Pacific” theater along with continued naval presence by both nations around the Strait of Malacca to be a “strategic headache.”³⁷

Gwadar simultaneously presents two solutions to the Malacca dilemma. First, it “acts a doorway to the Strait of Hormuz and the Persian Gulf for [China’s]

risk-free oil transportation,” shortening the transit of vital resources by more than 10,000 km. Additionally, it is likely that China will seek to use Gwadar as a port for the Chinese People’s Liberation Army Navy in an extension of its “String of Pearls” strategy, which would provide China a stable foothold in the Indian Ocean.³⁸

Finally, for decades, China has used the power of financing to extract unrelated diplomatic concessions. Even during the Cultural Revolution, when the nation’s economy struggled by any objective measure, China provided large amounts of foreign aid to Africa. A prominent example is the construction of the Tanzania–Zambia Railway in the first half of the 1970s, which China largely financed through a zero-interest 150 million USD loan. Such payments did, however, have a political price, as China leveraged them to secure diplomatic recognition from 44 African countries prior to receiving that status from the United States or Europe.³⁹ The inclusion of a provision in the 2017 “Long Term Plan” for “Pakistan to adopt China’s Digital Terrestrial Multimedia Broadcasting (DTMB) standard” is a textbook example. Adoption of China’s digital television broadcasting standard over the US or Europe equivalents offers Beijing much easier access to the media markets of a strategic neighbor. Moreover, China regularly uses other nations’ desires to join the BRI effort to drive them to officially end recognition of Taiwan and adopt the “One-China” policy as it did with tiny São Tomé and Príncipe before bringing it into the BRI investment group in 2017.⁴⁰

Pakistani Expectations

It is impossible to overstate the degree of optimism that surrounds the CPEC initiative within the Pakistani government and domestic media reporting. Islamabad’s official vision for the project is nothing short of a national transformation, listed as: “to fully harness the demographic and natural endowment of the country by enhancing its industrial capacity through creation of new industrial clusters, while balancing the regional socioeconomic development, enhancing people’s wellbeing, and promoting domestic peace and stability.”⁴¹ In 2016, Prime Minister Sharif stated that the project “would not only serve as a ‘game-changer’ for Pakistan, but a ‘fate-changer’ for entire region by helping it rid of economic deprivation and attain peace and prosperity.”⁴²

In 2014, less than a year after initiating CPEC, Islamabad unveiled “Pakistan 2025: One Nation—One Vision,” outlining a broad strategic vision intended to make Pakistan not only prosperous, but among the leading nations in South Asia and the Pacific. The CPEC effort is referenced more than 20 times in the document, citing it as the “backbone”⁴³ of the nation’s efforts to resolve its many energy and transportation problems and the means for Pakistan to “integrate with re-

gional developments and become a hub for trade and manufacturing.”⁴⁴ In fact, two of the seven strategic pillars—regional connectivity and energy improvements—are addressed almost exclusively through CPEC, and several of the others are heavily dependent upon the project’s success.

Pakistani media often refers to the nation’s relationship with China as an “all-weather friendship,” a pointed contrast to the on-again, off-again relationship it has had with the United States in its 70-year history.⁴⁵ China currently sits as Pakistan’s largest trading partner, with 11.9 billion USD in total cross-border transactions, amounting to 16 percent of Pakistan’s total foreign trade. However, while Islamabad likes to highlight that China–Pakistan trade has continued to grow rapidly, with the annual growth rate of 18.8 percent on average,⁴⁶ the trade balance strongly favors China. Pakistan’s trade deficit with China ballooned from under 1.6 billion USD in 2003 to 7.35 billion USD in 2014, the year after CPEC was announced,⁴⁷ and more than doubled again to 16.8 billion USD in 2017, four years into the effort.⁴⁸

Despite the seemingly one-sided benefit of the trade agreement, however, Pakistani media sees the success of this project as synonymous with the future financial prospects of the country as a whole. Some reporting goes so far as to claim that the “success of CPEC can provide a growth rate of 10 to 15 percent by 2030 to Pakistan’s economy.”⁴⁹ For context, China only achieved gross domestic product (GDP) growth greater than 10 percent in nine of the 20 years in the heart of its economic boom between 1990 and 2010 and never achieved 15 percent. In 2019, Pakistan’s GDP growth was only 1 percent and has exceeded 5 percent in only five of the last 20 years.⁵⁰ It appears highly unlikely that CPEC can achieve the kind of lofty economic growth expectations often cited by the Pakistani government and media.

Pakistan’s main interest is to “attract foreign capital” and to improve its own infrastructure and energy situation to provide an economic boost to the whole of the country, particularly “disadvantaged rural areas.” Islamabad also hopes to reverse “brain drain and capital flight that are reaching alarmingly high levels.”⁵¹ From its outset, Pakistan has stated that it views CPEC not just as a means for physical infrastructure improvement but also as a way to “provide it the much needed know-how, knowledge and expertise in new technologies to . . . strengthen Pakistan’s own inland transportation and logistics infrastructure.”⁵²

Finally, it is understood that Pakistan views every strategic relationship within the context of their ongoing regional competition with India. The United States has learned over the years that “money alone won’t influence the Pakistanis”⁵³ to abandon what they perceive as their strategic interests with respect to India, a lesson China would be wise to consider in their current engagement. The Obama

administration believed that Pakistan provided support to the Taliban and the Haqqani Network to undermine US efforts to build a stable government in Afghanistan out of fear that Kabul was sympathetic to India, in effect “surrounding and isolating Pakistan.”⁵⁴ There is ample evidence to indicate that part of Islamabad’s strategic calculation on CPEC is an effort to leverage China to reverse this situation. Indeed, India has asserted that improved Pakistani infrastructure within Gilgit-Baltistan and Pakistan-administered Kashmir, additional Chinese naval presence in the Arabian Sea, and the prospect of a China–Pakistan security alliance constitute a “serious threat to its own national security.”⁵⁵

Challenges

Debt

By far the most common Western criticism of BRI in general, and CPEC specifically, is the risk of a “debt trap.” While details vary by project, the overarching concern is that China encourages developing nations to take on billions of dollars in debt to finance BRI projects with highly questionable prospects of the returns being sufficient to service that debt. Over time, the borrowing country finds itself forced to relinquish control of some of the project’s key assets to Chinese companies or make other strategic concessions to the Chinese Communist Party, such as the recognition of China’s “One-China” policy. Pakistan and China have been intentionally vague on the specifics of CPEC’s financing, and China provides little information on the financial agreements for the entirety of the BRI effort. In CPEC’s case, the specific details of the arrangement are not even known to the “Pakistani parliament (which had not voted on it nor seen any planning documents), nor to the public.”⁵⁶ The World Bank estimates that participating states are financing more than 80 percent of the total BRI project by assuming “public debt borrowed by a government ministry or debt guaranteed by the government or debt borrowed . . . with an implicit government guarantee.”⁵⁷ In Pakistan’s case, the country is believed to be taking on debt equal to almost 20 percent of GDP. While certainly not the most egregious example, this rate is more than triple the BRI average at six percent of GDP.

The information that has been disclosed about CPEC finances often comes from the terms Pakistan offers for foreign firms to invest in the project. Islamabad, for example, has guaranteed a 17-percent return on equity for investors in energy projects.⁵⁸ Pakistan’s Planning, Development and Reform Minister, Ahsen Iqbal, indicated that the nation is prepared to repay 4–5 billion USD annually on these efforts, meaning for energy projects alone, the country’s debt could approach

“\$100 billion in principal and interest over the next twenty years.”⁵⁹ While most experts agree that the CPEC initiative will benefit the Pakistani economy, many doubt that Pakistan, or dozens of other BRI participants, will see the level of economic growth necessary to “stabilize the debt ratio.”⁶⁰ This gap indicates that Pakistan’s debt will likely grow rather than decrease over time, making it susceptible to the dreaded debt trap, in which Islamabad has no hope of repaying China and may be forced to offer other concessions to mitigate its financial situation.

Some estimates place Pakistan with more than 110 billion USD in foreign debt, with as much as 27.8 billion USD in debt service payments due prior to June 2023.⁶¹ Pakistan’s government has persistently sought relief from much of this debt over recent years, with Prime Minister Khan in April 2020 arguing the need for “urgent debt relief to the developing countries, at their request, and without onerous conditionalities.”⁶² Pakistan was awarded 800 million USD in debt relief in November 2020⁶³ and an additional 1.7 billion USD in December 2020⁶⁴ from the Group of 20 (G20) nations, ostensibly to offset financial losses associated with the coronavirus pandemic. It is increasingly unlikely, however, that the United States, Europe, or even the IMF will offer further debt concessions under the belief that they will simply be used to finance Pakistan’s debt with China and, in essence, provide direct Western funding to support the BRI at their own strategic expense.

These figures cause many Western analysts to believe that Pakistan may be falling victim to the type of debt trap that critics assert is one of the key failings of the China’s overseas financing efforts. In an often-cited case, critics of BRI assert that Sri Lanka’s acceptance of 307 million USD loan in 2009 and a second 757 million loan USD in 2012 from the Export-Import Bank of China to construct a 1.5 billion USD deep-sea port in Hambantota represents the worst of Chinese predatory lending. Beset by corruption, the port opened in 2010, and as early as 2012 it was clear that the economic benefits were falling far below the level required for Sri Lanka to service the loan. In 2017, Colombo was forced to cede it and approximately 15,000 surrounding acres of land to a Chinese state-owned business on a 99-year lease.⁶⁵ While the Hambantota port deal precedes BRI, it has all the hallmarks of more recent Chinese financing, including CPEC. The fact that Pakistan has already awarded the major contracts for both construction and administration of the Gwadar port complex to Chinese state-owned businesses indicate that Beijing is already exerting leverage over the project.

Security

Even Pakistani proponents of the project recognize the threat posed by the country’s domestic security situation. Much of Pakistan’s economic vision for the

project, and the basis by which it will be able to afford the loans that financed it, is dependent upon foreign business believing that Pakistan is a viable place in which to do business. By their own reckoning, the threat posed by terrorism has caused Pakistan's economy to largely stall "as new investors balk at the borders and many existing ones are more than willing to pull out."⁶⁶ Much of CPEC's allure comes from its promise to grow the economies of some of Pakistan's least developed regions, including the key Gwadar Port improvements in Balochistan and transportation and special economic zone improvements in the underdeveloped Khyber Pakhtunkhwa, Pakistan-administered Kashmir, and Gilgit-Baltistan. These improvements, however, are largely dependent upon Pakistan's military and security forces being able to develop and maintain sufficient security—not only for the construction of the projects, but over the long term—if business is to thrive there.

Recent media reporting indicates that Pakistan is failing to achieve this goal even within the already developed areas of the Punjab and Sindh provinces. The Sindhudesh Revolutionary Army insurgency group claimed responsibility for two attacks targeting Chinese citizens in Karachi in December 2020. Their statement read, in part, "China and Pakistan have forcibly been occupying the land under the projects of the China–Pakistan Economic Corridor (CPEC) and we will continue our attacks to target them,"⁶⁷ indicating this is merely the beginning of a campaign aimed at undermining the initiative. Similar attacks by Baloch separatists against the Chinese-controlled Pakistan Stock Exchange in June 2020 and a suicide bombing apparently targeting the Chinese ambassador to Pakistan in April 2021 demonstrate that militant groups are beginning to target Chinese citizens and companies in a manner like the attacks aimed at US and European interests over the past 20 years.

The emergence of a meaningful security threat targeting Chinese interests and investment is an extremely disturbing development for Pakistan and has significant potential to undermine the project. China has already demanded a "clear commitment from Pakistan accompanied by clear and concrete actions to protect the sovereignty and territorial integrity of People's Republic of China citizens on Pakistani soil."⁶⁸ Such a commitment would require Pakistan to take a much more active role in controlling extremists in both the Balochistan province and in Pakistan-administered Kashmir. Since Islamabad has frequently used such groups, including the Haqqani Network, to serve as strategic proxies for their interests in Afghanistan and India, it is unlikely that China will have more success in this area than the United States has over the past two decades. Furthermore, China's treatment of the Uyghur population in the Xinjiang is highly likely to fuel anti-Chinese rhetoric and incite additional attacks from Muslim extremist organizations, mak-

ing it extremely difficult for Pakistan to exercise this control even if it desired to do so.

Corruption

Pakistan has long been plagued by corruption at every level of government and private commerce. Transparency International annually ranks all 198 nations on its Corruption Perceptions Index based upon “how corrupt a country’s public sector is perceived to be by experts and business executives.” Since Pakistan’s principal objective is to attract foreign investment, this is a critical metric for CPEC’s chance of successful execution. However, Transparency international ranked Pakistan 124th in 2020 (and has only improved by four spots since 2012),⁶⁹ placing it near the bottom third of the list and only above largely failed states, such as Syria, Somalia, and Haiti. Pakistan recognizes that corruption is “widely seen as having seeped into the administrative fabric” and cites anticorruption efforts repeatedly in its “Pakistan 2025” vision.⁷⁰ Whether such efforts fundamentally change the patronage nature of Pakistani politics is yet to be seen.

These issues are compounded by involvement in the BRI, which has faced accusations of Chinese corruption around the globe. The second Belt and Road Forum, which China hosted in April 2019, has been “widely characterized as an attempt to rebrand the BRI, in response to criticism around debt and corruption.”⁷¹ It is not a good sign that much of CPEC’s planning and execution has been veiled in secrecy. Even CPEC’s Long-Term Plan, which outlined the core agreements between Pakistan and China, was developed centrally in Islamabad, with “little input from local leaders, business or civil society actors” and not publicly disclosed until December 2017 after many of the projects were already underway.⁷² Former Chief of Army Staff (a position widely regarded as being as powerful as Pakistan’s prime minister) Qamar Javed Bajwa heads Pakistan’s CPEC Authority and has been accused of using his position to amass significant undisclosed wealth in offshore accounts belonging to him and his family,⁷³ a commonplace practice in Pakistan. It has become common for the Pakistani government to “uncover” corruption in CPEC, but these efforts largely appear to be political ploys rather than earnest efforts to change the nature of the project.

Distribution of Financial Benefit

Since the inception of the CPEC effort, Pakistan has billed the project as a major undertaking that would revitalize the economy in virtually every part of the country and provide economic growth to the benefit of all Pakistanis. There is considerable evidence, however, that the project has so far failed to achieve these

lofty ideals. Construction of the Gwadar Port has not achieved the promised effect of turning “a sleepy fishing village into a bustling commercial hub” but rather changed the area into “a heavily militarized zone, displacing locals and depriving them of economic lifelines.”⁷⁴ Similar stories relating to the construction of power-production facilities and transportation infrastructure threaten to exacerbate already existing fault lines between the powerful Sindh and Punjab provinces and the remainder of the country. China’s agreement to finance two of the first three special economic zones in the Sindh and Punjab,⁷⁵ rather than in the underdeveloped provinces like Balochistan, indicates that powerful political interests are playing as large a hand as national interest in the distribution of financial benefits. Much of the domestic Pakistani criticism of the CPEC focuses on this very issue, particularly on the choice of the principal transportation infrastructure improvements connecting Asghar and Gwadar running through these two powerful provinces rather than through Khyber Pakhtunkhwa and Balochistan as originally envisioned in 2013. Islamabad has responded by including two lesser projects, the “Western Route” and the “Central Route,” but there is little evidence that these projects have received the level of funding priority as the primary “Eastern Route.”⁷⁶

Finally, much of the of the financial benefit even for the infrastructure improvement projects is already accruing to China rather than to Pakistan. In 2015, the state-owned China Overseas Port Holding Company, which operates the Gwadar Port awarded the 1.02 billion USD “Phase 2” construction project to fellow Chinese state-owned port infrastructure company Zhuhai Port Holdings.⁷⁷ Additionally, there is significant fear within Pakistan that Chinese companies enticed to move into the special economic zones will undercut existing domestic production with the aid of tax breaks provided by Pakistan rather than diversify the country’s economy.⁷⁸ The construction of dedicated housing, reportedly including a “\$150-million gated community” in Gwadar intended for housing up to 500,000 permanent Chinese workers, indicates that much of the anticipated economic growth generated by the CPEC will benefit China rather than Pakistan, which is largely financing the effort through public debt.⁷⁹ This discrepancy between populist economic growth expectations and reality has the potential to undermine domestic support for the CPEC within the Pakistani populace. Whether reduced public perception of the project has any impact on the decision of the Pakistani government with respect to CPEC, however, is yet to be determined.

Regional Concerns

CPEC is certain to exacerbate the complex geopolitical tensions between India and Pakistan. Each views virtually every strategic action by the other with suspicion, the effects of which are already evident only seven years into the project. India has publicly expressed three primary concerns with CPEC: (1) Pakistani infrastructure improvements in Gilgit-Baltistan and Pakistan-administered Kashmir strengthen Islamabad's hold on disputed territory, and Chinese military presence there hinders India's strategic position; (2) the prospect of a Chinese naval base in Gwadar extends China's maritime encirclement of India, often called the String of Pearls or pincer strategy; (3) India perceives a Sino-Pakistan security alliance is a "serious threat to its own national security."⁸⁰ These tensions are certainly made worse by the fact that Pakistan is working on this effort with China, a historical rivalry which broke into open war in the Sino-Indian War of 1962.⁸¹ True or not, Pakistan has already accused the Indian intelligence agency of "working actively to sabotage this mega project."⁸²

In a classical piece of strategic balancing, India has begun working with Central Asian and Middle Eastern states to create an alternative to the CPEC. In May 2016, Indian Prime Minister Narendra Modi and Iranian President Hassan Rouhani reached an agreement to develop the Iranian port at Chabahar as a direct competitor to Gwadar.⁸³ Chabahar, which sits only 100 miles west of Gwadar, offers virtually all of the same strategic advantages, albeit with approximately 10 percent of the capacity.⁸⁴ India has already invested 85 million USD to aid in developing the Chabahar Port, and proposes to build a railroad link through Afghanistan, creating the possibility "for entry to landlocked Afghanistan and Central Asia while bypassing Pakistan."⁸⁵ This has the potential to undercut much of the projected financial benefit Pakistan is counting on to recoup its costs in developing Gwadar. Furthermore, such Indian involvement in Afghanistan and Iraq is very likely to feed Pakistan's perception of strategic encirclement by its rival. This fear it has caused Pakistan to support of the Haqqani Network and other terrorist actors that serve as its strategic proxies, meaning that CPEC is likely to drive Pakistan's continued support for these groups.

In an escalatory move, China and Pakistan signed a memorandum of understanding on 8 December 2020 to "enhance defense cooperation between the Pakistan Army and the Chinese People's Liberation Army [PLA]."⁸⁶ The agreement has largely been billed in Pakistani press as a counter to growing ties between the United States and India, an arrangement that Pakistan believes has emboldened Indian Prime Minister Modi to take more repressive measures against the Muslim population in Indian-administered Kashmir. It is worth not-

ing however, that the Pakistan military's press release specifically mentioned a secondary objective of ensuring a "secure environment for the CPEC projects."⁸⁷ This is a worrying development that could indicate a future presence of PLA forces playing a direct role in establishing and maintaining the security of critical CPEC sites. The United States and India would certainly oppose such a move, as it would effectively play into India's worst fears of strategic encirclement by the Chinese and put into doubt critical United States strategic objectives in Afghanistan and South Asia.

Long-term Outcomes

As of this writing, it is fair to say that CPEC has achieved a moderate level of success in advancing both Pakistan's economy and Chinese interests in South Asia. The project was only meaningfully definitized in November 2017 and it is reasonable to expect an effort of this scale to take several years to begin showing results. The buildout of the Gwadar port and increased Chinese foreign direct investment in the newly established special economic zones are both likely to have a positive effect on Pakistan's economy. For China's part, closer political and military ties with Pakistan simultaneously diminish US influence in the region and enhance their own. However, it is equally fair to say that CPEC is very unlikely to achieve the level of staggering economic revitalization that both China and Pakistan have claimed or fundamentally reshape the political or security structures of the region.

As discussed above, both China and Pakistan have been deliberately vague on what, specifically, the plan is. Beyond the 62 billion USD proposed funding cap and a few marquis projects, extraordinarily little detail is publicly available on how these funds have been allocated, and neither country has yet produced a consolidated list of proposed projects. Both are quick to point to the key projects that have begun to bear fruit, including Gwadar Port complex and the emerging special economic zones as mentioned above, but it would be an exaggeration to attribute these successes solely to CPEC. Most were already underway at the time of Xi's unveiling of the BRI effort in 2013 and, at best, have been expanded in scope since. This criticism plagues much of the BRI, with critics pointing out that while it is "ostensibly a new program, it is best viewed as a rebranding of ongoing efforts to expand existing overseas infrastructure projects and construct new ones."⁸⁸

In the absence of meaningful metrics on CPEC's outcomes, it is helpful to examine the success of similar efforts the Chinese have undertaken in the past, and the Sicomines agreement in the Democratic Republic of Congo (DRC) may provide an instructive analogy. While this deal predates the BRI, it bears many of

the hallmarks of China's current investment portfolio and has been in place long enough to examine its outcomes. In 2008, China concluded a 6 billion USD deal, which DRC dictator Joseph Kabila backed with Congolese sovereign guarantees, combining the promise of infrastructure improvement with access to critical mineral reserves for Chinese state-owned enterprises. As with CPEC, Kabila promised that the Sicominex deal would be a catalyst for rapid economic growth in DRC, pledging significant gains in nearly every sector from infrastructure to health systems but providing few details on how these gains were to be achieved.⁸⁹

The results of the deal have been mixed, at best. The Chinese have likely achieved many of their economic objectives in the DRC, having secured access to "large reserves of tantalum, tin, gold and diamonds,"⁹⁰ which are vital to Chinese industry. The Congolese, however, have fared less well. Total infrastructure investment is believed to have been only a quarter of the promised 3 billion USD, and those projects that were financed have been plagued by corruption and are often of such poor quality that their rapid deterioration has fueled calls "for an audit of the whole building process."⁹¹ In a reflection of growing resentment of the Congolese people, "in the DRC, Lingala speakers coined the adjective *nguanzu*, derived from the Chinese city of Guangzhou, to mean 'unreliable' or 'flimsy'."⁹² In perhaps the most important lesson for Pakistan, the Chinese promise to grow Congolese mining expertise and help diversify its economy have almost totally failed to materialize. While Chinese companies have employed Congolese citizens in low-wage labor and mining jobs, repeated experience has shown that the employment of "Chinese nationals for more highly qualified jobs are characteristics of Chinese companies in Africa."⁹³ Thus far, there is little reason to believe that Pakistan's experience will differ meaningfully from that of the DRC.

Given the experience of countries like the DRC that have secured Chinese financing for infrastructure improvement and economic development, it seems likely that CPEC's outcomes will fall significantly short of the lofty rhetoric that surrounds it in Pakistan and China. However, because of the broad strategic importance of the BRI initiative to China and CPEC's billing as its "flagship" project, it is equally likely that neither Pakistan nor China can afford to allow it to completely collapse. Like the US banking industry in 2008, CPEC is simply too big to fail. Consequently, both nations are likely to continue to invest in key projects, like the Gwadar complex, while packaging almost any infrastructure improvement within Pakistan as being part of the CPEC vision, regardless of how flimsy the tie. All told, the most likely outcome of this effort will be a modest improvement in Pakistan's economic health that both governments will attempt to inflate for political benefit. If this is true, then it seems unlikely that CPEC will

fulfil China's desire to have Pakistan shift its strategic and economic ties entirely from the West and toward Beijing.

US Response

It is in the United States' interest to not over-react to the BRI effort in general or to CPEC specifically. For both political and economic reasons, CPEC is unlikely to bring the depth to the Sino-Pakistan relationship that the United States fears most. Since its establishment, Pakistan has sought to leverage its strategic position to secure external investment. From the 1950s through the 1970s, Pakistan marketed itself as a democratic bulwark against rising Soviet influence in India; in the 1980s, it rebranded as the key to defeating the Russians in Afghanistan; and in the 2000s, it has sold itself as a vital ally in the US war on terrorism. In each of these periods, Pakistan delivered far less than it promised even as it accepted tens of billions of dollars in US aid and security assistance. While there is unquestionable strategic value to China and Pakistan in the CPEC venture, some Pakistan observers see yet another ploy to put "pressure on the United States to maintain a relationship with Pakistan given U.S.-China competition."⁹⁴ Given this history, combined with the likelihood that many of the CPEC's lofty expectations are likely to fall short, Washington's best approach would be to show strategic patience.

For these exact reasons, the Department of State's approach so far has been widely constrained to the informational arm of US power. In 2019, the "principal deputy assistant secretary of state for South and Central Asia, Alice Wells, spoke in unusually strong terms about the negative impact of CPEC on Pakistan during a speech" and followed up on social media to assert that CPEC was likely to result in the "surrendering of assets and diminishing sovereignty." While China and Pakistan issued immediate condemnation of these comments, it is notable that neither government has yet to respond with a "complete picture of costs and projects."⁹⁵ These statements and others by the Department of State are a critical beginning for US efforts to change the narrative surrounding CPEC—within Pakistan and globally.

The United States must continue to shed light on the dark side of Chinese financing, including the perils of the debt trap and the consistent underperformance of these projects compared to their initial promises. Continuing to push the international community to demand that China and BRI recipient countries meet the same degree of transparency expected of other economic development initiatives, such as loans from the IMF and World Bank, could go a long way to undermine support for these efforts. Finally, it is vital that the United States, other large donor governments, and the World Bank grow increasingly skeptical of re-

quests for debt relief from nations that have accepted BRI or other forms of Chinese financing.

Conclusion

At 62 billion USD, the CPEC initiative is a massive undertaking. China and Pakistan have both promised that the effort will have a transformative effect on the economies of Pakistan and western China as well as aid in the formation of a long-term strategic relationship between the two nations. Already, there have been some modest successes. The completion of the Gwadar Port complex and surrounding transportation and industrial infrastructure as well as the emergence of several of the planned special economic zones represent some of the few bright spots in Pakistan's otherwise poor economy. These successes, however, are largely outweighed by the absence of a clearly articulated plan from either country on its total project scope or financial underpinnings. Given this lack of transparency and in comparing it to similar Chinese-backed efforts in other developing countries, it appears highly unlikely that CPEC will achieve anything close to the staggering revitalization of Pakistan's economy that its proponents have suggested, including preposterous estimates of up to 15 percent annual GDP growth. The more likely outcome is that China and Pakistan will seek to package these few improvements with other efforts, many of which were already underway when the CPEC began, and attempt to portray them as proof of the effort's success. Such modest successes are unlikely to allow China to fully supplant Western influence in the region over the long term as it hopes. ★

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Notes

1. Xi Jinping, "Promote People-to-People Friendship and Create a Better Future," (speech, Nazarbayev University, Kazakhstan, 7 September 2013), Ministry of Foreign Affairs of the People's Republic of China, <https://www.fmprc.gov.cn/>.
2. Xi Jinping, "Work Together to Build the Silk Road Economic Belt and the 21st Century Maritime Silk Road," (speech, Belt and Road Forum for International Cooperation, 7 May 2017), Ministry of Foreign Affairs of the People's Republic of China, <https://www.fmprc.gov.cn/>.
3. Siegfried Wolf, "China-Pakistan Economic Corridor and Its impact on Regionalisation in South Asia," in *Regional Cooperation in South Asia: Socio-Economic, Spatial, Ecological and Institutional Aspects*, ed. Sumana Bandyopadhyay, et al. (Cham, Switzerland: Springer International Publishing AG, 2017), 101.
4. Shehryar Khan and Guijian Liu, "The China-Pakistan Economic Corridor (CPEC): Challenges and Prospects," *Area Development and Policy* 4, no. 4 (2019), 468.
5. Muhammad Iqbal Chawla, "Belt and Road Initiative: Regional and Global Dimensions," *Journal of Political Studies* 25, no. 1 (2018), 82.
6. Wolf, "China-Pakistan Economic Corridor," 101.
7. Luca Bandiera and Vasileios Tsiropoulos, "A Framework to Assess Debt Sustainability and Fiscal Risks under the Belt and Road Initiative," *World Bank Group: Macroeconomics, Trade, and Investment Global Practice*, 2019, 3.
8. Wolf, "China-Pakistan Economic Corridor," 101.
9. Haroon Janjua, "Cash-strapped Pakistan Asks China to Shelve US\$2 Billion Coal Plant," *South China Morning Post*, 16 January 2019.
10. Howard W. French, *China's Second Continent: How a Million Migrants Are Building a New Empire in Africa* (New York: Vintage Books, 2015), 261.
11. Mauro Boffa, "Trade Linkages Between the Belt and Road Economies," *World Bank Group: Macroeconomics, Trade and Investment*, May 2018, 3.
12. Bandiera and Tsiropoulos, "A Framework to Assess Debt Sustainability," 2.
13. Yakov Silin, et al., "The Silk Road Economic Belt: Balance of Interests," *Journal of Economic and Political Studies* 6, no. 3 (2018), 294.
14. Silin et al., "The Silk Road Economic Belt," 295.
15. Muhammad Zahid, Ullah Khan, and Minhas Majeed Khan, "China-Pakistan Economic Corridor: Opportunities and Challenges," *Strategic Studies* 39, no. 2 (30 June 2019), 69.
16. Government of Pakistan Ministry of Planning, Development and Reform, *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)*, 21 November 2017, 2.
17. *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)*, 11.
18. Chawla, "Belt and Road Initiative: Regional and Global Dimensions," 83.
19. "CPEC 'Game-Changer' for Pakistan, 'Fate-Changer' for Region: PM," *Pakistan Point News*, 29 August 2016, <https://www.pakistanpoint.com/>.
20. Chawla, "Belt and Road Initiative," 82.
21. Nazim Rahim and Asghar Ali, "The Sino-Indian Geo-Strategic Rivalry: A Comparative Study of *Gwadar* and *Chabahar* Ports," *The Dialogue* 13, no. 1 (31 March 2018), 89.
22. Wolf, "China-Pakistan Economic Corridor," 101.
23. Wolf, "China-Pakistan Economic Corridor," 100.

24. Muhammad Saqib Irshad, Qi Xin, and Hamza Arshad, "One Belt and One Road: Does China-Pakistan Economic Corridor benefit for Pakistan's Economy?," *Journal of Economics and Sustainable Development* 6, no. 5 (2015), 202.
25. Irshad et al., "One Belt and One Road," 203.
26. Zahid Khan, "The China-Pakistan Economic Corridor: Economic Rationale and Key Challenges," *China Quarterly of International Strategic Studies* 5, no. 2, (2019), 251, <https://www.worldscientific.com/>.
27. Khan, "The China-Pakistan Economic Corridor," 254.
28. Khan and Khan, "China-Pakistan Economic Corridor: Opportunities and Challenges," 73.
29. International Crisis Group, "China-Pakistan Economic Corridor: Opportunities and Risks," *Asia Report*, No. 297, (29 June 2018), 12, <https://d2071andvip0wj.cloudfront.net/>.
30. "PM Inaugurates Gwadar Free Zone, Expo 2018," *Frontier Star* (Pakistan), 30 January 2018, <http://search.ebscohost.com.aufric.idm.oclc.org/>.
31. *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)*, 9.
32. Wolf, "China-Pakistan Economic Corridor," 101.
33. White House. *United States Strategic Approach to the People's Republic of China*, 5.
34. Wolf, "China-Pakistan Economic Corridor," 104.
35. Wolf, "China-Pakistan Economic Corridor," 104.
36. Zahid et al., "China-Pakistan Economic Corridor," 68.
37. Rahim and Asghar, "The Sino-Indian Geo-Strategic Rivalry," 91.
38. Rahim and Asghar, "The Sino-Indian Geo-Strategic Rivalry," 92.
39. Yun Sun, "China's Aid to Africa: Monster or Messiah," *Brookings*, 7 February 2014, <https://www.brookings.edu/>.
40. Venkateswaran Lokanathan, "China's Belt and Road Initiative: Implications in Africa," *ORF Issue Brief*, No. 395, August 2020, 3.
41. *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)*, 9.
42. "CPEC 'Game-Changer' for Pakistan, 'Fate-Changer' for Region: PM," *Pakistan Point News*.
43. Ministry of Planning, Development & Reform, Government of Pakistan, *Pakistan 2025: One Nation – One Vision*, 89.
44. *Pakistan 2025: One Nation – One Vision*, 61.
45. Irshad et al., "One Belt and One Road," 202.
46. *Long Term Plan for China-Pakistan Economic Corridor (2017–2030)*, 5.
47. Irshad et al., "One Belt and One Road," 201.
48. Khan and Liu, "The China-Pakistan Economic Corridor," 470.
49. Abbad Farooq, "Marketing China-Pakistan Economic Corridor: Promoting Pakistani Perspective," *The Geopolitics*, 15 January 2020.
50. The World Bank, "World Bank Open Data," <https://data.worldbank.org/>.
51. Wolf, "China-Pakistan Economic Corridor," 103.
52. "CPEC 'Game-Changer' for Pakistan, 'Fate-Changer' for Region: PM," *Pakistan Point News*.
53. Bob Woodward, *Obama's Wars* (New York: Simon and Schuster, 2010), 216.
54. Woodward, *Obama's Wars*, 215.
55. Wolf, "China-Pakistan Economic Corridor," 105.

56. Madiha Afzal, "At All Costs': How Pakistan and China Control the Narrative on the China-Pakistan Economic Corridor," *Global China*, June 2020, 1.
57. Bandiera and Tsiropoulos, "A Framework to Assess Debt Sustainability," 7.
58. International Crisis Group, "China-Pakistan Economic Corridor," 11.
59. International Crisis Group, "China-Pakistan Economic Corridor," 12.
60. International Crisis Group, "China-Pakistan Economic Corridor," 21.
61. Abdul Khaliq, "Urgent Debt Relief Needed as Pakistan Faces Perfect Debt Trap," *European Network on Debt and Development*, 9 September 2020, <https://www.eurodad.org/>.
62. Imran Khan, "Prime Minister calls for a "Global Initiative on Debt Relief," Embassy of Pakistan, 12 April 2020, <http://embassyofpakistanusa.org/>.
63. "Pakistan Secures \$800 Million Debt Relief from G20 Countries," *Business Today*, 22 November 2020, <https://www.businesstoday.in/>.
64. Farooq Naeem, "Pakistan Signs \$1.7 Billion Debt Relief Deal," *Barron's*, 21 December 2020, <https://www.barrons.com/>.
65. Amit Ranjan, "China's Infrastructure Projects in South Asia under BRI: An Appraisal," *Contemporary Chinese Political Economy and Strategic Relations: An International Journal* 5, no. 3 (December 2019), 1096–97.
66. Khan, "The China-Pakistan Economic Corridor," 251.
67. Zia Ur Rehman, "Pakistani Militants Shift Focus to Cities in Targeting of Chinese," *Nikkei Asia*, 27 December 2020, <https://asia.nikkei.com/>.
68. Wolf, "China-Pakistan Economic Corridor," 104.
69. Transparency International, "Corruption Perceptions Index," 5 January 2020, <https://www.transparency.org/>.
70. *Pakistan 2025: One Nation – One Vision*, 54–55.
71. Cobus Van Staten, Chris Alden, and Yu-Shan Wu, "Outlining African Agency Against the Background of the Belt and Road Initiative," *African Studies Quarterly* 19, no. 3–4 (October 2020), 121.
72. International Crisis Group, "China-Pakistan Economic Corridor," ii.
73. Ayjaz Wani, "Pakistan: Khan-Bajwa Marriage on the Rocks?," *Observer Research Foundation*, 27 October 2020, <https://www.orfonline.org/>.
74. International Crisis Group, "China-Pakistan Economic Corridor," i–ii.
75. International Crisis Group, "China-Pakistan Economic Corridor," 12.
76. Muhammad Zahid Ullah Khan and Minhas Majeed Khan, "China-Pakistan Economic Corridor: Opportunities and Challenges," *Strategic Studies* 39, no. 2 (30 June 2019), 76.
77. Zheng Xin, "Zhuhai Port Scores Big with Deal in Pakistan," *China Daily USA*, 30 October 2015, 18.
78. International Crisis Group, "China-Pakistan Economic Corridor," 12.
79. Dipanjan Roy Chaudhury, "As Part of CPEC, 'Chinese Only' Colony Coming Up in Pakistan," *Economic Times*, 21 August 2018, <https://economictimes.indiatimes.com/>.
80. Wolf, "China-Pakistan Economic Corridor," 105.
81. Rahim and Asghar, "The Sino-Indian Geo-Strategic Rivalry," 86.
82. Khan and Khan, "China-Pakistan Economic Corridor," 75.
83. Rahim and Asghar, "The Sino-Indian Geo-Strategic Rivalry," 86.
84. Rahim and Asghar, "The Sino-Indian Geo-Strategic Rivalry," 89.
85. Khan and Khan, "China-Pakistan Economic Corridor," 75.

86. "China Pakistan Sign Defence Pact to Counter US-India," *Global Village Space*, 8 December 2020, <https://www.globalvillagespace.com/>.
87. Kamran Yousaf, "Pakistan, China Ink Pact on Defence Cooperation," *Express Tribune*, 29 December 2020, <https://tribune.com.pk/>.
88. Andrew Scobell, et al., *China's Grand Strategy: Trends, Trajectories, and Long-Term Competition* (Santa Monica, CA: Rand Corporation, 2020), 51.
89. Andoni Maiza-Larrarte and Gloria Claudio-Quiroga, "The Impact of Sicominas on Development in the Democratic Republic of Congo," *International Affairs* 9, no. 2 (2019), 438–39.
90. Maiza-Larrarte and Claudio-Quiroga, "The Impact of Sicominas on Development," 427.
91. Maiza-Larrarte and Claudio-Quiroga, "The Impact of Sicominas on Development," 434–35.
92. Martin Kindl, "African Security Futures: Threats, Partnership, and International Engagements for the New U.S. Administration," *PRISM* 6, no. 4 (2017), 26.
93. Maiza-Larrarte and Claudio-Quiroga, "The Impact of Sicominas on Development," 443.
94. Afzal, "At All Costs," 7.
95. Afzal, "At All Costs," 5.

Interpreting the Signs

The Prospects of QR Coding the Battlespace

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Abstract

Despite the best of efforts, the number of attacks on “protected sites” (hospitals, schools, and other civilian infrastructure of importance) are increasingly with alarming frequency. This article considers this problem primarily from an operational point of view and proposes a specific and implementable “concept-technology” solution involving the use of QR codes/ coding to mark “protected sites” and blockchain technologies to address it. In the process, this article highlights the critical importance of considering seriously the targeting process used by modern militaries in the context of the problem at hand. It also critically examines two recent proposals that have been made to address this problem. The article describes in some detail the architecture, process-flow, and advantages of the solution that it offers vis-à-vis the other currently available options and the ways and means by which emergent combat systems manned and unmanned can, as a default state, incorporate measures by which they can “attend to protected symbols” in complex battlespaces, thereby augmenting and strengthening the United Nations’ “deconfliction” mechanism.

Introduction

The Clausewitzian observation regarding the “fog and friction of war” is a well-known, albeit often misconstrued, truism. While, in common parlance, it is indicative of the inevitable turbulence that marks the battlespace, for those in the thick of battle “the fog and friction of war” presents some rather intractable problems. These problems arise not only when contending with the adversaries that they face in battle but also as the modern uniformed soldier strives to wage war in accordance with a code of conduct that is enframed by international laws and conventions.¹ Among other things, this code of conduct involves limiting the potential for damage that may be caused to civilians, noncombatants, and infrastructure and facilities that are not directly and/or indirectly involved in the conflict during the high-intensity operations that characterize the current and emergent conditions of what some have referred to as “accelerated warfare.”²

Given the complexity that marks the modern battlespace, contending with this responsibility to avoid and/or to prevent damage and destruction to civilians and civilian infrastructure/facilities presents the military with an ethical problem, which not only directly impinges on its operational capability and efficiency but which also, according to some, puts the obligation of incurring higher risks on military personnel.³ This is because as the battlespace expands to encompass urban and populated areas there is a concomitant increase in the blurring of the distinction between “the civilian” and “the military.” Thus, as modern militaries increasingly strive to enhance their speed, agility, lethality, and precision-strike capabilities in a bid to shrink their own Observation, Orientation, Decision, Action (OODA) cycle vis-à-vis that of their adversaries, this blurring of the distinction between civilian and military puts an inordinate amount of pressure and responsibility on how military leaders plan and execute operations and, specifically, on how they design and operationalize targeting capabilities.⁴ Thus, increasingly, what is at stake for modern militaries is the need to achieve their operational aims while simultaneously upholding their commitment to respect and act in accordance with the international laws and conventions that guide the prosecution of war.

Aside from contexts involving nuclear warfare strategy where discussions continue on the subject of “force” (i.e., military) and “value” (i.e., population center) targeting, we appear to have moved on particularly in the conventional warfare context from an age in which we saw the use of indiscriminate wide-area bombing campaigns, which intentionally attacked civilian targets as a strategic end. In light of this, while it may be plausibly argued that our collective sensibilities about mass attacks, particularly against civilians and civilian infrastructure, have improved considerably and that laws, conventions, and procedures have been created, changed, and strengthened accordingly, there is, however, evidence that such kinds of attacks continue to persist in the modern battlespace.⁵ Thus, for example, *The New York Times* reported that in May 2020, within a span of “12 Hours, 4 Syrian Hospitals [were] Bombed.” The article further reported that “Physicians for Human Rights, an advocacy group that tracks attacks on medical workers in Syria, has documented at least 583 such attacks since 2011, 266 of them since Russia intervened in September 2015. At least 916 medical workers have been killed since 2011.”⁶ Such incidents led the UN to constitute a board of inquiry (BOI) in April 2019 to investigate these and related occurrences, though it warrants mentioning that the BOI’s report was in itself disturbing as it failed “to identify the role of the UN in facilitating attacks that it intended to prevent and [did not show] how the UN can avoid doing so in the future.”⁷

What is perverse about these and similar incidents is that they have taken place (and continue to take place) even though the UN has a specific process *deconfliction* that is intended to prevent such attacks. Deconfliction, which is essentially, an information-exchange mechanism, has been specifically designed to protect facilities such as schools and hospitals, which enjoy protected status under international humanitarian law (IHL). The mechanism involves requiring those operating such facilities to share their coordinates with the UN Office for Civil and Humanitarian Affairs (OCHA), which then shares this information with the warring parties such that they can put them on a no-hit list, thereby protecting these sites from unintentional and accidental attacks. There remains, however, a critical flaw in the design of this process, namely, that adherence to the deconfliction list is voluntary. Moreover, the warring parties could just as easily use the deconfliction list to specifically target the listed facilities for various ends. This was evident in the report of the April 2019 BOI that the UN had constituted.⁸ For our purposes, it is important to pay attention to three significant points that emerged from the UN's BOI report. First, the report clearly states that given the safety and security concerns of its UN OCHA personnel, the presence of UN officials was limited to nonexistent at the targeted sites.⁹ Second, the UN OCHA is organized in a stovepiped manner, thus inhibiting the sharing of information within the organization, which led to the reports of the attacks not being recorded, verified, and thus investigated.¹⁰ And third, more concerning, the report observed that though the purpose of the deconfliction mechanism was to identify and protect humanitarian sites, the mechanism was not intended to be a "protection tool."¹¹ What this suggests is that regardless of the good intentions of the UN to protect sites of humanitarian consequence, the currently available mechanisms are woefully inadequate. The problem is not simply confined to the inadequacy of the UN mechanism in question. As we segue into an age marked by the proliferation of autonomous weapon systems (AWS) and other technologically advanced machines of war, which, it is often speculated, will acquire the capability to make targeting decisions independent of human involvement and to act on them, we can expect this problem to be further exacerbated. What is necessary, therefore, is a solution or, at the very least, a pathway to a solution that can address this problem.

Given the sensitive nature of the problem and the stakes involved, it is not surprising that there have been various attempts to address this issue. Yet, these attempts have some significant conceptual, methodological, and technical drawbacks. Without undermining the intent underwriting these attempts, we cannot help but observe that, for the most part, while they focus on the humanitarian and ethical aspects of the problem, which certainly warrant attention as they are the

principal concern, they either overtly or implicitly undervalue the military-operational stakes involved, which is surprising given the context in which the solutions are offered. This is perplexing because the problem of accidental (or even intentional) attacks on humanitarian sites is one of targeting, which is a key military-operational capability. Thus, any solution that does not account for the very real complexities involved in the targeting process that militaries must contend with under accelerated warfare conditions and which does not find ways and means to address the problem at hand without compromising a key military capability—targeting—will fall short on two counts. First, it is unlikely that militaries will be amenable to a solution that materially hinders their operational capability, particularly one that is, quite literally, foundational to military operations; and second, a solution that does not take into account the targeting process and/or which underestimates it will likely suffer the same fate as the moribund option provided by the UN deconfliction mechanism—thus, rendering it, like the UN mechanism, more a theoretical model rather than as a “protection tool” of consequence.

This article offers an alternative in the form of a concept-technology solution, which is distinguished by a number of specific features: (1) it remains cognizant of and sympathetic to the military-operational needs—with specific reference to targeting—under modern combat conditions; (2) it seeks to provide a solution that is not only applicable to manned platforms but also, importantly, to the growing number of AWS that are and may be expected to populate the emergent battlespaces of the twenty-first century; (3) it employs a concept-technology pairing that is not abstract in nature (meaning, the “concept” is well-known and not obtuse or controversial, and the technologies involved are readily available and may require, at the most, only minimal reengineering prior to being deployed to achieve the requisite ends); and (4) it provides a means by which the inadequacies of the UN’s deconfliction mechanism may be directly addressed in terms of preventing attacks on “protected sites,” thereby upholding the core tenets of the IHL and, thus, serving as a viable protection tool. One additional benefit of the solution offered by this article is that it also showcases a way by which ethically grounded concept-technology pairings may be imagined and designed in and for the strategic-military context.

To this end, this article will first as a context-setting exercise briefly discuss the nature and character of the targeting process in the current and emergent military-operational environment. It is necessary to examine this because kinetic effects as experienced and witnessed in the battlespace are a direct outcome of the targeting process and capability. Thus, a clearer understanding of how the targeting process works, its implications (both operational and ethical), and where an intervention

may be possible (and/or warranted) is critically important. Second, considering this context-setting exercise, this article will critically examine two recent proposals that have sought to address the problem at hand. The aim of this examination is to point out how, despite their undoubtedly laudable intent to advance the humanitarian and ethical cause related to attacks on protected sites, these proposals exhibit some important conceptual shortcomings, which includes eliding the critical matter of engaging with military-operational considerations. When considered holistically, these shortcomings and omissions undermine the potential for adoption and implementation of these proposals. Third, having critically examined these two current and representative proposals, the article will then outline in some detail the concept-technology alternative that it offers. It will do so by (1) briefly discussing the technologies it seeks to use and the justifications for doing so; (2) describing the concept-technology pairing, which will include identifying how and in what ways it influences the targeting process to comply with the requirements of the IHL provisions related to protected sites without compromising this critical military-operational capability; and (3) indicating how and in what ways the suggested concept-technology pairing improves the UN deconfliction mechanism. The article will conclude by reiterating how the solution that it proposes serves not only as an example of how the problem of preventing attacks—accidental and otherwise—on protected sites may be addressed but also, from a wider strategic point of view, how such concept-technology pairings serve as examples by means of which the ethical design of militarily oriented solutions may be promoted, which contribute to the development of “trusted military systems”—autonomous and otherwise.

On Targeting: Setting the Crosshairs

As Merel Ekelhof cogently puts it, “[t]here seems to be a considerable lack of knowledge and understanding about targeting among individual members of the public, as well as many groups that represent the public in some way, such as lawyers, nongovernmental organizations, political leaders, industry, scientists, and the press.”¹² This lack of knowledge, when coupled with the exponential increase in the sophistication of citizen-based media, which often allows for the production of “Insta-News” and leverages “the network effect” to report on battlespace events in near real time, has, in large part, fostered an environment that has brought the *outcomes* of the targeting function of militaries under extremely close scrutiny. While in many instances this close scrutiny is warranted and serves to hold to account the actions of defense and security policy makers and their military counterparts, yet, it remains, for the most part, oblivious to the extraordinarily complex task of targeting.¹³ That said, and precisely because targeting is one of the

core functions of the military involving, “essentially[,] . . . practice of destroying enemy forces and equipment,”¹⁴ it is also an absolute necessity to keep in mind that it “is the *sine qua non* of the international law of armed conflict because intrinsic to it are the central tenets of civilized combat: distinction, proportionality, military necessity, and humanity.”¹⁵

Interestingly, targeting as we recognize it today is a relatively new phenomenon, accompanying the advent of aerial warfare. Prior to that targeting though always an important component of warfare was a linear, relatively unsophisticated and tactically oriented function/process. The advent of aerial warfare, however, changed that. Aerial warfare progressively enabled combatants to take the conflict often beyond the immediate battlespace and deep into the enemy heartland. As this ability matured, concurrently, the targeting function found itself becoming increasingly sophisticated, nonlinear, and acquiring a strategic dimension. This was reflected in the nature of the outcomes that the targeting function sought to achieve. While targeting retained its tactical relevance in terms of serving to destroy an adversary’s armies and equipment, increasingly, given the expansion of aerial warfare capabilities, it also began to be used to create “strategic effects” that could influence the behavior of an adversary. Thus, for example, the attempts to “blitz” London in a bid to compel the United Kingdom to recognize and accept the futility of continuing the struggle against Nazi Germany though the attempt failed and the sustained Allied bombing campaigns against Nazi Germany’s industrial and population centers and against Imperial Japan’s major cities in the East Asian theater are cases in point.¹⁶

The shocking experiences of these strategic bombing campaigns—including the unprecedented use of the two atomic bombs against Imperial Japan—coupled with the mass casualties, military and civilian, sustained over the two world wars and the subsequent wars in Korea, Vietnam, and elsewhere led to a considerable reevaluation of the merits of waging indiscriminate forms of warfare. These concerns and reevaluations found expression in a number of international agreements, such as the Nuremberg Charter, the 1977 Protocol I to the 1949 Geneva Convention, and so forth. This trend continued in the 1990s, as evidenced by the public outcry at the extent of the mass civilian casualties that were sustained, particularly in the wars that followed the break-up of Yugoslavia.¹⁷ Simultaneously, however, there were developments underway in the military-technology domain that aimed to co-opt the use of microelectronics and the then still-nascent information and computational technologies to develop “smart” and “precise” weapons.¹⁸ These advances in military technologies, particularly those that fueled the design and development of precision-guided munitions, were underwritten by at least two considerations. The first was military necessity. Having recognized the futility of

mass bombing campaigns and recognizing the benefits of assessing potential adversaries in systemic terms, strategic-military planners began revisiting the concept of the “extended battlespace” and the possibility of interdicting critical nodes of an adversary’s war-waging capabilities in a bid to degrade his fighting potential.¹⁹ The second reason was humanitarian in nature. Militaries also recognized the weight and importance of public opinion and began to sensitize themselves to it and to the need for waging war in a more discriminatory manner in a bid to reduce civilian casualties and to avoid inflicting damage to civilian infrastructure.²⁰ This, in turn, led to refocusing more closely on targeting.

In an Annex to “the keystone document of . . . joint operations . . . [which] . . . provides the doctrinal foundations and fundamental principles that guide the Armed Forces of the United States,”²¹ targeting is explained as “the process of selecting and prioritizing targets and matching the appropriate response to them, taking account of command objectives, operational requirements and capabilities.”²² Taking care to clarify that targeting is a process that is systematic, comprehensive, and continuous, the document goes on to point out that when combined with “a clear understanding of operational requirements, capabilities, and limitations, the targeting process identifies, selects, and exploits critical vulnerabilities of target systems and their associated targets to achieve the commanders’ objectives and desired end state.”²³ As such, targeting may be understood as being “the deliberate application of capabilities against targets to generate effects in order to achieve specific objectives . . . [thus representing] the bridge between the ends and means of warfare.”²⁴ The processual nature of targeting involving planning, tasking, executing, and assessing is suggestive of the “logical progression that forms the basis of decision-making and ensures consistency with the commander’s objectives and the end state.”²⁵ This is represented by the diagram below:

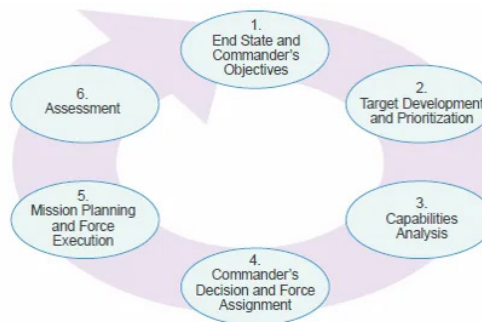


Figure 1. The targeting process. (Source: Annex 3-60, 10.)

In this context, the doctrinal documentation of the US military relating to targeting makes an intriguing point. It suggests that those who are engaged in discharging the targeting function are charged with predicting (or anticipating) and estimating which actions carried out by what means will satisfy the commander's intent. This requires them to fuse inputs received from intelligence, surveillance, and reconnaissance (ISR), strategic assessments, and operational planning exercises to generate a high level of situational awareness, which is a prerequisite for targeting to be effective and is indicative of the integrative nature of the targeting process. Note that the word *effective* in this context is not simply limited to kinetic and lethal outcomes. It also gestures to nonlethal (kinetic or otherwise) outcomes, which may direct or influence an adversary's actions.²⁶ At the same time, the targeting process is required to give due consideration and weightage to the "sensitivity" of the target, which is a matter of critical concern when dealing with targets whose interdiction may have potentially negative strategic-political (and humanitarian) consequences such as the targeting of the senior leadership of the adversary, attacking stores of dangerous munitions and equipment (for example, weapons of mass destruction), and, in a context most relevant to us, engaging in combat where the risk of collateral damage (particularly involving vulnerable civilians) is high. This emphasis on the sensitivity of the target underwrites the entire targeting process. Thus, the doctrinal documentation insists that the targeting process is not random and ad-hoc. It is "controlled by strategy, law of war, and rules of engagement."²⁷

Critical to the targeting process is the understanding of what constitutes a target. The aforementioned Annex explains: "A target is an entity or object considered for possible engagement or other actions,"²⁸ which may be "facilities, individuals, virtual (nontangible) things, equipment, or organizations."²⁹ As such, a target is said to possess a set of distinctive characteristics, namely, physical, environmental, functional, and cognitive. While the first two—physical and environmental—relate to the structure, constitution, and location of the target, the third relates to the functions that the target performs within the adversarial system and its relative importance to the adversary's war-waging capability. The fourth characteristic is primarily concerned with the human element of the adversarial war-waging system, which assumes importance especially in the context of effects-based operations, where the aim is to either disrupt an adversary's command and control system or to influence its behavior to achieve a desired outcome.³⁰ The Annex then provides what is, in our context, a significant clarification. It states that

a fundamental tenet of targeting [is] that no potential target derives its importance or criticality merely by virtue of the fact that it exists, or even that it is a

crucial element within a target system and other interdependent target systems. Any potential target derives importance, and thus criticality, only by virtue of the extent to which it enables adversary capabilities and actions that must be affected in order to achieve the commander's objectives.³¹

This clarification is important because it directs our attention to the primacy accorded to the commander's intent and aims, which is reflective of the "control" that a commander exercises in war, thereby underscoring the critical role of the human in the targeting process, which is a subject that has acquired much attention, particularly in the context of the often speculative discussions surrounding the use of artificial intelligence (AI) and autonomous systems in future warfare.

There are, in essence, two types of targeting: deliberate and dynamic. Despite what these terms may superficially indicate, the *Annex to the Joint Targeting Document* cautions us that "[i]t is a mistake to associate deliberate targeting with fixed targets and dynamic targeting with mobile targets."³² While the former is directed toward targets that are known in advance and/ or have been pre-identified as existing in a definite geophysical space and are known to have specific functions whose interdiction is assessed as being vital for the prosecution of an operation, and thus have been subjected to detailed planning and development, the latter is directed toward those targets which may not have been pre-identified or known in advance or whose identification may have taken place within a compressed timeframe thus preventing them from being subjected to the target planning process. Deliberate targeting is a structured, systematic, and analytical process whose sequence may be illustrated as depicted in figure 2:



Figure 2. Deliberate targeting. (Source: Bg. H. Walther, "Building Military Corpora for Curricula" [BILC Conference, 2013, Tbilisi, Republic of Georgia].)

While this may convey the impression that the process flow of deliberate targeting is linear and sequential, the reality is that “the targeting process is bi-directional, iterative, multi-dimensional, sometimes executed in parallel, and [as] part of a larger set of processes.”³³ Moreover, each stage is not an act in isolation; rather, the stages are closely interrelated and require close coordination. Given that deliberate targeting is directed toward targets whose identity, capability, and importance are known in advance, it generally involves the activation of plans and attack schedules that have been prepared ahead of time in addition to creating “on-call packages or missions that deal with the targets through predetermined CONOPS [concept of operations].”³⁴ As such, deliberate targeting is generally employed in the opening stages of a battle, where the aim is to neutralize at the earliest possible instance an adversary’s offensive and defensive military systems, which may be fixed and/or mobile. One of the stark examples of this in operation was during the US military campaign in Iraq in 2003. The lightning speed with which US (and Allied) air assets neutralized the Iraqi military systems suggests that prior to the initiation of hostilities the US military had conducted a deep and thorough analysis of potential Iraqi targets, which were subjected to the deliberate targeting process. This allowed the US forces to “shock and awe” their Iraqi opponents, which resulted in the US forces acquiring, retaining, and exploiting the initiative in the battlespace.

When considered in abstract terms, while the dynamic targeting process does not differ from the general logic underwriting the deliberate targeting process, there are, however, some significant differences. This is because as we noted above unlike the deliberate targeting process, which is directed toward pre-identified targets, the dynamic targeting process seeks to address targets that were either not pre-identified or were identified too late to be subjected to the deliberate targeting process. The dynamic targeting process involves six specific steps: find, fix, track, target, engage, and assess (F2T2EA), and the process sequence is represented as depicted in figure 3:

While the headings assigned to each of the steps are self-explanatory and descriptive of the activities that take place at each point of the F2T2EA cycle, a brief examination highlights the operative logic that underwrites the process. The first step—*find*—involves detection of a target. This requires what the doctrinal documentation refers to as “clearly designated guidance from commanders,”³⁵ which implies that there is a prior intelligence input (albeit, perhaps diffused) and a consequent prioritization. This leads to the allocation of ISR resources to detect such targets. On finding the target, a determination is made as to its relevance and the time-sensitivity that may be accorded to it in keeping with the commander’s intent. The key point to note here is that despite the moniker—*dynamic*—as-

signed to such kinds of targeting, the find action is not unfocused. The doctrine, thus, specifically states, “Commanders should not task sensors without an idea of what they may collect.”³⁶

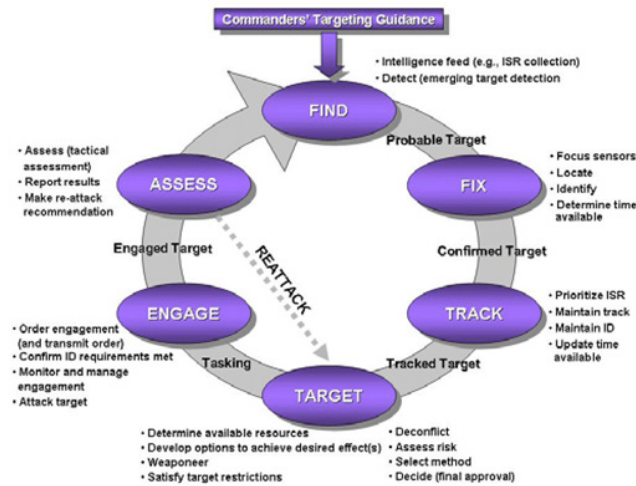


Figure 3. Dynamic targeting. (Source: AFDD 3-60, 48.)

The second step—*fix*—is the concrete determination that a target found by the above method is worthy of serious consideration. This requires the deliberate focusing of various kinds of sensors and other ISR assets to confirm the target’s profile and the timeframe within which an active engagement with it may be possible.

The aim of the third step—*track*—is to enhance the situational awareness needed to viably engage with the target. Like the step prior to this, tracking or following the target also necessitates the direction of sensor packages and other ISR platforms toward the target in a sustained manner. This allows for further refinements in the identification of the target, its capabilities, and a continual updating of the situational awareness relative to the target.

The fourth step—*target*—may be considered to be the prelude to the actual engagement of the target. This involves determining the weapons package that will be deployed against it (also known as weaponeeing) and devising the appropriate targeting solutions that may be required to effectively strike it. This step is also the point at which detailed assessments are made regarding the possible effects of striking the target in terms of potential for collateral damage, determining whether the target is on a no-strike list, and whether the target has been priorly designated

as a “restricted.” In effect, at this stage, all measures relating to target validation are undertaken and/or revised.

The fifth stage—*engage*—is the point at which the hostile profile of the target is reconfirmed and the orders to strike the target are issued, which a designated weapon-platform executes.

The sixth and last stage—*assess*—involves assessing the outcomes of the actions taken and the resultant effects on the target by deploying ISR assets to provide immediate feedback. This is critically important because—depending on the circumstances in which the strike is made—there is always the possibility that the strike may not have achieved the desired outcome in full or in part. If the assessment—based on the feedback received through the ISR assets—reveals that the outcomes have not been achieved, a reattack order is generated and executed.

What this brief discussion about the targeting process—involving deliberate and dynamic targeting—reaffirms is that targeting is not an ad-hoc and random activity; rather, it is a systematic and analytical decision-making exercise, which requires a myriad of increasingly granular levels of coordinated actions—each of which is critical to the process and none of which may be considered in isolation—to achieve the commander’s intent.

Yet, there is one specific element that plays a central role in targeting, which though being implicit in our discussion, has thus far remained unaddressed. It is also a matter of crucial importance in the specific context of this article. While we noted that regardless of whether the targeting process is oriented toward deliberate or dynamic targeting, the realization of the commander’s intent is contingent on—after cycling through the due process—a kill vehicle (attack platform) executing a specific tasking order. Similarly, the triggering of the targeting process and the intermediate steps of validation that co-constitute it is dependent on “the sensor” (or multiples thereof). Put differently, it could be said that the effectiveness of the targeting process is contingent on a sensor-to-shooter link given that, while on the one hand, the triggering of the targeting process is dependent on the sensor, on the other, the achievement of the desired outcome of the targeting process is contingent on the shooter. Alternately, it can be argued that while it is the sensor-to-shooter link that empowers (and validates) the targeting process, equally, it is the targeting process that bears the responsibility to align the shooter to the sensor to achieve the desired outcomes. The diagram in figure 4 is a representation of the sensor-to-shooter link and situates the targeting process in relation to it.

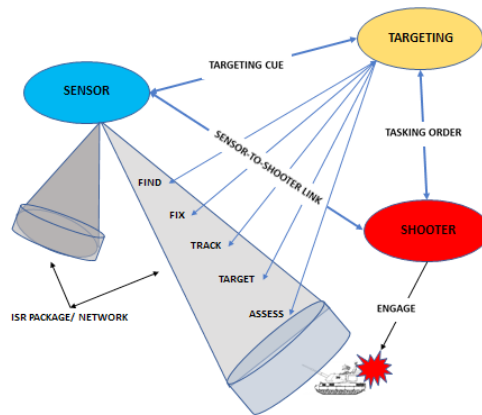


Figure 4. The Sensor-to-shooter link and the targeting process. (Source: Author)

In the context of a multi-domain battlespace, where sensor platforms and shooter platforms may be widely distributed over and across multiple domains, the robustness and efficiency of the sensor-to-shooter link is the key determinant of the effectiveness of the targeting process and, by extension, of a military's combat capability. As such, it is also one of the primary targets for adversarial disruption/interdiction. Recognizing this potential vulnerability, efforts are underway to progressively collapse this sensor-to-shooter link by, among other things, locating both the sensing capability and the shooting capability on the same platform. The advantages of doing so are self-evident. In the first instance, it allows for a near instantaneous reaction. This is particularly true in the case of the deliberate targeting process involving predetermined fixed targets for which preplanned strike packages may have been prepared. Secondly, it allows for the creation of a shock-and-awe effect, which could, potentially, overwhelm an adversary and lead to a rapid degradation of his war-waging capability. And third, it allows for increasing the efficiency of the dynamic targeting process by engaging with targets of opportunity under conditions of compressed timeframes. While the military-operational benefits of collapsing the sensor-to-shooter link may be undeniable, it is important, however, to appreciate the fact that in the context of a collapsed sensor-to-shooter link, the F2T2EA process as discussed above will also, therefore, be compressed. This most certainly will give rise to operational and ethical concerns. The operational concerns would arise because the targeting process would be compressed to a high degree, leading to a potential loss of control for the human operators, while the ethical concerns would be heightened because the

prospect of near instantaneous reaction times may result in unwanted and unwarranted actions that may severely violate the conditions of the IHL and the laws of armed conflict (LOAC).

Given this article's strategic intent, it is necessary at this point to take a step back and assess the salient points that have emerged as a consequence of our discussion of the targeting process, which may be enumerated as follows: (1) with the advent of aerial warfare, the targeting process has transited from being a purely tactical exercise to one that is spread across the strategic, operational, and tactical spaces of war, and is often employed to generate effects as much as to execute kill functions; (2) the targeting process is a structured, systematic, and analytical exercise, which unfolds in a cyclical and iterative manner, and while the targeting process may be rendered in discrete terms, in reality it is a complex process involving continuous interactions between its constitutive parts; (3) the trigger for initiating the targeting process begins with the statement of the commander's intent, which is then broken down into its constituent elements with increasing granularity, reinforcing the fact that targeting is a patently human activity, since it is a means by which a commander's intent (which is premised on perceptions of threats and/or benefits) is realized; and (4) deliberate and dynamic targeting processes are very similar in nature though the latter unfolds at a faster pace than the former and involves six distinct phases (F2T2EA). Further, we noted that implicit in the discussion about targeting is the question concerning the sensor-to-shooter link, which lends a distinct materiality to the targeting process by, on the one hand, providing crucial inputs which informs the commander's intent and, on the other, executing the tasking order to achieve the specific aims and objectives of the commander.

What is equally striking—though perhaps underappreciated—about the targeting process is that throughout the various stages that constitute it, the process remains mindful of the ethical dimension of combat. The evidence of this lies in the fact that, in the first instance, the commander's intent is always (at least, in theory) guided by the dictates of the IHL and the LOAC. Further, to ensure that the IHL and the LOAC are adhered to, continual assessments are made at the various stages of the targeting planning and development process. Thus, for example, this mindfulness of the conditions imposed by the IHL and the LOAC is particularly evident at the weaponizing stage where the appropriate strike packages are created keeping in mind the concerns regarding proportionality and appropriateness. Taken together, this reiterates a point that the doctrinal documentation strives to emphasize repeatedly, namely, that targeting is not a random and ad-hoc process; rather, that it is a carefully considered analytical exercise.

The above analysis notwithstanding, it also cannot be denied—as we noted at the very outset—that incidents involving attacks on protected sites continue to occur with alarming regularity. Thus, two critical questions stand: (1) given our brief exegesis of the targeting process, which revealed its deliberate and analytical nature, why do attacks on protected sites persist; and (2) having examined in some detail the mechanics and dynamics of the targeting process, can an *effective* intervention be made to ensure that such attacks can be prevented? While the first of the two questions may have (possibly nefarious) political reasons and implications, the second presumes that despite the apparently rigorous methodology informing the targeting process, there may exist the possibility of some form of intervention that can augment the targeting process, thereby addressing the problem on hand *more effectively* than is currently the case. This presumption underwrites two recent proposals that seek to employ technological means to intervene in the targeting process and thus warrants our brief critical attention.

Seeking Solutions: A Brief Review of Two Recent Proposals

The preceding discussion about how the targeting process unfolds highlights the systematic, analytical, and detailed steps that are involved in the identification, development, assessment, and engagement of a target. When cast within the context of the perpetual presence of the “fog and friction” of war, targeting emerges as one of the most complex of tasks that a military performs. This is particularly true when we account for the imperative of war fighters to maintain the operational or battle tempo. This is important because warfare, as Clausewitz cogently explained, is a duel between at least two entities who are aiming to outdo the other—both in terms of the capabilities that they bring to bear on each other *and* the speed with which they can act—in battle. Targeting, as we have seen, is also one of the most critical functions of a military, since it involves directly interdicting and degrading an adversary’s war-waging abilities. Thus, the speed at which the targeting process unfolds is also of critical concern and is one of the key metrics by which the effectiveness of a military force is gauged. Equally, as we have seen above, it is also precisely for this reason that the targeting process of the military is scrutinized so carefully, since the effects that it generates in the battlespace have real and tangible humanitarian consequences. Thus, any attempt to address humanitarian concerns—aside from measures to reinforce and/or expand the *jus ad bellum* framework—will have to focus on the military’s targeting process. This, for the reasons mentioned above, is a sensitive matter for it directly impinges on the effectiveness of a military force.

Labeling itself as Protected Assurance Understanding Situation Entities (PAUSE), the first of the two solutions that we will examine involves “the inte-

gration of two key technologies: blockchain and artificial intelligence (AI).³⁷ The solution is proposed in the context of the recognition that “[i]nformation flows in conflict and disaster zones continue to be marked by intermittent communications, poor situation awareness, mistrust and human errors,”³⁸ and the claim is that deploying blockchain and AI technologies—particularly “Protective AI”—will help “catch human mistakes and complement human decision-making.”³⁹ The conceptual premise of the solution appears to rest on the assumption that “[m]uch of the error of war could be reduced if decision-makers knew more,”⁴⁰ which, as the proponents point out, leads their solution to focus “primarily on the challenges of awareness [while acknowledging] that awareness absent humanitarian intent or capability is ineffective and leads to a lack of trust.”⁴¹ Contending that “[a]wareness of ignorance is a virtue associated with intellectual humility,” the proponents of PAUSE argue that given the conditions of radical uncertainty that marks the battlespace, military decision makers who are subjected to such uncertain conditions are justified “to make decisions when a certain threshold for evidence is met and the perceived risk of inaction is greater than the risk of action.”⁴² Of course, they also observe that with the increasing sophistication of ISR technologies, militaries are expected to “hold fire under uncertainty . . . [given that the] higher the humanitarian risk, the greater the evidential expectations in accordance with just war principles of discrimination and proportionality.”⁴³

Essentially, the PAUSE architecture consists of two technological layers. The first involves what has been identified as *Whiteflag*, which is a “digital communications protocol based on blockchain technology that provides a reliable means for both combatant and neutral parties in armed conflicts to digitally communicate.”⁴⁴ The need for this protocol is justified on the grounds that (1) the profusion of “digital technologies . . . has changed information availability in conflicts . . . [and is] driving a new requirement to share [presumably information] among disparate groups”⁴⁵; (2) there appears to be “very little uptake of message data” since “real-time messaging data being contributed by bystanders and those affected by a disaster has been deemed as unverifiable and untrustworthy, and has not been incorporated into established mechanisms for organizational decision-making”⁴⁶; (3) since “smart phones and social media are readily used for many purposes [including by state/non-state actors, humanitarian groups, local population engaging in citizen-journalism] . . . there is an opportunity for these groups to exchange these new sources of information to better meet humanitarian goals.”⁴⁷ Noting in passing that the effectiveness of such exchanges is contingent on them being neutral, secure, and providing undeniable proof of receipt, the Whiteflag protocol is promoted as being “a reliable means for both combatant and neutral parties in armed conflicts to digitally communicate.”⁴⁸ The reliability

of the Whiteflag protocol is assured given that the messaging system is underwritten by “the underlying blockchain.”⁴⁹ In effect, “Whiteflag operates by sending messages as transactions on a blockchain . . . [thus securing] the messages [and consequently ensuring that] . . . Whiteflag is neutral and cannot be controlled or manipulated.”⁵⁰ In this way, Whiteflag, it is claimed, provides information assurance and establishes the trustworthiness of the information by providing “instant verification of the originator, authentication of reliable sources, cross-checking facts with persistent information on the blockchain to evaluate reliability of sources, confirmation by multiple sources, duress functionality, and implementation-specific measures such as filtering, blacklisting, and other sources.”⁵¹

The second technological layer of the PAUSE solution is categorized by its proponents under the wide rubric of Protective AI. While the proposal is unclear about what specifically constitutes Protective AI and which particular aspect of Protective AI it wishes to leverage, its proponents gesture to two recent approaches to prospective designs of AI technologies that seek to ensure that such technologies meet ethical and legal standards, namely, MaxAI, which is a maximally-just ethical machine, and MinAI, which is a minimally-just ethical machine. A review of the literature provided by the proponents of the PAUSE solution suggests that they are aware of the speculative nature of the MaxAI solution since it requires a level of “reasoning” that is beyond our current technological capabilities. This accounts for the proponents of the PAUSE solution directing their attention to the MinAI solution. Noting in passing that we will examine the MinAI solution in some detail below, for our present purposes, it is interesting to note that the proponents of the PAUSE solution while, for the most part, remaining cognizant of some of the weaknesses of the MinAI solution, appear to consider it (or something approximate to it) as being representative of Protective AI.⁵²

Based on this, the proponents of the PAUSE solution “propose a trusted human-AI network based on the Whiteflag protocol and Protective AI . . . [whose] architecture mirrors trust relationships between military and civil authorities to increase efficiency and timeliness of information processing and exchange.”⁵³ According to them, their architecture also “makes use of AI and automation to extract, clarify, identify, categorize, locate, assess, and most importantly fuse information from eye-witness sources (with variable trustworthiness) to improve the accuracy and accountability of decision-makers.”⁵⁴

Aside from noting the paucity of details about exactly how the PAUSE solution would operate under real-life conditions, there are a few observations that we can make that are pertinent to the strategic objectives of this article:

1. The PAUSE solution, while paying lip service to “decision makers,” does not identify who they may be and where they may be located. Given that at

least one of the areas where the PAUSE solution may be expected to be deployed is in a high-intensity combat situation, surprisingly, there is no attention paid to the targeting process. Thus, the following questions stand: Where will the PAUSE solution be implemented? How and in what way will the PAUSE solution impact the targeting process? Will the PAUSE solution provide a refined product, which the targeting process can incorporate easily into itself, or will it require further processing after it is received by the targeteers?

2. While the use of citizen-based inputs may be helpful, the timelines involved in culling authentic information from such inputs remain unclear. This is especially critical since such inputs—as per the PAUSE solution—will co-constitute the data that the military will use during the target development process. The risks are simply too high.⁵⁵

3. From the documentation provided by the proponents of the PAUSE solution, it is unclear whether the Whiteflag protocol is open-source or proprietary. If it is the latter, then invariably the question will arise whether such a closed protocol will be advisable to use in matters relating to sensitive contexts such as targeting and the protection of sites of humanitarian importance. Moreover, it appears that the inclusion of the Whiteflag protocol is made to suit the PAUSE solution. In other words, there appears to be no overriding necessity to specifically use the Whiteflag protocol. If this is indeed the option to be taken, then there are other similar solutions available or, indeed, a tailor-made solution may be constructed under the watchful aegis of an internationally recognized body such as the UN OCHA or the International Committee of the Red Cross (ICRC).

4. As we will see when we review the MinAI solution, a key component of the PAUSE solution is the use of convolution neural networks (CNN) as applied to computer vision. The PAUSE solution gestures toward the more recent developments in the field of region-based convolution neural network (R-CNN) technologies but gives no indication as to how and where such technologies and their related processing systems will reside. This is a critical consideration, since operationalizing such a solution will require integrating it within the battlespace. The proponents of the PAUSE solution leave unaddressed precisely how this can be done.

In sum, therefore, while the intentionality underwriting the PAUSE solution is undeniably positive, as an implementable solution, there are many operational-level questions that remain unaddressed. Equally, at the conceptual level, the solution appears to be lacking a thorough appreciation of the critical importance that targeting plays in the context of modern warfare. As we have noted earlier, any

proposal that seeks to either intervene or influence the targeting process (and prowess) of a modern military force must necessarily account for how its integration will impact strategic and operational-level competencies. This is not a matter that any military organization will (or should) take lightly, since it directly impinges on its ability to discharge its mandated duties.

The second proposal that we will consider is the MinAI solution, which proponents of the PAUSE solution also invoked. Compared to the former, the MinAI solution is a more elegant and conceptually robust proposal. In effect, it identifies what it refers to as “the ethical machine spectrum,” at one end of which lies “maximally-just autonomy using artificial intelligence (MaxAI) guided by acceptable and nonacceptable actions [which] has the benefit of ensuring ethically obligatory action . . . [while at the other] a constraint-driven system . . . [allowing] what is ethically impermissible . . . [based] on the need to identify and avoid protected objects and behaviors.”⁵⁶ What is interesting about the MinAI proposal is that not only does it resist falling into the trap of invoking the need for what Ronald Arkin has referred to as an “ethical governor”⁵⁷, thus avoiding the pitfalls of some of the more speculative constructs that plague proposals like MaxAI, it also unabashedly promotes its simplicity. Claiming—not without reason—that there is a “general disdain for simple technological solutions aimed at a better state of peace,” the proponents of the MinAI solution assert, “It does not seem unreasonable to ask why weapons with advanced seekers could not embed AI to identify a symbol of the Red Cross and abort an ordered strike. Additionally, the location of protected sites of religious significance, schools, and hospitals could be programmed into weapons to constrain their actions.”⁵⁸ It is in keeping with this sentiment that the MinAI solution is proposed.

The proponents of the MinAI solution also argue that “to meet fundamental moral obligations to humanity, [they] are ethically justified to develop MinAI systems. The ethical agency embedded in the machine and, thus, technologically mediated by the design, engineering, and operational environment, is less removed from the human moral agency than it is in a MaxAI system.”⁵⁹ They also attempt to defend themselves from the charge that when considered from a long-term perspective, it may be more productive to seek a MaxAI solution than to expend energies on MinAI. They argue (1) that a realistic assessment suggests that Artificial General Intelligence (AGI) remains elusive and will likely remain so in the foreseeable future; (2) that there “are currently irresolvable problems with the complex neural networks on which the successes in AI are based,”⁶⁰ which, most likely, will escalate with the emergence of AGI; (3) that there is the unavoidable problem of the black-box phenomenon in the context of deep-learning systems, which may become even more acute as the operative algorithms mature and be-

come increasingly sophisticated⁶¹; and (4) that Moore's Law may not be immediately available to potential AGI technologies, which would likely make the cost of deploying such technologies on combat systems prohibitive.

Keeping in mind the need to modify existing weapon platforms to integrate the MinAI solution, its proponents, unlike the proponents of the PAUSE solution, address the requirements of the Commentary of 1987 to Article 36 of the IHL, which requires that a state must review not only new weapons but also any existing weapon that is modified in a way that alters its function—or a weapon that has already passed a legal review that is subsequently modified.⁶² Observing that while this may require a further review of Article 36, they draw attention to the older Saint Petersburg Declaration, which served as a precursor to Article 36 of the IHL, which states that “The Contracting or Acceding Parties reserve to themselves to come hereafter to an understanding whenever a precise proposition shall be drawn up in view of future improvements which science may effect in the armament of troops, in order to maintain the principles which they have established, and to conciliate the necessities of war with the laws of humanity.”⁶³

But these considerations, which are well-intentioned and undoubtedly aimed toward strengthening the case for improving “humanitarian outcomes through embedded weapon capability to identify and prevent attack on protected objects,”⁶⁴ do not give us any deeper insight into the precise mechanism by which such an objective would be achieved. Aside from identifying some of the more common countermeasures that may be launched against the proposed system and the counter-countermeasures that may work in addressing such adversarial actions, the proposal remains bereft of any design or operational detail. In a manner similar to the PAUSE solution, we are only left with some indications of the employment of R-CNN technologies applied to computer vision and the integration of the outcomes to a weapon platform. Precisely how this would happen and how the necessary failsafe mechanisms would work remain unexplained. Also unexplained is how such inputs would feed into the targeting process and how they would or could materially impact the tempo of battle that the targeting process is charged to maintain and augment under active combat conditions.

Given the above, our assessment suggests that the proponents of the PAUSE and MinAI solutions, while well-intentioned, may not have given due consideration to the problem on hand—protecting sites of humanitarian importance—in the context of the hard military problem of targeting. In the section that follows, we will provide a solution that aims to address the problem of protected sites, but in a manner that pays due consideration of the hard military problem of targeting under active combat conditions, thus, potentially, serving as a functional protec-

tive tool that can, conceivably, radically augment the UN-mandated deconfliction mechanism.

Interpreting the Signs: A Protection Tool for Protected Sites

In addition to noting the paucity of detailed information—in terms of technologies and processes—our review of the two proposed solutions also revealed one other curious fact. Both solutions invoked a set of technologies, namely, blockchain and AI (principally, R-CNN). While the former affords the possibility to create a “trustless” system (a paradoxical point in the context of wanting to create a “trusted Human-AI network” that the proponents of the PAUSE solution appear to have either missed or elided), the latter, in the form of R-CNN (which both the PAUSE and the MinAI solutions invoke), is at the cutting edge of work being done in the computer vision field which, arguably, has great potential in the military domain. Nevertheless, there remains the question as to the need for the deployment of these technologies. While we will see how the blockchain technology may be integrated into a possible solution (though not in the manner and for the reason proposed by the PAUSE solution), the need for employing emergent computer vision technology may not be necessary at all. Indeed, it may be both a case of overkill and of a needless complexification in what is already an overly complex operational space.

The solution offered by this article is grounded on two specific technologies: (1) QR (Quick Response) Codes and (2) blockchain. However, it also involves a number of other technologies that, though integral in the context of the proposed solution, are also ones that are almost always integrated within existing military platforms. These include the following: (1) all-weather sensor technologies; (2) encrypted information and messaging datalinks; and (3) dynamic machine- and human-readable battlespace mapping systems (including human-machine interface). While the justification for invoking the two primary technologies—QR Codes and blockchain—will be discussed in short order, it is first necessary to explicitly state the objective of the solution and then outline its fundamental nature and character.

As we noted above, the proponents of the MinAI solution—asserting that “simple technological solutions” can achieve “a better state of peace”—sought to make a case for embedding “weapons with advanced seekers” with AI that would, presumably, be underwritten by their MinAI design—thus enabling such weapon platforms with the capability to “identify a symbol of the Red Cross and abort an ordered strike” and to explore the possibility whereby “the location of protected sites of religious significance, schools, and hospitals could be programmed into weapons to constrain their actions.”⁶⁵ Yet, their appeal to seek simple technologi-

cal solutions aimed at a better state of peace by embedding AI modules, particularly those involving R-CNN and related computer vision technologies, appears contradictory. Among other things, the science and technology of convolutional and deep neural networks continues to be a complex field of study and research and the state of the technology is still relatively nascent to be employed, particularly in real-life combat conditions where “protected sites of religious significance, schools, and hospitals” are at stake.

Contrasted against this, the solution offered by this article, by invoking a set of much simpler technologies, seeks to radically augment the UN deconfliction mechanism that, in its present form, has proven to be ineffectual as a protection tool for protected sites. Unlike the PAUSE and MinAI solutions, the proposal set forth in this article aims to serve as a viable, effective, and immediately implementable protection tool—not by insisting on an “AI solution” but by leveraging the QR Code and blockchain technologies, which are, by many magnitudes, simpler than any AI module. It warrants reiterating that the singular focus of the proposed solution is to protect infrastructure and not humans, though, as the examples of human casualties in the context of attacks on protected sites show, humans will be indirect beneficiaries of the proposed solution. As such, the proposed solution may be considered to be a “concept-technology” paring, which brings together the concept of a protection mechanism with a set of technologies (QR Codes, blockchain, coupled with sensors, data and messaging links, and battle mapping systems). The design principle of the proposal is deliberately oriented to seamlessly integrate with the targeting process—involving deliberate and dynamic targeting—that militaries employ under combat conditions and may be integrated relatively effortlessly with manned and unmanned systems.⁶⁶ Additionally, when considered outside and beyond the operational-tactical sphere, the proposed solution may also serve specific strategic-political aims, which we will have occasion to briefly examine below. And, lastly, the proposed solution eschews the tendency to “moralize machines”; instead, it serves as an example of how a value-sensitive design orientation may be adopted when thinking through the design of military systems.

The proposed solution exhibits a number of distinctive characteristics. Thus, for example, the two core technologies that it invokes are cheap, secure, and easy to deploy (as is the case with QR Codes/Coding) and leverage the benefits of distributed ledger systems, which guarantees a trustless context and immutability of records, timestamps, and so forth (as is the case with blockchains). The solution is designed to ensure that the most critical function of QR Code generation is entrusted to an impartial/neutral agency (the UN OCHA and/or the ICRC). The solution is integrable within the military targeting process and is particularly sen-

sitive to the needs of dynamic targeting. As such, it does not disrupt or needlessly extend the sensor-to-shooter link; rather, it augments the targeting cycle by providing “detargeting cues” and, therefore, contributes to the updating of active and passive battle maps in near real time—thus, enabling “collective engagement capability” and “shared awareness” (particularly in battle swarm contexts), which are in keeping with the basic tenets of network-centric warfare. Lastly, and importantly, the proposed solution avoids the trap of the black-box problem that often afflicts AI solutions (particularly those involving convolutional and deep neural networks) by enabling humans to be involved both in the QR Code generation process and in reviewing, monitoring, and analyzing all the activities that take place, which are recorded on the blockchain. This has the added benefit of relatively “hardening” the proposed solution against potentially malicious actions in which bad actors may engage.

At this juncture, a brief overview of the two core technologies—QR Codes/coding and blockchain—invoked by the proposed solution is warranted. First released in 1994 in Japan by Denso Wave, Inc., a QR Code is a machine-readable, two-dimensional optical label that contains information about the item to which it is attached. QR Codes—in which 7,089 characters can be encoded in one symbol—are capable of handling all types of data, such as numeric and alphabetic characters, symbols, binary, control codes, and so forth. As such, QR codes are able to overcome the informational restrictions imposed by the previous barcoding system and found their first applications in the auto industry for use in electronic Kanban systems.⁶⁷ One significant development that boosted the adoption and widespread use of QR codes was Denso Wave’s decision to make the specifications of the QR Code publicly available so that anyone could use it freely. Although Denso Wave retains the patent rights to the QR Code, it declared that it would not exercise them, which enabled QR Codes to be used at no cost and to become a “public code” used by people all over the world.⁶⁸ In 1997, QR codes were approved as an AIM standard⁶⁹; in 1999, they were approved as a standard 2D code by the Japan Industrial Standards and made a standard 2D symbol on the Japan Automobile Manufacturers Association’s EDI standard transaction forms; and in 2000, they were approved by the International Organization for Standardization as one of its international standards.⁷⁰ By 2002, QR codes achieved mass popularity (beginning in Japan) with the release of mobile phone with integrated QR code readers. While there are five basic types of QR codes (QR Code Model 1&2, Micro QR Code, iQR Code, SQRC, and Frame QR), for our purposes, the most relevant variants are iQR Code (because of its storage capacity of 40,000 numerals), the SQRC (because it can carry public and private data), and the Frame QR (because it includes both design flexibility and security).

It is also important to note that QR Codes do not necessarily have to be small in size. Indeed, as is directly relevant for our purposes, QR Codes, scaled to size, can be affixed to large structures like buildings and so forth, as depicted in figure 5.



Figure 5. A huge billboard advertisement in Shibuya (Tokyo, Japan). A pedestrian may use a cellphone to read the QR code (barcode) with the phone's camera. The phone will open a web browser to the URL encoded in the QR code⁷¹⁾

Blockchain technology is, in effect, a “distributed database containing records of transactions that are shared among participating members. Each transaction is confirmed by the consensus of a majority of the members, making fraudulent transactions unable to pass collective confirmation. Once a record is created and accepted by the blockchain, it can never be altered and disappear.”⁷² Blockchains have three distinguishing properties, namely, decentralization, transparency, and immutability, which make the technology suitable for our purposes. Further, blockchains have the following capabilities that are of particular interest to us:

5. Shared governance and operation, which addresses “the scenario in which a collection of entities . . . want to participate in a communal system but do not trust each other or any third party to operate the system single-handedly. By deciding on the system details (governance) and then deploying networked devices . . . to run the system, each entity can be assured of correct operation.”⁷³ There are two basic governance models—open governance (or permissionless blockchain systems) where “any party that is willing to par-

ticipate in the consensus protocol is allowed to do so, regardless of their identity” and consortium blockchain systems (or permissioned systems) wherein “participation in the consensus protocol is limited to . . . [actors] approved on a whitelist defined at system initialization.”⁷⁴ Given the nature of our specific requirements, the type of governance model that will suit our purposes would be the latter.

6. Verifiable state, which reinforces the trust users have in the system (i.e., “that the current state of the system accurately reflects the transactions that the consensus protocol allowed to execute in the past”⁷⁵). To this end, all transactions are written to a cryptographically verified append-only ledger, providing full-system provenance, thereby allowing for the system’s current and past states (operations) to be audited.

7. Resilience to data loss, which points to the fact that in the event of a data loss, the content of the ledger is retrievable given that the data is replicated among all the actors/users on the blockchain. The diagram below illustrates outlines of these capabilities of the blockchain.

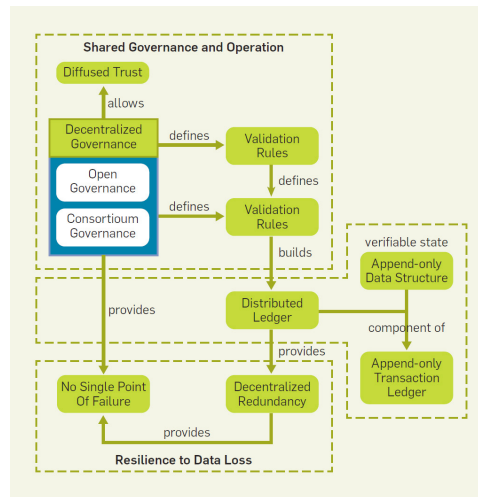


Figure 6. Blockchain capabilities. (Source: Ruoti et al, 2020.)

The above being a brief outline of the core technologies involved, the proposed solution makes four working assumptions:

8. The current UN deconfliction mechanism requires protected sites located in and around potential conflict sites to update the UN OCHA—within a specific timeframe (normally 72 hours)—with details regarding their geolocation, nature and function of the site and the activities that are conducted at

the site, which is then distributed to the belligerents via a so-called no-strike list. The proposed solution assumes that this procedure will continue, but it adds a number of additional steps to the process. The UN OCHA will, in addition to distributing this information to the belligerents, also populate a dedicated permissioned blockchain with the information it receives, including records of it having distributed the information to the belligerents. The UN OCHA will control the permissioned blockchain, and all members of the UN will be on a whitelist allowing them access to it. Moreover, as the blockchain is updated, a push notification would be sent to each member on the access list, informing them about the update.

9. Each member on the access whitelist will be able to retrieve the updated records. More specifically, since it is assumed that the belligerents will be state actors, they will have special access to these records, which will enable them to retrieve the information in a format that will allow them to populate their military targeting systems.

10. All combat platforms will be equipped with all-weather scanners and sensors that will be able to read QR codes in the battlespace. There is nothing extraordinary about this requirement as combat elements during the intelligence preparation of the battlespace (IPB), and subsequently during combat, are continually scanning the battlespace and its environs. Thus, their scanning and sensor systems that, it is assumed, are already scanning the battlespace will be able to scan and read the QR Codes. If modifications are required to be implemented to the combat platforms to accommodate this specific feature, then the same may be accomplished under the provisions of the St. Petersburg Declaration or by invoking the Commentary of 1987 to Article 36 of the IHL. For newer platforms, the inclusion of this capability would be mandatory prior to approval being given for their use in battle.

11. In addition to the modifications involving the installation of the appropriate scanners/sensors, one specific and critical modification is warranted. This involves a locking mechanism that comes into play when an attack platform either scans the UN-issued QR code and/or when its accompanying sensor package cues it with that information. It is necessary to emphasize the point that this locking mechanism should be a “limited feature.” It should be *limited* in the sense that it should only prevent an attack platform’s weapon system from firing at a specific geolocation (after adjusting for a circular error probability [CEP] factor to account for localized blast-radii) as identified by the scanning of the QR Code.

Given these assumptions, the solution’s workflow, which is indicative of the sequencing of its practical implementation, may be listed as follows:

12. The UN OCHA receives inputs as per the methodology employed for its current deconfliction mechanism for protected sites.
13. The UN OCHA generates and issues QR Codes to the protected sites while simultaneously updating a permissioned blockchain that, in turn, would trigger high-priority push notifications to all UN members, but also in a specific format to the belligerents, which can be incorporated into their individual tactical battle planning and management systems.
14. Prior to the initiation of hostilities and during the inevitable IPB phase during which the belligerents (but also any other authorized user of the UN OCHA blockchain) are engaged in actively scanning the battlespace, the QR Codes will be automatically scanned by their sensors. The information resulting from the scans will be transmitted—by dedicated communication and battle-networks, which are already in use by the military—to tactical and operational centers. This allows for a continuous updating of the targeting solutions that are prepared for deliberate and dynamic targeting processes that are estimated to be underway at this initial phase of the battle. Additionally, the activity of each scan and reading of a QR Code is directly updated to the UN-operated blockchain, which allows for a near-real-time updating of the record.
15. Similarly, the protected site, which has been scanned, will also record the scanning activity and will transmit that information to a localized database and/or uplink the information to the permissioned blockchain operated by the UN. This creates an additional record in the blockchain, which is also shared with all entities who are enumerated on the access whitelist. As a backup mechanism, a dedicated UN satellite platform may also be employed to facilitate the transacting of information to and from the blockchain.
16. With the commencement of active hostilities, the role of dynamic targeting takes on a greater importance. While dynamic targeting is not ad-hoc, nevertheless, it usually takes place within highly compressed timeframes. During such targeting actions, all attack platforms and their accompanying sensor packages continue their active scanning activities to support their military functions. Thus, during such active scanning activities, any protected site that has not yet been scanned will fall within the scanning envelope of either the attack platforms and/or their supporting sensor packages. As and when a scan takes place, the actions outlined in steps 3 and 4 will be executed. Diagrammatically, the process may be depicted as shown in figure 7.

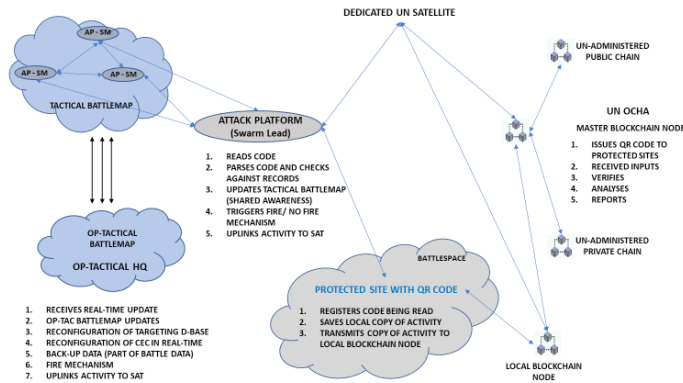


Figure 7. The Concept-Technology Solution. (Source: Author.)

As can be seen in figure 7, the solution described is intended to cover contingencies arising from determined and dynamic targeting practices. In this connection, it is important to underscore the point that when an attack platform (either singly or as part of a larger attack package) is updated with the data resulting from the scans of the QR Codes affixed to protected sites, its weapon systems are limited by a mechanism that prevents them from firing at the geophysical coordinates that the scan of the QR Code will reveal. Note that this limitation is specific only to the geolocation identified by the scan of the QR Code and does not result in “locking up” the weapon systems. In other words, as the attack platform reorients itself away from the specified coordinates, it immediately reacquires its firing capability. It also warrants mentioning that this limitation will not (and should not) impact the attack platform’s defensive (nonlethal) countermeasure systems.

Considering the above, it is now possible to list some of the advantages of employing the proposed solution. First, the proposed solution applies to manned and unmanned combat systems. In the latter instance, assuming that the unmanned combat system is capable of autonomous action, the “automated” locking mechanism, which is cued as a consequence of the scanning activity, serves as a narrow operational bottleneck. We suggest that this model of “embedding automation within autonomy” paradigm may be, prospectively, a remunerative way to consider problems related to autonomy in the context of emergent combat and combat-related technologies.

Second, the proposed solution does not require complex technologies to achieve its aim. In fact, it takes the basic principles of MinAI (without the AI component,

which is unnecessary in this context) and applies it to a technologically simpler and likely more cost-effective solution.

Third, the proposed solution intervenes in the targeting process, but it does so in a manner that is not disruptive to the maintenance of the operational/battle tempo. This will likely make the solution more palatable to military organizations given that with such a solution they will be able to maintain the delicate balance between discharging their military functions efficiently while at the same time upholding the tenets of the IHL and the LOAC without compromising the tempo of operations/battle.

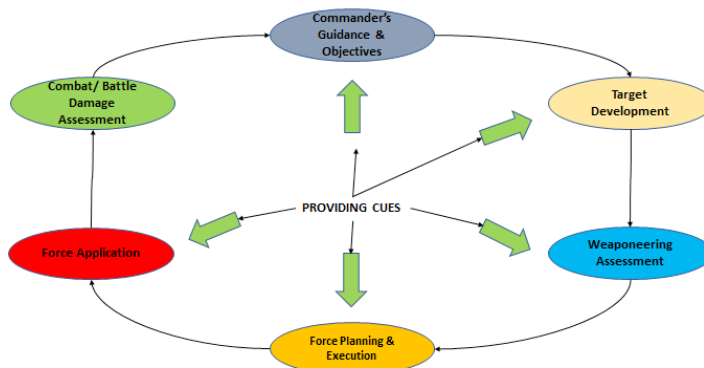


Figure 8. Cueing the targeting process. (Source: Author.)

Fourth, in many ways, the proposed solution not only augments the military's ability to achieve better battlespace knowledge/awareness but also promotes two of the core principles of network-centric warfare—namely, shared awareness and collective engagement capability. This is because, as the figure 9 depicts, when any one attack or sensor platform scans an existent QR code affixed on a protected site, not only are the tactical and operational centers of the military force and the UN-operated blockchain updated, simultaneously, the networked battle map of an attack and sensor package (potentially comprised of multiple attack/sensor platforms) is also updated on a real-time basis.

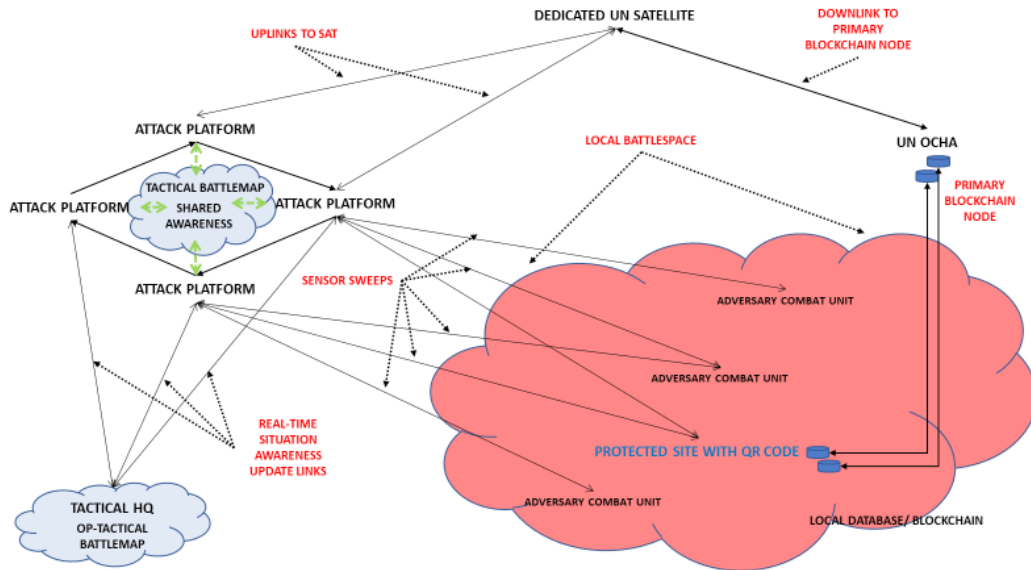


Figure 9. Promoting collective engagement capability and shared awareness. (Source: Author.)

Moreover, since each platform in a given attack package is also actively scanning the battlespace, the initial readings are reconfirmed multiple times and the records—both at the operational and tactical centers and the UN-operated blockchain—are updated accordingly, which only serves to augment the redundancy factor.

Fifth, the recording of the issuance of the QR codes to the protected sites, the recording of the scanning activities (both by the active scanner on the military platforms and by the protected sites) on the UN-operated blockchain creates an immutable and time-stamped record that is undeniable by any entity. Thus, if, despite such records being available, an attack is launched—as was tragically the case in Kunduz in 2015⁷⁶—then the option of claiming plausible deniability is not available, and the transgressor can be immediately taken to task.⁷⁷ Moreover, since access to the record is available—as per the proposed solution—to a whitelist, which will optimally include all UN members, the ability of a “cover-up” will also be greatly diminished. In this context, it may also be worth considering allowing specific neutral parties engaged in humanitarian work (for example, the ICRC) to also have access to the UN-operated blockchain in real time.

Conclusion

The problem of attacks on protected sites—despite the UN deconfliction mechanism being in place—continues unabated. The concept-technology solution offered by this article is one way by which this problem may be addressed. As we have seen, previous solutions that have attempted to incorporate technologies, though well-intentioned, have tended to be complex and have, potentially, multiple points of failure. The solution offered here is more simplistic—thus reducing the number of points of failure. The core technologies that the solution invokes, namely, QR Codes and the blockchain, are secure in their respective domains. Moreover, and particularly in the case of the QR code, if a further hardening is necessary, this may be accomplished with minimal effort. In relative terms, the cost of hardening the QR technology would likely be much lower than attempting to refine the currently available computer vision, R-CNN, and related technologies. Additionally, the need for a mechanism that performs better than what the UN can currently offer is immediate, and the other more sophisticated technologies that the PAUSE and MinAI solutions invoke will take time to refine to a degree that an active deployment in a conflict site would warrant.

The proposed solution also does not make unwarranted demands on the military. It respects the fact that targeting is a critical function and the solution's intervention in the targeting process may be considered to be supportive rather than disruptive. Further, it also does not make demands on the military to incorporate additional layers of technologies on its systems and platforms, for it seeks to leverage the very same technologies (scanners, sensors, communications, and data links, etc.) that the military currently uses to create opportunities for it to not only execute its core functions but also to do so in keeping with the dictates of the IHL and the LOAC.

And, last but not the least, the strategic-political climate in which the debate on the research and development work on AI and autonomous systems in the military context is taking place is fraught with contradictions, vested interests, and sometimes extreme ideological positions. Thus, to propose a fresh set of requirements that may in some form appear to restrict the freedom of action that nation-states may insist on would also be problematic. The current solution avoids such pitfalls. Indeed, if configured and packaged appropriately, the solution can be put forth virtually as a *fait accompli* to the global community of nation-states. After all, every nation-state recognizes the humanitarian cost of war. And, even if they transgress the laws governing war—inadvertently or knowingly—they recognize that there is a significant political cost to bear. The solution offered in this article is one low-cost means by which a degree of unanimity may be gained

among nation-states on the question of preventing accidental and deliberate attacks on protected sites. Moreover, in an age where the functional relevance of the UN and other humanitarian organizations like the ICRC is being eroded, their championing of a solution such as the one offered in this article can, if implemented with care, actually serve as a protective tool of consequence (unlike the currently available deconfliction mechanism). In this way, not only would such humanitarian organizations reassert their relevance, but they would also take the lead in addressing a key concern that has plagued the phenomenon of war—namely, how to reduce the human cost of war. ☸

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Notes

1. The reference here, of course, is to International Humanitarian Law (IHL) or what is otherwise known as the Laws of Armed Conflict (LOAC). With specific reference to the legal and ethical considerations that a modern combat soldier has to take into account see Paul A.L. Ducheine et al (Ed.) *Targeting: The Challenges of Modern Warfare*, (The Hague, The Netherlands, 2016), particularly Chap 5-8

2. Accelerated Warfare: Futures Statement for an Army in Motion, *Commander's Statement, Australian Army*, 3 January 2020. Available at https://researchcentre.army.gov.au/sites/default/files/2020-01/futures_statement_accelerated_warfare_a4_u.pdf (alternatively <https://bit.ly/371SA7U>)

3. Thus, referring to Michael Waltzer's comments on the “double effect” problem, Martin L. Cook notes, “[i]t is insufficient that the combatants do not intend directly to harm the non-combatants and then make a very subjective proportionality calculation. Rather, they should actively engage in actions to protect non-combatants, even if those actions increase their own risk”, which is a point of view that Cook (and presumably Waltzer) records as possessing a strong moral force. See Martin L. Cook, “Ethical Issues in Targeting”, in Ducheine et al (Ed.) *Targeting: The Challenges of Modern Warfare*, 2016, p153.

4. Col. Jason M. Brown, USAF, “To Bomb or Not to Bomb: Counterinsurgency, Airpower, and Dynamic Targeting”, in *Air & Space Journal*, Winter 2007, pp 76-81

5. J. Marshall Beier, "Discriminating Tastes: 'Smart Bombs, Non-Combatants, and Notion of Legitimacy in Warfare" in *Security Dialogue*, Vol 34, No. 4, Dec. 2003, p 413, 422.
6. Evan Hill and Christiaan Triebert, "12 Hours. 4 Syrian Hospitals Bombed. One Culprit: Russia," *New York Times*, 4 May 2020, <https://www.nytimes.com/>.
7. "UN Fails to Acknowledge Own Failures in Hospital Attacks Inquiry", April 16, 2020, The Syria Justice and Accountability Centre (SJAC). Available at <https://syriaaccountability.org/updates/2020/04/16/un-fails-to-acknowledge-own-failures-in-hospital-attacks-inquiry/> (alternatively <https://bit.ly/2J2bx28>)
8. "Summary by the Secretary-General of the report of the United Nations Headquarters Board of Inquiry into certain incidents in northwest Syria since 17 September 2018 involving facilities on the United Nations deconfliction list and United Nations supported facilities", *United Nations Organization*. Available at https://www.un.org/sg/sites/www.un.org.sg/files/atoms/files/NWS_BOI_Summary_06_April_2020.pdf (alternatively <https://bit.ly/3nLMors>)
9. Ibid., para 82-84
10. Ibid., para 91-92
11. Ibid., para 94
12. Merel A. C. Ekelhof, "Lifting the Fog of Targeting: "Autonomous Weapons" and Human Control through the Lens of Military Targeting", in *Naval War College Review*, Summer 2018, Vol. 71, No. 3, p2
13. Major Gen. Charles J. Dunlap (USAF, Retd.), "Preface", in Ducheine et al (Ed.) *Targeting: The Challenges of Modern Warfare*, 2016, p vii.
14. Ekelhof, 2018, p4
15. Dunlap, 2016, p viii
16. See, for example, Horst Boog, Gerhard Krebs, Detlef Vogel, *Germany and the Second World War: Volume VII: The Strategic Air War in Europe and the War in the West and East Asia, 1943-1944/5*, Illustrated Edition, (Oxford: Oxford University Press, 2006), pp 7-153
17. Beier, pp 419-420
18. See, for example, Paul Dickson, *The Electronic Battlefield: Origins of America's 21st-Century Way of Warfare*, (Bloomington: Indiana University Press, 2012)
19. Donn A. Starry, "Extending the Battlefield", *Military Review*, March 1981, pp. 31-50.
20. David R. Mets., "The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs", *Research and Education Paper No.12*, (Maxwell Air Force Base, AL: College of Aerospace Doctrine, 2001), p 39
21. Kevin D. Scott, Vice Admiral (USN), "Preface", in *Joint Publication (JP) 3.0: Joint Operations* (17 January 2017 Incorporating Change 1, 22 October 2018), (Washington, DC: The Joint Staff, 2018)
22. Joint Publication (JP) 3.0: Joint Operations, *Annex 3-60 Targeting*, (Last Updated: 15 March 2019), Curtis E LeMay Center for Doctrine Development and Education, (Montgomery, AL: Maxwell Air Force Base), p 3 (hereafter Annex 3-60 Targeting)
23. Ibid.
24. Ducheine, Schmitt, Osinga, "Introduction" in Ducheine et al (Ed.), *Targeting: The Challenges of Modern Warfare*, 2016, p2.
25. Annex 3-60, p 3

26. *Air Force Doctrine Document 3-60, Targeting* (Incorporating Change 1, 28 July 2011), LeMay Center for Doctrine Development and Education, (Montgomery, AL: 2011), p 2 (Hereafter AFDD 3-60)

27. Annex 3-60, p 40

28. Annex 3-60, p 4

29. Ibid.

30. AFDD 3-60, pp 3-6

31. Ibid.

32. Annex 3-60, p 4

33. Ibid., p 36

34. AFDD 3-60, p 17

35. Ibid., p 45

36. Ibid.

37. S. K. Devitt. J Scholz. T. Schless. L. Lewis, “Developing a Trusted Human-AI Network for Humanitarian Benefit”, *unpublished paper*, Jan, 2020, p1.

38. Ibid.

39. Ibid.

40. Ibid., p2

41. Ibid., p3

42. Ibid., p4

43. Ibid.

44. Ibid., p9

45. Ibid., p7

46. Ibid., pp 7-8

47. Ibid., p8

48. Ibid., p9

49. Ibid.

50. Ibid.

51. Ibid., p11

52. We say “something approximate to it” because the proponents of the PAUSE solution do not describe in any detail in their paper as to what the exact nature of the “Protective AI” technology that they seek to employ may be. They only state that “[d]esign of systems to achieve Protective AI based on a starting point of MinAI, [sic] must consider its own weaknesses and errors.” (ibid., p 14)

53. Ibid., p15-16

54. Ibid., 16. We also note with concern that despite the use of AI technologies, there have been, in recent times, extensive and effective disinformation campaigns, which have had (and, arguably, continue to have) deleterious strategic effects on, among others, the US government and polity, and whose long-term effects are virtually impossible to ascertain. Thus, the confidence expressed by the proponents of the PAUSE solution in this context is both baffling and, in our opinion, dangerous. For an overview of the problem see, Katarina Kertysova, “Artificial Intelligence and Disinformation: How AI Changes the Way Disinformation is Produced, Disseminated, and Can Be Countered”, in *Security and Human Rights*, 29, 2018.

55. This is directly related to the observation we make in footnote #55 above, albeit applied to the narrower military-operational context.

56. Jai Galliott and Jason Scholz, "Artificial Intelligence in Weapons: The Moral Imperative for Minimally-Just Autonomy", in *Journal of Indo-Pacific Affairs*, Winter, 2018, pp 58-59
57. Ronald C. Arkin, Patrick Ulam, and Brittany Duncan, "An Ethical Governor for Constraining Lethal Action in an Autonomous System", *Technical Report*, (Fort Belvoir, VA: Defense Technical Information Center), 1 January 2009)
58. Galliott and Scholtz, 2018, p58
59. Ibid., p60
60. Ibid., p61
61. See Davide Castelvechi, "Can We Open the Black Box of AI?", in *NATURE*, Oct. 5, 2016 for an overview of the so-called "black-box problem".
62. Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, Commentary of 1987, "New Weapons," 421. Available at <https://bit.ly/2HwtyVW>
63. St. Petersburg Declaration Renouncing the Use, in Time of War, of Certain Explosive Projectiles, Saint Petersburg, 29 November/11 December 1868". Available at <https://bit.ly/33aBkMB>
64. Galliott and Scholz, 2018, p 61
65. Ibid., p57
66. Note that in this iteration of the proposed solution, the orientation is towards aerial combat systems – manned and unmanned. The fundamental design principle, of course, is applicable in a multi-domain context with minimal modifications.
67. Electronic Kanban: A communication tool used in production management systems.
68. *History of QR Code*, "Section 2: Release of the QR Code and subsequent efforts to spread its use", *QR Code.com*, DENSO WAVE INCORPORATED. Available at <https://www.qrcode.com/en/history/>
69. AIM: Automatic Identification Manufacturer
70. *History of QR Code*, "Section 2: Release of the QR Code and subsequent efforts to spread its use", *QR Code.com*, DENSO WAVE INCORPORATED. Available at <https://www.qrcode.com/en/history/>
71. This file is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license. Available at <https://commons.wikimedia.org/wiki/File:Japan-qr-code-billboard.jpg>
72. D. Efanov and P. Roschin, "The All-Pervasiveness of the Blockchain Technology", in *Procedia Computer Science*, vol. 123, p 116, 2018
73. Scott Ruoti, Ben Kaiser, Arkady Yerukhimovich, Jeremy Clark, Robert Cunningham, "Blockchain Technology: What Is It Good For?", in *Communications of the ACM*, Vol. 63 No. 1, January 2020, Pages 46-53
74. Ibid.
75. Ibid.
76. Tim Craig, Missy Ryan and Thomas Gibbons-Neff, "By evening, a hospital. By morning, a war zone", in *The Washington Post*, October 10, 2015. Available at <https://wapo.st/338X0ce>
77. The operative assumption here is that a "bad actor" has somehow been able to either bypass the proposed "limited locking" mechanism and/ or there is a catastrophic system failure of the proposed mechanism.

The Perils of Power Asymmetry in the Indo-Pacific

What Should New Delhi Do about It?

DR. MONISH TOURANGBAM

MR. PAWAN AMIN

India's approach to the emerging geopolitics of the Indo-Pacific is determined primarily by the interface between its own great-power aspirations and the limitations imposed by its power asymmetry vis-à-vis the United States and China. The Indian foreign policy establishment seemingly finds succor in Washington's recognition of India's role as an aspiring leading power in the Indo-Pacific and ancillary pronouncements such as India becoming a major defense partner of the United States. The Indian Ministry of External Affairs, responding to the release of the US *National Security Strategy* (NSS) in December 2017, announced: "We appreciate the strategic importance given to India-US relationship in the new National Security Strategy released by the US. A close partnership between India and the US contributes to peace, stability and prosperity in the Indo-Pacific Region as well as to the economic progress of the two countries."¹ A number of US government documents during the Donald Trump administration, apart from the NSS, such as the *National Defense Strategy* (NDS), the Asia Reassurance Initiative Act, the *National Military Strategy* (NMS), the Department of Defense's *Indo-Pacific Strategy Report*, and the Department of State's *Free and Open Indo-Pacific Report* have categorically ushered in the Indo-Pacific era within US grand strategy. What remains for New Delhi to accomplish is a multiagency push to pull India closer into the US orbit in the intensifying balance-of-power dynamics in the Indo-Pacific. All these documents unequivocally project a greater role for India-US strategic engagement to build and sustain what Washington calls a "Free and Open Indo-Pacific."²

However, New Delhi still has not completely bought into the prospect of an alliance with the United States to contain China in the Indo-Pacific.³ Why does New Delhi exhibit a behavior of inconvenience toward any design of a US-China power contestation? Why does New Delhi berate Washington whenever the latter does not categorically chide China's aggressive behavior toward India but at the same time negate any overtures from Washington that appear to push New Delhi to get tough on Beijing? In the latter case, New Delhi often has been seen giving Washington a we-know-better-how-to-deal-with-Beijing sermon. Even as the

apex for the Indian foreign policy cerebrum argued for an unsentimental break with the past, if required, and to get the country more accustomed to playing with fire if the outcomes are tangible material benefits, there is a deeper continuity seen in India's peculiar balancing act—while trying to make it appear New Delhi does not do so.

Primarily, this article attempts to explain what makes India behave the way it does in its approach to the Indo-Pacific, a behavior that one Indian analyst prefers to call “evasive balancing.”⁴ The answer to such a behavior, this article contends, is found in the balance of power or, more specifically, in India's considerable power asymmetry relative to the United States and China in addition to the decreasing power gap between the United States and China. India's economic and military growth puts it below the United States and China in the hierarchy of differing capabilities, and China has been reducing its power gap with the United States. Such a scenario is bound to put limitations on India's foreign policy choices. Outright hostility with China, or entering into a formal alliance framework with the United States, is unlikely to be a decision that New Delhi makes easily. As such, a continuation of its current approach of alignment with a distant power such as the United States while negotiating a fraught relationship with a proximate power such as China toward a more peaceable status quo is likely to continue. However, recent events on the India–China border have made it incumbent on New Delhi to find ways to increase the cost of any future offensive maneuvers by Beijing.

This will not cause New Delhi to squander its practice of strategic autonomy. Nevertheless, there is now an appreciation for a bigger toolkit of policy options when it comes to handling tensions with China, which includes a much closer strategic embrace with the United States. There is now an acceptance that protection and promotion of Indian interests in the Indo-Pacific will not be preordained and that doing so will require New Delhi to work closely with the United States, particularly in the domains of defense and security.

In the absence of a dramatic shift in India's fortunes as far as its power position in the international system is concerned, or a formal alliance with the United States, what would be New Delhi's strategy to deal with the reconfiguration of interest and intent in the Indo-Pacific? First, this article reflects on the evolving power configuration in the Indo-Pacific and problematizes the perception that this new geopolitical region is multipolar or at least destined to become such. Next, it unravels how the asymmetry between India's national power compared to that of the United States and China creates limitations for India's balancing act between the two powers. Finally, considering that this dilemma is unlikely to end,

the article explores the merits and demerits of deepening New Delhi's commitment to the Indo-Pacific and adopting a more assertive position on China.

The Indo-Pacific: Wither Multipolarity

More than anything else, the confrontational streaks in American and Chinese behavior are driving the geopolitics of the Indo-Pacific. Other powers, including India, are responding to the repercussions of these new great-power dynamics in the region. India's Foreign Minister, S. Jaishankar, in *The India Way: Strategies for an Uncertain World*, contended: "As with many other developments in the world today, the trigger for Indo-Pacific too is the change in the American stance and the rise of China."⁵ Robert Kaplan wrote, in *Monsoon: The Indian Ocean and the Future of American Power*, that "the Indian Ocean is where the rivalry between the United States and China in the Pacific interlocks with the regional rivalry between India and China."⁶ C. Raja Mohan, in the opening pages of *Samudra Manthan: Sino-Indian Rivalry in the Indo-Pacific*, contended "that a rising China and an emerging India are turning to the seas in ways they did not before. This fact alone has the potential to alter the world's maritime environment."⁷ A number of primary documents released from different agencies of the US government since 2000 have made clear that US grand strategy in the twenty-first century has been directed toward containing the rise of China as a peer competitor. The primacy of countering peer competitors is a constant feature, and yet it is a dynamic one for great-power politics.

Amid the China threat in US geostrategic thinking and policy pronouncements, it is worthwhile recalling that not long ago Cold War geopolitics resulted into a slightly different story. The Shanghai Communiqué, signed after the US-China rapprochement in 1972, stated that "neither should seek hegemony in the Asia-Pacific region and each is opposed to efforts by any other country or group of countries to establish such hegemony. . . . China will never be a superpower and it opposes hegemony and power politics of any kind."⁸ Although much of US foreign policy bandwidth during the two terms of the George W. Bush administration, after the 9/11 attacks, was preoccupied by its wars in Afghanistan and Iraq, global terrorism, and state sponsors of terrorism, strategic minds in Washington were not oblivious to the specter of China's rise. Writing during the 2000 presidential campaign for *Foreign Affairs*, Condoleezza Rice, who later served as Bush's national security advisor and secretary of state, argued that China, despite economic interaction with the United States, remained "a potential threat to stability in the Asia-Pacific region." According to Rice, China was a country that resented "the role of the United States in the Asia-Pacific region" and aimed "to alter Asia's balance of power in its own favor."⁹ In one of the earliest references to

the US–India–China triangular equation in the twenty-first century, Rice contended that Washington “should pay closer attention to India’s role in the regional balance” and wrote: “There is a strong tendency conceptually to connect India with Pakistan and to think only of Kashmir or the nuclear competition between the two states. But India is an element in China’s calculation, and it should be in America’s, too. India is not a great power yet, but it has the potential to emerge as one.”¹⁰

After being sucked into the vortex of the Afghan War and the ill-premised Iraq War, the Barack Obama administration exhibited a clear intention to shift policy attention to the Asia-Pacific through the Asia Pivot policy, later renamed as the rebalancing strategy toward Asia-Pacific. Then-US Secretary of State Hillary Clinton, writing for *Foreign Policy* in 2011, remarked: “One of the most important tasks of American statecraft over the next decade will therefore be to lock in a substantially increased investment—diplomatic, economic, strategic, and otherwise—in the Asia-Pacific region.”¹¹ The Department of Defense report titled *Sustaining US Global Leadership: Priorities for 21st Century Defense*, released in early 2012, raised concerns regarding China’s use of antiaccess/area-denial capabilities to restrict America’s ability to project power and operate freely. Such circumstances, according to the report, required the US military to implement “the Joint Operational Access Concept, sustaining our undersea capabilities, developing a new stealth bomber, improving missile defenses, and continuing efforts to enhance the resiliency and effectiveness of critical space-based capabilities.”¹² The US *NMS* of 2015, while claiming to “support China’s rise and encourage it to become a partner for greater international security,” also remarked that “China’s actions are adding tension to the Asia-Pacific region.”¹³ The Chinese military strategy white paper released in the same year raised concerns regarding America’s rebalancing strategy toward the Asia-Pacific and reflected the shape of things to come in the Western Pacific waters—ground zero for US–China military confrontations. The military strategy paper noted: “In line with the strategic requirement of offshore waters defense and open seas protection, the PLAN (People’s Liberation Army Navy) will gradually shift its focus from ‘offshore waters defense’ to the combination of ‘offshore waters defense’ with ‘open seas protection,’ and build a combined, multi-functional and efficient marine combat force structure.”¹⁴

The South and East China Seas in the Western Pacific remain the battleground for US–China confrontation. While Beijing accuses Washington of disturbing the peace and stability in the region with the US offshore balancing strategy and its freedom of navigation operations, Washington pictures Beijing as the primary threat to a “free and open” Indo-Pacific given China’s militarized approach to the

region. In 2013, China announced an air defense identification zone (ADIZ) over the East China Sea, following which the United States sent two B-52 bombers to defy the Chinese ADIZ.¹⁵

China's military adventurism in the South China Sea and show of strength have raised concerns in Washington, and a survey of experts found the South China Sea to be the most likely region to see an armed confrontation in the near future.¹⁶ Moreover, China's deep economic and development partnership with countries in the region further complicates the new great-power dynamics in the Indo-Pacific. The same countries are wary of Chinese unilateral activism in the region and thus welcome the United States as a security partner.¹⁷

Diplomatically, the Association for Southeast Asian Nations (ASEAN) and the East Asia Forum were once expected to curtail China's intransigent behavior, if not contain its ambition. This optimism has dwindled, however, with ASEAN unity often falling victim to China's ability to influence the behavior of individual ASEAN member countries to veto decisions, which does not favor its interests. A good example of this is the "Code of Conduct (COC) for South China Sea," which remains a pipe dream to this day, nearly two decades since the signing of the "Declaration on the Conduct of Parties in the South China Sea." It was hoped that the signing of the COC will help bring about a peaceful settlement to the South China Sea dispute, but as of now there is not even a consensus on the geographic coverage of the COC.¹⁸ Moreover, the United States has also failed to demonstrate a consistency in its commitment when dealing with the grouping. While the Obama administration maintained regular high-level interactions with the multinational forum, multilateral diplomacy did not seem to be a very preferred means in the toolkit of Donald Trump's foreign policy. A survey conducted by Singapore's ISEAS-Yusof Ishak think tank found that, although the regional countries trust China less than they do the United States or Japan, they are more likely to align with Beijing over Washington.¹⁹ More than anything else, such surveys reflect the complexities inherent in the responses to the growing US-China strategic competition among the regional countries. It is prudent on China's part to engage the region continuously, as it exists in its own strategic backyard. Moreover, China stands to gain from co-opting countries into its orbit. Unfortunately, the same cannot be said for a distant power such as the United States. A change in policy direction in Washington risks leaving economically and militarily weaker countries in the lurch as they struggle to balance against China. One possible way to mitigate this used to be through signing high-level agreements for cooperation on defense, economics, technology, and the like, which granted littoral states some modicum of clarity on the trajectory of their ties and the terms of engagement with the United States. However, the foreign policy import of

Trump's "America First" rhetoric cast a long shadow of doubt on all US multilateral commitments, making it the first order of business for the Joe Biden administration to reaffirm faith in the US multilateral initiatives and signal a sense of strategic reassurance to its allies and partners.

As with all new occupants of the White House, Donald Trump accused his predecessor of going soft on China and squandering American predominance, something that Trump promised to correct by making "America Great Again" and keeping "America First."²⁰ While pulling out of the Obama-era Trans-Pacific Partnership, the Trump administration simultaneously seemed to ramp up America's Indo-Pacific push, clearly a successor to Obama's rebalancing strategy, renaming US Pacific Command as the US Indo-Pacific Command. While it may not have altered the command's area of responsibility, the rechristening sent a message of a new mental mapping in the US strategic approach to the region, straddling the two oceans.²¹

As the US-led post-World War II security and economic order experiences relative weakening, its hitherto unchallenged power projection and force posturing in the Western Pacific has had to confront a rising China that aims to establish sea control and sea denial in its maritime vicinity.

An assessment of the existing multinational frameworks in the region reveals that the United States is already in a position where it will have to play catchup to China to reestablish its influence in the region. In the strategic realm, China has been able to block any consensus-building effort by ASEAN, which is detrimental to China's own interests in the region. In the economic realm, the US withdrawal from the Trans-Pacific Partnership had left a void that China has now filled, to a certain extent by formalizing the Regional Comprehensive Economic Partnership. The Belt and Road Initiative (BRI), backed by loans from the Asian Infrastructure Investment Bank, a multinational financial institution created by China, has provided it significant economic leverage over most countries in the region. In recent years, the web of infrastructure and investment linkages that China's BRI has created, spanning the continental and maritime expanse of the Indo-Pacific, have pushed the United States to look for a credible response, striking new understandings with like-minded countries, including India. For instance, the Blue Dot Network is aimed at offering an alternative through "a multi-stakeholder initiative that will bring governments, the private sector, and civil society together to promote high-quality trusted standards for global infrastructure development."²² This can complement India's own economic diplomacy in the region and reduce India's material asymmetry when it comes to countering China's economic leverage in its neighborhood. However, the Blue Dot Network still remains, in

essence, prospective and is a long way from matching the ground implications of the BRI.

The first ever virtual leadership summit of the Quad countries in addition to regular ministerial meetings, the fact that all four members have become part of the Malabar naval exercise, and debates on a Quad Plus strategic alignment have added new heft to the US–India–Japan–Australia Quadrilateral Security Initiative, also called the Quad. However, there are material insufficiencies that will limit India's ability to counter China through bilateral arrangements with the United States, Australia, and Japan. Australia and Japan are much more intertwined in the US security architecture, and all three countries are economically much more dependent on China than they are on India.²³ As a result, effective cooperation would require an alignment of strategic calculation depending on circumstantial exigencies. Indeed, having a formal structure like the Quad ensures a purposeful advancement toward a strategic objective. However, there is a long way to go, as the Quad countries are still focusing on maintaining the momentum gathered since its rebirth through bilateral and multilateral understanding among the member countries.

The Structural Constraints on Great-Power Behavior

A number of US government documents, including the *NDS*, *NSS*, and *NMS*, have reflected a growing sense of threat perceived from a rising China. China has been called out for engaging in predatory economic practices and, along with Russia, has been clubbed as a near-peer competitor challenging American primacy globally and regionally, more particularly in the Indo-Pacific. The *NDS* contended: "Inter-state strategic competition, not terrorism, is now the primary concern in US national security." China is seen as a prominent "strategic competitor," using "predatory economics to intimidate its neighbors while militarizing features in the South China Sea." Multiple agencies of the US government believe that China has pursued its military modernization with the short-term aim of achieving regional hegemony in the Indo-Pacific and the long-term ambition of displacing America's global preeminence.²⁴ Great powers have always desired unchallenged access to regions beyond their own borders while at the same time having the capability to deny the same kind of access to any other powers in its own sphere of influence. Regardless of the change of presidencies in the United States and the change of guard in the Chinese Communist Party, the explanation for the behavior of a hegemon toward a peer competitor that aims to establish its own hegemony is to be found in longer-term structural trends.

Much of the story of American hegemony in the Western Hemisphere has meant denying the establishment of any counterhegemony in any other region.²⁵

During the Cold War, this meant Washington could join hands with Communist China to preclude the rise of Soviet hegemony in the Asia-Pacific. In the twenty-first century, strategic minds in Washington have been preoccupied with the rise of China's national power and finding means to arrest a balance of power tilted against America's favor.

A maverick and transactional Trump may have affected the character of US-China dynamics, lending it a more confrontational streak.²⁶ While the direction of Sino-US relations has been heading toward a confrontation for some time now, it can be argued that the Trump presidency increased the military risk-taking propensity for the two countries in China's near seas. In mid-January 2021, it was widely reported that China had increased the frequency and scale of its aerial incursion into Taiwan's ADIZ in an attempt to test the incoming Biden administration.²⁷ Beijing also went on to pass new legislation (effective 1 February 2021) that authorizes its coast guard to use force against foreign vessels (including military vessels) and structures in waters and reefs in the South and East China Seas, over which it maintains sovereign claims.²⁸ This dangerously reduces the threshold for conflict escalation in the region. Coast guards are responsible for carrying out a law-and-order function within the sovereign waters of a country; as such, they are not bound to adhere to any international operating procedures or bilateral agreements that act as guide to reducing accidental escalation on the high seas. In response, the Biden administration deployed an aircraft carrier strike group led by the USS *Theodore Roosevelt* for a Freedom of Navigation Operation to the South China Sea, much to Beijing's chagrin.²⁹

Joe Biden or, for that matter, Xi Jinping may not be able to dictate the nature of this new great-power competition. That script is already cemented by the structural constraints that determine state behavior based on the relative power asymmetry between the contestants. However, what differentiates and further complicates the current rivalry from the previous structural conflict (i.e., the Cold War) is that China is far more economically integrated into the global economy than any previous challenger to a regional hegemon.³⁰ This increases the cost of military conflict not only for the United States but also for every other country that benefits from the global supply chain. This will be an important factor that determines the behavior of other countries in the future and in how the US-China strategic competition plays out.

These same constraints also need to be appreciated when predicting the choices that India would have to confront in South Asia in the more immediate future. This, in turn, will also be one of the factors that determines the role India would play in the larger Indo-Pacific security architecture. An argument in favor of stronger defense cooperation between India and the United States in the Indian

Ocean can be made, owing to the relatively lopsided military balance between the United States and China in this region compared to the Western Pacific. Moreover, China's intent and ability to project power in these waters is still nascent, giving India and the United States a first-mover advantage should they muster the political will to fortify their combined naval supremacy in the region for some years to come. For that to happen, both countries need to be able to align their threat perception when it comes to Beijing.

New Delhi is currently preoccupied with the more immediate tactical threat China poses to its northern borders, while Washington is mobilizing its resources to contain an impending challenger on the high seas, one that is likely to threaten US influence in the littoral countries of the Western Pacific. Shared interests between India and the United States might not be enough for New Delhi to invest militarily into the US Indo-Pacific vision, as it stands constrained by a developing economy. Moreover, increasing hostilities with China in the maritime realm will open a new theater of conflict. Not only is this likely to affect commerce in an important sea line of communication; India also risks starting hostilities with other Indian Ocean littorals such as Sri Lanka and Pakistan who are more favorably predisposed toward Beijing and whose ports the PLAN ships and submarines often use as docking facilities.³¹

The Limits of Indian Power Influence Its Behavior

Many see, or would prefer to see, the Indo-Pacific to be multipolar, wherein no one country or two countries call all the shots.³² A multipolar Indo-Pacific might be preferable for many, including India, but what *is* the Indo-Pacific in reality? Whether the US–China strategic competition will lead to hot conflict and what would keep the two away from such an eventuality have been prominent points of discourse.³³ However, rhetoric and action point to increasing divergences and confrontation between the two in the Indo-Pacific, leaving other, less powerful stakeholders to hedge their bets, even as both Washington and Beijing publicly give assurances that neither is interested in forcing others to choose between the two.

New Delhi principally espouses an Indo-Pacific guided not by competing strategies but by the inclusivity of interests. Prime Minister Narendra Modi, speaking at the Shangri La Dialogue in 2018, remarked: “India does not see the Indo-Pacific as a strategy or as a club of limited members. Nor as a grouping that seeks to dominate. And by no means do we consider it as directed against any country. A geographical definition, as such, cannot be. India's vision for the Indo-Pacific is, therefore, a positive one.” Prime Minister Modi alluded to the need for all to “have equal access as a right under international law to the use of common

spaces on sea and in the air that would require freedom of navigation, unimpeded commerce and peaceful settlement of disputes in accordance with international law.” The dragon in the room—China—was not mentioned by name. The Indian prime minister chose to focus on pushing forth a more sociocultural and economic web of engagements in the Indo-Pacific rather than the more strategy-oriented narrative of hegemonic quest.³⁴ By contrast, then-US Secretary of Defense James Mattis, speaking at the same event, minced no words and directly reprimanded China for its behavior in the Indo-Pacific, contending that “China’s policy in the South China Sea” stood “in stark contrast to the openness of America’s strategy.” Mattis further remarked: “China’s militarization of artificial features in the South China Sea includes the deployment of anti-ship missiles, surface-to-air missiles, electronic jammers, and more recently, the landing of bomber aircraft at Woody Island. Despite China’s claims to the contrary, the placement of these weapons systems is tied directly to military use for the purposes of intimidation and coercion.”³⁵

The following year, General Wei Fenghe, China’s state councilor and minister of national defense, speaking at the same platform, contended that “China develops its military entirely for self-defense.” He warned the United States against bullying China and warned: “In recent years some countries outside the region come to the South China Sea to flex muscles, in the name of freedom of navigation. The large-scale force projection and offensive operations in the region are the most serious destabilizing and uncertain factors in the South China Sea.”³⁶

A multipolar order is not synonymous to an equilibrium of material capabilities among the power poles. There is a hierarchy present in the multipolar system, and how India navigates the accumulation and projection of power between the United States and China in such a system remains a primary foreign policy challenge. India, with its growing material capabilities, is indeed one of the significant poles of the emerging multipolar world order. However, when India’s national power is seen in relation to the two prominent poles—Washington and Beijing—the gaps remain glaringly obvious. As the United States and China grow increasingly confrontational in attempting to create their own favorable balances of power in the region, would a multipolar Indo-Pacific crumble even before it is realized? What would that mean for India’s traction? How could India practice strategic autonomy in such a scenario? Could India continue hedging its bets between Washington and Beijing while simultaneously balancing against China’s rise? Is the ambivalence in the Indian approach a real strategy, or is it the outcome of the country’s poorer power parameters vis-à-vis the United States and China? Finally, power limitations might restrict New Delhi’s ability to emerge from ambivalence, even if India desired to do so. This amounts to a situation

where the best New Delhi could do would be to make the ambivalence and uncertainty in India's intentions and actions a strategy to deal with the power asymmetry inherent in its relations with Washington and Beijing in the Indo-Pacific.³⁷

At the moment, what works in India's favor is (1) its relative military parity with China in its territorial conflict and (2) the limitations in China's power projection capability in the Indian Ocean. Moreover, the current regime in New Delhi is more willing than its predecessors to confront China militarily and economically. This was on display in the months leading up to the June 2020 clash in the Galwan Valley. Thereafter, India showed not only an increased willingness to commit to extended periods of offensive deployments but also the ability to withstand the economic impacts of banning imports of Chinese commodities in crucial sectors as well as the diplomatic courage to cross Beijing's red line on the One China policy by deepening ties with Taiwan. At the time of writing this paper, the disengagement of troops had been completed in the Pangong area, while the situation at Gogra–Hot Springs, Demchok, and Depsang remained unresolved. While New Delhi and Beijing have both taken pains to stress the success of these disengagement talks, analysts have noted that a return to status quo is unlikely.³⁸ As of now, the disputed area between Finger 4 and Finger 8 in Pangong Lake have been declared as no-man's-land. It has been noted that this is also going to be the most likely outcome of a peaceful solution in the remaining three contested hotspots.³⁹ However, all these areas were patrolled by Indian troops prior to April 2020. While both sides continue to remain cautiously optimistic, as the troop positions on both sides allow them to spring to action at a moment's notice, a recent comment by Colonel Zhang Shuili, the spokesperson of PLA's Western Theatre Command, provides insights into PLA's tactical thinking on the India-China border. Colonel Shuili espoused a resolution to the Taiwan reunification issue before concentrating military efforts on the border dispute with India.⁴⁰ He hopes that the unification of Taiwan will reduce Washington's commitment to the Indo-Pacific architecture, making it less predisposed to aiding India.⁴¹ Thus, while the confluence of factors necessary for deepening India–US cooperation in the Indo-Pacific—be it the existence of a clear and present danger or the political will in the incumbent administrations—fortunately exists today, it is racing against the clock as to the expected material gains from this alignment.

A strengthening of China's foothold in Western Pacific will likely eat away at the US commitment to the Indo-Pacific, thereby possibly limiting the scope of India–US cooperation in the Indian Ocean. This increases the urgency on New Delhi to forego the strategic flexibility it prefers traditionally and set course on a

policy direction accepting the costs that come with it—including setbacks to its bilateral ties with Russia. In return, India will expect the United States to be more sensitive to its threat perception and more forthcoming in assisting its strategic aspirations. This can take the form of increased technology sharing and cooperation for facing the territorial threat India faces from China, a reevaluation of Washington's defense ties with Islamabad, and diplomatic support for India's goals in multilateral forums.

While having a sure-footed foreign policy gives more clarity to the likely strategic gains and challenges that the future holds, New Delhi seems to be overtly pronouncing its material ambitions while also trying to assert ideational influence at the moment. For example, Foreign Minister Jaishankar argued that it was imperative to undertake an “unsentimental audit of Indian foreign policy,” saying: “Hedging is a delicate exercise, whether it is the non-alignment and strategic autonomy of earlier periods, or multiple engagements of the future. But there is no getting away from it in a multi-polar world. This is a game best played on the front-foot, appreciating that progress on any one front strengthens one's hand on all others. In that sense, it is having many balls up in the air at the same time and displaying the confidence and dexterity to drop none.”⁴² This hints at a foreign policy establishment with a higher threshold for risk tolerance. It does not necessarily portend a change in India's foreign policy behavior in the near term but indicates a willingness to handle multiple sets of complex interactions simultaneously to achieve its foreign policy objectives.

Some voices view hedging as a strategy that is doomed to fail and have already proposed a strong alignment with the United States in balancing against China.⁴³ However, an overriding and perhaps more establishmentarian view would be to argue that there is more logic in India's quest for strategic autonomy, either through nonalignment in the past or multialignment now.⁴⁴ However, this does not necessarily mean that India prefers the status quo ante. If anything, its foreign policy decisions in recent years indicate a willingness to wither the hesitance to confront China, which goes beyond just their bilateral equation.

Strategic Inertia in India's Foreign Policy

As New Delhi's drive to be recognized as a leading power by virtue of its material capabilities and ability to shape political outcomes in the external environment increases, so shall the need to realize the limitations imposed by power asymmetry vis-à-vis the United States and China and the need to align New Delhi's foreign policy playbook in the Indo-Pacific.⁴⁵ Power asymmetry complicates India's practice of strategic autonomy in its response to a rising China and New Delhi's strategic embrace of the United States. While New Delhi must

exercise restraint and choose its fights with Beijing wisely, New Delhi and Washington, despite converging broadly, continue to face difficulties in aligning each other's threat perceptions and respective responses.⁴⁶

How can India extract benefits from America's balancing strategy against China without really committing to being a balancer under the US traditional alliance system? While pure geopolitical rationale might make it prudent for New Delhi to balance against China, India is deterred at the same time by the asymmetry between its own and China's national power. As a result, New Delhi propagates a narrative that India, unlike the United States, does not intend to contain China. Fareed Zakaria, writing about the rise of new powers in Asia and their dynamics with Washington, contended: "The process will not be mechanical. As one of these countries rises (China), it will not produce a clockwork-like balancing dynamic where its neighbor (India) will seek a formal alliance with the United States. Today's world is more complicated than that."⁴⁷ Rather than balancing against a threat, India seems more at ease in balancing between two stronger powers. For India's strategy in the Indo-Pacific, balancing, hedging, and evasive balancing are all means to extract favorable outcomes for India. However, such behaviors are made incoherent by power asymmetry. The inconsistency in India's approach to dealing with China's behavior in the Indo-Pacific is a product of power asymmetry, which complicates the behavior of building a partnership with a distant power (the United States) to balance against a proximate power (China).

India's Indo-Pacific strategy does not maintain equidistant positions between the United States and China. Developments in the military sector—such as the burgeoning defense trade; military-to-military exercises; envisioning greater technology transfers and coproduction of military equipment; the signing of foundational agreements; and the designation of India as a major defense partner—all signal an unmistakable shift toward greater alignment with the United States. Counteracting China's unilateral designs in the Indo-Pacific remains a joint concern, and in strategy there is indeed a convergence between the forward-based US deployment in the Western Pacific and the Indian Navy's emphasis on mission-based deployment.⁴⁸ In addition, improving India's maritime domain awareness and antisubmarine warfare capabilities in the Indian Ocean remain mutual interests.⁴⁹ However, in India's foreign policy discourse, there is still a lingering fear of being seen as too close to Washington and thus being perceived as having compromised the famed Indian strategic autonomy.⁵⁰

Simultaneously, despite an evident power asymmetry vis-à-vis China, New Delhi has, in many instances, also purposefully stood its ground against Beijing's attempts at bullying, be it India's decision to stay out of China's ambitious BRI or the military standoffs at Doklam and the Galwan Valley.⁵¹ It would be an

understatement to say that the contours of the India–China relationship are complex, mixed with optics and substance. Tense events like the Doklam and Galwan standoffs have been followed quickly by informal leadership summits such as the one Prime Minister Modi and President Xi held in Wuhan and Mamallapuram, India. These efforts to drive the relationship from the top are instantly recognizable as inevitable efforts to build on the positives while managing and addressing the negatives.⁵² A pertinent question in this case would be to ascertain the impact such a dalliance in India–China relations has on Washington. There are those who believe that, while Washington would not welcome an India–China conflict given its escalatory risks, the US bureaucracy also harbors a belief that manageable India–China tensions in the continental and maritime space could expose New Delhi’s weaknesses relative to China and push India closer to Washington.⁵³ Even while New Delhi tries distancing itself from any stark game of checkmating China, the Indo-Pacific at its core is predicated on the ways and means of counteracting China’s unilateral adventurism. In the prevailing circumstances, New Delhi is focused on precluding a rising perception by others that India is being increasingly pulled inside the US orbit, aimed against China in a polarized Indo-Pacific.⁵⁴ There are costs to be paid for foreign policy choices. The challenge is in not only knowing the costs but to also engage in a clear-headed calculation of which costs India can and cannot afford.⁵⁵ Despite a broad convergence over the goal to deter Chinese hegemony in the Indo-Pacific, the United States seems more willing to respond to Chinese actions in the Western Pacific than in the Indian Ocean.

Will Delhi’s Dilemma End?

Issues of convergence and divergence in the Indo-Pacific largely revolve around operationalizing the common interest of managing China’s rise. Both India and the United States have deeply intertwined relationships with China, something that is bound to impinge on the ways New Delhi and Washington perceive and evolve their own strategies in the Indo-Pacific, with implications for their bilateral cooperation in the region. It might be fair to say that Prime Minister Modi has been reaching out to countries far and near and powers big and small, including those that were hardly in the travel itineraries of former Indian leaders. This perhaps is one of the elements of a policy of multialignment, which India’s foreign minister described as “more energetic, more participative as compared to an earlier posture of abstention or non-involvement.”⁵⁶ However, there is more continuity than change in India’s foreign policy trajectory.⁵⁷ New Delhi’s dilemma of choosing new partners and paying the cost incurred is reflected in India’s Indo-Pacific strategy. Even while there is a consensus on the attractiveness of the Indo-Pacific

construct compared to the earlier references to India as a linchpin of America's rebalancing strategy toward the Asia-Pacific, there is a continuing ambivalence as to how far India should go in aligning with the United States in the Indo-Pacific. Despite India's prominent role as an Indian Ocean power in America's Indo-Pacific strategy, there continue to be deep hesitations in becoming a front in the great-power competition between the United States and China.⁵⁸ Some are of the view that "older models of regional engagement, which view different parts of Asia and the Pacific and Indian Oceans as requiring distinct approaches and multilateral partnerships, are still seen as relevant," relative to a prominent approach that views the Indo-Pacific in terms of China-rivalry and partnerships that are exclusive and not inclusive in intent.⁵⁹

Understanding India's predicament in the Indo-Pacific cannot be decoupled from the complex contemporary history of US-China relations. America's relationship with China has gone through the kinds of difficulties that have become a classic case of the dynamic geopolitical landscape and how the rise of new powers impact great-power behavior, leading to significant ramifications in balance-of-power politics. Despite some occasional hiccups and differences emerging because of deeper engagement across the political and economic realms, the overwhelming logic of India-US strategic convergence remains shared concerns over China's behavior in the regional and global scheme of things.⁶⁰ However, India's Indo-Pacific strategy is designed to counter China in South Asia and the Indian Ocean, whereas the US Indo-Pacific strategy is primarily meant to counter Chinese intransigence in the Western Pacific. Bridging this gap will not be easy, and the challenge is made more consequential for India given its power asymmetry relative to the United States and China. India's former national security advisor and foreign secretary, Shivshankar Menon, wrote: "The more India rises, the more it must expect Chinese opposition, and it will have to also work with other powers to ensure that its interests are protected in the neighbourhood, the region and the world. The balance will keep shifting between cooperation and competition with China, both of which characterise that relationship. The important thing is the need to rapidly accumulate usable and effective power, even while the macro balance will take time to right itself."⁶¹

How much of this "usable and effective power" will come from New Delhi's strategic engagement with Washington? The complex competition-cooperation dynamic in the India-China relationship and in the US-China relationship will constrain New Delhi's ability to shape India's strategic embrace with the United States completely to its taste. So, if India's power asymmetry relative to the United States and China is prominent and remains so, what strategic realities should New Delhi keep in mind while negotiating its global and regional aspirations

with India's finite capabilities? In a way, the path to an effective strategy in the Indo-Pacific may not lie in envisioning an end to New Delhi's dilemma but in recognizing that India will have to negotiate the implications of this power asymmetry by aligning its aspirations and capabilities.⁶² Invoking greater realism and evolving an effective grand strategy to emerge as a leading power could depend on a sober appreciation of not only India's rising national power but also its deficiencies.

The Way Forward

Given the differing spatial focus between India and United States in the Indo-Pacific, is a strategic alignment possible between the two countries to meet the common threats emanating from a rising China, which grows increasingly capable of and intent on using force farther away from its borders? Not unless Washington spells out what it can offer India to allay New Delhi's strategic concerns regarding China and vice versa. If both countries focus their resources in regions where they each see a threat, then the purpose of organizing a cooperative mechanism is moot.

This does not require either India or the United States to do anything differently. They can start by better coordinating their existing policies to meet the other's strategic concerns regarding China. India's Act East policy sees New Delhi engaging in deeper defense cooperation with countries in South East Asia, especially Vietnam. While Vietnam's Three Nos policy (No basing rights to foreign troops; No to alliances; No teaming up with one side to combat against another) limits its ability to deepen ties with the United States, India is perfectly placed to initiate backdoor negotiations to soften Vietnam's stance. Both India and the United States deepened their engagements with Taiwan in the face of hostility from China. India and the United States can work together to strengthen Taiwan's economic engagement in the Indo-Pacific region through joint development projects while also extending diplomatic support for integrating Taiwan in regional and global multilateral frameworks on issues concerning development and public health.

Given the high likelihood of resurgence in Sino-Indian border tensions, New Delhi needs to accept the limitations in its foreign policy maneuverability vis-à-vis China. In no way does this need to become a unidirectional policy approach. A deeper strategic alignment at the cost of maintaining autonomy might yield results in terms of more policy options. It would also mean working harder and with more clarity of purpose in convincing Russia that an intransigent China in the Pacific is not in any country's interest. A nascent attempt at co-opting Russia into the Indo-Pacific architecture was made in early 2021 by exploring a track

2-level India–Japan–Russia trilateral as a part of Prime Minister Narendra Modi’s Act Far East policy.⁶³ Russia had been seeking Japanese and Indian presence and investment in the Russian Far East amid the growing Chinese presence.⁶⁴

India has also signed reciprocal bilateral logistics pacts with France, the United States, Singapore, South Korea, and Australia to allow the navies to use each other’s ports for replenishment during transit. This takes India a step closer to formalizing a mechanism for increasing interoperability among the major navies patrolling the waters of the Indian Ocean. India also took a step toward shredding its reticence regarding joint patrols with foreign partners by engaging with France in March 2020.⁶⁵ So far, India has engaged only in joint patrol with its maritime neighbors. However, increasing tensions on the India–China border resulted in increased frequency of Indian naval exercises in the South China Sea in 2020. This included the passage exercises with Vietnam, Russia, and the United States; coordinated patrol (CORPAT) with Indonesia, Bangladesh, and Thailand; and the Malabar Exercise in the Bay of Bengal and the Arabian Sea with Quad countries, which saw the participation of Australian Navy after 13 years. The Indian Navy also undertook exclusive economic zone surveillance with Maldives, Seychelles, and Mauritius. This indicates that India is willing to inflict a cost to China for any territorial dispute in the maritime realm.

It will be prudent for New Delhi to initiate dialogue with Beijing on a mechanism for defusing tensions in the event hostilities break out between the two navies in the Indian Ocean, in the form of an “incidents at sea” agreement (which existed between the United States and Soviet Union during the Cold War).⁶⁶ At present, the codes for unplanned encounters at sea are applicable only to the air force and the navy. A crisis management mechanism for coast guard vessels needs to be formalized.

It has been argued that the United States proposes more exercises than India can accept. Under the Quad 2.0 framework, the United States could consider a diplomatic push toward non-Quad Indian Ocean countries and organize less complex countercoercion exercises with India and other smaller states in South Asia.⁶⁷ India and the United States could also start an Indian Ocean Cooperation and Training Exercise, similar to the one in Southeast Asia, with a focus on counternarcotics, counterpiracy, and counterterrorism.⁶⁸

Another area where the United States and India can cooperate is by expanding the scope of the Asia-Pacific Economic Cooperation forum to address the issues of debt relief for countries in the Indian Ocean region where countries such as Maldives and Sri Lanka are under major debt distress due to Chinese loans.⁶⁹ Smaller Indian Ocean littoral states are unlikely to be enthused by defense

cooperation and would need economic inducements to wrestle their way out of the economic leverage that Beijing wields over them. ☸

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Notes

1. Ministry of External Affairs, Government of India, "Official Spokesperson's Response to Media Queries on Indo-US Relationship," 19 December 2017, <https://www.mea.gov.in>.
2. White House (United States), "National Security Strategy of the United States of America," December 2017, ; US Department of Defense, "Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge," <https://dod.defense.gov>; Senate Foreign Relations Committee (United States), "Asia Reassurance Initiative Act of 2018," Public Law No: 115-409, 115th Congress, 31 December 2018, <https://www.congress.gov>; US Joint Chiefs of Staff, "Description of the National Military Strategy 2018," <https://www.jcs.mil>; US Department of Defense, "Indo-Pacific Strategy Report Preparedness, Partnerships, and Promoting a Networked Region," 1 June 2019, <https://media.defense.gov>; US Department of State, "A Free and Open Indo-Pacific: Advancing a Shared Vision," 4 November 2019, <https://www.state.gov>.
3. Ministry of External Affairs, Government of India, "Prime Minister's Keynote Address at Shangri La Dialogue," 1 June 2018, <https://mea.gov.in>.
4. Rajesh Rajagopalan, "Evasive Balancing: India's Unviable Indo-Pacific Strategy," *International Affairs* 96, no. 1 (2020): 75–93.
5. S. Jaishankar, *The India Way: Strategies for an Uncertain World* (India: HarperCollins, 2020), 184.
6. Robert D. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power* (New York: Random House, 2011), 9.
7. C. Rajamohan, *Samudra Manthan: Sino-Indian Rivalry in the Indo-Pacific* (Washington DC: Carnegie Endowment for International Peace, 2012), 1.
8. Office of the Historian, US Department of State, "Joint Statement Following Discussions with Leaders of the People's Republic of China," <https://history.state.gov>. Also see Monish Tourangbam, "Countering Hegemony: The US-China Balance," *The Diplomat*, 24 July 2017, <https://thediplomat.com>.
9. Condoleezza Rice, "Promoting the National Interest," *Foreign Affairs* 79, no. 1 (2000): 56, <https://www.jstor.org>.
10. Rice, "Promoting the National Interest."

11. Hillary Clinton, "America's Pacific Century," *Foreign Policy*, 11 October 2011, <https://foreignpolicy.com>.
12. US Department of Defense, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," January 2012, 4–5, <https://archive.defense.gov>.
13. US Joints Chiefs of Staff, "The National Military Strategy of the United States of America 2015," June 2015, <https://www.jcs.mil>, 2.
14. The State Council Information Office of the People's Republic of China, "China's Military Strategy," May 2015, <https://www.chinadaily.com.cn>.
15. "China Establishes 'Air-Defence Zone' Over East China Sea," *BBC News*, 23 November 2013, <https://www.bbc.com>; and Zachary Keck, "US Bombers Challenge China's Air Defense Identification Zone," *The Diplomat*, 27 November 2013, <https://thediplomat.com>.
16. Ralph Jennings, "China Sends Ships, Planes over Disputed Seas to Show Strength after COVID-19 Outbreak," *Voice of America*, 25 March 2020, <https://www.voanews.com>; Paul Haenle, "Security Concerns in Asia-Pacific Escalate Amid Coronavirus Scramble," *Carnegie Endowment for International Peace*, 29 April 2020, <https://carnegieendowment.org>; Mira Rapp-Hooper, "Top Conflicts to Watch in 2020: An Armed Confrontation in the South China Sea," *Council on Foreign Relations*, 10 January 2020, <https://www.cfr.org>.
17. Michael Sampson, "Expanding Influence: China's Evolving Trade Agreements in the Asia-Pacific," *The Diplomat*, 5 February 2020, <https://thediplomat.com>.
18. Viet Hoang, "The Code of Conduct for the South China Sea: A Long and Bumpy Road," *The Diplomat*, 28 September 2020.
19. Joshua Kurlantzick, "U.S.-ASEAN Relations-No Summit, But What's the Status," *Council on Foreign Relations*, 2 March 2020, <https://www.cfr.org>.
20. "Donald Trump: 'We Are Going to Make America So Great Again,'" *BBC News*, 10 February 2016, <https://www.bbc.com>.
21. For a diagnostic account of the Indo-Pacific as an interplay of mental mappings, see Rory Medcalf, *Contest for the Indo-Pacific: Why China Won't Map the Future* (Carlton, AU: La Trobe University Press, 2020).
22. Ministry of External Affairs, Government of India, "Joint Statement: Vision and Principles for India-U.S. Comprehensive Global Strategic Partnership," 25 February 2020, <https://mea.gov.in>.
23. Dhruva Jaishankar, "India-Australia Security Relations: They've Only Just Begun," *The Interpreter*, 19 October 2020 <https://www.lowyinstitute.org>.
24. White House (United States), "National Security Strategy of the United States of America"; US Department of Defense, "Summary of the 2018 National Defense Strategy"; US Joint Chiefs of Staff, "Description of the National Military Strategy 2018."
25. John Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton, 2014).
26. Mark Beeson, "Donald Trump and Post-Pivot Asia: The Implications of a 'Transactional' Approach to Foreign Policy," *Asian Studies Review* 44, no. 1 (13 November 2019): 10–27, <https://doi.org/10.1080/10357823.2019.1680604>.
27. Kari Soo Lindberg, "China Tests Biden's Will on Strategic Flash Point of Taiwan," *Bloomberg*, 25 January 2021, <https://www.bloombergquint.com>; Michael Safi, "Chinese Aircrafts Enter Taiwan's Air Defence Zone for Second Day," *The Guardian*, 24 January 2021, <https://www.theguardian.com>; "China Flies Warplanes Close to Taiwan in Early Test for Biden," *CNN*, 25 January 2021, <https://edition.cnn.com>.

28. Yew Lun Tian, "China Authorizes Coast Guard to Fire on Vessels if Needed," *Reuters*, 22 January 2021, <https://www.reuters.com>; "China Coast Guard Gains New Powers," *ANI*, 15 February 2021, <https://www.aninews.in>.
29. "US Flexing Its Muscles by Deploying Military in South China Sea: China," *Economic Times*, 25 January 2021, <https://economictimes.indiatimes.com>.
30. Rajesh Rajgopala, "India and US Must Know That the New Cold War Is a Different Beast—China Isn't USSR," *The Print*, 16 February 2021, <https://theprint.in>.
31. Atul Aneja, "China Says Its Submarines Dock in Sri Lanka 'For Replenishment,'" *The Hindu*, 28 November 2014, <https://www.thehindu.com>; Vijay Shukla, "Chinese Submarines in Sri Lanka Unnerve India: Next Stop Pakistan?," *The Jamestown Foundation—China Brief*, 29 May 2015, <https://jamestown.org>; Gurmeet Kanwal, "Pakistan's Gwadar Port: A New Naval Base in China's String of Pearls in the Indo-Pacific," *CSIS Briefs*, 2 April 2018, <https://www.csis.org>; M. Abi-Habid, "How China Got Sri Lanka to Cough Up a Port," *New York Times*, 25 June 2018, <https://www.nytimes.com>; H. I. Sutton, "Satellite Imagery Shows Chinese Navy in Pakistan," *Forbes*, 8 April 2020, <https://www.forbes.com>; and Kardon Kennedy et al., "Gwadar: China's Potential Strategic Strongpoint in Pakistan," *U.S. Naval War College—China Maritime Studies Institute*, China Maritime Report no. 7 (2020): 54, <https://digital-commons.usnwc.edu>.
32. Medcalf, *Contest for the Indo-Pacific*; Rory Medcalf, "Indo-Pacific Visions: Giving Solidarity a Chance," *Asia Policy* 14, no. 3 (2019): 79–95, <https://www.nbr.org>. Also see Alyssa Ayres, *Our Time Has Come: How India Is Making Its Place in the World* (New Delhi: Oxford University Press, 2018), 25.
33. Henry A. Kissinger, "The Future of U.S.-Chinese Relations: Conflict Is a Choice, Not a Necessity," *Foreign Affairs* 91, no. 2 (2012): 44–55, <https://www.jstor.org>; and Graham Allison, *Destined for War: Can America and China Escape Thucydides's Trap?* (Melbourne: Scribe, 2010).
34. Ministry of External Affairs, Government of India, "Prime Minister's Keynote Address at Shangri La Dialogue."
35. US Department of Defense, "Remarks by Secretary Mattis at Plenary Session of the 2018 Shangri-La Dialogue," 2 June 2018, <https://www.defense.gov>.
36. Ministry of National Defense of the People's Republic of China, "Speech at the 18th Shangri-La Dialogue by Gen. Wei Fenghe, State Councilor and Minister of National Defense, PRC," 2 June 2019, <http://eng.mod.gov.cn>.
37. Arzan Tarapore, "Using Uncertainty as Leverage: India's Security Competition with China," *War on the Rocks*, 18 June 2018, <https://warontherocks.com>.
38. Rohan Venkatramakrishnan, "What Does the Pangon Lake Disengagement Mean for India-China Trade and Ties", 27 February 2021, <https://scroll.in>.
39. H. S. Panag, "LAC Disengagement Done. India, China Can Now Return to Old Love-Hate Routine," *The Print*, 18 March 2021, <https://theprint.in>.
40. Hemant Adlakha, "Chinese View: Indian Army Illegally Crosses LAC Again, Occupies Chinese Territory," *ICS Translations*, <https://www.icsin.org>.
41. Adlakha, "Chinese View."
42. Ministry of External Affairs, Government of India, "External Affairs Minister's Speech at the 4th Ramnath Goenka Lecture, 2019," Media Centre, Ministry of External Affairs, 14 November 2019, <https://mea.gov.in>.
43. Rajesh Rajagopalan, "India's Strategic Choices: China and the Balance of Power in Asia," *Carnegie India*, September 2017, <https://carnegieendowment.org>.

44. Shyam Saran, *How India Sees the World: Kautilya to the 21st Century* (New Delhi: Jugger-naut, 2017), 2; Shivshankar Menon, "India's Foreign Affairs Strategy," Brookings India Impact Series, *Brookings Institution India Center*, May 2020, <https://www.brookings.edu>, 14–15. Shyam Saran is a former foreign secretary. Shivshankar Menon is a former national security advisor and a former foreign secretary.

45. Ashley J. Tellis, "India as Leading Power," *Carnegie Endowment for International Peace*, 4 April 2016, <https://carnegieendowment.org>.

46. Dinshaw Mistry, "Aligning Unevenly: India and the United States," *Policy Studies*, no. 74, East-West Center, Honolulu, <https://www.eastwestcenter.org>; and Paul Staniland, "America Has High Expectation for India: Can New Delhi Deliver?," *War on the Rocks*, 22 February 2018, <https://warontherocks.com>.

47. Fareed Zakaria, *The Post-American World and the Rise of the Rest* (New Delhi: Penguin Books, 2008), 233.

48. Zack Cooper and Andrew Shearer, "Thinking Clearly About China's Layered Indo-Pacific Strategy," *Bulletin of the Atomic Scientists* 73, no. 5 (2017): 305–11, <https://doi.org/10.1080/00963402.2017.1364005>; and "Indian Navy to Implement New Deployment Plan for Warships in IOR to Counter China," *Firstpost*, 9 May 2020, <https://www.firstpost.com>.

49. Sameer Lalwani and Liv Dowling, "Take Small Steps to Advance the US-India Relationship," *DefenseOne*, 21 December 2017, <https://www.defenseone.com>. Also see Monish Tourangbam, "Avoid Incidents at Sea Between India and China," in Michael Krepon, Travis Wheeler, and Liv Dowling (eds.), *Off Ramps from Confrontation in Southern Asia* (Washington DC: Stimson Center, 2019), 101–10.

50. SAV Editorial Staff, "Dr. C Raja Mohan on Multialignment in Indian Foreign Policy, Afghanistan, and More," *South Asian Voices*, 13 March 2020, <https://southasianvoices.org>.

51. Pramit Pal Chaudhuri, "Doklam Standoff to Climate Change: 8 Ways India Stood Up in the World in 2017," *Hindustan Times*, 30 December 2017, <https://www.hindustantimes.com>; and "Modi Only World Statesman to Stand Up to China on BRI: Pillsbury," *Economic Times*, 12 July 2018, <https://economictimes.indiatimes.com>. For an account of the interface between India's great-power relations and its own great-power aspirations, see Rajesh Rajagopalan and Varun Sahni, "India and the Great Powers: Strategic Imperatives, Normative Necessities," *South Asian Survey* 15, no. 1 (2008): 5–32, <https://doi.org/10.1177/097152310801500102>.

52. Ministry of External Affairs, Government of India, "India-China Informal Summit at Wuhan," 28 April 2018, <https://mea.gov.in>; and Ministry of External Affairs, Government of India, "2nd India-China Informal Summit," 12 October 2019, <https://www.mea.gov.in>.

53. J. T. White, "Navigating Two Asias: How Washington Deals with the Indo-Pacific's Rising Powers," *India Review* 18, no. 4 (2019): 427, <https://doi.org/10.1080/14736489.2019.1662191>.

54. White, "Navigating Two Asias," 429.

55. Shivshanker Menon, *Choices: Inside the Making of India's Foreign Policy* (Gurgaon: Allen Lane, 2016).

56. Ministry of External Affairs, Government of India, "External Affairs Minister's Speech at the 4th Ramnath Goenka Lecture, 2019."

57. C. Rajamohan, "Raja Mandala: A Continuing Foreign Policy Consensus," *Indian Express*, 27 March 2018, <https://indianexpress.com>.

58. Shyam Saran, "Mapping the Indo-Pacific," *Indian Express*, 29 October 2011, <http://archive.indianexpress.com>; Leon E. Panetta, "Partners in the 21st Century," Manohar Parrikar Institute for Defence Studies and Analyses, 6 June 2012, <https://idsa.in>; Dinakar Peri, "Out at Sea: On the Indian Ocean Region," 28 December 2017, *The Hindu*, <https://www.thehindu.com>.
59. Priya Chacko, "The Rise of the Indo-Pacific: Understanding Ideational Change and Continuity in India's Foreign Policy," *Australian Journal of International Affairs* 68, no. 4 (2014): 448, <https://doi.org/10.1080/10357718.2014.89156>.
60. White, "Navigating Two Asias," 407–08.
61. Menon, "India's Foreign Affairs Strategy."
62. John Lewis Gaddis, *On Grand Strategy* (New Delhi: Penguin Books, 2018).
63. Dipanjan Roy Chaudhury, "India-Japan-Russia Grouping in the Works," *Economic Times*, 12 February 2021, <https://economictimes.indiatimes.com>.
64. Chaudhury, "India-Japan-Russia Grouping."
65. Dinakar Peri, "In a First, India, France Conduct Joint Patrols from Reunion Island," *The Hindu*, 21 March 2020, <https://www.thehindu.com>.
66. Tourangbam, "Avoid Incidents at Sea Between India and China."
67. J. T. White, "After the Foundational Agreements: An Agenda for US-India Defense and Security Cooperation," *Foreign Policy at Brookings*, <https://www.brookings.edu>.
68. Aman Thakker, "Sino-Indian Border Clashes: Implications for U.S.-India Ties," *CSIS*, 16 July 2020, <https://www.csis.org>.
69. Marwaan Macan-Markar, "India and China Compete Over Indian Ocean Debt-relief Diplomacy," *Financial Times*, 7 December 2020, <https://www.ft.com>.

Peace and Tranquility Are Insufficient

A New Command Is Required for Ladakh

DR. AMARJIT SINGH

In May 1999, as soon as the snows began to melt, Pakistan cleverly occupied peaks ahead of India in the Kargil and Dras sectors. Consequently, India had to “fight with what they had” to evict the intruders from what was rightfully Indian territory.¹ After that, India made it a point to be the first back to those peaks, located in Jammu & Kashmir (J&K), every summer. Thus, some lessons were learned, but it seems probable that India learns by one mistake at a time—and sometimes not even that. That is because India evidently left peaks in its perceived territory unoccupied in Ladakh and Aksai Chin.² It is also very strange to imagine that Indian forces would construct a road in a forward area along the Shyok River without ensuring that the road is perpetually secured. However, this is exactly what India allowed in the Galwan area—that is to say, India allowed the Chinese to come extremely close to their road, allowing them to occupy adjacent peaks so that the Chinese are now close enough to cut off that road any time and endanger the supply to Siachen Glacier. This time, in summer 2020, though it is hard to say, not only were the politicians sleeping but also possibly the Indian forces. This article discusses Chinese claims over Aksai Chin, Chinese adventurism, India’s stated mission to retake Aksai Chin, the strengths and weaknesses of India’s military in Ladakh, and the requirements to recapture Aksai Chin without losing any ground itself.

China Will Occupy Unoccupied Territory

All responsible parties seemed not to understand a basic principle of warring neighbors—that military planners look for undefended areas to occupy and underdefended areas to attack—such that the Chinese very predictably entered where the peaks and territories were unoccupied by Indians. Other reasons may also explain why the Chinese entered gray areas in Ladakh, among which may be to put India in its place after India redrew the map of Jammu and Kashmir, creating the distinct Union Territory of Ladakh, or that China desires territorial expansion for minerals and resources.

However, India should have learned a lesson in 1953 when it spotted Chinese patrols in Aksai Chin but did little to beef up its own patrolling, signaling, and forward bases. The prime minister at the time, Jawahar Lal Nehru, did not ask the

army to go in and occupy those peaks but instead dismissed Aksai Chin as “a barren land where not a blade of grass grows.” Well, it is from those barren lands that the Chinese can lop off Ladakh from India. And what has not been well explored: Aksai Chin may have valuable minerals in its land.

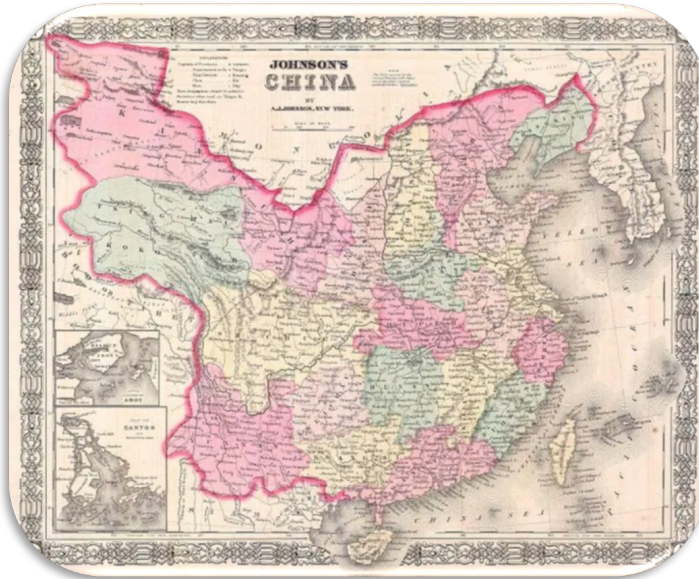
China Will Take Advantage of Unoccupied Lands

Common sense dictates that an unoccupied area will be encroached on by an enemy for any reason—even for the artificial reason of “differing perceptions,” which is applied seemingly daily in Sino-Indian border matters. Such differing perceptions can be misused and misapplied. In fact, one wonders why India is not the first to use these so-called differing perceptions to its advantage but instead is always on the defensive. Given that China makes incursions all the time, why has India not staged an operation by a battalion to ambush the Chinese intruders and capture a platoon of Chinese that do intrude?³ This is not mere rhetoric, as there is a sound case for India to occupy more peaks than required so as to assert its sovereign rights and ensure its dominance. For India to think that a boundary will be respected by an enemy when India has no activity or occupation there is an impractical mind-set.⁴

In its own view, India thought that maintaining a barren distance in Ladakh from the enemy was insurance against intrusion.⁵ If India fears an eyeball-to-eyeball standoff with them, it must know that without a doubt, the Chinese are signaling every intention of confronting Indian forces. Thus, no matter what, India cannot avoid the very confrontation it seeks to avoid. Consequently, India has work yet to do. The Chinese—or anyone else—will respect the Line of Actual Control (LAC) only to the extent it is guarded, manned, and adequately defended.

Thus, it is logical to conclude that from the perspective of India's security—if India wishes to stand tall—India would give China a warning: intrusions or changes in the status quo, or stretching the interpretation of “differing perceptions,” will be dealt with firmly beyond the currently established protocol. At the very least, India must aim to force China to go back to the LAC of 1 April 2020. Moreover, India has a rightful claim to the 1959 LOC. Better yet, India has an internal mission and obligation to return to the actual lines that their police patrolled in 1950–51, which is the actual and original border of Aksai Chin between Tibet and India, bequeathed to India in October 1947 by the erstwhile Kingdom of Jammu and Kashmir⁶ (which is further evidenced by Indian Parliament resolutions on the matter).⁷ Note that China has never controlled Aksai Chin: even the East Turkestan government-in-exile recognizes that fact.⁸ See figure 1, from 1865, demonstrating that maps at the time did not show Aksai Chin as part of

China. But it appears that India has not exhibited efforts to reclaim its own territory, even if it has the muscle to do so.



Source: Salih Hidayar, "Aksai Chin (Eastern Ladakh) Is a Part of India Not China," n.d., East Turkistan Government in Exile, <https://east-turkistan.net/aksai-chin-eastern-ladakh-is-a-part-of-india-not-china/>

Figure 1. A. J. Johnson's Map of China, 1865 (does not include Tibet or Aksai Chin).

In fact, the current disengagement and de-escalation activities should come with a warning. Lest we lose the history, let us recall that on July 15, 1962, China withdrew from Galwan.⁹ It was headline news in India's national newspapers. At that time, India patted itself on the back as to how remarkably its diplomatic offensive had succeeded. However, the Chinese came back in force just three months later, on 20 October 1962. India must be alert—now and in the future—because Indians have no idea what China is planning. Note that Chinese president Xi Jinping has been eerily silent on the Sino-Indian border conflict, just as he was silent on Hong Kong for a whole year before revoking Hong Kong's special status when he did speak on it.

China Is Presumably Planning for War

Lately, President Xi has been telling the People's Liberation Army to prepare for war. He has made this statement many times, the latest of which was on October 14, 2020.¹⁰ In fact, during a visit to a military base in Guangdong he asked his troops to "put all [their] minds and energy on preparing for war."

What that really means is best known to Chinese authorities, but neighbors must take this seriously. It is not difficult to understand he could be planning something big in one direction—read: Taiwan—and plans to keep the rest of his territory safe lest other neighbors seek to take advantage of that battle. Moreover, China wishes to make some “statement” to the world at the centennial marking of its revolution, in 2049.¹¹ Arguably, and quite indubitably, China wishes to be the dominant power in the world—and that cannot happen without military might.

But for India, alertness is not only about defending every square inch; it must also factor in what the Indian home minister wants to do (discussed further below).

Warning Signs Should Be Heeded

World nations knew that Adolf Hitler was arming Germany as early as 1934–35, but they sought to ignore Germany for various reasons, not the least of which was a disbelief that a broken Germany in debt could rise so suddenly. However, history proves that ignoring warning signs is egregious. Even in 1939, British prime minister Neville Chamberlain gave away Czechoslovakia for a false promise by Germany under the Munich Agreement, with the illusory hope of preventing war.¹² Consequently, there is a valid fear that Indian diplomats may fall victim to false promises by China. After all, India is known to give away at the table what it won by war—in 1948, 1965, and 1971.¹³ In this respect, “peace and tranquility” should be understood as outdated, and “disengagement and de-escalation” are a risky dream. As Ertugral Bey Ghazi, father of Othman I, father of the Ottoman Empire, said: “I do not dream, I do what is necessary.”¹⁴ Similarly, it is probably time for India to stake its claims on the ground rather than dream of words to be printed in newspapers and broadcast on news channels.

China’s aggressiveness was felt in 2020 across the Taiwan Strait, in the South China Sea, in Ladakh, and in claims against Russia that Vladivostok is a part of China.¹⁵ For realists, none of these can be taken lightly.

Indian Home Minister Wants to Retake Aksai Chin

For those who insist on peace and tranquility on the border, we all know there are different sides to that argument. But note very carefully that when Indian home minister Amit Shah claimed Aksai Chin in 2019 to be a part of India when redrawing the map of Kashmir, he stated that India would take Aksai Chin back, which leaves open the possibility of force and is not limited to diplomacy. He said explicitly: “Kashmir is an integral part of India. . . . When I talk about Jammu and

Kashmir, Pakistan occupied Kashmir and Aksai Chin are included in it.” Then he emphatically added: “We will give our lives for this region.”¹⁶

Further, the Indian Parliament passed a resolution on 22 February 1994, asserting Indian authority over all the erstwhile state of Jammu and Kashmir, which unambiguously includes Aksai Chin. The resolution categorically spelled out India’s stand:

(a) The State of Jammu & Kashmir has been, is and shall be an integral part of India and any attempts to separate it from the rest of the country will be resisted by all necessary means; [and further]

(b) India has the will and capacity to firmly counter all designs against its unity, sovereignty and territorial integrity.¹⁷

The previous territories of J&K that are now transferred to the Union Territory of Ladakh are characterized in that resolution as an integral part of India. Use of the phrases “resisted by all necessary means” and “firmly counter” do not exclude use of force. That the incumbent home minister said we would “give our lives for this region” means to regain the area through battle, or else the loss of life does not factor in. Thus, “peace and tranquility” on the border is merely diplomatic parlance that India and China can use at their convenience when they deem necessary, but the actual situation on the ground tells a different story.

In addition, Gen. Bipin Rawat, holding the newly created position as India’s Chief of Defence Staff, said: “The next agenda is retrieving [Pakistan-occupied Kashmir] and making it a part of India. The government takes actions in such matters.” There is a clear implication of using force in the J&K area.¹⁸ India is planning for it and, perhaps, simply waiting for the opportune moment, which could be a full-scale attack on India by either China or Pakistan or both. The Apache and Chinook helicopters are presumably a part of this plan, as are the Rafales and the S-400, Mig-29s, and Su-30s. In the interim, Israel sent its own, in-use surface-to-air missile defense system to resist China in Ladakh. T-90 tanks support that mission.¹⁹

“Opportune Moment”

The opportune moment for India to go all-out to retake India’s lost territories can be tricky to understand. The parameters that factor into determining the opportune moment are manifold:

- The foremost is to ensure that India has support from the international community—the major powers in the UN Security Council other than China.

Other international support is also paramount—Germany, Japan, Australia, Indonesia, Saudi Arabia, UAE, and Israel.

- Next, India must determine that it is actually ready on the ground. Unlike the false analysis made by Chief of the Army Staff (COAS) Gen. J. N. Chaudhuri on 20 September 1965 for a cease-fire with Pakistan—on the basis that India was running out of ammunition when it had consumed only 14–20 percent of its ammunition²⁰—a realistic assessment is necessary. This includes verifiable estimates of strength and ordnance.
- Third, the Indian generals must be ready and feel courageous. In this regard, note that Indian defense minister Y. B. Chavan reported in his diaries that General Chaudhuri appeared to lack courage and would frequently lapse into depression at even the slightest news of a reversal.²¹ In 1962, the good generals were sidelined, and Lt. Gen. B. M. Kaul was elevated, leading to a disaster that is well known. It is not totally incorrect that some generals would rather not see fighting in J&K or Ladakh. Some generals do not even want another mountain strike corps.²²
- Fourth, India must have real capabilities, equipment, and resources. Sentiments and dreams alone do not win battles; neither do false assessments.
- Fifth, the political masters must have the will and courage.
- Sixth, the Indian public must be behind the cause. In a democratic society, this is even more essential.
- Seventh, the politicians and generals must be aligned in their management information system. If the generals always wait for the politicians to tell them what to do, while the politicians think that the generals are doing their job, then there is a serious disconnect.
- Eighth, provided the above are in place, choose a moment when China is engaged in an invasion of Taiwan or heavily engaged in defending its artificial islands in the South China Sea. Alternatively, any moment is fine if it can be recognized that China's supply and logistic lines to Ladakh are much too long, despite their infrastructure buildup, which makes it difficult and expensive for China to defend distant Ladakh. The decisive advantage that China may have in transportation infrastructure is more than belied by the plausible inability of the Chinese to defend their sprawling infrastructure. In other words, with thousands of miles of transportation networks to protect, Indian air attacks have only to break the transportation network at its weakest links. As such, China is vulnerable to Indian air attacks.

Galwan Valley

Note that Galwan Valley was named after an Indian explorer.²³ The Chinese were nowhere near Galwan to ever claim it. At the most, they considered Tibet to be a dependent country. The US Foreign Office had in 1899 recognized Tibet, along with East Turkestan and Mongolia, as Chinese dependencies; see figure 2. But even per that map, Aksai Chin was not viewed as part of China or its dependencies. In addition, even communist China's map of 1945 excluded Aksai Chin.²⁴ It appears that China increases its claims as it expands.²⁵



Figure 2. US Treasury Department map of China and Chinese dependencies, 1899.

The roads through Aksai Chin were under the control of the British Indian government when during the Great Game it sent missions to Khotan, Yarkand, Kashgar, Ferghana, Khiva, and Bokhara, returning via Kunduz and Kabul.²⁶ Consequently, the strategic importance of Aksai Chin as the trijunction and intersection of Central Asia, Tibet, and East Turkestan was engraved on British strategic thinking. But unfortunately, that strategic thinking was lost on the Indians, who ran independent India.

Does India Have Adequate Strength to Retake Aksai Chin?

It is unlikely that diplomatic strategies alone will lead to a unilateral withdrawal of troops by China from Aksai Chin, although a partial withdrawal from the northern and southern banks of Pangong Lake was implemented in February 2021.²⁷ However, India is notorious for losing at the negotiation table what it won in war. For instance, it failed to push ahead in Kashmir in 1948–49, preferring to go to the United Nations instead; India lost at Tashkent in 1965, especially Haji Pir, what it won in hard-fought battles; and India gave away in Simla the 90,000 Pakistani POWs it captured in 1971. But how can India appropriately use force? Is India ready? Does India have adequate force?

At least two important articles bring out India's inadequacy to achieve its goals on Ladakh,²⁸ although it is easy to understand how the odds are stacked against Indian troops in the rugged mountains of the Karakorum. Against 60,000 Chinese soldiers in Aksai Chin, two Indian divisions in the Fire and Fury Corps are simply unable to push the Chinese back, although they may be adequate to somewhat hold the line, albeit with some give-and-take. However, it was later reported that India had matched the Chinese troop strength of 60,000.²⁹ In fact, as the ground situation stands at present, China is positioned favorably at Hot Springs; in Depsang, China virtually overlooks the road to Daulat Beg Oldie (DBO) from the plateau it has occupied; and unfortunately for India, the Chinese are no longer within the crosshairs of Indian troops at Spangur Lake after the recently announced disengagement from the Pangong Tso and Spangur Lake areas.³⁰

India gained a partial upper hand at the Pangong Tso Lake area after it occupied six strategic heights between 29 August and mid-September 2020.³¹ But that advantage is now gone after a partial withdrawal. Thus, China can now slowly advance into other areas in a low-intensity fashion, mountain by mountain and turn by turn, with only a company or platoon at a time. Such an operation would not set off alarm bells in Leh or New Delhi, though that nibbling at Indian territory by China has for now been forestalled by Indian forces, as well as by the diplomatic agreements, albeit a bit late in the game. However, each time the Chinese take territory that is not theirs, New Delhi is told there is no invasion, so the Fire and Fury Corps simply holds its fire and fury.³²

So close have the Chinese come to the Indian positions that, through artillery fire alone, China can conceivably cut off India from Siachen Glacier and DBO without ever invading Indian territory. This is the greatest fear at present among military planners and analysts because such an action could exhaust Indian forces, eventually allowing China to capture Siachen Glacier. If India does not do something now to safeguard itself while the battle intensity is low, India could conceiv-

ably lose DBO at some point, although the Indian media and military chiefs constantly reassure the Indian public that Indian forces are prepared for any eventuality, which has yet to be proven in battle.³³ There can come a time when the preparation may not be enough.

A New Corps Is Needed

If India does not want to incur further encroachments by the Chinese, it must physically occupy in strength as many forward areas, posts, and hundreds of peaks in their own territory as possible. Even peaks far from roadways need to be occupied because mountaineer-soldiers from the Chinese army can manage to climb and cross those peaks. India did that a few years ago under an aggressive commander when it secretly climbed the mountains from Finger 4 all the way to Finger 8, thereby taking the Chinese by surprise one morning; the Chinese awoke to Indian machine guns and RPGs staring down at them from the peaks.³⁴

In the area of Ladakh, building strength will necessarily require a whole new corps, at the least, if six Chinese divisions of 10,000 troops each are to be put to a disadvantage. Essentially, in mountain warfare, infantry might and logistics at location are the highest priorities, no matter the GDP of the country. This corps will have to improve upon the Indo-Tibetan Border Police. This corps will need light and heavy armaments and mortars, missiles of various types, light and heavy tanks,³⁵ light and heavy artillery, signals and surveillance equipment including satellite support, antimissile missiles, coordinated networking, personnel vehicles and carriers, warm clothing, snow goggles, constant air patrolling, and at least 50–60 attack helicopters. A strong presence will have to be maintained during the winter.

This corps will need all the engineering support for infrastructure works, including roads, bridges, tunnels, and warm housing, as well as equipment and computer maintenance, to mention a few items. Adequate air transport is essential, as are supported and protected supply lines. Soldiers will need to be heavily trained in mountaineering skills, in which India has excellent capabilities, having invested substantively in mountain warfare since the 1960s. A sizable horse cavalry—at least one additional battalion in each brigade—is recommended in those difficult mountainous areas. I also advise having military dog squads that can smell the enemy at close quarters.³⁶ Soldiers will need battery-heated clothing and protection, oxygen masks, medical services, and solid nutrition and mess services, complete with a half-dozen eggs a day and meat for those who want it.³⁷

As recently as October 2020, former Indian COAS Gen. J. Singh also recommended that one additional Ladakh strike corps be created, calling it the need of the hour, although there are also other senior retired generals who wish for better

equipment, more modernization, improved technology, and increased firepower instead of another corps.³⁸

But, going from the experience in the Eastern Sector, it has taken the Indian government 12 years to raise the Panagarh Corps, and the job is yet incomplete.³⁹ Such a timeline is not acceptable from a force readiness perspective. In the next 12 years, the Chinese could be eyeball-to-eyeball with Indian troops at all their current locations, and China's technology and intelligence gathering could be far superior to India's. By then, India could have lost a large chunk of additional territory to the deceptive and aggressive Chinese.⁴⁰ But know this: the Chinese respect only power and resistance. If India fights back, it is possible that China could be completely stopped, which is all the greater reason for India to shore up its military above and beyond the probability of defeat to secure the probability of victory. In that sense, it is better for the Indian tiger to face up to the Chinese dragon now rather than later.

Analytically speaking, it would have been better for India to take on the dragon in 1975, and even in 1990, when Chinese forces were arguably weaker than India's. That China was weaker was evidenced by the fact that it refrained from attacking India during the 1971 war despite urgings from Pakistan and Henry Kissinger.⁴¹ Moreover, Indian forces had taken adequate steps to guard its China border in 1971.⁴² The only advantage China had was psychological, which should have been solidly dispelled by 1975 after the drubbing China received at Indian hands at the Nathu La Pass in 1967 in the Sikkim-Tibet border. The only problem then was that a powerful United States was supporting both Pakistan and China, which is why India's arm was twisted by the United States in 1972 to return Pakistan's 90,000 POWs, after which it supported the Chinese through the 1970s as it tried to rein in the Soviet Union and end the Vietnam conflict. In the 1980s, the United States needed Pakistan to fight the Russian invasion of Afghanistan, so India and Indians' concerns were put on the back burner. But, in only about a quarter-century, it is a totally different world—with new alliances, new economies, new technologies, and new behavior.

Rotation, Acclimatization, and Health

For a new corps in Ladakh, we realize the cost, commitment, logistics, funding, and preparation necessary. The management of health is critical. A set rotation of troops must be established to bring them into Ladakh, complete with two to three weeks of acclimatization, to ensure manning and defense year-round. Even as troops are being rotated out, others will have to be rotated in. The Army Medical Corps will have to step in to design the rotation flow, regime of activities, and exercises for soldiers being acclimatized. Adequate iron and magnesium supple-

ments, including mineral supplementation of zinc, iodine, and selenium, will help to boost the immunity of soldiers and protect muscular and mental strength at those high altitudes. Appropriate accommodation and facilities will be needed for soldiers and officers being acclimatized, as well as those at the peaks and forward areas. The rotation schemes will probably need to be planned a full year in advance. This will have to be a dedicated effort to the hilt. Military defense is not a walk in the parks and bungalows of Lutyen's Delhi. Neither are military battles won by words alone, such as "peace and tranquility."

Lack of Money Is No Excuse When It Comes to Defending the Nation

Unquestionably, defending a nation requires the government and people to spend. If the Indian government will always begrudge the extra money, as it does, and complain about being poor, then India stands to lose the next encounter and more.

It is evident that war planning can spur industrial production, get India out of the economic depression it is in, and improve national pride.⁴³ India must prepare for a prolonged war of six months, for which adequate ammunition, spare equipment, spare parts, and oil supplies must be secured.⁴⁴ Many do not want such in the lure of peace. But there is no choice because war is virtually being thrust on India. If India does not rise to the occasion now, it could be too late later.

The expense of war must not be exaggerated, but it must be seen in perspective, even if war is not desired. Contrary to fears, war can be an industrial and economic stimulant. Germany recovered from Depression in the 1930s with its war buildup; the United States convincingly emerged from the Depression in World War II. After the 1962 and 1965 wars that India fought, it saw a spurt in industrial activity. Thus, defense expenditures being high is by itself not a convincing argument to not build up the country's military.

Further, hoping that the United States and Russia will physically intervene on India's side in a war with China is simply wishful thinking with a lot of uncertainty. The only certainty is fighting with your own resources. So, it is already surprising that India has not spent another \$500 million to triple the production of the Tejas fighter aircraft and advance the agenda on the indigenous Medium Multi-Role Combat Aircraft.⁴⁵

With the defense budget at 1.45 percent of GDP, there is immense room for doubling and tripling this budget in the interest of India's honor. But this expenditure should start now on the same scale as after the 1962 invasion. From a defense perspective, seeing the dangers confronting India from a belligerent China, it is surprising that India has not ordered any new assets beyond what were already in the pipeline, and beyond an additional US\$1 billion that was authorized by

Prime Minister Narendra Modi for essential purchases such as ammunition. Arguably, India should have already planned since the Galwan incident to spend an additional \$25 billion, at the very least, for the expedited inflow of military equipment needs from fighter aircraft to nuclear submarines, helicopters and howitzers for its mountain warfare, drones, missiles, antimissile missiles, and fundamental training of personnel. While nonmilitary expenses such as health, education, industry, and infrastructure are necessary for the well-being of any country, one can argue that the current military expense is insufficient for a serious future conflict.

Add an Extra Strike Corps: Make It a New Command

If India wants to liberate Aksai Chin, as stated by Home Minister Shah, then India will need to do more than just wait for the world to rein in China, much as has been expressed that the Biden administration served as a catalyst for China to withdraw behind Finger 8 in the Pangong Tso area. An additional strike corps will be needed for India to liberate Aksai Chin; otherwise, it is difficult to conceive of China unilaterally withdrawing from there. India's force strength will have to be greater than China's in the region for India to liberate Aksai Chin. Notwithstanding China's greater economic prowess, even it has a limit to the number of high-tech military assets it can effectively introduce into Ladakh. Moreover, boots on the ground matter. Besides, the high-flying Chinese military technology, if present, can always be thwarted by well-entrenched Indian defenses. Thus, an additional strike corps will be absolutely necessary to penetrate deep into Aksai Chin to sever the main road between Tibet and Xinjiang and to recover the original borders the British legitimately bequeathed to India, which were a part of the former Kingdom of Jammu and Kashmir (and the Sikh Kingdom of Punjab before that). Since 1962, China has advanced its boundaries westward beyond the LAC. This is egregious by all accounts.⁴⁶

However, what matters is the objective. If the Indian objective is only to defend Ladakh, then an additional strike corps is probably unnecessary. Many retired generals give an opinion based on their perceived objectives and mission, without spelling it out. Therefore, many people appear to talk past each other because they get their objectives mixed up. If the objectives were clarified, one would likely find more people on the same page.

What would it mean to add this extra strike corps? It would simply mean that, with a total of three corps, a new command headed by an army commander will be required for Ladakh.

No one should think twice about adding this additional command if the liberation of Aksai Chin is desired. Until 1965, only a single Western Command defended India from Ladakh to Rajasthan. Lt. Gen. Harbaksh Singh, the army

commander, had a lot of territory to cover and defend during the 1965 Indo-Pakistani war. In 1972, the Northern Command was carved out of the Western Command. The Northern Command was responsible for the LOC with Pakistan and Ladakh, headed by Lt. Gen. Prem Singh Bhagat. Western Command headquarters was moved down from Simla to Chandimandir in the 1970s. And, in 2005, the Western Command was further broken down with the creation of the South Western Command, formed to take care of Rajasthan. Thus, the original Western Command has changed dramatically since 1947. Until 2020, when Jammu & Kashmir was reorganized, all the states belonging to the original Western Command had their own independent army command—Rajasthan, Punjab, and Jammu and Kashmir. Now that Ladakh has Union Territory status, it can be argued that it is time to give the defense of Ladakh prominence by assigning a full theater to the defense of that new territory: even name it the “Ladakh Command.” With that concept, the Northern Command can focus like a laser on Skardu, Baltistan, and Azad Kashmir. In its own theory, it is necessary for India to wrench Gilgit and Baltistan from Pakistan to sever the land connection between China and Pakistan—both mortal enemies of India.

The main purpose of this new Ladakh command would be to defend and strike deep. Two corps could serve as the anvil that would blunt Chinese attacks, while one strike corps would take the battle into Aksai Chin.

Air Capabilities in Ladakh

Currently, India claims to have the ability to defend itself in Ladakh—both in the air and on the ground. For all its rhetoric and size, the Chinese air force is still relatively backward compared to India’s smaller air force. An analysis done of the major air force assets of China in Hotan and Kashgar reveals that the Indian air force has more than adequate capability to defend against any air encroachment by China.⁴⁷

Hotan was seen in July 2020 to have 56 fighters and four AWACS; the fighters were mostly Su-27 or equivalent copy (J-11), which are only air defense fighters and cannot operate 24/7, leaving gaps in air cover; and Mig-21 copies (J-7) that can be used only for air defense since they do not have the range to reach Ladakh and return; they also have six J-8s, which are known to be trouble-prone aircraft.⁴⁸

Kashgar carries six H-6 bombers, a copy of the old Tu-16 bomber. As such, the H-6s are World War II relics. They are slow and have a fat radar signature. The bomb load that six H-6 bombers can carry can be delivered by only three Jaguar aircraft in the Indian inventory. Without a doubt, the H-6s can be intercepted very quickly and destroyed if they try to enter Indian airspace. Kashgar also has 15 JH-7 aircraft, which is somewhat equivalent to the Jaguar. Though it has modern

avionics, the JH-7 has a limited range carrying a full load and can just about make it to the Ladakh border, rendering it ineffective for deep strikes. The JH-7s, as well, can be easily intercepted by the Su-30s fielded by India.

The Chinese built up Ngari Airport close to the Uttarakhand border and placed J-11s there. This airport will have to be knocked out by the Indian air force as a matter of priority.⁴⁹ Another, smaller civilian airfield in Yarkhand cannot accommodate more than 12 fighter aircraft.⁵⁰

The J-20s, known to be stealth aircraft, could possibly be overrated. For one, their stealth is not efficient, and Indian fighters have reported picking up J-20s on their radar. This also means that the J-20 has been operating close to the Indian border, which requires India to be on alert. But China's bark sounds more ominous than its bite because the J-20 uses an underpowered engine of the Su-27. Next, the J-20 is more of an air defense fighter than a multirole fighter like the Rafale. Further, China has only 13 to 20 such aircraft. Thus, the threat from China on account of its J-20s is very limited.⁵¹

Significantly, the Chinese airfields in Xinjiang and Western Tibet can accommodate only 162 aircraft, even though China has 755 aircraft in the Su-27, J-20, J-11, J-10, and J-20 categories. Thus, even though the Chinese air force is numerically larger than India's, China cannot field more aircraft than India for battles in Ladakh and Aksai Chin.⁵²

However, it is not to be underestimated that Chinese Su-30s can be brought into the combat theater within a few hours from the eastern coast. These can be refueled in air while still northeast of Ladakh to enable them to strike at the airfields in Srinagar, Leh, Chushul, and DBO, as well as army cantonments in all those locations. It is all the more important that India finds an opportunity to take on China in Aksai Chin to preempt Chinese adventures.⁵³ China also fields a larger and better array of rocket artillery, and it has already deployed the S-400 surface-to-air missile suite into service. The counter to this can be provided by the Rafales, but India has few—and all 36 Rafales are not expected from France until 2023. For India, every bomb and payload it drops on China will therefore have to count for something: precision bombing will be crucial, and the Indian pilots will be tested as never before.

China's Missile Threats

Possibly, the greatest threat is China's rocket and missile forces, which are much larger than India's. They could quickly fire a salvo of rockets and missiles at the Srinagar, Leh, Chushul, and Ambala airfields. Those rockets could reach their target within 3–5 minutes. If Indian pilots are not sitting in their cockpits ready

for takeoff on a warning signal, India could lose its top-line fighter aircraft within minutes.

China's missile threat is more ominous. It is estimated that China has 1,300–1,900 missiles of all ranges. Of course, China will not use all of those in one limited battle in Ladakh and will definitely not use its ICBMs, which it would rather reserve for Guam, Hawaii, and San Diego. Realistically, China can afford to use perhaps 600 missiles against India. These are the DF-11, DF-15, DF-21, and WS-2 types. However, these missiles can carry only about 500 kg of bombs and could destroy only a 150-square-meter area (22,500 sq. m) with conventional payloads. This is nothing significant, given that a typical airfield is 5 million square meters. Moreover, the accuracy varies, and by the time the Chinese destroy a whole airbase, it will need anywhere upward of a few dozen missiles. This is not economical. Even the US cruise missile attack on Syrian bases failed to put the airfields out of commission.⁵⁴

India's countermeasures against Chinese attack are in effect. Reports indicate that India has deployed adequate missile forces along the Tibet border.⁵⁵ These missiles can intercept incoming aircraft, launch their own barrage against airfields in Kashgar, Khotan, Yarkhand, and Ngari, and target military garrisons and camps across Tibet.

Despite the massive importance of the subject, there seems to be insufficient discussion in literature of India's capabilities to intercept incoming missiles aimed at airfields and deep inside Indian territory—all the way to industrial factories in Bengaluru and Hyderabad. However, the S-400s are important precisely for this reason.

Of course, if China escalates its attack to Indian industrial sites, then the game is thrown wide open, and India can retaliate by attacking Chinese industrial destinations, naval bases, and military and production facilities all the way to Chengdu, Hainan, Fuzhou, and Dalian. The question of destroying the Three Gorges Dam will also come up, notwithstanding international treaties on the matter of not attacking hydroelectric plants. The destruction of the Three Gorges Dam would make the overall Chinese defense and economy suffer a great deal. At this stage, the question of numbers will come into play, because India does not reveal how many long-range missiles it has and what payloads it can carry. One can only hope that India is not deficient on this count.

It is noteworthy, in this respect, that a systems analysis of strategic defense needs was conducted back in 1969 and showed that a strategic missile program could cost only 8 percent of the defense budget.⁵⁶ If the program had been started then, India would be more advanced today.

Land Capabilities in Ladakh

India has matched the 60,000 troops that China has brought to Ladakh. First, it must be appreciated that the supply lines of Chinese forces are spread long and thin, coming from Chengdu and Golmud.⁵⁷ But the Chinese have built roads along the northern bank of Pangong Lake and southern bank of Spangur Lake with the sole intention of an assault on Chushul. They have reinforced these with boat harbors on Pangong Lake, able to ferry troops and materials. But Chinese encampments beyond Finger 8 at Rimuchang, where an old Indian fort once existed, can be very quickly destroyed in air raids by India. The Chinese can scarcely maneuver or disperse there, while Indian aircraft can bomb them where they are, especially with cluster bombs. The Chinese have actually trapped themselves by coming so far west along a mountainous region in the high altitudes of the Himalayas. Even their positions are unsustainable.⁵⁸

If India can knock out Chinese barracks and garrisons at those altitudes, the Chinese troops will attrite from natural causes. However, this does mean that India shall have to place greater emphasis on its air force. The limited squadrons it has delays the objective of defeating the Chinese army. But India must possibly live with the knowledge that it will not have 38 squadrons until 2030. This is ironic knowing that, even in 1965, India had more operational squadrons than 38.

Other Chinese encampments and garrisons in the region include Rutog, a major military garrison town. These cannot withstand aerial bombardment by India save with the SAMs the Chinese have. Hence, the SAM launch trucks shall have to be specially targeted for India to dominate airspace all over Ladakh.

After India captured the six strategic peaks on 30 August–1 September, the Chinese were at a definite disadvantage in the Pangong and Spangur Lake areas. With domination of those heights, Chinese camps at the bottom of those peaks, such as Finger 4 and Sirijap, were easy targets for Indian mortars, grenade launchers, light artillery, antivehicle missiles, and machine guns. The single-file access roads the Chinese built south of Spangur Lake could be choked off by Indian forces from those dominating heights. And from the Rezang La and Rechin La Heights that India occupied, the Indian army had commanding views over Chinese encampments, such that the Chinese were sitting ducks for Indian forces.⁵⁹ Without a doubt, China will lose Molde if it decides to become aggressive or if India decides to go on the offensive. However, there are hundreds of other peaks in the area that India can occupy but has not as of yet. To make the battle easier for the Indians, those peaks must be occupied.⁶⁰

However, all this is only for defending the existing peaks and areas. The additional strike corps is necessary to successfully evict the Chinese from Aksai Chin, otherwise the Indian home minister's plan is only a dream.

Conclusion

India's stance is currently only that of defending existing positions. If it wishes to do so convincingly, another corps is needed to occupy strategic peaks, though the cost may be substantial. This is because China has aggressively nibbled away Indian territory and will likely continue to do so each time it gets an opportunity. But then, if India's objective is to evict China from Aksai Chin—a noble cause supported and backed by the Indian Parliament resolution of 1994—and the new government maps released in 2019, then India unquestionably needs an additional strike corps.

India's position on the ownership of Aksai Chin is supported even by 1945 maps of communist China that did not show Aksai China as part of its territory. Thus, China's claims post-1949 are disingenuous.

With some likelihood, China is planning for a war—if not now, then soon—given how much it is acting up in the Taiwan Strait, South China Sea, and Ladakh. There is strong evidence for this through President Xi Jinping's own statements asking the PLA to prepare for war. In this respect, both China and India are probably looking for an opportune moment to attack each other. But the appropriate time for India to assert itself will require eight requisites to be fulfilled, among which are political will, support of the public, courage of generals, and overall readiness. Moreover, if China is busy in a war with Taiwan, it may be a convenient time for India to initiate offensive operations in Ladakh, given that war is virtually inevitable between China and India. China will find it difficult to sustain operations in Ladakh in such a situation.

As this article demonstrates, India has the advantage in Ladakh over the air and land despite current deficiencies and even after considering the missile threat. However, India must make up its mind what it wants as a nation: Defend its territory, or retake Aksai Chin?

If the latter, then without a doubt it must boldly face the Indian public and explain it needs to spend money on raising necessary military assets for the defense of Ladakh and the recapture of Aksai Chin. In this case, India must not worry about the money, or else India shall need to worry about its honor. Not only that: someone should also wield a whip to raise two new corps for Ladakh at a galloping pace—a mountain corps to hold existing positions and territory, in which India is deficient; and another to strike deep into Aksai Chin, and probably

also Tibet and Xinjiang. Consequently, a new military command, which normally consists of three corps, is necessary to defend Ladakh and recapture Aksai Chin.

No doubt this does not come easy, for raising two new corps and creating a new command comes with immense space and logistics planning at every step of the way. But this is the only feasible path for India to recapture Aksai Chin. ♣

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Notes

1. Comments by Chief of the Army Staff Gen. Ved Malik.
2. Ajai Shukla, "Echoes of Kargil: China intrusion can lead to India losing DBO link," *Broad-sword*, <http://ajaishukla.blogspot.com>, 1 June 2020.
3. Though the Chinese got bashed badly, they did just that on June 15—they surprised the Indian patrol and took 10 prisoners.
4. Any homeowner who thinks he is free to leave the front door open just because it is a criminal act for anyone to enter and steal is in for a surprise. If he thinks others will respect the law, he does not understand basic human nature. Similarly, if India leaves its pathways and territory open, you can bet your last rupee that someone will enter to occupy it.
5. For a long time, there was some sense to it, in the interests of defense. But now that India is stronger, has effective communications, and a proper warfighting structure, India can afford to get bolder and take the battle into Chinese territory.
6. Sajid Ali, "How, on This Day 72 Years Ago, Jammu & Kashmir Agreed to Become a Part of India," *The Print*, 26 October 2019, <https://theprint.in>, .
7. Note that this border is with the country of Tibet, NOT with China. "Parliament Resolution on Jammu and Kashmir, Feb 22, 1994," Institute for Conflict Management, <https://www.satp.org>.
8. Salih Hudayar, "Aksai Chin (Eastern Ladakh) Is a Part of India Not China," n.d., East Turkistan Government in Exile, <https://east-turkistan.net/aksai-chin-eastern-ladakh-is-a-part-of-india-not-china/>.
9. Shreya Dhondial, "A 1962 News Report & Cautionary Tale: Why Indian Army Is Wary of China's Current 'Disengagement'," *News India*, last updated 7 July 2020, <https://www.news18.com>.
10. Ben Westcott, "Chinese President Xi Jinping Tells Troops to Focus on 'Preparing for war,'" *CNN*, 14 October 2020, <https://www.cnn.com>.
11. Graham Allison, "What Xi Jinping Wants," *The Atlantic*, 31 May 2017, <https://www.theatlantic.com>.
12. Richard Nelsson (compiler), "The Munich Agreement—archive, September 1938," *The Guardian*, 21 September 2018, <https://www.theguardian.com>.

13. Sant Kumar Sharma, "Haji Pir Pass: How India Won It in War—and Gave It Away on Table!" NewsBred, <https://www.newsbred.com>; and Rakesh Krishan Simha, "Why India Quit When It Was Winning," Russia Beyond, 2 September 2015, <https://www.rbth.com>.
14. "Resurrection: Ertugral," season 2, episode 95.
15. "China Claims Ownership of a Russian City," Gravitas, July 3, 2020.
16. Lt. Gen. H. S. Panag, "Amit Shah's Political Aim to Recover PoK Is Not Backed by India's Military Capacity," The Print, 19 September 2019, <https://theprint.in>.
17. "Parliament Resolution on Jammu and Kashmir, Feb 22, 1994"; ; and Shubhajit Roy, "PoK a Part of India, One Day Will Have Physical Jurisdiction: External Affairs Minister S Jaishankar," *Indian Express*, 29 June 2020, <https://indianexpress.com>.
18. Roy, "PoK a Part of India."
19. Dipanjan Roy Chaudhury, "Russian-origin Defence Equipment Deployed on Ladakh, Signifies Special Relationship: Indian Envoy," *Economic Times*, 17 October 2020, <https://economictimes.indiatimes.com>.
20. Simha, "Why India Quit."
21. Simha, "Why India Quit."
22. "Why 2nd Strike Corps is Required in Ladakh," Guarding India, 13 October 2020, <https://guardingindia.com>; and "India-China: A General's View," Outlook, July 2019, <https://mail.google.com/mail/u/0/#search/bajwa/FMfcgxwJWXbnqKSbTNvqDXChrDrxhxGg?projector=1>.
23. "How Was Galwan Valley Named? Explorer's Grandson Explains," *Hindustan Times*, 19 June 2020, <https://www.hindustantimes.com>.
24. Hidayar, "Aksai Chin."
25. In fact, if it claims the Mongolian rulers as Chinese, there is nothing stopping China from claiming all of Russia and Eastern Europe—and all the Asian Middle East!
26. Peter Hopkirk, "The Great Game: The Struggle for Empire in Central Asia" by Peter Hopkirk," John Murray/Kodansha International, 1990/1992.
27. Aijaz Hussein, "India, China Begin Troop Withdrawal from Contested Border," AP News, 11 February 2021, <https://apnews.com>.
28. Lt. Gen. Panag, "Amit Shah's Political Aim"; and Lt. Gen. H. S. Panag, "India's Fingers Have Come under Chinese Boots. Denial Won't Help Us," The Print, 4 June 2020, <https://theprint.in>.
29. Eurasian Times Desk, "60,000 Troops Deployed, No Point of Talking to China—Is the US Warning India of an Imminent War?," *Eurasian Times*, 11 October 2020, <https://eurasian-times.com>.
30. "India, China Came Close to War Last Year Says Lt-Gen," *Times of India*, 18 February 2021, <https://timesofindia.indiatimes.com>. China was arguably smart to withdraw from a weak position while also making India withdraw to the status quo positions of 1 April 2020. That India had to scale down from mountain peaks in its own territory sounds like a giveaway of sovereign rights by India.
31. "Indian Army Has Occupied Six New Major Heights on LAC with China," *Economic Times*, 19 September 2020, <https://economictimes.indiatimes.com>.
32. XIV Corps, headquartered in Leh.
33. India was evidently not prepared for the 1 April incursion by Chinese troops up to Finger 4, into the Galwan River area, and the buildup of Chinese tanks and artillery at Depsang Plains.
34. The Chinese then negotiated the withdrawal of Indian troops.

35. Interestingly, Indian military planners discovered that “heavy” tanks would tilt a tank battle in the user’s favor in certain areas such as the Depsang Plains, where China had already moved a large number of tanks. The Depsang Plains are expected to be a future tank battle area. Heavy tanks will also deliver a punch east of Chushul before the terrain hits the higher mountains.

36. In any hand-to-hand combat, man’s most faithful friend will always jump into the battle to defend its master. This can be critical, on occasion. If Colonel Babu’s men had dogs with them at PP14 in the Galwan area, their casualties would likely have been less, and more casualties would have been inflicted on the Chinese.

37. Go slow on the XXX Hercules rum, I’d say, because consuming alcohol at high altitudes is not a good idea. Just to add, for the extra-strong soldiers, eight chapattis per meal is normal, unless you want your soldiers to fight on a hungry stomach, which does not make for a good soldier. In mountain patrolling, remember the Hindi adage *kadam choti, haath mein soti, and pait mein roti* (“take small steps, have a walking stick in hand, and food in the stomach”).

38. “Why 2nd Strike Corps Is Required in Ladakh.”

39. XVII Corps, headquartered in Panagarh, West Bengal. Strangely, it is responsible for strike abilities across the entire Sino-Indian border from Ladakh to Arunachal. It has been argued that this does not bring operational efficiency when the corps is not more focused regarding its area of operations.

40. It is interesting that the Chinese probably think of Indians as pushovers.

41. “US Pleaded with China to ‘Menace’ India during 1971 War: Book,” Outlook, 1 July 2007, <https://www.outlookindia.com>.

42. Personal communication with Lt. Gen. Jasbir S. Bawa, former Engineer in Chief–Indian Army.

43. “War with China?” *Swamy Says*, 24 June 2020, <https://www.youtube.com>

44. Oil supplies include gasoline, aviation fuel, diesel fuel for ships and generators, and possibly kerosene for cooking.

45. The effort toward indigenous production of armaments has gone much too slowly in India. While 70 percent of India’s defense armaments are acquired from overseas, 95 percent of China’s military hardware is indigenously produced.

46. <<AU: Which source?>>Ibid.

47. “PLAAF Deployments in Xinjiang,” Cybersburg Shiv’s Channel, n.d., <<AU: Can we provide a different citation?>><https://mail.google.com/mail/u/0/#search/indian+airforce/KtbxLthNTmnmMGCFjCTwQMqbSPpvVZwxjB?projector=1>.

48. “PLAAF Deployments in Xinjiang.”

49. “Chinese Presence Around Pangong Lake—A Detailed Analysis,” Cybersburg Shiv’s Channel, n.d., <https://www.youtube.com>.

50. “PLAAF Weakness over Ladakh,” Cybersburg Shiv’s Channel, n.d., <https://www.youtube.com>.

51. “How the IAF Will Face the J-20 Threat from the PLAAF,” Cybersburg Shiv’s Channel, n.d., <<AU: Can we provide a different citation?>><https://mail.google.com/mail/u/0/#search/indian+airforce/KtbxLthNTmnmMGCFjCTwQMqbSPpvVZwxjB?projector=1>.

52. “PLAAF Weakness over Ladakh.”

53. There may be many types of opportunities presenting themselves. One such opportunity could be when China is busy in a conflict with Taiwan, for instance.

54. "Chinese Missile Threat—An Analysis," Cybersburg Shiv's Channel, n.d., <https://www.youtube.com>.
55. "India Deploys BrahMos, Akash, and Nirbhay Missiles to Keep Chinese Adventurism in Check," *Economic Times*, 1 October 2020, <https://economictimes.indiatimes.com>.
56. S. Swamy, S., "Analysis of Strategic Defense Needs," *Economic And Political Weekly*, 4(8) (11 Feb. 1969).
57. "Chinese Airfields of Relevance to India," Cybersburg Shiv's Channel, 25 March 2017, <https://www.youtube.com>.
58. "Chinese Presence Around Pangong Lake—A Detailed Analysis," Cybersburg Shiv's Channel, 6 June 2020, <https://www.youtube.com>; and "Chinese Roads and Presence in Aksai Chin," 19 May 2017, Cybersburg Shiv's Channel, <https://www.youtube.com>.
59. "Dominating the Heights in Ladakh," Cybersburg Shiv's Channel, 20 September 2020, <https://www.youtube.com>.
60. The author sometimes wonders whether there is lack of will here on the part of Indian generals or on the part of the politicians in New Delhi or both.

Clausewitz's Trinity of War and Nuclear Deterrence

The Case of Indian Nuclear Deterrence and Strategic Stability in South Asia

DR. GHULAM MUJADDID

Abstract

This article reiterates the relevance of Clausewitz to India's nuclear deterrence, which is supported by New Delhi's "trinity of war" aggregates of constitutional democracy, economic strength, technological advancement, diplomatic engagement, military buildup, and nationalistic cultural ambitions. These aggregates impart substance and credibility to India's nuclear doctrine and force posture, making India's position more confident and reliable in comparison to Pakistan's deterrent. This dynamic could undermine strategic stability in South Asia by incentivizing India to contemplate counterforce options against Pakistan.

Introduction

The realist theory of classical nuclear deterrence seems to be widely popular in the South Asian strategic community.¹ There seems to be scant realization that the classical theory of nuclear deterrence has its imperfections, especially in the South Asian context where weapon numbers, delivery systems, and technological capabilities are celebrated.² More nuanced perspectives on nuclear deterrence that emphasize chance, irrationality and credibility seem to attract less than required attention in the South Asian environment.³

Undue emphasis on nuclear capabilities alone could tend to blur the perennial linkages of a nation's war-making and war-avoidance capabilities with the quality of society, political system, economy, diplomacy, and technological prowess. Nuclear deterrence, like any other aspect of war-making or war-avoidance capability of a nation-state is developed and employed as part of the "strange trinity of war" as espoused by Clausewitz.⁴ His theory of war and the conception of trinity remain applicable to nuclear deterrence as well.⁵

This implies that the Indian nuclear deterrence is not only affected by the nuclear capability, but also by other elements of the trinity: the emotions of Indian people; quality of Indian government and polity; strength of economy; as well as advanced technology and preparedness of its military forces. In this context, this

paper argues that Indian nuclear deterrence is supported by its trinity of war aggregates. These aggregates impart substance and credibility to India's nuclear doctrine and force posture, making it more confident and reliable in comparison to Pakistan's deterrent. This dynamic could undermine strategic stability in South Asia by incentivizing India to contemplate counterforce options against Pakistan.

Clausewitz's Trinity and Nuclear Deterrence

As Donna Uthus has aptly observed, "We can hardly speak about nuclear deterrence without invoking Carl von Clausewitz." And it is remarkable to see the list of Clausewitz's admirers that include pioneering nuclear strategists and contemporary analysts alike.⁶ Postwar strategists and scholars strongly admiring Clausewitz have included Bernard Brodie, Herman Kahn, Robert Osgood, Raymond Aron (French), Tom Schelling, Henry Kissinger, and Michael Howard (British). Clausewitz's followers have been influential largely in articulating a political philosophy of deterrence, which has had wide influence on international relations theory.

According to Clausewitz, war is a strange trinity of propensities. First being that the "essential nature" of war is violence imbedded in human psyche as impulses of hate and enmity. The uncertain, unquantifiable, and unexpected nature of war is the second strand. Whereas, the third strand of the trinity envisages war as "a political tool" where it becomes "the province of pure intelligence."⁷ Nuclear deterrence is the relationship between two nuclear armed states that is based on possession of nuclear weapons along with delivery means; the will/resolve to deliver; and cognizance by each adversary that the other would actually deliver the nuclear weapons.⁸ Strategic stability rests on the stability of nuclear deterrence and implies that because of the mutual vulnerability of strategic forces on each side, neither side would feel compelled to initiate a nuclear first strike. Such a dynamic is based on the shared assumption that showing restraint—even in a crisis—would be far more advantageous than striking first.⁹

Clausewitz's conception of trinity suggests that nuclear deterrence depends not merely on the size, sophistication and destructiveness of nuclear weapons and their delivery means, rather nuclear deterrence also depends on the quality of society, economy, and government.¹⁰ Nuclear deterrence must have political objective to achieve. As instrument of policy, war is prosecuted to achieve a better state of peace for the society; and it must not be waged to put the existence of the society in peril.¹¹ Nuclear deterrence, like war in general, is not an independent phenomenon in its own right; neither does it have a rationale of its own.¹² Nuclear weapons may be the "absolute weapons," but they are not the absolute guarantee of national security and survival, if they were not interwoven into the trinity of

war. Strategic stability, nuclear deterrence, nuclear doctrine, and posture—all are firmly imbedded in the trinity of war.¹³ The interrelations among various elements of the trinity and the phenomenon of nuclear deterrence are complex and complicated.¹⁴ That is why American military strategist Bernard Brodie had cautioned against looking at nuclear deterrence in easy to understand paradigms.¹⁵ In this regard, the objective of deterrence in the sense of avoidance of war needs to be understood in the same context. While commenting on the “deep structures” of the Cold War, E. P. Thompson observed in the 1980s, “Deterrence has repressed the export of violence toward the opposing bloc, but in doing so the repressed power of the state has turned back upon its own author. The repressed violence has backed up and worked its way into the economy, the polity, the ideology, and the culture of the opposing powers.”¹⁶ Decades later, it is now clearer that nuclear deterrence has a complicated nature that is intricately linked with a nation’s political, economic, diplomatic, technological, and emotional-cultural domains—called trinity of war aggregates for the purposes of this study.

Indian Trinity of War Aggregates

India, with 1.3 billion peoples, is the 2nd-most populous country in the world. Slightly more than one-third the size of the United States, India is the 8th-largest country by area—land frontiers run across 9,300 miles (15,000 km) and coastline stretches more than 4,670 miles (7,516 km)—and India is the world’s largest democracy.¹⁷

India is an economy of an estimated 2.7 trillion USD—sixth-largest in real terms and third-largest in terms of purchasing power parity, after China and the United States—and the government aspires India to be a 5 trillion USD economy in the next few years.¹⁸ India’s defense, nuclear, and space programs have received adequate budgetary support from the successive governments in power, enabling the related research and development organizations to implement their plans and achieve most of their targets. India’s “Vision for Decade” announced by the Finance Minister in her 2019–2020 budget speech, highlights 10 priority areas for development. They include: infrastructure; healthy society; greener India; water management; medical equipment manufacture; digital India; electronics; defense manufacturing; and space and satellite programs.¹⁹

India has been aspiring to be a great power since its independence in 1947.²⁰ The *Joint Doctrine of Indian Armed Forces* (JDIAF) of April 2017 claims, “The size of our Nation, our continental relevance as well as our strategic location at the “head and heart” of the Indian Ocean gives us tremendous leverage to preserve peace, promote stability, and maintain security.”²¹

India's great-power ambition has been acknowledged as a motivation to attain nuclear weapons capability.²² The Indian ruling elite have maintained that "we do want nuclear weapons because we are a great power and we need them to protect ourselves from the Chinese and Pakistani threats."²³

At the international level, India's democratic credentials and its diplomatic and cultural outreach have enhanced India's prestige, having partly formed the basis for Indo-US Civil Nuclear Agreement of October 2008, and other strategic partnerships. The joint statement issued after then-US President George W. Bush's visit to India in March 2006 states, "Both our countries are linked by a deep commitment to freedom and democracy; a celebration of national diversity, human creativity and innovation; a quest to expand prosperity and economic opportunity worldwide."²⁴ Fourteen years later, the opening of the Joint Statement titled "Vision and Principles for the United States-India Comprehensive Global Strategic Partnership" on conclusion of then-US President Trump's visit to India reiterate the same sentiments.²⁵

Other than the United States, India has signed strategic partnerships and nuclear cooperation agreements with Canada, France, Japan, Kazakhstan, Mongolia, Namibia, Russia, South Korea, and the United Kingdom. Of mention, in 2014 India and Australia signed a nuclear cooperation agreement under which India would be able to procure Australian uranium for its civilian nuclear reactors.²⁶ Additionally, India has developed strategic cooperation with Israel and Russia in space technology, ballistic missile defense (BMD) systems and missiles. Indo-Russian strategic cooperation is exemplified in the joint development of BrahMos cruise missile, nuclear submarines, and S-400 air defense system.²⁷

Inclusion of India in the three principal, multilateral export control regimes has enhanced its prestige as a responsible nuclear state and has bolstered its strategic importance. India joined the Missile Technology Control Regime in 2016 and has participated in the Wassenaar Arrangement, implementing export controls on conventional arms and dual-use goods and technologies, as its 42nd member state since December 2017.²⁸ On 19 January 2018 India became the 43rd member of the Australia Group, which is a multilateral export control regime for chemical and biological weapons technologies.²⁹

India's population is young, multiethnic, and multireligious and is laden with great opportunities as well as attendant challenges. India has registered improvement in its per capita income and literacy rates in the past decade; although the challenges remain in other areas of human resource development.³⁰ Indian diaspora is one of the largest in the world, and is contributing to India's wealth and social investment abroad.³¹ Indian citizens' attitudes on national security reflect concerns about security of their homeland, according to a Pew survey.³² An esti-

mated 88 percent of Indians consider terrorism to be a big security issue, and an estimated 66 percent believe that the indigenous Naxalite movement is “a very serious threat.” The same proportion considers Lashkar-e-Taiba to be a menacing threat to the country. Whereas, an estimated 47 percent of Indians surveyed have rated Pakistan as “the biggest threat.” A scant six percent of Indians have regarded China as a threat to India.

In the trinity of war, the attitudes and perceptions of the people are important. Consequently, the Indian government makes policies and creates conventional and nuclear capabilities to comfort the concerns of their people and boost their trust in India as a safe and secure country.³³ The trinity relationship between the Indian people, their culture, government, economy, strategic partnerships, and military technology serve as the foundation on which the structure of India's national security and deterrence strategy stands. India is also afflicted with many societal, political, social, and economic challenges such as the lingering issue of Jammu and Kashmir, Naxalite insurgency, rising Hindu nationalism, the recent maltreatment of the Muslim minority, and hegemonic behavior toward the neighbors.³⁴ These challenges affect Indian trinity aggregates and nuclear deterrence in their own ways; and need serious soul searching by the Indian leadership.

Indian Nuclear Doctrine and the Trinity

In 1999, India announced its Draft Nuclear Doctrine (DND) that outlined the basic contours of Indian nuclear doctrine.³⁵ In January 2003, India released its official nuclear doctrine that retained the principal aspects of the DND—India would continue with credible minimum deterrence and a ‘no first use’ (NFU) policy and would respond with punitive retaliation should the deterrence fail. India would also maintain “sufficient, survivable and operationally prepared nuclear forces which are capable of shifting from peacetime deployment to fully employable force in the shortest possible time.” The document stressed that “India would show political will to use nuclear forces; and would maintain effective conventional military capabilities to lift threshold for initiation of conventional as well as nuclear war.” The document further asserts that India would build flexible, responsive, and effective nuclear triad; and pledged that India would not use nuclear weapons against any nonnuclear weapon nation.³⁶

The doctrine of 2003 is a fairly comprehensive document that manifests India's national resolve and as part of the trinity aggregates. It reflects supremacy of constitutional-political leadership and reposes confidence in nation's economy to produce enough fiscal surpluses to support and sustain nuclear deterrence. The Indian strategic community continues to assess and interpret the doctrine. In 2014, for example, the incumbent National Security Advisor (NSA) Ajit K. Doval

said that “India is shifting its posture from credible minimum deterrence to credible deterrence.”³⁷ In 2015, however, former Strategic Forces Commander Lt Gen B. S. Nagal suggested that NFU doctrine should be replaced by doctrine of ambiguity.³⁸

The JDIAF of 2017 gives a comprehensive and enduring statement of India’s operational nuclear doctrine. The concepts outlined in the doctrine are so profound that some of them need to be reproduced for the sake of concise understanding:

Conflict will be determined or prevented through a process of credible deterrence, coercive diplomacy and conclusively by punitive destruction, disruption and constraint in a nuclear environment across the Spectrum of Conflict . . . Coercion and Deterrence aim to counter threats to our security by communicating to potential adversaries the consequences of their anticipated action or inaction. . . . Deterrence and Coercion strategies will only succeed if an opponent understands that the threats (or incentives) are credible . . . Space bestows immense force multiplication capability on the Armed Forces, and the dependence on space assets for military operation is rapidly increasing.³⁹

JDIAF presents Indian military’s basic principles to achieve the political objectives of deterrence by integrating credible deterrence, coercive diplomacy, conventional punitive actions, space, and cyberspace capabilities into Indian nuclear posture. JDIAF operationalizes the nuclear doctrine and posture as strands of the trinity connected with rationality and intelligence.

Indian former and present National Security Advisors and Strategic Force Commanders should be satisfied to find their concerns addressed by the Joint Doctrine’s conventional and nuclear preemptive orientations. In a 2019 article, General Nagal reiterated his case for preemptive counterforce doctrine.⁴⁰ Former NSA Shivshankar Menon, from whom Ajit Doval took over in 2014, in his book *Choices*, observes that “India may conduct a preemptive first strike if the use of Pakistani nuclear arsenal appears imminent. This first strike would decapitate Pakistani arsenal to the effect that its ability to retaliate further is taken out of the equation.” To reinforce Indian retaliatory posture, Menon suggests “that Indian retaliation should not be restricted to civilian targets; it must take out Pakistan’s ability to endanger any Indian cities after Pakistan’s initial salvo.”⁴¹ India’s doctrinal thinking seems to have swayed toward preemptive counterforce option toward Pakistan.

Against China, Indian’s doctrine remains to be “counter value assured retaliation” or an assured second-strike capability.⁴² India’s doctrinal choices toward China face an inherent dilemma. China modernizes and enhances its nuclear capabilities to balance the United States’ nuclear deterrent. China’s nuclear bal-

ancing acts are taken to threatening by India, who would adjust its minimum nuclear deterrent accordingly.⁴³

Indian adjustment in its deterrent posture against China would make Pakistan feel insecure. This lends itself to a triangular dynamic of nuclear deterrence and the trinity aggregates in South Asia. Pakistan's side of the triangle seems to shrink on account of economic downslide, technological gap, governance problems, and sliding social cohesion. Chinese and Indian sides of the triangle are on the way to elongation, albeit unequally. Simply put, the three nuclear armed nations comprising the triangle have unequal trinities. This implies that deterrence stability is likely to remain stressed in the foreseeable future.

Indian Nuclear Force Posture

The changing geo-political balance of international politics has helped India in developing an operational triad of nuclear weapon systems.⁴⁴ India's sea-based nuclear deterrent; advanced ballistic and cruise missile systems—especially those with multiple independently targetable reentry vehicles (MIRV) capability; state of the art nuclear capable aerial platforms including the ostensible fifth-generation Rafale aircraft; BMD systems including S-400; a formidable array of space-based intelligence surveillance and reconnaissance; as well as navigation and communication satellites, are a corollary of India's democratic, diplomatic, economic, and technological development.

India is estimated to have between 130–140 nuclear warheads—an amount that is expected to increase to around 250 weapons by 2025.^{45,46} Its land-based missiles comprise Prithvi, Agni and Shourya series of missiles. The Indian Air Force (IAF) has modified its Mirage 2000, SU-30 and Jaguar aircraft for nuclear strike. The technologically advanced French Rafale aircraft is in the process of induction in the IAF and would be used in nuclear strike role.

India deployed its first nuclear-powered submarine *Arihant* with K-15 Sagarika 750-km range submarine-launched ballistic missiles (SLBM) in August 2016; and deployed its second nuclear submarine *Arighat* in 2017.⁴⁷ In August 2018, *Arihant* test fired three Sagarika K-15 SLBMs while in November that year, Indian Prime Minister Modi announced *Arihant* had completed its first “deterrence patrol,” thus operationalizing India's nuclear triad.^{48,49} The nuclear submarines had reportedly sailed off prior to India's airstrike on Balakot, Pakistan, on 26 February 2019; the *Arihant* ought to have carried ready-to-launch SLBMs.⁵⁰ This indicates that Indian nuclear submarines, equipped with ready to use SLBMs, have become part of the Indian nuclear force posture and deterrence strategy. Indian warheads and delivery systems had been kept in de-mated state until recently. Recent developments indicate that some of the canisterized ballistic mis-

siles (e.g., Agni–IV intermediate-range ballistic missile) and cruise missiles may actually be in ready to use status. A section of IAF nuclear attack aircraft is believed to be colocated with ready to use air-launched BrahMos supersonic cruise missiles.⁵¹ Consequently, India's ready to use nuclear force components seem to impart preemptive counterforce option. In the same vein, satellite-based command, control, communications, computers, intelligence, information, surveillance, and reconnaissance (C4I2SR) capabilities are also crucial to India's ready to respond nuclear posture.⁵²

Nuclear Deterrence, Trinity, and Strategic Stability

India is compelled to follow a “differentiated deterrence” option in the exercise of its nuclear deterrence.⁵³ Against China, Indian deterrence is stable and rests on the concept of mutual vulnerability and NFU. India–China nuclear deterrence is stable also due to absence of nonstate actors capable of causing deterrence break down between them. Among the average Indians, Pakistan remains the major focus of security concern, while China is less so. Successive Indian governments have sought to engage with China despite the disputed borders and China's role in “propping up Pakistan.”⁵⁴ India has pursued diplomatic moves toward China, including the signing of the 2005 Agreement on Political Parameters and Agreed Guidelines of Settling the Border Dispute.⁵⁵ In 2017 Indian and Chinese troops were engaged in a tense standoff at Doklam that lasted for 73 days. In late April 2018, Prime Minister Modi and President of China Xi Jinping held an informal summit in the Chinese city of Wuhan, where the two agreed to “respect each other's sensitivities, concerns and aspirations” and maintain peace and tranquility along their common but un-demarcated frontiers.⁵⁶ The informal Wuhan summit sows that instability at a lower level actually caused stability at a higher level of deterrence between the two countries. This factor is reinforced by the ongoing drawdown of the Chinese forces from Ladakh, a territory within the disputed Kashmir region, following a prolonged and violent faceoff. This reflects that an adequate level of strategic stability exists between India and China despite border issues and strategic competition.⁵⁷

India's strategic competition with China fuels Indo–Pakistan deterrence relationship. India's bid to counter China appears threatening, and Pakistan is compelled to balance India's nuclear developments. Such a vicious circle of action–reaction and arms race complicates strategic stability in South Asia. The Indo–Pakistan paradox of stability–instability seems to intensify owing to continued territorial conflict over the Kashmir region, and lack of consultation among leaders of the two countries.⁵⁸ India's counterforce capabilities and doctrinal options in its trinity aggregates affect the strategic stability dynamics in a peculiar way.

India's counterforce incentives are likely to exacerbate its own signaling difficulties; make assertive versus delegative control problematic; and enhance its "always-never" dilemma. This might also enhance crises instability, where India might be tempted to launch a hasty nuclear strike; or Pakistan might attempt its first strike option out of pure fear augmented by "use it or lose it" dilemma. Pakistan's anxiety over its lack of geographic depth and difficulties with weapons dispersal and concealment could add to this dilemma.⁵⁹ India–Pakistan deterrence stability is also marred by actions of the nonstate actors as demonstrated by Uri and Pulwama incidents.⁶⁰ Emboldened by its favorable trinity aggregates, the IAF attack across the international border on 26 February 2019 has demonstrated that India would need to act with more maturity expected from a stronger nuclear power that is vying for a great-power status.

Implications for South Asia

There is little doubt that India has been able to create a better aggregate of the trinity of war that supports and sustains its nuclear deterrence. India appears to be more secure than it has ever been in its recent history. This is despite having a recent share of governance dysfunctions, societal fissures, political exclusion, and rising poverty levels. These factors challenge the quality of Indian deterrence and war-making capabilities in their own right. Despite these challenges, India is likely to bolster its democratic disposition, social, economic, educational, and technological development. As this study has shown, India has intensely engaged with international community at political, diplomatic, cultural, economic, technological, and strategic levels. Resultantly, India has grown stronger in the region and, paradoxically, she has also exacerbated the vulnerabilities of the region.⁶¹ India's unilateral change of status quo on Kashmir, its aggressive air strike on Pakistani territory, military standoff with China, and uneasy relations with Nepal and Myanmar have the potential to destabilize the region and present it with nuclear dangers.

As India's nuclear rival, Pakistan would be well-advised to strengthen its aggregates of the trinity. Emphasis on political stability, social development, economic revival, and diplomatic engagement seems urgent and inescapable.⁶² Pakistan needs to stabilize its society, reinvigorate its economy, and have effective representative government. Pakistan must curb the ability of nonstate actors to organize on its soil. At the strategic level, over-emphasis on nuclear weapons should be replaced with emphasis on effective command and control system, operationalization of naval leg of the triad, dispersal and concealment of nuclear missile sites and launchers, and acquisition of early warning systems and capabilities. This would ensure country's dignified existence based on measured but

assured second-strike capability in the face of preemptive counterforce threats. Pakistan must make strides in the civilian use of its nuclear, space, and cyberspace technologies.

Conclusion

In line with thinking of Clausewitz, nuclear deterrence is not a stand-alone, self-contained, or independent phenomenon. It is linked with the strange trinity of war. Nuclear deterrence is an instrument of policy and has political objective to achieve. India has been able to build its nuclear deterrence on its democratic credentials, diplomatic and cultural outreach, economic development, and technological and military advancements. India has invested in creating a sizable social capital for itself in the world. She has been able to spare enough fiscal and societal surpluses to support and sustain its nuclear deterrence. Indian nuclear deterrence is politically responsible, technologically intensive, and draws heavily on cooperative diplomatic and international efforts. Indian deterrence is aided by sophisticated space, cyberspace and information technologies and state of the art military systems. Accordingly, India maintains a stable deterrence relationship with China that is based on NFU, mutual vulnerability and assured second-strike capability. In the case of Pakistan, Indian doctrinal thinking has swayed toward proactive operations and counterforce options. This is because Indian nuclear deterrence against Pakistan is supported by stronger aggregates of the trinity. Such a dynamic, however, may accentuate India's own nuclear dilemmas and paradoxes, and exacerbate Pakistan's fears and use it or lose it dilemma. This does not auger well for strategic stability of the region. India would need to be a more mature nuclear power, so that its trinity of war aggregates do not cause its to destabilize the strategic stability. At the same time, Pakistan should build its trinity of war aggregates; focus on building a cohesive nation; stabilize its internal environment and society; and reinvigorate its economy, governance, and international engagement. Possession of nuclear weapons means little if other strands of the trinity are not equally developed to achieve an effective nuclear deterrence. ★

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Notes

1. Carranza implicitly rejects the caricature of classic realism that has become South Asia's conventional wisdom. See foreword "An Ever-thicker Shadow" in Mario Esteban Carranza, *South Asian Security and International Nuclear Order: Creating a Robust Indo-Pakistani Nuclear Arms Control regime* (Surrey, England and Burlington, USA: Ashgate Publishing Company, 2009), viii.

2. Frank C. Zagare, D. Marc Kilgour, *Perfect Deterrence* (Cambridge, UK: Cambridge University Press, 2000), 3–4, 7–9; and Scott D. Sagan, "Nuclear Dangers in South Asia," *Forum on Physics & Society*, April 2004, https://theasiadialogue.com/wp-content/uploads/2017/06/sagan_nuc_sasia.pdf.

3. Zagare and Kilgour, *Perfect Deterrence*, 5–6.

4. David Jordan, et al, *Understanding Modern Warfare* (Cambridge and New York: Cambridge University Press, 2008), 32–35, 29–30.

5. Christopher Bassford, "The Primacy of Policy and The Trinity in Clausewitz's Mature Thought" in *Clausewitz in the Twenty-First Century*, ed. Hew Strachan and Andreas Herberg-Rothe (Oxford: Oxford University Press, 2007), 74–90.

6. Donna Uthus Gregory, "Clausewitz: A Mind Under Arms," Working Paper No. 6 presented at the First Annual Conference on Discourse, Peace, Security, and International Society, Ireland, August 1987, La Jolla, California: University of California, 1988. 1, 36.

7. *Ibid.*, 8.

8. Bernard Brodie, "The Anatomy of Deterrence" in *Strategy in the Missile Age* (Princeton: Princeton University Press, 1959), 264–304; and T.C. Schelling, "The Diplomacy of Violence" in his book *Arms and Influence* (New Haven: Yale University Press, 1966), 1–34.

9. Thomas C. Schelling and Morton H. Helperin, "Strategy and Arms Control" in Gregory D. Koblenz (ed.) *Strategic Stability in the Second Nuclear Age*, Special Report No. 71, New York, NY, Council on Foreign Relations, November 2014, 19–20; and Feroz Hassan Khan, "Going Tactical: Pakistan's Nuclear Posture and Implications for Stability," *Proliferation Papers*, no. 53, September 2015, 13–15.

10. Kenneth Waltz, *The Spread of Nuclear Weapons: More May be Better*, Adelphi Paper 171 (London: International Institute for Strategic Studies, 1981).

11. John Baylis et al., *Strategy in the Contemporary World: An Introduction to Strategic Studies* (Oxford: Oxford University Press, 2002), 8–11.

12. Lawrence Freedman, *Deterrence* (Cambridge: Polity Press, 2004), 4; and David Jordan, et al, *Understanding Modern Warfare* (Cambridge, UK: Cambridge University Press, 2016), 41–49.

13. Christopher Bassford, "Clausewitz's Categories of War and the Supersession of 'Absolute War'," 3 January 2017, <https://pdfs.semanticscholar.org/f238/d4bc06d41808ed5e9b7662f753bce9faa4e6.pdf>.

14. Thérèse Delpech, *Nuclear Deterrence in the 21st Century: Lessons From the Cold War for a New Era of Strategic Piracy* (RAND Corporation, 2012), 1.

15. David Jordan, et al, *Understanding Modern Warfare*, 18–20.

16. E. P Thompson, "A Letter to America" in *Protest and Survive*, ed. E.P. Thompson and Dan Smith (New York: Monthly Review Press, 1981), 44.

17. Central Intelligence Agency, "India," *CIA Factbook*, 24 May 2019, <https://www.cia.gov/library/publications/the-world-factbook/geos/in.html>.

18. Union Budget 2019-20: Budget Speech by Union Finance Minister Nirmala Sitharaman, *YouTube*, <https://www.youtube.com/watch?v=bROhD9Q6ar8>.

19. Ibid.
20. Bharat Karnad, *India's Nuclear Policy* (New Delhi: Pentagon Press, 2008), 37–40.
21. *Joint Doctrine Indian Armed Forces* (New Delhi: Directorate of Doctrine, Headquarters Integrated Defence Staff, April, 2017), 7.
22. Bharat Karnad, *India's Nuclear Policy*, and T.V. Paul, “The Systemic Basis of India's Challenge to the Global Nuclear Order,” *Nonproliferation Review*, 6:1, 9.
23. George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley: University of California Press, 1999), 449; and Mario Esteban Carranza, *South Asian Security and International Nuclear Order: Creating a Robust Indo-Pakistani Nuclear Arms Control Regime* (Surrey, UK and Burlington USA: Ashgate, 2009), 1.
24. White House, Press Release, “U.S.–India Joint Statement,” 2 March 2006. <https://2001-2009.state.gov/p/sca/rls/pr/2006/62418.htm>.
25. Ministry of External Affairs Government of India, “Joint Statement: Vision and Principles for India-U.S. Comprehensive Global Strategic Partnership” 25 February 2020. https://mea.gov.in/bilateral-documents.htm?dtl/32421/Joint_Statement_Vision_and_Principles_for_IndiaUS_Comprehensive_Global_Strategic_Partnership.
26. “Arms Control and Proliferation Profile: India,” *Arms Control Association*, posted January 23, 2018, <https://www.armscontrol.org/factsheets/indiaprofile>.
27. Mark Episkopos, “Will Russia and India Build ‘Stealth’ Submarines Together?,” *The National Interest*, 15 July 2019; and Franz-Stefan Gady, “Russia Confirms Delivery of S–400 Air Defence Systems to India Will Begin in 2020,” *The Diplomat*, 3 July 2019, <https://thediplomat.com/2019/07/russia-confirms-delivery-of-s-400-air-defense-systems-to-india-will-begin-in-2020>.
28. Martand Jha, “India and the Wassenaar Arrangement,” *Livemint*, 5 February 2018. <https://www.livemint.com/Sundayapp/AETSo9p0H9Dii7ou9WRvrO/India-and-the-Wassenaar-Arrangement.html>
29. Rajeswari Pillai Rajagopalan, “What Does India's New Australia Group Admission Mean for its Old NSG Bid?,” *The Diplomat*, 01 February 2018. <https://thediplomat.com/2018/02/what-does-indias-new-australia-group-admission-mean-for-its-old-nsg-bid/>.
30. India's human development index for 2019 is positioned at 131 out of 189 countries. India's life expectancy stands at 68.8; its literacy rate is 69.3%. India spends 3.1 times more on health and education of its people than on its military. Large population below poverty line and lack of sanitation and high homicide rate are some of the challenges that India faces. Pakistan's and China's HDI rankings are 154/189 and 85/189 respectively. As compared to Pakistan, India fairs slightly better in human development indicators, but lags much behind China. See United Nations Human Development Programme: Human Development Reports- India, <http://hdr.undp.org/en/countries/profiles/IND>.
31. United Nations, International Migrant Stock 2015 Graphs. Twenty countries or areas of origin with the largest diaspora populations (millions). United Nations Population Division, <https://www.un.org/en/development/desa/population/india>; and “India to Retain Top Spot in Remittances with \$80 bn in 2018: World Bank,” in <https://www.livemint.com/.../India-to-retain-top-spot-in-remittances-with-80-bn-World-Bank>, 8 December 2018.
32. “Indians Reflect on Their Country & the World,” *Pew Research Centre*, 31 March 2014, 11. http://www.pewglobal.org/files/2014/03/Pew_Research_Center_Global_Attitudes_Project_India_Full_Release_FINAL_March_31_2014.pdf.

33. *Joint Doctrine Indian Armed Forces* April, 2017, 1–6.
34. Maria Abi-Habib, “Violence in India Threatens Its Global Ambitions,” *New York Times*, 5 March 2020.
35. Kumar Sundaram and M. V. Ramana, “India and the Policy of No First Use of Nuclear Weapons,” *Journal for Peace and Nuclear Disarmament*, 2018, 1:1, 156.
36. Ministry of External Affairs Government of India, “The Cabinet Committee on Security Reviews Operationalization of India’s Nuclear Doctrine,” 04 January 2003. <https://www.mea.gov.in/press-releases.htm?dtl/20131/The+Cabinet+Committee+on+Security+Reviews+perationalization+of+Indias+Nuclear+Doctrine>.
37. Abhijit Iyer-Mitra, “Era of Effective Deterrence,” in *The Pioneer*, 31 October 2014, <http://www.dailypioneer.com/columnists/oped/era-of-effective-deterrence.html>.
38. Balraj Nagal, “India’s Nuclear Strategy to Deter: Massive Retaliation to Cause Unacceptable Damage,” *CLAWS Journal*, Dec 2015. http://www.claws.in/images/journals_doc/440323975_balrajnagal.pdf.
39. *Joint Doctrine Indian Armed Forces*, 14–15, 26.
40. Lt. Gen. B.S. Nagal, “India’s Nuclear Doctrine and Strategy,” in Lt. Gen. A.K. Singh and Nagal (eds.), *Military Strategy for India in the 21st Century* (New Delhi: Centre for Land Warfare Studies, 2019), 218.
41. Harsh V. Pant and Yogesh Joshi, “Why a Rethink of India’s Nuclear Doctrine may be Necessary,” Observer Research Foundation, 27 March 2017, <https://www.orfonline.org/research/why-a-rethink-of-indias-nuclear-doctrine-may-be-necessary/>.
42. Christopher Clary and Vipin Narang, “India’s Counterforce Temptations: Strategic Dilemmas, Doctrine, and Capabilities,” *International Security*, 43:3 (Winter 2018/19): 8.
43. Michael Krepon, Joshua T. White, Julia Thompson, and Shane Mason eds., *Deterrence Instability and Nuclear Weapons in South Asia* (Washington D.C.: Stimson Center, 2015), 58 For a recent assessment see Sushant Singh, “Can India Transcend its Two-Front Challenge?,” *War on the Rocks*, 14 September 2020. <https://warontherocks.com/2020/09/can-india-transcend-its-two-front-challenge/>.
44. Pant, “Why a Rethink of India’s Nuclear Doctrine may be Necessary.”
45. Clary and Narang, “India’s Counterforce Temptations,” 26.
46. This conservative estimate of 250 weapons is based on the stock of estimated weapon grade material available for 150–200 bombs as given in the Table in Ibid., 26.
47. “Arms Control and Proliferation Profile-India,” *Arms Control Association*, last reviewed January 2018.
48. Franz-Stefan Gady, India Test Fires Short-Range Ballistic Missiles from Submerged Sub, *The Diplomat*, 22 August 2018.
49. “INS Arihant completes first deterrence patrol: PM Modi,” *India Today*, 5 November 2018.
50. Abhishek Bhall, “Navy was War-ready, Deployed Nuclear Submarines During IAF’s Air-strikes in Pakistan,” *India Today*, 17 March 2019.
51. For ready to use canisterized ground based ballistic missiles, BrahMos cruise missiles and SLBMs refer to Clary and Narang, “Indian Counterforce Temptations”, 26 and Countries- India, “Missiles”, *Nuclear Threat Initiative*, last updated October, 2020. <https://www.nti.org/learn/countries/india/delivery-systems/>

52. For detailed discussion on Indian space (and air) based ISR capabilities that could optimize ari operational command, control and decision making in case of counterforce option, refer to Clary and Narang in Ibid., 31-36.

53. Bharat Karnad, *India's Nuclear Policy*, 3.

54. Ibid., 35,136,144.

55. Indian Minister of External Affairs "Agreement on the Political Parameters and Guiding Principles for the Settlement of the India-China Boundary Question," Parliamentary Questions and Answers, 23 February 2011, Manohhar Parrikar Institute for Defence Studies Analysis, <https://idsa.in/resources/parliament/Indo-Chinaborderdispute23.02.11>.

56. "One Year After They Almost Went to War, Can China and India Get Along?," *A China File Conversation* (blog), 14 June 2018, <http://www.chinafile.com/conversation/one-year-after-they-almost-went-war-can-china-and-india-get-along>.

57. Harsh V. Pant and Yogesh Josh, "Did India just win at the Line of Actual Control?," *Foreign Policy*, 24 February 2021. <https://foreignpolicy.com/2021/02/24/india-china-line-of-actual-control-disengagement/>. The frequent high-level contacts between India and China during the intense border crises have tended to strengthen strategic stability between the two nuclear neighbors.

58. S. P. Kapur, "India and Pakistan's Unstable Peace: Why Nuclear South Asia is Not like Cold War Europe," *International Security*, 30:2, 2005, 129.

59. Daniyal J. Iqbal, "The Pakistan-India security dilemma," *The News*, Islamabad, 4 October 2016. Also see Ankit Panda, "Why Pakistan's Newly Flight-Tested Multiple Nuclear Warhead-Capable Missile Really Matters," *The Diplomat*, 25 January 2017.

60. Adil Sultan, "Pulwama-Balakot Crisis: The Evolving Strategic Discourse in South Asia," in *Pakistan Politico*, 5 April 2019, <http://pakistanpolitico.com/pulwama-balakot-crisis-the-evolving-strategic-discourse-in-south-asia/>.

61. Michael Krepon, Joshua T. White, Julia Thompson, Shane Mason eds., *Deterrence Instability and Nuclear Weapons in South Asia* (Washington D.C.: Stimson Center, 2015), 58.

62. Feroz Hassan Khan, "Going Tactical: Pakitsan's Nuclear Posture", 42.

The Belt and Road Initiative

A Lens into China's Energy Security and Maritime Strategy

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Abstract

This article contends that China, through its Belt and Road Initiative, is continuing a long-standing pursuit of its energy security strategy begun in 1993 and a separate maritime strategy. The economic corridors that have resulted will diversify the sources and routes of energy imports, and the initiative's energy cooperation projects are a continuation of China's long-term goals. China's maritime strategy, pursued through the Maritime Silk Road, is designed to achieve the goals of developing naval bases and the blue-water navy and increasing military capabilities and naval activities to protect China's vital interests.

Introduction

In fall 2013, Chinese president Xi Jinping launched the Belt and Road Initiative (BRI), which comprises the land-based Silk Road Economic Belt (SREB) and the sea-based Maritime Silk Road (MSR).¹ The Chinese government's "Vision and Actions" document states that the SREB will bring China, Central Asia, Russia, and Europe (especially the Baltic) closer to one other; will connect China with Southeast Asia, South Asia, and the Indian Ocean; and will link China with the Persian Gulf and the Mediterranean Sea through Central Asia and West Asia.² The SREB emphasizes transcontinental connectivity via land routes, a Eurasian railway network, oil and gas pipelines, and six economic corridors: New Eurasian Land Bridge; China–Mongolia–Russia Economic Corridor; China–Central and West Asia Economic Corridor; China–Indo–China Peninsula Economic Corridor; China–Pakistan Economic Corridor; and Bangladesh–China–India–Myanmar Economic Corridor. The goal for the MSR is just as clear: the "Maritime Silk Road is designed to go from China's coast to Europe through the South China Sea and the Indian Ocean in one route, and from China's coast through the South China Sea to the South Pacific in the other."³ In the history of human civilization, the BRI is the most ambitious economic development, global connectivity, infrastructure, and investment project ever launched by any country.⁴ It involves at least 68 countries across different continents, 65 percent of the global population, and 40 percent of global GDP.⁵ Naturally, the project has attracted

attention from elected leaders, diplomats, scholars, and policymakers worldwide, and in real time scholars are attempting to unfold the underlying motivations. Put simply, China's twin motivations are economic and strategic.

Some scholars who emphasize the economic factors contend that the BRI is a master plan to develop western regions in China to channel industrial overcapacity and excess foreign exchange reserve into making the overall economy healthier. The border regions of the western provinces are underdeveloped, so in order to develop them the Chinese government focuses on cross-border economic activities between underdeveloped regions and neighboring states.⁶ Overcapacity in various industrial sectors, including coal, steel, cement, and energy, had been slowing the overall growth of the Chinese economy. In addition, the possession of massive foreign exchange reserves and the tremendous stimulus package provided by the government during the 2008 global financial crisis worsened economic conditions. China was searching desperately for new overseas markets to offset this industrial overcapacity and excess financial resources.⁷ Therefore, some observers argue that purely economic considerations led to the launching of the BRI; strategic concerns were secondary. Such strategic aspirations had been shapeless, they contend, before China had launched the BRI.⁸

Conversely, there are opinions that strategic interests are paramount. Some analysts contend that the BRI is designed to counter America's strategy of encirclement in the Indo-Pacific.⁹ Some have also observed that the BRI was planned to revise the existing regional (and therefore global) order and thereby create a new, China-centric order.¹⁰ The BRI is seen as a Chinese version of the post-World War II Marshall Plan in this respect.¹¹ There are also theories proposed that the BRI is China's counter-response to America's Pivot to Asia strategy and its proposed economic dimension, the Trans-Pacific Partnership.¹² Others contend that the BRI is a Chinese geostrategy to expand the sphere of China's regional dominance.¹³ Contrary to some conventional opinions, some scholars contend that the BRI is neither an infrastructure project nor a route connectivity project. Instead, it is a global strategy based on smart power, which China has devised to occupy the paramount position in the global economy and improve China's image.¹⁴ Some scholars have also demonstrated how energy security shapes the BRI.¹⁵

The aim of this article is not to determine whether economic factors or strategic factors are dominant in the BRI. Both are present, and any single interpretation can be misleading. Instead, this article contends that China is pursuing its two longtime and overarching strategies: energy security and maritime dominance. Well before it launched the BRI, China was pursuing a cooperation-based energy security strategy because, militarily, it could not defend its own energy interests.

Thus, to tackle its vulnerability over oil imports, China started upgrading its maritime strategy—in the form of the so-called String of Pearls—to defend commercial and strategic interests (which of course included energy security). To ensure uninterrupted oil imports from overseas, China, instead of relying on foreign tanker fleets, emphasized oil imports from Chinese-flagged tankers.

This article is divided into three sections. The first addresses the origin of China's energy insecurity and its strategy in response. The second section demonstrates how, before the BRI, China was already implementing its cooperation--based energy security strategy as well as its maritime strategy. The final section explains in greater detail how China has been pursuing its long-term energy security and maritime strategies via the BRI to protect its vital interests.

China's Energy Insecurity

Although China has a vast reserve of coal, its domestic energy resources are inadequate to meet growing energy demand.¹⁶ Coal fulfills around two-thirds of China's total energy supply, but coal reserves are likely to be depleted within less than 50 years.¹⁷ Under these circumstances, the growing imbalance between demand for and supply of oil and gas will make China more dependent on massive imports from overseas.¹⁸ For instance, about 75 percent of China's total oil consumption and 45 percent of its total gas usage is met through imports.¹⁹

In 1993, China turned into a net oil importer from a net oil exporter, which heightened energy insecurity due to excessive dependence on imports of foreign oil, which could pose a severe threat to national security.²⁰ One may observe that the root of China's energy insecurity is geostrategic vulnerability. The United States militarily controls the most crucial maritime route that spans from the Persian Gulf to the South China Sea. China imports most of its foreign oil through this route, so it believes that the United States is capable of disrupting China's oil supply during a political and military crisis such as Taiwan. Chinese analysts believe that the United States has executed this containment strategy to limit China's access to oil imports. Thus, China considers the United States to be the biggest threat to China's energy security.²¹ China's overdependence on maritime choke points, such as Malacca Strait, for oil imports has made it strategically vulnerable.²² (This is known as the so-called Malacca dilemma.)²³ Notably, 80 percent of China's oil imports routes through Malacca Strait.²⁴ Therefore, China has adopted policies such as investment in oil and gas exploration and development projects overseas; construction of energy infrastructures, including oil and gas pipelines; and diversification of the sources and routes of energy imports.²⁵ To reduce its dependence on Middle Eastern oil and lessen strategic vulnerabilities related to seaborne energy imports, China has been investing massively in oil- and

gas-rich regions in Africa, Central Asia, and Russia. Consequently, African nations such as Sudan, Angola, and Congo; Central Asian nations such as Kazakhstan, Turkmenistan, and Uzbekistan; and the Russian Federation have received substantial investment from China. This policy of seeking resources outside the Middle East may help China to minimize the Malacca dilemma.²⁶

Indeed, China's decision to invest in oil and gas resources in Central Asia and Russia can secure its energy supply because Central Asian states and Russia have sizable unexplored oil and gas reserves.²⁷ In addition, Central Asia's significant strategic advantages have made it a top preference for Chinese investment. Unlike West Asia, the presence and strength of the US military is not as strong in Central Asia. China's energy interest in Central Asia is less vulnerable to the military dominance of the United States.²⁸ To exploit the same strategic advantage, China prefers to invest in oil and gas resources in Russia. Thus, by diversifying its sources of oil imports, China has been trying to minimize geopolitical risks related to its foreign oil supply.²⁹ Investment in overseas oil and gas resources and the construction of oil and gas pipelines are crucial parts of China's diversification of energy supply plan.

Implementation of Cooperation-based Energy Security Policies

From 1949–1993, China was self-sufficient in terms of its energy. In this period, China depended only on domestic production, and energy security played a minimal role within Chinese foreign policy during this period. As self-dependence ended in 1993, China began to import oil from overseas. From 1993, China's energy security strategy became an integral part of Chinese foreign policy and national security. After 1993, national oil corporations (NOCs) started playing a significant role in energy security policy through foreign direct investment in overseas energy resources.³⁰ Notably, in 1982, 1983, and 1988, the Chinese government formed three NOCs: the China National Offshore Oil Corporation, the China National Petrochemical Corporation (Sinopec), and the China National Petroleum Corporation.³¹ From 1993 onward, NOCs started investing in overseas oil development and exploration projects in the countries such as Kazakhstan, Turkmenistan, Venezuela, Peru, Indonesia, Angola, Nigeria, Sudan, Kuwait, Iraq, and many others.³² In its Eleventh Five-Year Plan (2006), China emphasized energy security. Since 2006, Chinese corporations started investing in select foreign countries, and medium-size and smaller corporations started investing as well. Notably, since 2006, China's foreign policy played a more active role in backing China's energy security strategy. After the outbreak of the global economic crisis in 2008, China got the opportunity to invest its vast currency reserve

in the global market. Consequently, China started investing in overseas energy resources.³³

Since 2008, China's nationalized oil corporations started purchasing overseas oil and gas resources, and between 2011 and 2013, it invested around \$73 billion in such resources. In 2010, the amount of oil production from China's overseas resources was 1.36 million bbl/d; in 2013, this increased to 2.1 million bbl/d. In 2013, 26 percent of China's overseas oil production came from Iraq; other nations, such as Kazakhstan, Sudan, and South Sudan, also contributed to China's overseas oil production. In 2013, the NOCs concluded several bilateral oil-for-loan agreements, worth \$150 billion, with many nations, including Kazakhstan, Russia, Venezuela, Angola, and Ghana. In oil-for-loan agreements, China provides loans to partner countries to construct energy infrastructures and explore energy resources in return for receiving oil from those partner countries at established rates. China has signed many such agreements worth more than \$45 billion with Venezuela in return for receiving 600,000 bbl/d in crude oil and related products. China has signed gas-for-loan contracts with Turkmenistan; China and Russia have signed several oil and gas agreements, including two loan-for-oil deals whereby China would receive 600,000 bbl/d of oil from Russia via the Eastern Siberia–Pacific Ocean pipeline. Additionally, China and Russia have signed agreements whereby China would receive up to 800,000 bbl/d of crude oil from Russia by 2018. China now receives oil from Eastern Siberia. Thus, China has strengthened its energy security through energy-rich neighbors to gain better access to their energy resources.³⁴

The construction of oil and gas pipelines is the central component of China's plan to diversify routes for energy imports. In 2006, China inaugurated its first transnational oil pipeline through which it started receiving Kazakh and Russian oil. Oil from central and western Kazakhstan is sent to China through this pipeline. Initially, this pipeline delivered 200,000 bbl/d of oil, but after pipeline expansion in 2013, delivery capacity doubled.³⁵ In 2015, to import oil from Myanmar, China launched an oil pipeline that had a delivery capacity of 440,000 bbl/d.³⁶

From 2007, China turned from a net natural gas exporter into a net natural gas importer. China's demand for gas imports significantly increased due to construction of pipelines and infrastructure to process natural gas.³⁷ Currently, China imports around 45 percent of its gas.³⁸ In 2019, China imported 4.6 trillion cubic feet (Tcf) of natural gas, 7 percent more than in 2018.³⁹ In 2019, 62 percent of China's total natural gas imports came from liquefied natural gas imports, and 38 percent via pipeline from three Central Asian countries—Turkmenistan, Uzbekistan, and Kazakhstan—and Myanmar.⁴⁰

The Central Asian Gas Pipeline (CAGP) is China's first international natural gas pipeline, which imports natural gas from Kazakhstan, Turkmenistan, and Uzbekistan. The CAGP has been developed through several phases. Phase one (Line A) and Phase two (Line B) became functional in 2010 with a capacity of 1.1 billion cubic feet per year (Bcf/y). Phase three (Line C), which became partly operational in May 2014, added 880 Bcf/y. In 2014, China imported more than 1,040 Bcf/y of gas from Turkmenistan and Uzbekistan, an amount that is likely to increase with pipeline expansion. Soon after the beginning of gas production from the new Galkynysh field in September 2013, the amount of production increased, and in 2013 China and Turkmenistan signed a gas supply contract to increase capacity from 1.4 trillion cubic feet per year (Tcf/y) to 2.3 Tcf/y by 2020. In September 2013, China signed agreements with Uzbekistan and Tajikistan to construct Phase four (Line D) of the CAGP. Through Line D, natural gas would handle the Galkynysh field's second stage of development. In September 2014, Line D construction started with an expectation that it would add 880 Bcf/y to the CAGP by 2016.⁴¹ Line D is expected to handle additional capacity of up to 1.1 Tcf in the CAGP system and increase supply capacity from Turkmenistan to 2.3 Tcf/y. Although the Line D has faced several obstacles, it is expected to become functional by 2022.⁴²

In May 2014, China and Russia signed a historic gas agreement, whereby China would purchase 1.3 Tcf/y of gas for 30 years at \$400 billion from Russia's East Siberian field. In November 2014, China and Russia signed a memorandum of understanding that China would receive 1.1 Bcf/y of gas from Russia's Western Siberia.⁴³

To sponsor the construction of a gas pipeline for an additional 420 Bcf/y, China signed an agreement with Myanmar in 2008. The pipeline became functional in the middle of 2013, and China had received 116 Bcf of gas by 2014.⁴⁴

Strategic Initiatives to Strengthen China's Energy Security: From the String of Pearls to the Nationalization of Tanker Fleets

The Malacca dilemma led China to introduce the "String of Pearls" strategy,⁴⁵ through which China seeks to enhance maritime capability and protect vital interests. The phrase "String of Pearls" was first used in a 2005 report prepared by the defense contractor Booz-Allen-Hamilton to explain China's maritime strategy. "Pearls" refers to several seaports and naval bases located in Pakistan, Myanmar, Sri Lanka, and Bangladesh. China may exercise its maritime strategy, protect its vital overseas interests, and project its military capability utilizing this strategy.⁴⁶ China claims that the String of Pearls is designed to ensure its energy

security by protecting the sea lines of communications (SLOCs) that stretch from the Indian Ocean via Malacca Strait to southern China.⁴⁷ Indeed, the protection of SLOCs to ensure the supply of energy and raw materials is the core of the strategy.⁴⁸

The nationalization of tanker fleets is another way to protect China's energy interests. China believes that as most of the tanker fleets China uses to import oil are foreign, and thus the energy supply may be interrupted during crises such as sanctions or blockades. Therefore, China wants to import oil by its Chinese--flagged tanker-fleets to ensure the uninterrupted energy supply because state--flagged tanker fleets may enjoy sovereign immunity in the crisis. As a result, China aimed to transport 60–70 percent of its oil imports with state-flagged tanker fleets by 2020. However, there is no guarantee that the Chinese-flagged tanker fleets can ensure uninterrupted oil supply during a crisis.⁴⁹

Energy cooperation is the foundation of China's energy security strategy. Notably, scholars contend that China's energy cooperation strategy was derived from severe energy insecurity due to China's weakness in protecting its energy shipping routes militarily.⁵⁰ Consequently, to remove this strategic vulnerability, China introduced the maritime strategy, in the form of String of Pearls, to strengthen energy security and protect other vital interests in a more comprehensive manner. China has nationalized its tanker fleets to strengthen energy security.

BRI: The String of Pearls and Energy Security Strategy under One Umbrella

Because energy cooperation is an essential part of China's long-standing energy security strategy, it is no surprise that energy cooperation is part of the BRI agenda. Scholars observe that investing in the construction of energy infrastructure and facilities under the BRI is an effective way to channel China's industrial overcapacity and excessive accumulated capital.⁵¹ Furthermore, China's massive investment in the BRI energy projects can help China continue its long-term energy security strategy more comprehensively. Besides investing in energy projects through the BRI, investing in the MSR maritime projects is another effective way to channel Chinese capital and strengthen China's long-term maritime strategy.

Energy Security Strategy under the Belt and Road Initiative

Energy cooperation is an essential aspect of the BRI, which is clear from the BRI documents and statements by the Chinese government.⁵² In addition, China

proposed to form the “Belt and Road Energy Club” to promote energy cooperation among BRI countries.⁵³

The BRI and China’s long-standing energy security strategy are interconnected. Economic corridors are essential to China’s energy security strategy. Most are designed to diversify energy imports’ sources and routes. They include the China–Mongolia–Russia Economic Corridor; China–Central and West Asia Economic Corridor; China–Indo–China Peninsula Economic Corridor; China–Pakistan Economic Corridor; and Bangladesh–China–India–Myanmar Economic Corridor. They will import oil and gas from Russia, Central Asia, the Middle East, Africa, and Myanmar. For example, the China–Central and West Asia Economic Corridor will tighten China’s energy ties with Central Asia and Russia and help China lessen its dependence on the Persian Gulf region. The China–Pakistan Economic Corridor and Bangladesh–China–India–Myanmar Economic Corridor will help China import energy from Africa and the Gulf region by partially avoiding the Strait of Malacca.⁵⁴ These economic corridors can diversify the sources and routes of energy imports and reduce China’s energy anxiety and strategic vulnerability. One may note that the plan of diversification works effectively. For example, in 2014, 11 percent of China’s crude oil imports came from Russia,⁵⁵ and in 2019 it rose to 15 percent.⁵⁶ Notably, in 2014, 68 percent of China’s crude oil imports came from the Middle East and Africa,⁵⁷ which rose to 62 percent in 2019.⁵⁸ These statistics indicate that China’s dependence on Malacca Strait for importing oil from the Middle East and Africa will not fade immediately. Instead, even in the distant future, China will still depend on the vulnerable route through Malacca Strait for importing Middle Eastern and African oil. Therefore, under the MSR, and reinforcing its String of Pearls strategy, China has been enhancing its maritime power to construct seaports and overseas military bases.

The Arctic Ocean region is also vital for China, mainly for two reasons. First, the Arctic region has a reserve of 13 percent and 30 percent of the world’s unexplored oil and gas, respectively. Second, the Arctic maritime route may reduce China’s strategic vulnerability related to the SLOCs that stretch from the Horn of Africa to Southeast Asia. Therefore, Chinese experts recommended that the Chinese government sketch out a master plan to exploit the potential economic and strategic advantages of the Arctic.⁵⁹ As a result, China included the Arctic region in the MSR to exploit the Arctic region’s economic and strategic advantages.⁶⁰

One may note that various BRI documents issued by the Chinese government have concentrated on maritime security issues and the protection of energy interests, which include the protection of energy supply, energy infrastructure, such as oil and gas pipelines, and energy transport routes.⁶¹ Furthermore, one may con-

tend that, by absorbing the String of Pearls strategy into the BRI, specifically MSR, China can lessen the risks of seaborne energy imports and protect China's vital economic and strategic interests. This notion confirms that the MSR is devised to advance China's maritime and overseas interests, facilitate maritime trade and transport, and promote maritime security.⁶² This includes the protection of the seaborne energy supply, commercial shipments, vital SLOCs, and overseas energy resources. The construction of seaports and the modernization of the Chinese navy or the People's Liberation Army Navy (PLAN), which is a fundamental requirement for the development of the blue-water navy, are inevitable to ensure maritime security and protect China's vital interests.

In the 2015 Defense White Paper, China stated that, instead of concentrating only on the "offshore water defense," China would focus on both that and "open seas protection."⁶³ The addition of open seas protection in China's maritime strategy demonstrates that China has shifted its maritime strategy to develop a robust blue-water navy. Notably, much earlier than China's 2015 Defense White Paper's official release, in 2010, Chinese military personnel unofficially confirmed that China had been shifting its naval strategy. This meant a shift from coastal defense to far sea defense to protect China's vital shipping routes and SLOCs. Under the MSR, China has been constructing seaports overseas and modernizing its navy, yet another aspect of the String of Pearls strategy.

The Continuation of the String of Pearls Strategy under the Maritime Silk Road

China has been constructing or has proposed construct seaports in BRI countries to advance its commercial and military interests. These include Hambantota and Colombo (Sri Lanka), Kyaukpyu (Myanmar), Casablanca (Morocco), Mombasa (Kenya), Kumpport (Turkey), Bagamoyo (Tanzania), Port Djibouti (Djibouti), Piraeus (Greece), Gwadar (Pakistan), Chittagong (Bangladesh), and some others. Chinese companies have been heavily investing in these seaports.⁶⁴ Chinese corporations—mainly two state-owned companies, China Merchants Group and Cosco Group—have already invested around \$11 billion into overseas ports to ensure access.⁶⁵ The Chinese companies have invested in 42 ports in 34 countries under the MSR.⁶⁶ The construction of ports and investment in harbors are essential for China if it is to become a maritime superpower.⁶⁷ Scholars are concerned that China-sponsored ports that have been built ostensibly for commercial purposes may eventually be used for military purposes.⁶⁸ Similarly, the United States is deeply concerned about these ports because Washington suspects they will be used as naval bases for China's blue-water navy to advance China's military ambi-

tions.⁶⁹ Experts assume that the construction of ports and logistic hubs equipped with military facilities could motivate China to increase its military footprint in the Indian Ocean in the coming years.⁷⁰ Moreover, experts assume that China may establish overseas military bases in some BRI countries,⁷¹ including some debt-ridden countries such as Sri Lanka, which is now compelled to allow China to access or control its seaports in lieu of repaying its Chinese loan.⁷² . Using Sri Lanka's inability to repay Chinese debt, China in 2017 took away Sri Lanka's Hambantota port on a 99-year lease.⁷³ Turning apprehensions into reality, China in 2017 inaugurated its first overseas military base in Djibouti.⁷⁴ Indeed, Hambantota and Djibouti are just the tips of the iceberg; surely, China will take control of more ports and inaugurate more overseas military bases in the near future to strengthen its strategic presence in the maritime theater, especially the Indian Ocean. One can observe that the construction of seaports and the logistic hubs equipped with military facilities under the MSR are extensions of China's long-term maritime strategy. This is precisely the point of the String of Pearls strategy.

The construction of seaports and the modernization of PLAN are important to ensure maritime security under the MSR. Experts argue that, besides many other important strategic factors, another vital issue is the protection of China's vital SLOCs that stretch from the Persian Gulf to the Indian Ocean, through which most of China's energy imports pass.⁷⁵ According to leading Chinese energy experts, China's worry over disruption to its energy supply by the United States during political or military crisis, such as the Taiwan issue, has led China to modernize its navy.⁷⁶ Experts argue that the protection of China's energy interests and the SLOCs led to the development of China's blue-water navy.⁷⁷

One can easily understand the relationship between the modernization of PLAN and China's energy security strategy based on former Chinese president Hu Jintao's statements. In November 2003, then-President Hu Jintao expressed his deep concern over China's risk related to oil imports through the unstable route of Malacca Strait.⁷⁸ On 27 December 2006, Hu Jintao strongly advocated for a powerful blue-water navy that would be capable of defending China's national interests.⁷⁹ He indicated much earlier that China would modernize its navy and change its maritime strategy to protect vital interests, including energy security. Consequently, in November 2012, at the 18th National Congress of the Communist Party of China, China formally revealed its ambition of becoming a maritime power.⁸⁰ After a few months, in April 2013, China released its Defense White Paper, which emphasized the protection of maritime interests integral to China's national interests.⁸¹ Indeed, maritime security issues, such as the security of seaborne energy imports, the protection of overseas interests, the protection of

SLOCs, and the protection of Chinese shipments, are significant for China's national security and interests.⁸²

Conclusion

This article contends that, after China became dependent on energy imports from overseas in 1993, it started thinking about energy security. As a result, it started pursuing an energy cooperation strategy to collaborate with oil- and gas-rich countries. In addition, to address its strategic vulnerability related to oil imports, China has developed its maritime strategy, namely the String of Pearls, to protect vital interests, including energy interests.

After launching BRI in 2013, China has been continuing its long-standing energy security strategy and the maritime strategy to protect its vital interests more vigorously. Under the MSR, China has been increasing maritime capabilities to develop a blue-water navy and construct seaports in various countries. China's blue-water navy can efficiently operate in the deep seas to protect China's national interests. ♀

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Notes

1. National Development and Reform Commission (NDRC), Ministry of Foreign Affairs and Ministry of Commerce, People's Republic of China, "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road," 28 March 2015, <https://reconasia-production.s3.amazonaws.com>.

2. NDRC, "Vision and Actions," sec. III.

3. NDRC, "Vision and Actions," sec. III.

4. Gal Luft, *Silk Road 2.0: US Strategy Toward China's Belt and Road Initiative*, Strategy Paper no. 11 (Washington, DC: Atlantic Council, October 2017); Subhomoy Bhattacharjee, "Belt and Road Initiative: 'China's Social Governance of the World,'" *Business Standard*, 21 November 2019, <https://www.business-standard.com>; Bipul Chatterjee and Saurabh Kumar, "Promises and pitfalls of the Belt and Road Initiative," *Asia Pacific Bulletin*, no. 388, 18 July 2017, 1–2.

5. Bhattacharjee, "Belt and Road Initiative."

6. Mingjiang Li, "China's Economic Power in Asia: The Belt and Road Initiative and the Local Guangxi Government's Role," *Asian Perspective* 43(2) (2019): 273–95; Mingjiang Li, "From Look-West to Act-West: Xinjiang's Role in China–Central Asian Relations," *Journal of Contemporary China* 25(100) (2016): 515–28.

7. Peter Cai, *Understanding China's Belt and Road Initiative*, Analysis (Sydney: Lowy Institute for International Policy, March 2017), <https://www.lowyinstitute.org/publications/understanding-belt-and-road-initiative>; Alice de Jonge, "Perspectives on the Emerging Role of the Asian Infrastructure Investment Bank," *International Affairs* 93(5) (2017): 1061–84; Michael D. Swaine, "Chinese Views and Commentary on the 'One Belt, One Road' Initiative," *China Leadership Monitor*, no. 47 (Summer 2015): 1–24; Yong Wang, "China's Economic Challenges: Grappling with a 'New Normal,'" *Global Asia* 9(4) (2014): 12–17, <https://www.globalasia.org>.

8. Nadège Rolland, *China's Eurasian Century? Political and Strategic Implications of the Belt and Road Initiative* (Washington, DC: National Bureau of Asian Research, 2017); Mingjiang Li, "The Belt and Road Initiative: Geo-economics and Indo-Pacific Security Competition," *International Affairs* 96(1) (2020): 169–87.

9. Ashley J. Tellis, *Protecting American Primacy in the Indo-Pacific*, Congressional Testimony, 25 April 2017, <https://carnegieendowment.org>.

10. William A. Callahan, "China's 'Asia Dream': The Belt Road Initiative and the New Regional Order," *Asian Journal of Comparative Politics* 1(3) (2016): 226–43; Theresa Fallon, "The New Silk Road: Xi Jinping's Grand Strategy for Eurasia," *American Foreign Policy Interests* 37(3) (2015): 140–47.

11. Shannon Tiezzi, "The new Silk Road: China's Marshall Plan?," *The Diplomat*, 6 November 2014, <http://thediplomat.com/2014/11/the-new-silk-road-chinas-marshall-plan/>; Michelle Penna, "China's Marshall Plan: All Silk Roads Leading to Beijing?," *World Politics Review*, 9 December 2014, <https://www.worldpoliticsreview.com>.

12. Theresa Fallon, "China's Pivot to Europe," *American Foreign Policy Interests* 36(3) (2014): 175–82; Frank Tang, "How Does China's 'One Belt, One Road' Match Up Against the TPP?," *South China Morning Post*, 24 January 2017, <https://www.scmp.com/news/china/economy/article/2064967/xis-one-belt-one-road-better-idea-tp>; William H. Overholt, "One Belt, One Road, One Pivot," *Global Asia* 10(3) (2015): 16–21, <https://www.globalasia.org>.

13. Doug Stokes, "Trump, American Hegemony and the Future of the Liberal International Order," *International Affairs* 94(1) (2018): 133–50; Harsh V. Pant and Kartik Bommakanti, "India's National Security: Challenges and Dilemmas," *International Affairs* 95(4) (2019): 835–58.

14. Andreea Brînză, "Redefining the Belt and Road Initiative," *The Diplomat*, 20 March 2018, <https://thediplomat.com>.

15. Erica Downs, Mikal E. Herberg, Michael Kugelman, Christopher Len, and Kaho Yu, "Asia's Energy Security and China's Belt and Road Initiative," NBR Special Report no. 68 (Washington, DC: National Bureau of Asian Research, November 2017).

16. Erica Strecker Downs, *China's Quest for Energy Security* (Santa Monica, CA: RAND Corporation, 2000), 6.

17. Malavika Jain Bambawale and Benjamin K. Sovacool, "China's Energy Security: The Perspective of Energy Users," *Applied Energy* 88(5) (2011): 1950.

18. Downs, *China's Quest for Energy Security*, 8.

19. Jude Clemente, "China Is The World's Largest Oil & Gas Importer," *Forbes*, 17 October 2019, <https://www.forbes.com>.

20. Downs, *China's Quest for Energy Security*.

21. Downs, *China's Quest for Energy Security*, 44–45.

22. Christopher Len, "China's 21st Century Maritime Silk Road Initiative, Energy Security and SLOC Access," *Maritime Affairs* 11(1) (2015): 4–5.

23. Ian Storey, "China's "Malacca Dilemma," *China Brief* 6(8) (12 April 2006), <https://jamestown.org>.
24. US Energy Information Administration (USEIA), "China: International Energy Data and Analysis," 14 May 2015, 12, <https://www.eia.gov>.
25. Downs, *China's Quest for Energy Security*, 13; Emre İşeri, "The US Grand Strategy and the Eurasian Heartland in the Twenty-First Century," *Geopolitics* 14(1) (2009): 42.
26. Zhang Jian, *China's Energy Security: Prospects, Challenges, and Opportunities* (Washington DC: Brookings Institution, July 2011), 16–17.
27. İşeri, "The US Grand Strategy," 42; BP, "BP Statistical Review of World Energy 2019," 2019, 14, 30, <https://www.bp.com>.
28. Downs, *China's Quest for Energy Security*, 46–47.
29. USEIA, "China: International Energy Data and Analysis," 10.
30. Zhang, *China's Energy Security*, 14–15.
31. Downs, *China's Quest for Energy Security*, 13.
32. Downs, *China's Quest for Energy Security*, 21–23.
33. Zhang, *China's Energy Security*, 14–15.
34. USEIA, "China: International Energy Data and Analysis," 9–11.
35. USEIA, "China: International Energy Data and Analysis," 11.
36. USEIA, "China: International Energy Data and Analysis," 12.
37. USEIA, "China: International Energy Data and Analysis," 15.
38. Clemente, "China Is The World's Largest Oil & Gas Importer."
39. USEIA, "Country Analysis Executive Summary: China," 30 September 2020, 8, <https://www.eia.gov>.
40. USEIA, "Country Analysis Executive Summary: China," 10.
41. USEIA, "China: International Energy Data and Analysis," 21–22.
42. USEIA, "Country Analysis Executive Summary: China," 10.
43. USEIA, "China: International Energy Data and Analysis," 22.
44. USEIA, "China: International Energy Data and Analysis," 22.
45. Christopher J. Pehrson, *String of Pearls: Meeting the Challenge of China's Rising Power Across the Asian Littoral* (US Army War College, 2006), 7, <https://www.jstor.org>.
46. Bertil Lintner, *The Costliest Pearl: China's Struggle for India's Ocean* (London: Hurst & Company, 2019), 17–18; Pehrson, *String of Pearls*; Prabhash K. Dutta, "Can China Really Encircle India with Its String of Pearls? The Great Game of Asia," *India Today*, 15 June 2017, <https://www.indiatoday.in>.
47. Hankwon Kim, "The Implications of the Chinese 'String of Pearls' for the U.S. Return to Asia Policy: The U.S., China, and India in the Indian Ocean," *Journal of Global Policy and Governance* 2 (2013): 200, <https://doi.org/10.1007/s40320-013-0032-5>.
48. Pehrson, *String of Pearls*, 5.
49. Gabriel Collins, "An Oil Armada? The Commercial and Strategic Significance of China's Growing Tanker Fleet," in *Asia Looks Seaward: Power and Maritime Strategy*, ed. Toshi Yoshihara and James R Holmes (Westport, CT: Praeger, 2008), 111–24.
50. Charles E. Ziegler, "The Energy Factor in China's Foreign Policy," *Journal of Chinese Political Science* 11(1), (2006): 1–23.

51. Kaho Yu, "The Geopolitics of Energy Cooperation in China's Belt and Road Initiative," in *Asia's Energy Security and China's Belt and Road Initiative*, NBR Special Report no. 68 (Washington, DC: National Bureau of Asian Research, November 2017), 33.
52. Belt and Road Portal, "Vision and Actions on Energy Cooperation in Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," 16 May 2017, <https://eng.yidaiyilu.gov.cn>.
53. Belt and Road Portal, "Vision and Actions on Energy Cooperation," sec. IV.
54. Weifeng Zhou and Mario Esteban, "Beyond Balancing: China's Approach Towards the Belt and Road Initiative," *Journal of Contemporary China* 27(112) (2018): 492.
55. USEIA, "China: International Energy Data and Analysis," 11.
56. USEIA, "Country Analysis Executive Summary: China," 6.
57. USEIA, "China: International Energy Data and Analysis," 11.
58. USEIA, "Country Analysis Executive Summary: China," 6.
59. Jian, *China's Energy Security*, 20.
60. State Council Information Office, People's Republic of China, "China's Arctic Policy," January 2018, <https://eng.yidaiyilu.gov.cn>.
61. State Council of the People's Republic of China, "Full Text of the Vision for Maritime Cooperation under the Belt and Road Initiative," 20 June 2017, <http://english.www.gov.cn>; Belt and Road Portal, "Vision and Actions on Energy Cooperation," secs. II and III; NDRC, "Vision and actions," sec. IV.
62. State Council of the PRC, "Vision for Maritime Cooperation."
63. State Council Information Office, "China's Military Strategy," May 2015, <http://english.www.gov.cn>.
64. *The Economist*, "China Is Making Substantial Investment in Ports and Pipelines Worldwide," Special Report, 6 February 2020, <https://www.economist.com>.
65. Shin Watanabe, "China Drops \$11bn Anchors to Expand Maritime Silk Road," *Nikkei Asian Review*, 5 January 2020, <https://asia.nikkei.com>.
66. Maritime Fairtrade, "China Invests in 42 Ports under Maritime Silk Road," 4 November 2018, <https://maritimefairtrade.org>.
67. James Kynge et al., "How China Rules the Waves," *Financial Times*, 12 January 2017, <https://ig.ft.com>.
68. *The Economist*, "China Is Making Substantial Investment."
69. "Remarks by Vice President Pence on the Administration's Policy Toward China," Hudson Institute, Washington, DC, 4 October 2018, <https://www.whitehouse.gov>.
70. David Brewster, "Silk Roads and Strings of Pearls: The Strategic Geography of China's New Pathways in the Indian Ocean," *Geopolitics* 22(2) 2017: 269–91.
71. Ralph Jennings, "China May Consider These Countries for Its Next Overseas Military Base," *Forbes*, 10 October 2017, <https://www.forbes.com>.
72. *The Economist*, "China Is Making Substantial Investment."
73. *The Economist*, "China Is Making Substantial Investment."
74. John Fei, "China's Overseas Military Base in Djibouti: Features, Motivations, and Policy Implications," *China Brief* 17(17), 22 December 2017, <https://jamestown.org>.
75. Ronald O' Rourke, "China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress," CRS Report RL33153, 5 July 2013, 5–6, <https://>

www.refworld.org; David Pilling, "China Flexes New Economic Muscle at Sea," *Financial Times*, 22 April 2009, <https://www.ft.com>.

76. Wu Lei and Shen Qinyu, "Will China Go to War over Oil?," *Far Eastern Economic Review* 169(3) (April 2006): 38.

77. Richard L. Armitage and Joseph S. Nye, *The U.S.-Japan Alliance: Getting Asia Right Through 2020* (Washington, DC: Center for Strategic and International Studies, 2007), 4.

78. Storey, "China's 'Malacca Dilemma.'"

79. David Lague, "China Airs Ambitions to Beef Up Naval Power," *New York Times*, 28 December 2006, <https://www.nytimes.com>.

80. *Global Times*, "Full Text of Hu Jintao's Report at 18th Party Congress," 17 November 2012, <http://www.globaltimes.cn>.

81. *Global Times*, "China's Development of Blue-water Navy a Must: Expert," 16 April 2013, www.globaltimes.cn.

82. Edward Wong, "Chinese Military Seeks to Extend Its Naval Power," *New York Times*, 23 April 2010, <https://www.nytimes.com>.

The Failure of North Korean Containment

How Illicit Networks Fund the Nuclear Program—and the Need for a New Strategy

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Introduction

Sleek, black limousines symbols of power and wealth began transporting North Korean leader Kim Jong-un to meetings with foreign heads of state in Northeast Asia and around Pyongyang beginning in the late 2010s. However, these armored vehicles, marketed to global heads of state, should not be allowed within the Democratic People's Republic of Korea (DPRK). In 2006, the United Nations enacted Security Council Resolution 1718, banning the import of luxury goods to the DPRK.¹ The first sighting of luxury vehicles occurred in the aftermath of US secretary of state Mike Pompeo's visit to Pyongyang in October 2018. As news agencies discussed the implications of a proposed summit between the United States and the DPRK, a photograph of Kim Jong-un's arrival provided a clue to a monumental problem: the unmistakable Rolls-Royce emblem embellishing a partially obscured wheel on a dark sedan in the background.² The DPRK has a track record of circumventing sanctions, yet the appearance of a vehicle valued upward of \$1.6 million raised alarm for a different reason.³ As Hugh Griffiths, former coordinator of the UN Panel of Experts on North Korea, explained: "If you can smuggle luxury limos into North Korea, which is done by shipping container, that means you can smuggle in smaller components dual-use items for ballistic and nuclear programs. That's the really worrying thing."⁴

International sanctions have not affected the DPRK's ability to fund and develop nuclear technology, which continues unabated. Kim Jong-un presides over a sophisticated global network that engages in diverse illicit activities that mitigate economic losses from trade bans. The United States must accept a fundamental reality: the policy of forcing the Kim regime to relinquish its nuclear weapons program in exchange for sanctions relief is untenable. It is no closer to achieving results than it was in 2010, even while the DPRK produces long-range missiles and plans to develop tactical nuclear warheads. The failure of trade sanctions exhibits the need for a new strategy to deal with the DPRK and its nuclear arsenal. Therefore, the United States should use multilateral talks to negotiate

incremental deals that produce tangible results and build trust. Put simply, an enforceable security guarantee, achieved through mutual peace declarations, will help normalize the DPRK's international relations so that it can undergo economic reform and emerge as a legitimate global partner. Such measures are more likely to attain results that all partners can agree on and could, at a minimum, result in a moratorium on future nuclear production and development. Only then can talks of the DPRK's complete denuclearization be possible.

The Failure of Sanctions to Counter Weapons of Mass Destruction

The United Nations and partner countries have levied a series of sanctions against the DPRK since the mid-2000s to pressure the Kim regime into negotiating terms for the dismantlement of its nuclear weapons program. It imposed sanctions after the DPRK's missile and nuclear tests in 2006, 2009, 2013, 2016, and 2017 that initially banned materials related to weapons of mass destruction (WMD) but expanded to trade bans on crude oil, seafood, luxury items, textiles, and coal. Further sanctions were enacted against individuals connected to the WMD program, banking transactions, and other institutions involved in weapons procurement.⁵ The economic conditions in the DPRK have degraded significantly since, leading to irregularities in currency exchange rates, drastic increases in vegetable prices (particularly cabbage),⁶ empty grocery-store shelves, and the rise of smuggling across the Chinese border. However, these conditions have not discouraged Kim from advancing his nuclear weapons program or forced him to reach out to the United States and the Republic of Korea (ROK) to negotiate terms. Even while the DPRK's population was asked to "tighten their belts,"⁷ new weapons rolled across parade routes through Pyongyang to Kim Il-sung Square. These sanction failures are complex and due to various reasons, including illicit trade, cross-border smuggling, and even regime type. The following sections explain how Kim Jong-un evades sanctions and continues to fund his nuclear program.

Sanctions Are Ineffective Against Authoritarian Regimes

COVID-19 lockdown measures, loss of foreign tourism, and the closure of the border with China have compounded the effects of sanctions, yet Kim stands firm in his *byungjin* policy. *Byungjin—the simultaneous advancement of the nuclear program and the economy—is at the forefront of the DPRK's political ideology and firmly drives nuclear policy.* Therefore, a quid pro quo or a freeze-for-freeze model is necessary for sanctions to work, with trade ban effects used as a bargaining chip. In their book *Hard Target: Sanction, Inducements, and the Case of North Korea*,

Stephan Haggard and Marcus Noland explain that sanctions can work “via *direct economic* costs on the leaders of the state” such as the freezing of personal assets or via “*indirect political* costs that affect the welfare of the constituent group” such as embargoes on foodstuffs (emphasis in original).⁸ In theory, the steep costs will induce leaders to cooperate with the international community. However, sanctions levied historically against different governments have enjoyed varying degrees of success, with regime types playing a significant role. For example, in the early 1990s, Iraq was subjected to some of the most devastating sanctions at the time, yet its authoritarian leader, Saddam Hussein, made few efforts to lift them. Conversely, as Risa Brooks explains, “the porous sanctions imposed on democratic South Africa cost the state relatively little, the equivalent of 1–3 percentage points of growth a year,” but played a significant role in ending apartheid.⁹ Her conclusion, which Haggard and Nolan echo, is that an authoritarian regime such as the DPRK is the most difficult to sanction successfully, vulnerable only under particular circumstances.

An authoritarian regime can impose the cost of sanctions directly on its own populations, repress them, and invoke forced labor. Further, the DPRK continues to adhere to a centrally planned command economy in which the state sets the conditions for the investment, procurement, and production of capital goods. The tight control that the Kim regime exerts over the economy allows it to tap into the “revenue streams from the markets and entrepreneurial sectors” to supplement state income.¹⁰ Moreover, the regime can leverage its workforce to conduct illegal trade to circumvent sanctions and recoup some of the state’s lost income from international partners. People in the DPRK are powerless to resist Kim and face imprisonment in labor camps, or even death, if accused of antisocialist behavior detrimental to the state. With those issues in mind, it is easier to understand why sanctioning the DPRK has not provided the results some policy makers want and illustrates how the Kim regime has continued propping up its economy to fund the nuclear program despite international attempts to halt it.

Illicit Trade Revenue Enables WMD Procurement

Sanctions may have stunted the DPRK economy, but the trade continues, albeit illegally. Officially, trade with China, the DPRK’s number-one partner, “in October [2020] fell to an all-time low, decreasing 99.4% compared to the same period last year,”¹¹ according to a report by the Korea International Trade Association. However, that report does not paint an accurate economic picture. Illegal foreign trade exists on two fronts. The first is the trade banned under UN sanctions, such as coal exports, which continue via offshore ship-to-ship transfer and other secret means. The second is from transnational illicit activity, which the

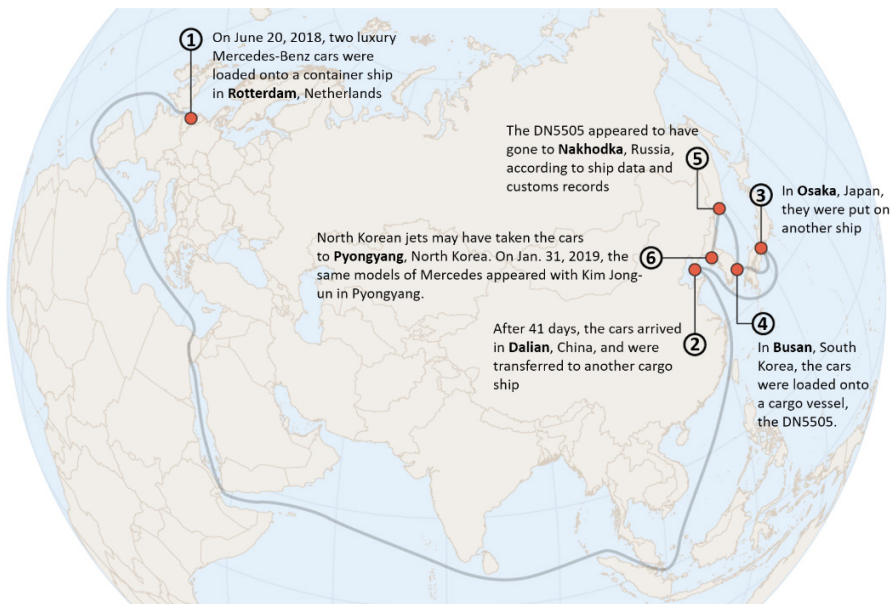
DPRK has conducted for decades, including arms trade, counterfeiting, drug trafficking, and cybercrime. These activities do not fully make up the difference in lost trade revenue, but they provide a stable income stream that is difficult to trace and harder to eliminate. Indeed, although legal, reported trade across the China–North Korea border is at an all-time low, illegal, unreported trade continues almost unabated, providing hundreds of millions of US dollars in revenue to the Kim regime.¹²

The US Department of Justice (DOJ) unsealed an indictment in May 2020 that accused nearly three dozen people—twenty-eight North Korean and five Chinese nationals—of laundering approximately \$2.5 billion in assets through a global network of more than 250 shell companies.¹³ The indictment alleges that the individuals funneled the money through several companies and financial institutions in the United States, Europe, and China back to the state-run Foreign Trade Bank of the DPRK. The indictment further alleges that the DPRK used the money to support its WMD program. The operations included in the DOJ's indictment may be only the tip of the iceberg in the DPRK's transnational, illicit networks with secretive agents operating in the world's dark places while conducting business for the Kim regime. Interestingly, Kim has come to preside over DPRK, Inc., a global leader in illicit trade that continues to defy law enforcement agencies worldwide and earns hundreds of millions of dollars in revenue annually.

The Democratic People's Republic of Korea, Incorporated

The Rolls-Royce spotted during the meeting between Kim and Pompeo is one of three luxury limousines that the DPRK has imported illegally. (See figure 1.) A Mercedes-Benz Maybach S62 and Maybach S600 Pullman Guard made their way to the DPRK from Rotterdam, the Netherlands, where in 2018 an unknown entity procured and later shipped them inside containers owned by the China Cosco Shipping Corporation.¹⁴ A report by the Center for Advanced Defense Studies utilized open-source shipping information and commercial satellite imagery to determine the two vehicles' path into the DPRK and how the shipment evaded sanctions. The report's authors, Lucas Kuo and Jason Arterburn, begin their account with a sobering finding: "Between 2015 and 2017, as many as 90 countries served as luxury goods procurement sources for North Korea, a much broader scope than previously understood."¹⁵ Some of the companies within those countries were knowingly complicit with the DPRK, but others who acted as middlemen never knew who owned the items or knew the final destination. The sophisticated network is cloaked in such a way that most involved in the transportation do not realize they are participating in illegal activities.

The two vehicles made their way via merchant vessels through four different countries, making port calls in China, South Korea, Japan, and Russia, each time transferred to a new ship owned by another company. The voyage's final leg occurred onboard a Togo-flagged vessel belonging to Do Young Shipping on its way to the far eastern Russian port of Nakhodka from Busan, South Korea. Mysteriously, the ship went dark, turning off its location transponder shortly after leaving Busan, and it appeared again 18 days later in South Korean waters. Kuo and Arterburn suggest that transporters loaded the two vehicles "onto Ilyushin-76 (IL-76) heavy-lift cargo jets operated by Air Koryo, North Korea's state-run airline[, and] reportedly traveled from Pyongyang, North Korea to Vladivostok, Russia,"¹⁶ on October 7. Those aircraft have the same tail numbers as the cargo planes used previously to transport Kim's Rolls-Royce Phantom limousine and likely transported the two Maybachs to Pyongyang from Russia.¹⁷ The complicated procurement and shipping network that illegally imported these luxury vehicles under the international community's nose is the same system that procures nuclear-related technology. The Kim regime is not only good at making money; it can smuggle in high-profile contraband at will. Pyongyang uses several other methods for circumventing sanctions, with some of the biggest earners highlighted in the following sections.



(Source: Edward Wong and Christoph Koettl, "How North Korea's Leader Gets His Luxury Cars," *New York Times*, 16 July 2019, <https://www.nytimes.com/2019/07/16/world/asia/north-korea-luxury>)

Figure 1. Shipment path of luxury cars from Rotterdam to the DPRK

The Pyongyang Fall Fashion Show

North Korea celebrated the seventy-fifth anniversary of the founding of the Worker's Party of Korea, kicking off with a massive parade at midnight on October 10, 2020. The uncharacteristic night parade was just the beginning of surprises as lines of new vehicles, missiles, and equipment filed past the viewing platform. All eyes were on the new, 11-axle transporter erector launcher and its massive intercontinental ballistic missile (ICBM) as it lumbered through the bright lights in Kim Il-sung Square early in the morning. However, many observers seemed to care little about the sea of marching uniforms and equipment in all patterns and colors, reminiscent of Milan's most fashionable runways, all on display for sale to finance the new ICBMs. Brian Davis, a seasoned intelligence professional with decades of experience in South Korea, likened the parade to a fashion show.¹⁸ The only items missing were the price tags. The overhead drone footage, sweeping camera shots, and cameras mounted on radio-controlled cars made for entertaining television. The world was watching, and Kim Jong-un was busy showing his wares for sale to interested global buyers. Countries in the Middle East or the Horn of Africa in the market for cheap, dependable equipment need only turn on the television to view a catalog of the newest merchandise on display. Under strict sanctions, a country must fund its missile and nuclear programs somehow, and the DPRK has shown a proclivity for the illicit arms trade.

The DPRK's trade in arms is well documented. In the 1980s and early 1990s, North Korea gained notoriety as an exporter of ballistic missiles and conventional arms to a range of countries and terrorist groups.¹⁹ Recently, due to increased sanctions, the nation has shifted from missile systems to small arms and munitions, evidenced by the US seizure of 30,000 rocket-propelled grenades destined for Egypt in 2017.²⁰ Further, since 2017, Numidia has contracted the Korea Mining Development Trading Corporation to build a munitions factory in that country²¹; the Presidential Guard of the Democratic Republic of the Congo bought DPRK weapons and training²²; and Syria received more than 40 shipments of materials to make chemical weapons.²³ These examples are just a few that member states have identified and reported to the UN Security Council. It is difficult to estimate the total income generated by the DPRK's arms trade given the lack of price and sales data. However, Dr. Larry M. Wortzel, senior fellow in Asian security at the American Foreign Policy Council, estimated that Pyongyang had earned \$560 million in sales in 2001.²⁴ Though dated, few interdictions of DPRK arms shipments have occurred, providing the Kim regime unimpeded access to global arms buyers.

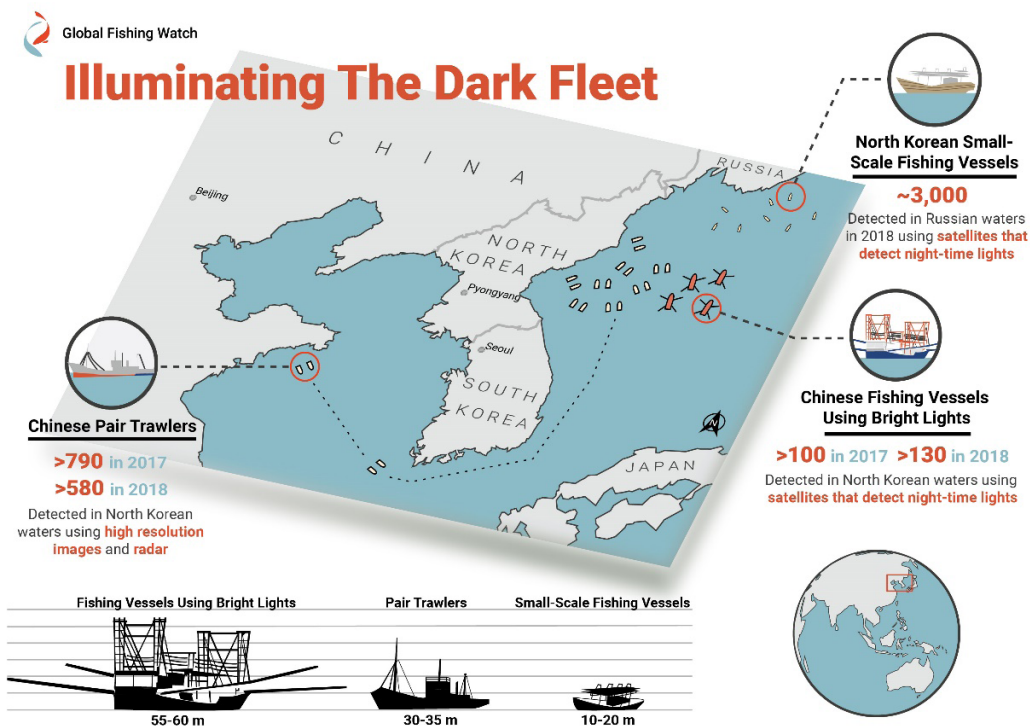
Forced Overseas Labor

The US Department of State assesses that as many as 100,000 DPRK citizens work overseas,²⁵ and “some estimates suggest that North Korean laborers may generate as much as \$1.2 to \$2.3 billion per year for the Kim regime.”²⁶ These workers are sent abroad by the government and overseen by handlers who often force them to work 12- to 16-hour days with only one or two days off per month. They earn little, and out of that portion, a large percentage is taken for the Kim regime, upward of 70–90 percent.²⁷ DPRK laborers raise two concerns. First, this is a humanitarian issue that often involves individuals trafficked to another country and forced to work for almost no pay, often in poor conditions. Second, these workers generate hard currency for the Kim regime that most likely gets funneled into the WMD program. The UN enacted several security resolutions in response to these issues beginning in April 2017. Initially, the resolutions capped the number of laborers in overseas countries but expanded later to include a ban on new DPRK contracts. Following the Hwasong-15 ICBM test launch in November 2017, the UN responded with resolutions that ban DPRK migrant workers abroad²⁸ and “prohibit the opening, maintenance, and operation of all joint ventures or cooperative entities, new and existing, with DPRK entities or individuals.”²⁹ However, DPRK migrants continue working abroad, especially in Russia and China, and the international community can do little to prove their existence or enforce their expulsion.

Chinese “Dark Fleets”

Seafood—particularly flying squid and crab—was once one of the DPRK’s primary exports, generating roughly \$300 million profit per year.³⁰ The fishing industry has long been a staple of the DPRK economy, providing a robust domestic food source and lucrative exports. Historically, the DPRK has also sold fishing rights to the Chinese but controlled the number of permits so they did not impede the domestic catch. However, DPRK fishermen have faced difficulty after the UN levied sanctions against the entire industry in 2017. Those sanctions prohibited buying seafood from the DPRK, entering a business venture without UN approval, and selling DPRK fishing rights.³¹ Some exports continue illegally, but the industry has not succeeded as in years past, prompting the Kim regime to consider alternatives to make up the lost revenue. In response, Kim began selling more fishing rights to the Chinese. The UN found that “the price of a fishing permit for three months was approximately 400,000 yuan totaling close to \$120 million in revenue in 2018.”³² The sale of fishing permits has ballooned, and entire fleets of Chinese vessels—traveling “dark” with transponders turned off—have

choked the DPRK economic exclusion zone, forcing DPRK fishermen into Japanese waters while the Chinese threaten overfishing. These so-called dark fleets (see figure 2) provide revenue to replace legitimate seafood trade lost to sanctions but at the cost of overfishing and DPRK fishermen's livelihoods lost at sea.³³ Alarming, since 2018, 383 DPRK fishing vessels have washed up on the west coast of Japan,³⁴ many empty, some carrying remains, and others carrying hungry survivors. The competition of dark fleets caused some DPRK fishermen to give up their trade. However, the industry continues to bring in hard currency for the regime by a practice difficult to police.³⁵



(Source: Jaeyoon Park et al., "Illuminating Dark Fishing Fleets in North Korea," *Science Advances* 6, no. 30 (2020))

Figure 2. Chinese dark fleet activity off the DPRK's eastern coast, 2017–18

Cryptocurrency, Wire Transfers, and Sputtering ATMs

The DPRK uses an intracountry version of the internet so that the Kim regime can control its citizens' information consumption. However, that does not mean the Kim regime forbids foreign internet usage altogether. On the contrary, the

DPRK possesses a robust cabal of hackers spread throughout the world who target finance, with the UN acknowledging the DPRK “is becoming increasingly sophisticated in terms of its attack vectors against both financial institutions and cryptocurrency exchanges.”³⁶ Moreover, the DPRK uses its forced labor practices to send its information technology workers to fill jobs worldwide, with as many as 1,000 active in 2019. The UN estimates that these individuals earned close to \$20.4 million per year for the state.³⁷ To further diversify this income, the DPRK has begun hacking banks in a campaign the US Cybersecurity and Infrastructure Security Agency dubbed “Fast Cash,” whereby hackers send fraudulent wire transfers and cause ATMs to spit out cash.³⁸ These activities account for just a portion of the DPRK revenue through cyberattacks.

The most significant threat posed by the DPRK is cybercrime, especially robberies of financial institutions and cryptocurrency exchanges. The BeagleBoyz, a hacker group connected to the Kim regime, has attempted to steal nearly \$2 billion from global banks since 2016.³⁹ One of its most successful attacks occurred in late 2016, when the BeagleBoyz stole \$81 million from the Bank of Bangladesh.⁴⁰ Additionally, at a cryptocurrency conference held in April 2019 in Pyongyang, organizers told attendees they should embrace “[the] potential money laundering and sanction evasion applications of cryptocurrency and blockchain technology.”⁴¹ That sentiment follows a 2018 DPRK-sponsored cyberhack into a digital currency exchange from which hackers stole nearly \$250 million worth of digital currency.⁴² These events in cyberspace demonstrate how the Kim regime is prioritizing activities to generate revenue for the state, and the hackers have been reasonably successful with few repercussions. Such illicit activity poses a significant challenge to the international community and provides a generous income source for the DPRK nuclear program.

The Untenable Policy of Forced Denuclearization

The unveiling of the new mobile ICBM during the October 10 parade, and the DPRK nuclear program’s continued funding through illicit trade during times of severe economic hardship, confirm that the Kim regime is adamant about continuing its *byungjin* policy. During the Eighth Congress of the Workers’ Party of Korea, held in January 2021, Kim stated that the United States was the DPRK’s “biggest, main enemy.”⁴³ An article in the state newspaper *Rodong Sinmun* magnified his sentiment:

Reality shows that, in order to deter U.S. military threats and achieve peace and prosperity on the Korean Peninsula, we should strengthen our national defense capabilities without stopping for even a moment. . . . [N]o matter who is in

power in the U.S., the true nature of the U.S. and its policy towards North Korea never changes. We should heighten nuclear technology and improve nuclear weapons to be smaller and lighter ... and continue producing super-large nuclear warheads.⁴⁴

Following that speech, plans were declared to develop a solid-propellant ICBM with a range of 15,000 kilometers capable of carrying multiple reentry vehicles (MRVs). Kim also mentioned the desire to add tactical nuclear warheads to his arsenal.⁴⁵ It has never been more evident that the DPRK has no intention of denuclearization and that the rhetoric from the regime and state-run media has not changed. Kim is determined to protect his power through nuclear deterrence and has made several moves since the failed Hanoi summit in 2019 to confirm that. The DPRK attaining tactical nuclear capability would exponentially complicate denuclearization talks and counterproliferation. Kim's message is unmistakable: he continues to go to great lengths and costs to develop a host of nuclear weapons to ensure regime survival.

What Are the Options?

As previously highlighted in a *Rodong Sinmun* report, the DPRK believes that, no matter who is sitting in the Oval Office, the US position toward the Kim regime never changes. "Kim Jong Un views nuclear weapons as a security guarantee to ensure state survival, which is at odds with US policy that demands the DPRK relinquish its nuclear weapons, making a full denuclearization agreement improbable."⁴⁶ Therefore, the current US foreign policy toward the DPRK is unsustainable. Furthermore, international sanctions have not curtailed nuclear development or procurement and may have further steeled Kim's resolve to continue his nuclear program unabated. Markus Garlauskas, the former senior intelligence official on the DPRK, argues that the United States should abandon any assumption that it can force Kim to give up his nuclear program in return for economic benefits.⁴⁷ A new strategy is necessary that prevents flight-testing, delays nuclear advancement (MRVs, tactical nukes, etc.), and provides Joe Biden's administration with options to offer incremental, tangible incentives to reduce enrichment and storage capacity. Full denuclearization should still be the long-term goal, but it cannot be achieved while the DPRK fully embraces Kim's *byungjin* policy. Kim requires a security guarantee to reconsider *byungjin*, which is achievable only through a multilateral peace declaration guaranteed by all parties to end belligerent acts in exchange for verifiable denuclearization steps.

Mini-deals, Moratoriums, and Tangible Incentives

Dr. Victor Cha, professor at Georgetown University and a North Korea expert, recommends that the United States consider seeking “mini-deals” rather than pushing for one big deal to begin negotiations. Mini-deals “consist of incremental and calibrated steps on each side” for verifiable concessions such as “a freeze of nuclear operations at the main nuclear complex at Yongbyon in return for partial sanctions relief.”⁴⁸ These quid pro quo or action-for-action deals suggested by Dr. Cha can help build mutual trust and jump-start negotiations toward more realistic near-term goals. For example, the United States used a similar approach early in Kim Jong-un’s rule when on February 29, 2012, the DPRK agreed to implement moratoriums on nuclear and long-range missile tests. In return, the United States provided 240,000 metric tons of food aid.⁴⁹ Given the current economic strife in the DPRK, a mini-deal of this type has merit if the United States provides tangible incentives, unlike in its previous summits.

After the failed Hanoi summit, a nuclear testing moratorium would be a remarkable diplomatic achievement and would provide a successful deal to build on. Most important, the moratorium would delay the advancement of MRVs and tactical nuclear warheads, two technologies that must not be operationalized. Garlauskas contends that MRVs alone would “increase Pyongyang’s ability to challenge U.S. missile defenses”⁵⁰ and represent a credible threat to the US homeland. Production freezes, test moratoriums, and pauses in DPRK provocations will likely have support from the ROK, Japan, and even China while providing the United States the opportunity to build new relations with the Kim regime for further talks.

Normalizing Relations through Political Transformation

Some past negotiations with the DPRK over denuclearization attempted to normalize relations with the ruling regime but fell short. In the so-called Agreed Framework, Bill Clinton’s administration pledged to “move toward normalizing economic and political relations, including by reducing barriers to investment, opening liaison offices, and ultimately exchanging ambassadors.”⁵¹ That framework ultimately failed because both sides did not uphold the agreed-on terms. The most recent Singapore and Hanoi summits show that any serious talks about nuclear technology will not be successful without normalizing relations first. Dr. Cha contends that, “without a fundamental change in bilateral relations, nuclear negotiations will remain mired in the tit-for-tat deals of the past that will eventually fail.”⁵²

Once the United States achieves a testing moratorium or fissile production freeze, the Biden administration should shift its negotiations to normalizing relations with the DPRK. China, the ROK, and Japan have a mutual interest aligned with the United States for a stable, peaceful DPRK; therefore, a credible peace declaration—supported by a multilateral security guarantee—would signal to Kim that *byungjin* is no longer necessary for state survival. Leveraging sanctions relief, economic investment, and the facilitation of trade with the DPRK's neighbors in exchange for an end to nuclear procurement and proliferation would unbind Kim from China and allow the DPRK to be more self-reliant. Those incentives and verifiable results open the door for closer ties, thereby leading to talks on improving human rights and on economic reform.

Economic Reform and Investment

For the DPRK to be truly self-reliant and for Kim to remain in power, the regime must consider economic reform. A quasi-market system already exists within the DPRK, what Dr. Andrei Lankov and colleagues refer to as “Pseudo-state Enterprises” (PSEs).⁵³ PSEs are “state-run and owned on paper but in practice [are] controlled by private interests to which much of the profits accrued.”⁵⁴ These businesses evolved out of necessity at the end of the Arduous March Famine of 1996–99 so that farmers and others could make a living. This marketization has been allowed under the Kim regime but is closely monitored and supervised by the state. Remarks made by Kim at the Eighth Party Congress point to a crackdown on nonsocialist activity, which could mean targeting PSEs. Still, there is recent precedent for Kim's desire to integrate with the global economy. In 2018, he expressed interest in joining the World Bank and the International Monetary Fund, which would provide “access to a huge pool of expertise, technical assistance, and funds.”⁵⁵ The incentive of integrating into the global economy cannot be underestimated and would provide significant leverage for nuclear talks.

International investment in the DPRK led by the United States and the ROK should follow and “include economic projects in a package on a nuclear deal with North Korea. We can select three of four concrete projects” such as hydroelectric plants and tourism infrastructure “and offer them to North Korea in negotiations.”⁵⁶ These incentives would come with comparable DPRK nuclear concessions. Dr. Victor Cha provides an excellent example:

The parties would seek to cap and contain the most dangerous elements of North Korea's weapons programs in order to stop their growth and minimize chances of inadvertent use, proliferation, and leakage. The countries would open a nuclear deterrence dialogue to avoid nuclear miscalculation, cooperate on nuclear safety

(avoiding meltdowns and loose nukes), and limit the range and payload of missiles.⁵⁷

The goal is to provide tangible incentives to prove to Pyongyang that there is credible peace through multilateral security guarantees. Kim must realize that *byungjin* is not the only way to guarantee his state's security and economic growth and that his multilateral partners in the region are crucial to his country's development and legitimacy on the global stage. Only then can complete denuclearization become a possibility.

Conclusion

The surprise sighting of a Rolls-Royce Phantom limousine in 2018 exemplified the grand failure of international sanctions to cripple the DPRK's ability to import illegal goods, offering further proof that the country can easily procure nuclear materials and technology. The status quo strategy of attempting to strong-arm King Jong-un into denuclearization in exchange for sanctions relief is untenable and has failed to achieve measurable results. Kim presides over a vast illicit network that the international community has yet to demolish. As long as the network exists, funds for the nuclear program will continue to flow into North Korea. The Biden administration cannot continue with this strategy if it hopes to negotiate with the DPRK successfully; nor can it default to Barack Obama's policy of strategic patience or Donald Trump's policy of all-or-nothing concessions. Washington must enlist its regional allies along with China and Russia to form multilateral talks to restrain North Korea's nuclear program and then work toward a mutual peace declaration. Although policy makers will likely call for full denuclearization and balk at anything less, that policy has proved counterproductive and continually fails. The Biden administration must act, and it must do so under an incremental agreement-driven strategy. Failure to act would allow the DPRK time to develop MRVs and tactical nuclear warheads, complicating matters exponentially and placing denuclearization further out of reach. There is no perfect solution, but the approach proffered here is an option that would satisfy regional neighbors and allies, garner domestic support in the United States, and provide Kim Jong-un substantial incentives in return for cooperation. ★

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Notes

1. United Nations Security Council Resolution 1718, S/RES/1718 (14 October 2006), <https://www.undocs.org>.
2. Joshua Berlinger, "Kim Jong Un appears to have a new Rolls-Royce," CNN, 9 October 2018, <https://edition.cnn.com>.
3. Edward Wong and Christoph Koettl, "How North Korea's Leader Gets His Luxury Cars," *New York Times*, 2019, <https://www.nytimes.com>.
4. Deirdre Shesgreen, "Limos, Vodka and Nukes: How a Sanctions' Sleuth Traces North Korea's Illicit Transactions," *USA Today*, 2019, <https://www.usatoday.com>.
5. Yong Suk Lee, "International Isolation and Regional Inequality: Evidence from Sanctions on North Korea," *Journal of Urban Economics*, no. 103 (2018): 34–51.
6. Jiuen Kim, "Vegetable Shortages in North Korea Cancel Traditional Kimchi-Making Season," Radio Free Asia, 2020, <https://www.rfa.org>.
7. Kim Jong-un, "Report of the Fifth Plenary Meeting of the 7th Central Committee of the WPK," National Committee on North Korea, 2020, <https://www.ncnk.org>.
8. Stephan Haggard and Marcus Noland, *Hard Target: Sanction, Inducements, and the Case of North Korea* (Stanford: Stanford University Press, 2017), 6.
9. Risa Brooks, "Sanctions and Regime Type: What Works, and When?" *Security Studies* 11, no. 4 (2002): 1–50.
10. Benjamin Katzeff Silberstein, "The North Korean Economy: Growing Resource Scarcity May Accelerate State Control Over Markets," 38 North, 2020, <https://www.38north.org>.
11. "N. Korea-China Trade Hits All-Time Low in Oct. Amid Pandemic," Yonhap News Agency, December 2020, <https://en.yna.co.kr>.
12. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 2515, S/2020/840 (28 August 2020), <https://undocs.org>.
13. Katie Benner, "North Koreans Accused of Laundering \$2.5 Billion for Nuclear Program," *New York Times*, May 2020, <https://www.nytimes.com>.
14. Wong and Koettl, "How North Korea's Leader Gets His Luxury Cars."
15. Lucas Kuo and Jason Arterburn, "Lux and Loaded: Exposing North Korea's Strategic Procurement Networks," Center for Advanced Defense Studies, 2019, <https://www.c4reports.org>.
16. Elizabeth Shim, "Three North Korea Aircraft to Fly to Vladivostok," 2018, UPI, www.upi.com; Kuo and Arterburn, "Lux and Loaded," 34.
17. Kuo and Arterburn, "Lux and Loaded," 34.
18. Brian Davis (intelligence professional) in discussion with the author, October 2020.
19. Joseph Bermudez, *The Armed Forces of North Korea* (London: I. B. Tauris, 2001).
20. David Choi, "North Korea Reportedly Tried to Smuggle 30,000 Rocket Launchers to Egypt," *Business Insider*, 3 October 2017, <https://www.businessinsider.com>.
21. Byrne and Somerville, "Our Man in Malaysia," 10.
22. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 1874 (2009), S/2020/151.

23. "N Korea 'Providing Materials for Syria Chemical Weapons,'" BBC News, 28 February 2018, <https://www.bbc.com>.
24. Larry Wortzel, "North Korea's Connection to International Trade in Drugs, Counterfeiting, and Arms," Heritage Foundation, 20 May 2003, <https://www.heritage.org>.
25. "2020 Trafficking in Persons Report: North Korea," US Department of State, 2020, <https://www.state.gov>.
26. Jason Arterburn, "Dispatched: Mapping Overseas Forced Labor in North Korea's Proliferation Finance System," Center for Advanced Defense Studies, 2018, <https://www.c4reports.org>.
27. Arterburn, "Dispatched," 7.
28. Arterburn, "Dispatched," 9.
29. United Nations Security Council Resolution 2375, S/RES/2375 (11 September 2017), <https://www.undocs.org>.
30. Matt Rivers and Yuli Yang, "North Korean Crabs in China Show Challenge Facing Trump," CNN Online, 11 October 2017, <https://money.cnn.com>.
31. Jaeyoon Park et al., "Illuminating Dark Fishing Fleets in North Korea," *Science Advances* 6, no. 30 (2020).
32. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 1874 (2009), S/2020/151.
33. Jaeyoon Park et al., "Illuminating Dark Fishing Fleets," 1.
34. "Keep an Eye on North Korean Ships, the First Surveillance Unit in Japan," Neikki, 7 December 2019, <https://www.nikkei.com>.
35. Choe Hang-sung, "Defying U.N. Ban, Chinese Ships Pay North Korea to Fish in Its Waters," *New York Times*, 22 July 2020, <https://www.nytimes.com>.
36. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 1874 (2009), S/2020/151.
37. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 2464 (2019), S/2019/151.
38. Christopher Bing, "North Korean Hackers Ramp Up Bank Heists: U.S. Government Cyber Alert," Reuters, 27 August 2020, <https://www.reuters.com>.
39. "FASTCash 2.0: North Korea's BeagleBoyz Robbing Banks," CISA Alert (AA20-239A), 26 August 2020, <https://us-cert.cisa.gov>.
40. "FASTCash 2.0."
41. United Nations, Report of the Panel of Experts Established Pursuant to Resolution 2464 (2019), S/2019/151.
42. US Department of the Treasury, "Guidance on the North Korean Cyber Threat," DPRK Cyber Threat Advisory, 15 April 2020, <https://home.treasury.gov>.
43. Jeongmin Kim and Kelly Kasulis, "North Korea Calls The US Its 'Biggest Enemy' and Vows to Keep Developing Nukes," NK News, 2021, <https://www.nknews.org>.
44. Kim and Kasulis, "North Korea Calls the US Its 'Biggest Enemy.'"
45. Ankit Panda, "What Biden Should Know about North Korea's New Nuclear Plans," Carnegie Endowment for International Peace, 15 January 2021, <https://carnegieendowment.org>.
46. Michael Brodka, "Restarting Negotiations with the DPRK: A Timely Opportunity for Multilateral Diplomacy," *Joint Communiqué* 2, no. 1 (2021): 6–7, <http://faoa.org>.
47. Markus Garlauskas, "Fast Thinking: What We're Watching in North Korea," Atlantic Council, 13 January 2021, <https://www.atlanticcouncil.org>.

48. Victor Cha, "Denuclearizing North Korea: Six Options for Biden," War on the Rocks, 22 December 2020, <https://warontherocks.com>.
49. Kelsey Davenport, "Chronology of U.S.-North Korean Nuclear and Missile Diplomacy," Arms Control Association, July 2020, <https://www.armscontrol.org>.
50. Markus Garlauskas, "Fast Thinking."
51. Kelsey Davenport, "The U.S.-North Korean Agreed Framework at a Glance," Arms Control Association, July 2018, <https://www.armscontrol.org>.
52. Cha, "Denuclearizing North Korea."
53. Andrei Lankov, Peter Ward, Ho-yeol Yoo, and Ji-young Kim, "Making Money in the State: North Korea's Pseudo-State Enterprises in the Early 2000s," *Journal of East Asian Studies* 17 (2017): 51–67.
54. Lankov et al., "Making Money in the State," 51.
55. Ana Nicolaci da Costa, "What Would It Take for North Korea to Join the IMF?" BBC News, 12 October 2018, <https://www.bbc.com>.
56. Byung-Yeon Kim, "Future Scenarios for North Korea's Economy: Challenges and Opportunities," Center for Strategic and International Studies, 1 December 2020, <https://www.csis.org>.
57. Victor Cha, "Engaging North Korea Anew: A Bold Political Strategy Should Accompany Nuclear Negotiations," *Foreign Affairs*, 17 November 2020, <https://www.foreignaffairs.com>.

Al-Qaeda's Keys to Success

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Over the past 20 years, al-Qaeda has been the most recognizable and infamous terrorist organization on the planet. The group has planned and executed thousands of violent attacks, spurred dozens of offshoot affiliate and copycat groups, and even created rival Islamic extremist organizations. Despite all this, and subsequently spending the past 20 years at war with the world's most effective militaries, the group continues to carry out its operations. Moreover, the success of foreign al-Qaeda affiliates illustrate that the group has become a global threat. Analyzing the tools that the organization has used to succeed will give us a better understanding of how to combat al-Qaeda. Perhaps more importantly, it will also help intelligence agencies recognize what strategies the group will likely employ in the future. There are some who argue that al-Qaeda is dying. In this article, I argue that not only is it far from dead, but that the main factors contributing to al-Qaeda's continued global success are decentralization, effective narratives and propaganda, and the specific targeting of locations with a preexisting history of instability and violence.

This article will use three al-Qaeda affiliates and allies—al-Shabaab, Ansar al-Dine (AAD), and al-Qaeda in the Indian Subcontinent (AQIS) — to demonstrate each of the above listed success factors. However, before we can discuss how al-Qaeda has achieved their success, we must first define success. If success is to be defined as the completion of each organization's stated goals, none of them have yet succeeded. For example, "For Al Qaeda in the Islamic Maghreb (AQIM) . . . the goal is to overthrow regimes in North Africa, especially Algeria, and replace them with an Islamic regime."¹ Moreover, if one takes the global end-state as described by al-Qaeda's once-spiritual and now operational leader Ayman al-Zawahiri: "It is the hope of the Muslim nation to restore its fallen caliphate and regain its lost glory,"² then al-Qaeda has not come even close to accomplishing its goal. AQIM has been unable to topple the Algerian government, and, along with AAD, it failed to topple the government in Mali in 2012 despite its attempt to hijack the Tuareg rebellion. As for the global al-Qaeda movement, it remains a disparate and decentralized entity, rather than a "restored" and unified caliphate as imagined by al-Zawahiri. To examine al-Qaeda's successes, one must recognize that, despite not achieving its stated political goals, it has been able to achieve significant global disruption. Therefore, it is worth investigating how they have been successful in that sense, despite the efforts of much stronger opponents. For the purposes of this article, I will define success using three criteria: relative free-

dom to carry out violent attacks with low probability of state interference, steady sources of recruitment and resupply, and a high probability of continued survival of the group and its leaders. I will show that, due to the success factors listed above, al-Qaeda as a global organization has been and will continue to be successful.

Decentralization

The first key to al-Qaeda's success is its ability to operate in a decentralized fashion. Currently, it has a global network of affiliates, allies, and supporters across the planet, including at least five major regional affiliates and more than 14 allied terrorist groups.³ However, this was not always the case. Before 2001, al-Qaeda was a more centralized organization with most of the operational control falling under Osama Bin Laden. Then, as pressure from the US and its allies mounted, the organization was forced to adapt and change how they did business. "In the following years (after 2001), al-Qaeda adapted to increased pressure, especially from the U.S. military in Afghanistan and Pakistan, by further decentralizing its decision-making and operational planning. Bin Laden recognized regional groups that became their own centers of operation."⁴ As it evolved, its focus naturally shifted to a more decentralized operational model. It began to create affiliates, like al-Qaeda in the Arabian Peninsula (AQAP), AQIM, and al-Qaeda in Iraq (AQI), and allowed them to carry out attacks autonomously, establish interactions among themselves, and set up further alliances in still more regions and countries.

Before continuing, it is important to identify the nature of the connections that largely comprise the global al-Qaeda network. Broadly, the organization can be split into four categories: al-Qaeda Central, affiliates, allied groups, and inspired networks. al-Qaeda Central is the group's leadership nexus commanded by Ayman al-Zawahiri that is mostly located in Pakistan. One can argue which organizations fall into the categories of affiliated groups and which are merely allies but, in general, affiliates are formal yet geographically separated branches of al-Qaeda. AQIM, AQIS, AQAP, and Al Shabab all fall into this category. Third are the allied groups "that have established a direct relationship with Al Qaeda but have not become formal members. This arrangement allows the groups to remain independent and pursue their own goals, but to work with Al Qaeda for specific operations or training purposes when their interests converge."⁵ Finally, there are the inspired groups that do not have any formal contact with al-Qaeda, but have been inspired by the message, actions, or branding of al-Qaeda as a whole.

All these entities have ties of varying degrees to al-Qaeda Central. Furthermore, all these entities, particularly the affiliates, contribute to the overall success of greater al-Qaeda by virtue of their links to the organization. AAD falls into the

third category of al-Qaeda allied groups. Although al-Qaeda would classify it as an ally rather than an affiliate, according to the US State Department “AAD is an organization operating in Mali which cooperates closely with AQIM, a designated Foreign Terrorist Organization...AAD has received support from AQIM since its inception in late 2011 and continues to maintain close ties to the group. AAD has received backing from AQIM in its fight against Malian and French forces.”⁶ This means that AAD has autonomy to carry out its own main objectives—fighting the French and local Malians—while still receiving training, funding, and legitimacy from their links to al-Qaeda.

How does this translate into a tool for success for the global al-Qaeda enterprise? In addition to making worldwide operations possible, decentralization can be effective in spreading the al-Qaeda brand. As Rohan Gunaratna in his book *Inside Al Qaeda* explains, “What gives al-Qaeda its global reach is its ability to appeal to Muslims irrespective of their nationality, giving it unprecedented reach. It can function in East Asia, in Russia, and the heart of Europe, in sub-Saharan Africa and throughout Canada and the US with equal facility.”⁷ Working with allies like AAD means that the al-Qaeda brand is being carried to many countries and peoples. Furthermore, it is heightened by local individuals who coopt the message into their local context and carry the message to their towns and villages. This gives al-Qaeda global reach and influence that translates into recruitment potential and local support. Thus, providing AAD and, by consequence, al-Qaeda with one of the criteria of success: a steady source of recruitment and resupply.

Perhaps the best example of local context resulting in support for the larger al-Qaeda movement comes from the AAD subsidiary, the Macina Liberation Front (FLM). Although still a part of the AQIM organizational structure, the FLM maintains specific cultural and tribal associations, as it is primarily composed of members of the Fulani ethnic group. Though the FLM’s broad objectives remain the same as AAD and AQIM, its narrative and some of its unique objectives are shaped by the group’s affiliation with the Fulani ethnicity and tribal identity.⁸ The name “Macina” is a reference to the Macina empire, which was a nineteenth-century Fulani imperial power in the Sahel. The FLM leans heavily on the backdrop of this historical empire for legitimacy, power, and support among disenfranchised Fulani, and AQIM is more than happy to use the same highly localized issues to benefit its overall objectives.⁹

However, arguably the greatest benefit of decentralization, whether through allies like AAD or regional affiliates like AQIM, is simple strength and resilience. This is vital to al-Qaeda networks worldwide. Although local fighters in are unlikely to commit transnational acts of terror, they carry the banner of al-Qaeda. By having a global network, al-Qaeda is stronger, harder to fight, and more tactically

and strategically effective. “Al-Qaeda’s expansion is made much more dangerous by the existence of such relationships...It is now sharing finances, fighters, and tactics across large geographic areas...the entire network is stronger”¹⁰ This means that not only does decentralization aide in recruitment and spreading narrative, but it also gives the group greater freedom to carry out attacks in a myriad of locations while simultaneously protecting al-Qaeda leadership from the consequences of those attacks.

Conflict Locations

The second way that al-Qaeda has found success stems from their desire to continue on the path toward decentralization. In their need to establish geographically distant affiliations and alliances, al-Qaeda has consistently chosen locations where there is a preexisting history of instability and violence. “Al Qaeda has flourished in an environment of weak or quasi-states that are undergoing disruptive political or social change. Vast swaths of political instability in many parts of the world, and particularly in Africa and Asia, have provided a breeding ground for al Qaeda and its analogues.”¹¹ These locations are rife with poor governance, armed groups, and militias not tied to the state and supplied with unregulated weapons. These conditions make for the perfect foundation of al-Qaeda success as defined above.

If one examines al-Qaeda’s main affiliates — AQAP, AQIS, AQIM, and Al Shabab — as well as most if its allies — like Ansar Dine and Hay’at Tahrir al-Sham from Syria — they all came into being amid conditions of conflict and unrest in their respective locations. This is not to say that al-Qaeda has not set up cells and alliances in locations that are more stable. However, it is in conflict zones that the local al-Qaeda affiliates are the most successful. Thus, due to widespread war and civil conflict, Africa has presented a perfect target for al-Qaeda Central, which has been their breeding ground for over 30 years.

Why is it that conflict zones, especially internal civil wars like the ones that gave rise to AQAP, AQIM, AQI, and al-Shabaab, provide such fertile soil for al-Qaeda’s expansion? It may seem evident on the surface, but it nevertheless warrants some investigation. One of the most dangerous consequences of civil war is the weakening and potential dissolution of the power of the state and its institutions to ensure its own security. In his 2003 work *Failed States, Collapsed States, Weak States: Causes and Indicators*, author Robert Rotberg said “Nation-states fail because they are convulsed by internal violence and can no longer deliver positive political goods... (No political good) is as critical as the supply of security.”¹² Without no state power to limit extremist operations, freedom of movement is guaranteed. Additionally, as the state can provide little to its people, the extremist

organizations can become a surrogate for the state, making recruitment far easier than it would have been with the existence of strong government apparatus. Civil wars create “certain conditions that assist terrorist groups in recruiting and operating more freely. These conditions are easily sustained in a failed state because of the lack of government control.”¹³ The creation of al-Shabaab in Somalia is perhaps the most devastating examples of al-Qaeda using an already tense situation to infiltrate and create an affiliate.

There is significant evidence that, as early as the 1980’s, al-Qaeda had already begun to infiltrate into the Horn of Africa Region. “The countries of East Africa and the Horn offer an enticing environment for al Qaeda to exploit. Poverty is widespread. Social and economic inequality is common. Political marginalization of minority groups exists in every country...”¹⁴ Although, in the beginning, most of al-Qaeda’s support would have come in the form of providing logistical and material support to ideologically aligned militias and organizations. By the 90’s, its influence could be felt in multiple countries. “Most of the al-Qaeda-related attacks in Ethiopia were carried out by a Somali-based organization known as al-Ittihad al-Islami (AIAI) or Islamic Unity in the early and mid-1990s. Although probably not controlled by al-Qaeda, growing evidence indicates that AIAI received training and support from al-Qaeda.”¹⁵ al-Qaeda, true to form, was taking full advantage of turmoil wherever possible. However, it was Somalia that would present al-Qaeda with the ideal location for its newest affiliate.

In May of 1988, after over 20 years of rule, tribal forces backed by Ethiopia rebelled against the military Junta of General Siyad Barre. Although resistance against Barre had been building for years in the largely ungovernable tribal areas of Somalia, it would still be three years until the rebels defeated the government forces and force Barre to flee. Unfortunately, the rebel victory did not result in a new government structure, but rather caused the nation to dissolve into chaos, infighting, warlords, and anarchy.¹⁶ The plight was made still worse by a drought that struck in 1992 and subsequent attempted international interventions that ended in the disastrous “Blackhawk down” incident of 1993.¹⁷

Into this chaos stepped Somalia’s Islamic Courts. More than legal entities, the Islamic Courts were a response to the complete lack of security and stability throughout the country. Although their legitimacy was largely based in religious fundamentalism, “The establishment of the Islamic Courts was not so much an Islamist imperative as a response to the need for some means of upholding law and order. The Islamist agenda in the Courts was not particularly ‘programmatic;’ they were not presided over by expert Islamic judges, nor were they adherents to any specific school of Islamic law.”¹⁸ Their true objective was to reign in some of the anarchy that begun in the 1990s. Using various militias and extremist groups

and their military arm, over the next 15 years the courts consolidated their power. By 2006 the Islamic Courts controlled well over 50% of what used to be the Somali Republic.¹⁹

In 2006, several of the Courts united to the Islamic Courts Union (ICU). As they had in the past, the ICU chose to use the militia known as *Al Shabab* as their military wing to enforce their edicts and decrees throughout Somalia. On the surface, the ICU was supposed to be a moderating force that sought to bring people together from all ends of the spectrum of political Islam. However, by this time al-Qaeda had been working ceaselessly to gain a foothold in al-Shabaab and the imprint of its ideology was undeniable. According to Cedric Barnes and Harun Hassan in *The Rise and Fall of Mogadishu's Islamic Courts*, "...key activists within the Islamic Courts certainly subscribed to forms of political Islam ranging from Quttubism to Wahabism that have all espoused radical, violent and anti-'Western' sentiment in some form or other. . . . It was certainly true that militant jihadis, above all al-Shabaab, became an important component of the overall Islamic Courts coalition."²⁰ With the general acceptance of al-Shabaab as a primary military wing of the ICU, and al-Qaeda's control over al-Shabaab's ideological stance, al-Qaeda was at least nominally in charge of the politics of Somalia.

In December 2006, United Nations and Ethiopian troops, along with troops from Somalia's nascent Transitional Federal Government (TFG), attacked the extremist elements of the ICU and pushed it out of Mogadishu. The ICU splintered and subsequently disbanded on December 27, 2006. However, al-Shabaab continued to remain active throughout 2012. It fought against the TFG, African Union, and UN forces, as well continued to strengthen its ties to al-Qaeda.²¹ In 2009, al-Shabaab's leadership made a video pledging allegiance to al-Qaeda and, in 2012, al-Qaeda made al-Shabaab an official affiliate.²²

al-Qaeda shaped and eventually subsumed al-Shabaab by targeting a region where violence and chaos were and remain rampant. A lack of governmental security and state-provided authority rendered Somalia an ideal location for an affiliate. However, it was by no means unique. Mali, Yemen, Syria, Iraq, and Pakistan all have similar stories and, as such, all are the home bases for powerful and prolific al-Qaeda Affiliates.

Propaganda and Narrative

The usage of effective narratives and propaganda networks is the third and final method by which al-Qaeda can succeed regularly. We have already seen how al-Qaeda used the preexisting hatred and rivalries during the Algerian Civil War to gather recruits to their name. We also saw how AAD used its affiliation with al-Qaeda to gain prestige and legitimacy, while al-Qaeda Central used AAD to

spread their brand. However, the propaganda networks are not limited within the bounds of war, nor are they static in their growth, evolution, or distribution. In his 2015 piece “Confronting The Changing Face Of Al-Qaeda Propaganda,” Alberto Fernandez illustrated that “Over the years, al-Qaeda and its fellow travelers have transitioned to new platforms and mechanisms as circumstances have changed... in late 2012, the extremists’ migration to social media such as Twitter and beyond accelerated.”²³ al-Qaeda and its allies and offshoots made use of its already decentralized structure to quickly and poignantly spread its narrative globally.

There is not an affiliate that has not participated in the pervasiveness of al-Qaeda propaganda, although some with more success than others. For example, AQAP has been the most prolific affiliate, with products that range from magazines to twitter accounts, targeting anyone who may be vulnerable to radicalization, all with the goal of attracting recruits and support. They use a various mediums and method of communication which allow their narrative to transcend both technology and literacy barriers. For example, in 2010, al-Qaeda launched the online magazine *Inspire* in several languages. Thanks to the ease of internet dissemination, the magazine “become a vital recruitment method for al-Qaeda. The ‘Inspire magazine’ ‘encourages young Muslims [men] in the West to commit terrorist attacks’”²⁴ Additionally and perhaps even more dangerously, it publishes everything from tactics and training techniques for would-be militants, to step-by-step instructions on bomb-making.

Unfortunately, these tactics not only work, but have been absolutely fundamental in spreading al-Qaeda and building its recruitment base. The creation of AQIS is one of the most recent displays of this very phenomenon. Created in 2014 out of various al-Qaeda allies operating in Pakistan, India, and Bangladesh, AQIS has shown itself to be highly adept at utilizing media and propaganda. Less than a month after its creation in September of 2014, they launched an online magazine, “Resurgence.” Produced by *As Sahab*, al-Qaeda Central’s propaganda arm, “the magazine covers a variety of jihadist topics... heavily focused on recent events, especially al Qaeda’s activities in the Indian Subcontinent.”²⁵ Although mostly targeting subcontinental audiences, “Resurgence” is still produced by al-Qaeda Central. However, AQIS maintains its own autonomous propaganda efforts that do not stop with the magazine.

In Bangladesh, AQIS’ media blitz has had, arguably, the most prolific effect of any of their target locations. Partially as a consequence of AQIS’s recent creation and partially due to religious friction in Bangladesh, AQIS can present itself as highly attractive to the local population by using fundamentalist rhetoric mixed with modern means of distribution. Broadly, AQIS’s propaganda focuses on four main narratives: the threat (real or perceived) of Indian hegemonic ambition,

Muslim persecution, the religious credentials of the state leadership, and the overall promotion of Islamic values, particularly as they pertain to contrasting governmental policies.²⁶ Each narrative is consistently rooted in both Islamic fundamental thought and real-world issues facing Bangladeshis to ensure the widest possible appeal while maintaining Islamic legitimacy for al-Qaeda Central.

The rhetoric is not the only thing that gives Islamist narratives their appeal. AQIS has also proven adroit at using social media and other technological platforms. "AQIS's online propaganda has attracted disenchanted and frustrated youths within Bangladesh. A 2017 survey conducted by the Bangladeshi Police with 250 extremists revealed that 82 percent of them were originally inspired by social media propaganda"²⁷ Moreover, once radicalized, these same youths continue to use these social media platforms to communicate among each other and make efforts to radicalize their peers.

More worrying than just the appeal of the AQIS narrative is that, thus far, it has proven difficult to combat, while remaining effective in shielding AQIS leadership from implication and arrest. Despite the recent series of operations aimed at disrupting the networks of Islamist militants, AQIS' continued online propaganda efforts have negative implications for peace and security in Bangladesh. Security forces are in the dark about the whereabouts of some of the key figures of AQIS... (yet) they remain active as evident from their online statements."²⁸

Kinetic operations can do little to counter the pervasive effects of AQIS online presence and producing counternarratives often fails when those narratives are seen to originate within the government. Thus, AQIS uses its propaganda networks to ensure steady recruitment sources and, in some cases, even protect its leadership from apprehension. As a result, AQIS and all the other affiliates who employ similar strategies are able to use them to maintain their continued success.

This analysis would be incomplete without addressing the counterargument, which, since 2014, has often taken the shape of al-Qaeda's perceived setbacks or failure due to the rise of ISIS. There are some who would argue that with ISIS's achievements over the past five years, al-Qaeda's model is not one of sustained success. However, further investigation shows that ISIS' successes are, in fact, proof of al-Qaeda's continued global success. First, ISIS was an offshoot of al-Qaeda and modeled much of their strategy from that of al-Qaeda. They used effective propaganda networks and undoubtedly focused on locations already in conflict (often caused by al-Qaeda itself). However, unlike al-Qaeda, ISIS chose to maintain a central physical location of its power and authority. Though it began to spread using its propaganda, ISIS's focus was almost always its self-proclaimed caliphate in Syria and Iraq.

Fortunately, this unwillingness to decentralize gave the US and its allies a distinct target. Coalition partners were able to strike at the Islamic State with relative impunity because they knew where it was. Clear battle lines could be drawn, and territory could be retaken. When ISIS chose not to follow the al-Qaeda strategy of decentralization, they ensured their own short-lived success. While they still exist today, ISIS fighters are weakened and hiding. Those still able to consistently carry out operations are, in fact, ISIS affiliates — the result of ISIS using the al-Qaeda model to ensure survival. Using the criteria for success laid out in the beginning of this article, ISIS is mostly unsuccessful as of this writing. Conversely, and unfortunately, al-Qaeda has weathered the storm and may be emerging to prominence yet again if the actions of its affiliates in Africa, India, and the Yemen are any indication.

Decentralization, effective narratives, and propaganda, as well as a focus on locations with a preexisting history of instability and violence, have been al-Qaeda's keys to continued global success. Although groups like ISIS may have emerged to briefly challenge this model's effectiveness, al-Qaeda has proven to be consistent in its ability to foster success. With this model, al-Qaeda has relative freedom to carry out violent attacks with a low probability of state interference, steady sources of recruitment and resupply, and high probability of its continued survival. Moreover, given the efficacy of these strategies, it would not be difficult to assess that al-Qaeda will continue using them to prolong their achievement. With that foreknowledge, governments and policy makers can improve their decisions regarding the ideal methods by which nations and individuals can counter al-Qaeda, and thereby begin to stymie that success. ♣

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Notes

1. Seth G. Jones, "Re-Examining the Al Qaeda Threat to the United States" (Paper presented before the Committee on Foreign Affairs Subcommittee on Terrorism, Nonproliferation, and Trade, Committee on Foreign Affairs Subcommittee on Terrorism, Nonproliferation, and Trade, United States House of Representatives, One Hundred Thirteenth Congress, First Session, July 18, 2013).
2. Ibid.
3. Mapping Militant Organizations. "Al Qaeda."
4. Zimmerman, "Al Qaeda Renewed."
5. Seth G. Jones, "Re-Examining the Al Qaeda Threat to the United States"
6. "Terrorist Designations of Ansar Al-Dine," U.S. Department of State, accessed October 13, 2019.
7. Rohan Gunaratna, *Inside Al Qaeda* (New York: Columbia University Press, 2002).
8. Francesco Angio, "Jihadist Groups in the Sahel. An Etymological Analysis," *Revista Unidad de Investigación Sobre Seguridad y Cooperación Internacional*, no. 46 (January 2018).
9. Pauline Le Roux, "Confronting Central Mali's Extremist Threat," *Africa Center for Strategic Studies*, February 22, 2019.
10. Katherine Zimmerman, "Al-Qaeda Renewed: It is Decentralized and Dangerous"
11. Paul J Smith, "Transnational Terrorism and the al Qaeda Model: Confronting New Realities," *Parameters*, Summer 2002, pp. 33-46. Accessed October 20, 2019
12. Robert I Rotberg, *Failed States, Collapsed States, Weak States: Causes and Indicators* (World Peace Foundation, 2003).
13. Suman Soni, "Terrorism in Civil Wars," *The Strategy Bridge*, accessed September 7, 2020, <https://thestrategybridge.org/the-bridge/2018/10/30/terrorism-in-civil-wars>.
14. David Shinn, "View of Al-Qaeda in East Africa and the Horn," *Journal of Conflict Studies*, SUMMER 2007, 47-75.
15. Shinn.
16. Hamza Ashrif, "Somalia: The Forgotten Story," accessed September 7, 2020, <https://www.aljazeera.com/programmes/aljazeeraworld/2016/10/somalia-forgotten-story-161027115655140.html>.
17. Martin Meredith, *The Fortunes of Africa: A 5000-Year History of Wealth, Greed, and Endeavour*, First edition (New York: Public Affairs, 2014).
18. Cedric Barnes and Harun Hassan, "The Rise and Fall of Mogadishu's Islamic Courts," *Journal of Eastern African Studies* 1, no. 2 (July 1, 2007): 151-60, <https://doi.org/10.1080/17531050701452382>. Mogadishu, has severely deteriorated since the US-backed Ethiopian intervention in the country. The Islamic Courts, which were ousted, had strong support in the country but fell victim to the influences of 'extremist elements' within the country and an Ethiopian power eager for the Courts' downfall. The local standing of the Islamic Courts was damaged by their defeat, but the subsequent disorder has served to make their time in control appear as a 'Golden Age'. Support for the Courts has been fairly consistent for over a decade and is therefore unlikely to melt away." "container-title": "Journal of Eastern African Studies", "DOI": "10.1080/17531050701452382", "ISSN": "1753-1055", "issue": "2", "note": "publisher: Routledge\n_eprint: <https://doi.org/10.1080/17531050701452382>", "page": "151-160", "source": "Taylor and Francis+NEJM", "title": "The Rise and Fall of Mogadishu's Islamic Courts", "volume": "1", "author": [{"family": "Barnes", "given": "Cedric"}, {"family": "Hassan", "given": "Har"}]

un"]], "issued": {"date-parts": [{"2007", 7, 1}]}], "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"}]

19. Shinn, "View of Al-Qaeda in East Africa and the Horn."

20. Barnes and Hassan, "The Rise and Fall of Mogadishu's Islamic Courts." Mogadishu, has severely deteriorated since the US-backed Ethiopian intervention in the country. The Islamic Courts, which were ousted, had strong support in the country but fell victim to the influences of 'extremist elements' within the country and an Ethiopian power eager for the Courts' downfall. The local standing of the Islamic Courts was damaged by their defeat, but the subsequent disorder has served to make their time in control appear as a 'Golden Age'. Support for the Courts has been fairly consistent for over a decade and is therefore unlikely to melt away.", "container-title": "Journal of Eastern African Studies", "DOI": "10.1080/17531050701452382", "ISSN": "1753-1055", "issue": "2", "note": "publisher: Routledge\n_eprint: https://doi.org/10.1080/17531050701452382", "page": "151-160", "source": "Taylor and Francis+NEJM", "title": "The Rise and Fall of Mogadishu's Islamic Courts", "volume": "1", "author": [{"family": "Barnes", "given": "Cedric"}, {"family": "Hassan", "given": "Harun"}], "issued": {"date-parts": [{"2007", 7, 1}]}], "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"}]

21. Mapping Militant Organizations, "Al Shabaab," Stanford University, Mapping Militant Organizations, January 2019.

22. Nelly Lahoud, "The Merger of Al-Shabab and Qa'idat al-Jihad," Combating Terrorism Center at West Point, February 16, 2012, <https://www.ctc.usma.edu/the-merger-of-al-shabab-and-qaidat-al-jihad/>.

23. Alberto Fernandez, "Confronting the Changing Face of Al-Qaeda Propaganda," *Washington Institute for Near East Policy: Policy Focus*, no. 139 (April 2015): 32–37.

24. Esther Solis Al-Tabaa, "Targeting a Female Audience: American Muslim Women's Perceptions of al-Qaida Propaganda," *Journal of Strategic Security* 6, no. 3 (2013): 10–21.

25. Thomas Joscelyn, "Analysis: Al Qaeda's 'Resurgence' Focuses on Indian Subcontinent," *Long War Journal*, October 23, 2014.

26. Shafi Md Mostofa, "A Study of Al-Qaeda's Propaganda Narratives in Bangladesh," *Counter Terrorist Trends & Analysis* 11, no. 2 (February 2019): 1–5.

27. Ibid.

28. Ibid.

China–South Korea Relations Amid the Sino-American Strategic Rivalry

ANTHONY V. RINNA

Abstract

South Korea's perception of China's role in both the denuclearization and peaceful unification of the Korean Peninsula has in part shaped the Republic of Korea's (ROK) current unwillingness to align itself with the US's *Indo-Pacific Strategy*, especially due to the significant effects Sino-US tensions have on Beijing's strategy toward the Korean Peninsula. In particular, Seoul remains concerned that outright alignment with the United States against China could exacerbate the Korean Peninsula's position in Sino-US strategic competition. For South Korea, this carries the risk of both Seoul's diminished influence in the pursuit of Korean denuclearization amid Sino-US tensions as well as a reduction of Beijing's prospective support for Korean unification under the ROK's lead.

Introduction

Against the backdrop of the US's official designation of South Korea as the "linchpin" of its Indo-Pacific Strategy, policy makers in the Republic of Korea (ROK) are struggling to define how they will promote and pursue Seoul's national interests on the Korean Peninsula amid the Sino-US strategic rivalry. Indeed, despite Seoul's designation as a strategic linchpin, the ROK has not officially endorsed Washington's Indo-Pacific vision.

In this context, US attempts to enlist Seoul in a framework aimed at containing China have combined with the ROK's emphasis on the need for both South Korean-led denuclearization and the peaceful reunification of the Korean Peninsula. What this may mean is that Seoul faces pressure to choose strategic alignment with Washington against Beijing's rising ambitions at the cost of some of its own core interests, the realization of which the ROK considers China's support to be indispensable. In particular, strategically aligning with the US against China will potentially prompt Beijing to harden any opposition it has toward major shifts in the status quo on the Korean Peninsula that appear favorable to US interests. This could include calcifying policy differences between China and the US regarding the best path forward toward denuclearization and strengthening Beijing's views of a separate North Korean state providing a buffer against US ally the ROK.

By its very nature, the ROK-US alliance prevents China and South Korea from becoming particularly close,¹ especially as China considers the ROK-US alliance to be set against North Korea and to constitute an integral part of the US bid to contain China.² Nevertheless, from South Korea's vantage point, Beijing's willingness to support Seoul's interests requires a solid China-ROK relationship despite South Korea's security alignment with the US. Indeed, the state of China-US relations has a significant effect on Beijing's ties with Pyongyang and Seoul, arguably more so than the state of the two Koreas' respective ties with the People's Republic of China (PRC).

Whereas a downturn in Beijing-Seoul relations does not necessarily translate into an uptick in China-North Korea relations, China's relations with the US significantly affect the state of play on the Korean Peninsula as far as Chinese interests are concerned, in part given that Sino-US tensions throw the strategic value (for China) of a separate North Korean state's role as a buffer into sharp relief.³ As such, a fear of needlessly undermining relations with the PRC has informed Seoul's hesitancy to fully endorse Washington's Indo-Pacific strategy.⁴ Instead, South Korea has pursued what is frequently labeled as "strategic ambiguity,"⁵ attempting to stake out a position between China and the US so that it can utilize the benefits it gains from its relations with both countries in pursuit of its own interests. Of course, key South Korean goals such as the denuclearization and unification of the Korean Peninsula also constitute core US interests. China likewise considers denuclearization of the Korean Peninsula to be a priority (although its position on unification is less certain). Yet the perceived risk for South Korea is that outright alignment with Washington against Beijing will undermine Seoul's ability to pursue these fundamental interests on its own terms.

The Korean Peninsula in Sino-US Strategic Competition

The Korean Peninsula has increasingly become a geographic locus of contention between Beijing and Washington due to a combination of the worsening crisis over the North Korea's weapons capabilities as well as the Sino-US trade war.⁶ Strategically, the Korean Peninsula has a dual significance for China, as peninsular stability is important for both China's Northeast Asian subregional interests as well as its growth as a great power.⁷

One of the essential principles of Beijing's Korea policy has long been to maintain strong ties with the Democratic People's Republic of Korea (DPRK), calling for restraint (as opposed to blaming Pyongyang) in the event of a North Korean security provocation. In recent years, China's policies toward North Korea have become increasingly couched in the specter of strategic competition with the United States.⁸ Helping to perpetuate the perception in many quarters of the

PRC's foreign-policy elite of the DPRK as a strategic asset providing a buffer between China and South Korea,⁹ it also attempts to exercise leverage in the North Korean security crisis in relation to the Sino-US strategic competition.¹⁰

Pyongyang's security provocations since the second North Korean nuclear crisis in 2002–2003 have, however, prompted a more robust debate regarding North Korea's value in Beijing's foreign policy.¹¹ Particularly due to the DPRK's 2013 nuclear test, Beijing took on a revised Korea policy based on the concept of China as a rising great power, de-emphasizing peripheral security in favor of the role that the Korean Peninsula plays in China's strategic vision of turning the PRC into an undisputed global power.¹² Nevertheless, Beijing continues to provide what it considers to be a necessary degree of support for the DPRK to prevent significant economic or political problems in North Korea from causing instability on China's periphery.¹³

Furthermore, the China-DPRK relationship has experienced a new sense of purpose in Beijing's foreign policy as the Korean Peninsula becomes a node of Sino-US strategic tensions. Historical narrative in particular has recently played an increasingly prominent role in the way the Korean Peninsula has become a focal point of Sino-US strategic enmity, with a recent emphasis on the notion of Beijing's participation in the Korean War as an act against American military aggression. The most notable example of this is Xi Jinping's speech at the Great Hall of the People on 25 October 2020 commemorating Beijing's actions in the war; also attendant is a pervasive revival of the Korean War-era rallying cry of "*resist America, aid Korea*" in Chinese public discourse as relates to Beijing-Washington strategic tensions. Recent examples include statements from Chinese military and civilian officials and other organs of the Chinese Communist Party that draw parallels between China's intervention in the Korean War and modern Sino-US tensions.¹⁴

Yet even amid a recognition of the DPRK's importance for China in Beijing's strategic standoff with Washington, Beijing's Korea policy under Xi Jinping—against the views of traditionalists in Chinese policy circles—has placed an unprecedented emphasis on relations with the ROK.¹⁵ The reason for this (China's continued recognition of the DPRK's strategic value notwithstanding) has been to decrease Beijing's emphasis on ties with a reckless North Korea and instead turn the China-ROK relationship into the node of Chinese influence on the Korean Peninsula. Beijing's motive for doing so in part stem from a belief that turning South Korea into China's "pivotal state" in Northeast Asia would undermine the ROK-US alliance.¹⁶

China–South Korea Relations: Evolving Yet Unbalanced

China–South Korean relations, formally established in 1992, have evolved significantly in terms of their official designation, expanding from their initial status as a so-called amicable cooperative relationship to their current state as a “strategic partnership” in 2008. Yet despite their outward appearance, designations such as “amicable cooperative relationship” and “strategic partnership” have in some ways negatively affected ties between Beijing and Seoul, as such official labels have led to so-called strategic expectations which, when not met, have led to “strategic mistrust” between the two.¹⁷

Even more so, however, South Korea’s relations with the United States have also significantly shaped the trajectory of China–ROK relations. Indeed, whereas China–ROK relations grew notably under Kim Dae-jung (1998–2003) and Roh Moo-hyun (2003–2008), under Lee Myung-bak’s administration (2008–2013), China–South Korea ties were not nearly as warm as they had been. This is in part because of Lee’s emphasis on recalibrating the ROK–US alliance, which had suffered as a result of serious policy differences over North Korea policy between the United States and South Korea under the Kim and Roh administrations.

The perceived lack of action taken by Beijing after North Korea’s 2010 sinking of the ROKS *Cheonan* and attack on Yeongpyeong Island caused further deterioration in ties between Seoul and Beijing. China, for its part, blamed the cooling of DPRK–ROK relations on Lee’s refusal to continue with the “Sunshine policy”-based rapprochement with North Korea that had occurred under Kim Dae-jung and Roh Moo-hyun.¹⁸ Nevertheless, Lee perceived that South Korea’s future was invariably linked to strong relations with China and therefore sought to build upon the foundation in China–South Korean ties that his immediate predecessors had implemented.¹⁹

Considering China–ROK rapprochement and the difficulties in China–DPRK relations stemming from North Korea’s 2013 nuclear test, Xi Jinping made Seoul (rather than Pyongyang) the destination of his first visit to the Korean Peninsula in 2014. Maintaining this momentum, ROK president Park Geun-hye (2013–2017) pursued solid ties with Beijing even despite her staunchly pro-US stance.²⁰ Although China–South Korea bilateral ties suffered notably toward the end of Park’s administration due to the ROK’s decision to deploy the US’s Terminal High Altitude Area Defense (THAAD) system in 2016–2017, China and South Korea’s relationship started to mend once again under president Moon Jae-in (2017–present)—to the point that Xi Jinping had expressed a strong desire to visit Seoul by the end of 2020. The visit never materialized that year, yet Chinese foreign minister Wang Yi visited Seoul in both late 2019 and late 2020. Around the

time of his second visit to Seoul, high-level officials from the Chinese and South Korean foreign ministries convened in Beijing, where they resolved to take Beijing–Seoul ties to a “new level.”²¹

All the same, China–South Korean relations are beset by persistent asymmetry, not only in terms of each country’s respective overall national power but also insofar as which aspects of bilateral ties are the most highly developed. Economics and trade dominate China–South Korea relations, while military and security issues occupy the lowest rung of their relationship.²² Even from the outset of the launching of China–ROK relations, trade has been the most important aspect of the bilateral relationship, with remarkable growth in economic exchanges over two decades from the establishment of diplomatic ties in 1992. By 2008 China took top place among South Korea’s trade partners.²³

China–South Korea relations have developed parallel to Seoul’s tight-knit security alignment with Washington to the extent that South Korean policy makers speak of their country’s relationship as being primarily rooted toward China in the economic realm and toward the United States in the security sphere. These spheres, however, are not entirely mutually exclusive, for as long as China–ROK ties in the security field remain affected by Sino–US tensions in the military and security sphere, other aspects of Beijing–Seoul ties will remain stunted as well.²⁴ This does not negate the fact, however, that South Korea plays a crucial role in China’s ability to push back against the US’s attempts to rein in China in the Indo-Pacific. Indeed, China’s maintenance of solid ties with the ROK is essential for Beijing’s ability to execute its strategic policies on the Korean Peninsula aimed at fighting back against what it sees as US encroachment on its sphere of influence in the Indo-Pacific.

THAAD’s Long Shadow over China–South Korea Relations

Just as deterring the longtime threat to regional security the DPRK poses comprises the mainstay of ROK–US security relations, the biggest issue in China–South Korea security relations is also North Korea. The nature in which North Korea factors into China–ROK ties, however, is vastly different from the Seoul–Washington defense partnership, given that China is apprehensive about the ROK–US alliance while South Korea remains concerned about the China–DPRK alliance.²⁵ Any South Korean hardline stance toward the DPRK has the potential to damage China–ROK ties. North Korea knows this and, with its awareness that Beijing will not punish any North Korean provocations, has the ability to sabotage any improvement in China–South Korea ties if it so desires by provoking the ROK.²⁶

Indeed, the fallout from THAAD—a system installed to provide defense against the DPRK’s persistent existential threat to the ROK—underscores the effects the North Korean security crisis has over China–South Korea relations, particularly as relates to the ROK–US alliance. While debate within South Korea over the appropriateness of deploying THAAD started off as a domestic issue within the ROK, it quickly turned into a crucial factor in Seoul’s relations with Beijing. Chinese defense officials raised the THAAD issue during a February 2015 conference in Seoul, with then–Assistant Foreign Minister Liu Jianchao again raising this concern during a visit to the ROK the following month. Seoul attempted to assuage Chinese concerns by insisting that THAAD was not aimed at China but rather was only for North Korean ballistic missiles.²⁷

South Korean lawmakers from the Democratic Party (then in opposition) later wished to discuss THAAD with the Chinese foreign ministry during a visit to Beijing, drawing criticism from policy makers across the aisle that it would set a precedent for China to be able to interfere in the ROK’s own policy-making process. Nevertheless, in the face of punitive economic measures with the tacit blessing of the Chinese government, eventually even Democratic Party lawmakers came to believe that China had used excessive force in trying to overturn what was fundamentally a policy decision aimed at strengthening the ROK’s ability to defend itself from North Korea.²⁸ All the while within South Korea itself, the ROK’s relations with China and the US continued to be a source of domestic debate over THAAD. Some South Korean opinion-makers accused fellow citizens who opposed THAAD’s deployment as being pro-Chinese. In return, opponents of THAAD accused those supporting the missile defense system’s deployment in Korea as being excessively pro-American.²⁹

China’s punitive economic actions toward South Korea during the THAAD crisis appear to have been geared not only toward retaliating against the ROK but also toward sending a warning to other countries about the dangers of aligning with the US in opposition to the PRC.³⁰ Nevertheless, for China, South Korea’s decision to allow the US to deploy THAAD aroused particularly bitter disappointment. Despite South Korea’s status as a longtime US ally, China has, since the end of the Cold War, viewed South Korea as being a potentially solid partner for the PRC. Indeed, Seoul’s overarching security policy emphasis on North Korea (as opposed to any real significant wariness over China’s military rise) as well as shared skepticism between Beijing and Seoul over Japanese remilitarization fostered a feeling among some of Beijing’s foreign-policy elite that Seoul’s strategic worldview was not entirely incompatible with Beijing’s. The ROK’s decision to host THAAD, however, caused policy makers in Beijing to view South Korea as having stabbed it in the back.³¹

The worsening of China–ROK relations due to THAAD had negative effects on both Beijing’s and Seoul’s interests. For China, cooled ties with South Korea ran counter to Beijing’s interest in maintaining favorable relations with countries along its periphery, in particular Beijing’s bid to turn the ROK into the pivotal state of its Northeast Asia policy. From Seoul’s end, THAAD sharpened the sense that South Korea’s security relationship with the US, which fundamentally contradicts Chinese interests, puts the ROK in a bind where balancing between China and the US is concerned.³²

As such, the Moon Jae-in administration set out to implement a “reset” in China–South Korea relations.³³ Given that South Korea’s ultimate decision to deploy THAAD signaled a South Korean tilt toward the US against China, Seoul has arguably found it necessary to focus on strengthening its strategic partnership with China to maintain its balanced position between Beijing and Washington.³⁴ Yet Seoul’s best efforts at restoring ties with the PRC as a result of THAAD notwithstanding, a full recovery of China–ROK ties is hardly a foregone conclusion. Even as Xi Jinping had repeatedly expressed his will to visit South Korea in 2020, China–South Korea relations are still experiencing effects from the THAAD fallout.³⁵

Although THAAD demonstrated South Korea’s vulnerability toward China in the economic sphere, particularly as relates to Seoul’s security alignment with the US, South Korea has an acute sense of how China’s strategic enmity with the US can affect the ROK’s own interests beyond the scope of mere economic suffering. Particularly with the peaceful unification of the Korean Peninsula at front-and-center of South Korea’s foreign-policy interests, one of the most pressing questions regarding South Korea’s position between Beijing and Washington is whether Seoul can reach an understanding with China over the future of a reunified Korea while maintaining solid security ties with the US for the purpose of deterring a conventional attack from North Korea.³⁶ To achieve this, South Korea cannot afford to be seen as being willing to participate in US-led initiatives aimed at containing China given Beijing’s pervasive sensitivity to how South Korea–US security cooperation allows the US to project power too close for Beijing’s comfort in proximity to the PRC’s periphery.

South Korea between China and the US: Views from Washington, Beijing, and Seoul

The US, for its part, must contend with South Korea’s current unwillingness to fully endorse the US’s *Indo-Pacific Strategy*. For decades, policy makers in the US have too often assumed that the ROK will take their side and have failed to ap-

preciate the fact that policy positions that were unthinkable even up until relatively recently have now entered mainstream policy debates in South Korea.³⁷

Washington views China's drive for enhanced ties with South Korea as being part of a bid to undermine the ROK-US alliance. Jung Pak, currently the US deputy assistant secretary of state for East Asian and Pacific affairs, has recently argued, for example, that China wishes to undermine the ROK-US alliance given its designated role as the "linchpin" of the US's *Indo-Pacific Strategy*,³⁸ conceivably through a combination of public assurances and private threats.³⁹ Even so, despite the ROK's hesitancy to sign onto Washington's strategic ambitions against the PRC, policy makers in Washington appear to be attempting to take the ROK-US alliance in a direction that will make it a component of its strategic standoff with Beijing. In recent years, the US government has implemented numerous laws and policies aimed at solidifying South Korea's position as a crucial partner in Washington's Indo-Pacific strategy, such as the Asia Security Reassurance Act of 2018 as well as the most recent iterations of the National Defense Authorization Act (NDAA) 2020. Such policies, however, appear to be out of touch with the reality that Seoul has not fully bought into the US's strategic interests.⁴⁰

Regarding public pronouncements from Beijing, rather than outright advocating for a 180-degree shift in South Korea's foreign-policy orientation away from the US toward China, several prominent voices in China's foreign-policy community, ranging from practitioners to academics at elite state-funded universities have advocated for the ROK to occupy a sort of middle ground between the PRC and the United States.⁴¹ Such views align in many ways with the views of South Korean policy makers working at the highest levels of government. Moon Chung-in, who served as ROK presidential national security adviser until February 2021, has asserted that South Korea should not perceive China as a threat and as such there is no merit for South Korea in aligning itself with the US against China.⁴² Seoul's current track of "strategic ambiguity," however, has prompted criticism from a number of high-profile detractors of the current left-of-center Moon Jae-in administration, who say that the Blue House's timid approach to China comes at the detriment of relations with Washington.⁴³

To be sure, even while Sino-US tensions negatively affect Korean interests, the ROK believes that it must be ready to promote shared values within the Indo-Pacific.⁴⁴ Nevertheless, despite South Korea's decades-long alignment with Washington in the security realm, the notion that South Korea need not participate in the Sino-US strategic competition is hardly a taboo in South Korean policy discourse that has traditionally been staunchly pro-US. A 2020 report from South Korea's National Assembly Research Service, for example, advises that Seoul must evaluate the direction of its alliance with the United States in light of

Washington's strategic competition with Beijing, particularly given the aforementioned US legislative efforts aimed at strengthening Washington position vis-à-vis Beijing.⁴⁵

Sino-US Rivalry and Its Implications for Korean Denuclearization and Unification

At the core of the debate within the ROK is how South Korea can preserve its alliance with the US while still preserving its own national interest in such a way that does not needlessly provoke China.⁴⁶ One area in which this balancing act has manifested itself is the question of North Korean denuclearization. The US willingness to negotiate with the DPRK over denuclearization affects the way the Korean Peninsula factors into Sino-US strategic tensions from China's end.⁴⁷ This fact, unfortunately for the PRC, has brought to light the underdeveloped nature of security relations between Seoul and Beijing, which arguably has a negative impact on Chinese security interests.

The 2018–2019 “era of summit diplomacy” created momentum toward a negotiation-based solution to the Korean security crisis and provided Seoul an opportunity to improve relations with Beijing. However, the ROK's insistence upon being at the forefront of a political solution to the Korean security dilemma has undermined the potential for China-ROK security cooperation.⁴⁸ Incidentally, however, South Korean experts also fear the ROK could be marginalized in questions of Korean denuclearization in the context of Sino-US tensions.⁴⁹

As the Korean Peninsula takes on an increasing air of a geopolitical battleground between China and the US, there is a risk that South Korea could be sidelined in the Korean denuclearization process, especially as the US continues to apply the “China responsibility theory.”⁵⁰ In this regard, Seoul's objective is to ensure that it leads denuclearization efforts, rather than an associate of either China or the US in a Sino-American strategic rivalry in which the issue of Korean denuclearization is but one facet.

In addition, explicitly supporting the American Indo-Pacific strategy could anger Beijing, which may lead to delayed reunification with the North, another significant detriment to South Korea's core national interest.⁵¹ In this case, as opposed to apprehensions about being sidelined by either Beijing or Washington, Seoul recognizes China's crucial function in the issue of Korean unification and is reluctant to undermine potential Chinese support for unification.

Perhaps even more so than in the past, by virtue both of its geographic proximity to the Korean Peninsula and its solid ties with both the DPRK and the ROK, China is indispensable to questions of Korean unification. Although the US of-

ficially supports a reunified Korean Peninsula,⁵² at present, the PRC's position on Korean unification—whether under Pyongyang's or Seoul's lead—is unclear. Views among China's foreign-policy elite regarding Korean unification range from those who believe unification would promote stability on China's periphery to those who fear the negative effects the PRC may be forced to contend with as a united Korea works out how to manage issues such as integrating the economically disparate north and south.⁵³

The lack of clarity regarding Beijing's views on unification notwithstanding, China has hinted in the past that it may not be opposed to Korean unification under Seoul.⁵⁴ Chinese support for ROK-led unification, however, would likely hinge on the condition that, at the very least, South Korea's pro-US orientation not undermine Chinese interests.⁵⁵ Considering this reality, if South Korea and the United States cannot assure Beijing that the ROK-US alliance can serve its purpose of deterring North Korea without infringing on Chinese interests, Beijing may eventually double-down on support for North Korea against South Korean and US interests.⁵⁶

Conclusion

The particulars of South Korean foreign policy are subject to change according to the presidential administration in Seoul as well as external circumstances in Northeast Asia's strategic environment. As such, the possibility remains that the ROK could conceivably find itself pursuing a position that inclines to a greater extent toward US interests against the PRC than South Korea currently pursues. Nevertheless, the ROK has consistently found itself pursuing increasingly intimate relations with the PRC even while maintaining a treaty alliance with the United States.

Even as Seoul has repeatedly acknowledged China's indispensability in fostering Korean peace and security, the fact remains that China–South Korea relations will remain in a difficult position as the Korean Peninsula takes on a greater importance in Sino-US strategic tensions. For South Korea, security relations with the US are ensconced in the principle of pursuing the denuclearization and unification of the Korean Peninsula while maintaining support from Washington to ensure the ROK's survival through deterrence against the DPRK.

The United States seeks to enlist the ROK, a democracy and adherent of the US's espoused “rules-based international order,” in efforts to contain China. The ROK is unique in its position as being the pro-US half of a divided country, the denuclearization and unification of which Washington's rival China serves an indispensable function. While memories of China's economic retaliation against South Korea in response to the THAAD deployment may partially inform Seoul's

unwillingness to join an explicitly anti-PRC group of nations, the roots of the ROK's reluctance to join in Washington's bid to oppose China extend to the heart of South Korea's main foreign-policy interests.

Officially, Beijing appears content to let South Korea occupy a middle ground between China and the US, even as it is no secret the PRC would prefer to see US influence on the Korean Peninsula diminished significantly. In contrast to the pervasive view in Beijing's that the DPRK is a strategic asset (even as many among China's foreign policy elite also view North Korea as a strategic liability⁵⁷), Washington does not necessarily view a divided Korean Peninsula *per se* as offering any strategic advantages as a component of a wider strategic competition with China. Nevertheless, at present the US appears to view Seoul's participation in a US-led strategic initiative aimed at China as being more important than allowing the ROK to pursue a security relationship with China that may be to South Korea's benefit. In any case, the Sino-US rivalry will continue to exert significant influence on China-ROK relations, in particular Seoul's ability to pursue policies in which both Beijing's and Washington's participation and support are crucial. 🌐

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Notes

1. Na Yǒngchu and Lee Dongmin, (나영주, 이동민), "대량 탈북 난민의 발생과 중국의 군사적 개입 가능성" (The outbreak of a large-scale exodus from North Korea and the possibility of Chinese military intervention), 통일정책연구 (*Unification Policy Studies*) 26, no. 2 (2017), 237–38.
2. Lee Sōnghyōn (이성현), "2019년 한중관계 평가와 2020년 전망" (An assessment of China-South Korea relations in 2019 and the outlook for 2020), 세종연구소 (*The Sejong Institute*), 정세와 정책 (*Situation and Policy*), no. 30, 2019.
3. Lee Sun-Woo and Hyungjin Cho, "A Subtle Difference between Russia and China's Stances toward the Korean Peninsula and Its Strategic Implications for South Korea." *Journal of International and Area Studies* 25, 1 (2018), 117–18.
4. Ferrier, Kyle, "The United States and South Korea in the Indo-Pacific after COVID-19." *Journal of Indo-Pacific Affairs* 3, no. 3 (Fall 2020), 100.
5. Also known in Korean as "walk the line foreign policy"—줄타기 외교.
6. Shin Jongho (신중호), "중국 시진핑 2기 지도부 구성과 대외정책 전망," (Xi Jinping's second period leadership formation and view on foreign policy), 통일연구원, *Korea Institute for National Unification*, 18, no. 25 (2018), 15.
7. Lee Dongnyul (이동률), "한중관계의 현황과 과제 그리고 대안" (The current state, tasks and direction of China-South Korea relations), 2013 중국정세보고 국립외교원 중국연구센터

터 (2013 China Situation Report, ROK National Diplomatic Academy, China Research Center), 2014, 3.

8. Min T'aeün, Shin Jongho, and Lee Git'ae (민태은, 신중호, 이기태) '미-중-일 정책 및 정상회담 전망' (A view of US-China-Japan policy and summitry), 통일연구원, *Korea Institute for National Unification*, CO 18, no. 43 (2018), 4.

9. Shin Jongho, (신중호), "최근 북중관계 분석 및 2015년 전망" (A recent analysis of China-DPRK relations and the outlook for 2015), 통일연구원, *Korea Institute for National Unification*, January 2015, CO 15, no. 2 (2015), 4.

10. Shin, "중국 시진핑 2기 지도부 구성과 대외정책 전망," 157.

11. "China's Evolving North Korea Strategy", *U.S.-China Economic and Security Review Commission Report*, Section 5, (2018), 415, <https://www.uscc.gov/>.

12. Kim Heung-kyu, "A View from South Korea on Sino-ROK Relations," *Korea Economic Institute of America, Joint U.S.-Korea Academic Studies*, August 2017, 27-28.

13. Lee Ch'unbok, Lee Söngu, Lee Jiyöng, and Kang Jihye (이춘복, 이성우, 이지영, 강지혜), "북한 3차 핵실험 후 중국의 대응과 북중관계: 시진핑 시대 중국의 대북정책은 진화하고 있는가" (China's relation to North Korea's third nuclear test and China-DPRK relations: China's North Korea policy under Xi Jinping is evolving), 제주평화연구원 (*Jeju Peace Institute*), 2013, 1-12.

14. Maeil Kyöngje (매일경제), "중국군 장성 '한국전쟁 참전, 美 천하무적 신화 깨뜨려'" (Chinese military officer, 'Participation in the Korean War breaks the myth of an unrivaled US'), 3 October 2020, <https://www.mk.co.kr/>; Yang Sheng and Zhang Han, "China commemorates war against US aggression in Korea," *Global Times*, 19 October 2020, <https://www.globaltimes.cn/>; and Maeil Kyöngje, (매일경제), "중국 공청단 '한국전쟁 남침 아니다...한 국가 내전' 레변 (종합)" (CCP Youth Wing argues 'Korean War not an invasion of the south, but a civil war within one country'), 27 October 2020, <https://www.mk.co.kr/>.

15. Kim, "A View from South Korea on Sino-ROK Relations," 3.

16. Sun Yun, "The Chinese Perception of the US-China-ROK Triangle," *Joint US Korea Academic Studies*, (2018), 172.

17. Cho Yöngnam (조영남), "한·중 관계의 발전추세와 전망: 바람직한 중국정책을 위한 시론 (Trends and views in the development of China-South Korea relations: expressing desirable Chinese foreign policy), 국제-지역연구 (*International and Regional Studies*) 20, no. 1 (2011), 100-01.

18. Sun, "The Chinese Perception of the US-China-ROK Triangle," 171.

19. Jung H. Pak, "Trying to Loosen the Linchpin: China's Approach to South Korea," in *Global China: Assessing China's Growing Role in the World*, Brookings Institution, 2020, 2, <https://www.brookings.edu/>.

20. Sun, "The Chinese Perception of the US-China-ROK Triangle," 172.

21. KBS News, "장하성 주중대사, 미 대선 후 중국 외교부 만나 '협력' 강조" (ROK ambassador to China Chang Ha Seong to meet with PRC foreign ministry and strengthen "cooperation" following US election'), 11 November 2020, <http://world.kbs.co.kr/>.

22. Cho, "한·중 관계의 발전추세와 전망," 9.

23. Paek Yöngsö (백영서), "역사적 관점에서 본 한중관계 25 : 성과와 과제" (25 Years of Korea-China Relations in Historical Perspective: Achievements and Challenges), 대한민국 외교부 (*ROK Ministry of Foreign Affairs*), 2017, 3.

24. Cho, "한·중 관계의 발전추세와 전망," 99.

25. Paek, “역사적 관점에서 본 한중관계 25년,” 6-7.
26. Sun, “The Chinese Perception of the US-China-ROK Triangle,” 171.
27. Park Hwirak, (박휘락), “사드 (THAAD) 배치를 둘러싼 논란에서의 루머와 확증편향,” (Rumors and confirmation bias surrounding the controversy over the THAAD deployment)” 전략연구 *Strategic Research* 23, no. 1 (2016), 16-17.
28. Scott Snyder and See-Won Byun, “Two Koreas Defy Chinese Sanctions,” *Comparative Connections* 19, no. 1 (2017), 88.
29. Paek, “역사적 관점에서 본 한중관계 25년,” 28-29.
30. Lee Sŏngghyŏn (이성현), “미중 관계의 미래와 한국의 선택,” (The future of China-US relations and South Korea’s choice), 세종연구소 *Sejong Institute*, 2019, 5.
31. Michael D. Swaine, “Chinese views on South Korea’s deployment of THAAD,” *China Leadership Monitor* 52, no. 4 (2017), 9.
32. Chŏn Byŏnggon (전병곤), “한국 새 정부의 대중정책 방향과 과제,” (The current tasks and future direction of the new South Korean government’s China policy), 통일연구원, *Korea Institute for National Unification*, 14 June 2017, 1.
33. Chŏn, “한국 새 정부의 대중정책 방향과 과제,” 2.
34. Chŏng Uksik and Lee Yongsŭng (정옥식, 이용승), “사드와 한국의 국익” (THAAD and South Korea’s national interest), 민족 연구 (*Minjok Studies*) 67, 2016, 18.
35. Lee, “미중 관계의 미래와 한국의 선택,” 4.
36. Kim Heung-kyu, “China and the US-ROK Alliance: Promoting a Trilateral Dialogue,” *Council on Foreign Relations*, 2017, 7.
37. Jeffrey Robertson, “Coming soon: a neutral South Korea?,” *The Interpreter*, 4 November 2020, <https://www.lowyinstitute.org/>.
38. Pak, “Trying to Loosen the Linchpin,” 7.
39. Pak, “Trying to Loosen the Linchpin,” 5.
40. Anthony Rinna, “The misplaced optimism of America’s Korea policy,” *East Asia Forum*, 16 January 2021, <https://www.eastasiaforum.org/>.
41. Maeil Kyŏngje, (매일경제), “중국대사 “한반도문제, 대화·협상만이 해결 방법” (China ambassador, “talks and negotiations are the only way to resolve the Korean Peninsula crisis”), September 27, 2020 <https://www.mk.co.kr/>; Hankyoreh (한겨레), “중국 “협력의 동반자”... 한국 “미·중 협력해야 평화” (‘China, “Cooperative partnership”... Korea “China-US cooperation needed for peace’), 23 August 2020, <http://www.hani.co.kr/>; and Cho Yŏngsin (조영신), “韓, 中美갈등 샌드위치 아니라 가교역할...3국 대화채널 주도” (In China-US conflict, South Korea is not a sandwich but plays a bridging role, leading the three countries into a conversation channel), 아시아경제, 6 January 2021, <https://cm.asiae.co.kr/>.
42. Moon Chung-in, “S. Korea should carefully consider its own national interest regarding alliance with the US,” *Hankyoreh*, 2 November 2020, <http://www.hani.co.kr/>.
43. Recent examples of such criticisms include media comments from China policy practitioner Chung Jong-wook (<https://www.chosun.com/>) and Kim Hyeon-wook of the ROK’s National Diplomatic Academy (<https://www.donga.com/>).
44. Kim Yegyŏng (김예경), “2020년 미중 전략경쟁 전망과 한국의 대응방향” (A view of the China-US strategic competition in 2020 and the nature of South Korea’s adaptation), 국회입법조사처 정치행정조사실 외교안보팀 (National Assembly Research Service, Politics and Administration Division, Foreign Policy and Security Team), 31 December 2019, 14.

45. Kim Dohŭi, (김도희), “미국의 인도-태평양 전략 관련입법동향과 시사점” (Legislative trends and current issues related to US's Indo-Pacific Strategy) 국회입법조사처 정치행정조사실 외교안보팀 (*National Assembly Legislative Research Group, Political Administration Research Division, Foreign Affairs and Security Team*), 8 August 2020, 7.
46. Kim Jinho (김진호), “한반도에 대한 중국인의 역사의식과 중국의 현실적 대한반도 정책.” (Chinese historic consciousness regarding the Korean Peninsula and China's actual Korea policy) 제주평화연구원 (*Jeju Peace Institute*) 43 (2018).
47. Park Chunsŏk, (박준석), “미중 패권경쟁, 최후의 승자는?” (Amidst the Sino-American competition for hegemony, who is the ultimate victor?) 세계는 지금 (*The World Today*) Vol. 339, 한국개발연구원 *Korea Development Institute*, February 2019, 56.
48. Bi Yingda (毕英达), 朝「半」新形「下」深化中「安全合作的思考」 (Thoughts on Deepening China-Korea Security Cooperation under the New Situation on the Korean Peninsula). 「代」 「系」 (*Contemporary International Relations*) No. 10 (2019) 35–41, cited in Danielle Cohen, “Country Report: China,” *Asan Forum*, December 2019, <http://www.theasanforum.org/>.
49. Shin Jongho (신종호), “미중 정상회담 평가와 한반도에 대한 합의” (An assessment of the China-US summit and agreement over the Korean Peninsula), 통일연구원, *Korea Institute for National Unification*, April 2017, 4; and Kim, “2020년 미중 전략경쟁 전망과 한국의 대응방향,” 16.
50. Shin, “미중 정상회담 평가와 한반도에 대한 합의,” 3–4.
51. Lee Jangu (이장우), “동북아의 전략적 환경변화에 따른 한국의 대응방안” (South Korea's adaptability to shifts in Northeast Asia's strategic environment), *Asia-Pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology* 6, no. 10 (October 2016), 463–64.
52. “U.S. Relations with North Korea,” *US Department of State*, 17 July 2018, <https://www.state.gov/>.
53. Huilin Cao, ‘Comparative analysis of China and Russia's positions on the unification of the Korean Peninsula,’ *Pern University Herald. Political Science* 13, no. 3 (2019), 21–22.
54. Sun, “The Chinese Perception of the US-China-ROK Triangle,” 170.
55. Heung-kyu Kim, “China's Position on Korean Unification and ROK-PRC Relations,” *The Brookings Institution*, 2014, <https://www.brookings.edu/>.
56. Kim, “A View from South Korea on Sino-ROK Relations,” 34.
57. Lee Gihyŏn, Kim Aegyŏng, and Lee, Yŏnghak (이기현·김애경·이영학), “중국의 주변 외교 전략과 대북정책: 사례와 적용” (China's peripheral diplomacy and its North Korea policy: the case and its application), *KINU 연구총서 (Research Series)* 15, no. 9 (2015), 119.

Regional Comprehensive Economic Partnership and China's Geopolitical Checkmate in the Indo-Pacific Region

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Abstract

The Regional Comprehensive Economic Partnership (RCEP), as the world's largest free trade bloc, integrates the strategically sensitive Indo-Pacific region where China's rise is predominantly seen with suspicion by most of the regional countries. Besides countering the Noodle/Spaghetti Bowl Effect of multiple free trade agreements under ASEAN+1 formula, the RCEP, which is driven by the willingness among regional countries to seek greater economic integration, gives Beijing the opportunity to link regional economies ranging from the integrated arrangements like ASEAN to those of the regional opponents like Japan and South Korea into China's economic orbit. This helps China to discourage regional opposition to its rise in the Indo-Pacific region. On the other hand, it weakens the prospects for a regionally coherent response spearheaded by the United States toward China's rise. Therefore, this article explains the strategic importance of the RCEP and its role in China's rise and declining credibility of the American opposition to it. Finally, using qualitative content analysis, the article argues that a successful RCEP amplifies the strategic ambiguity among the US regional allies and strategic partners linked in security arrangements like Quadrilateral Security Dialogue in their commitment to counter China and will further weaken the credibility of the American efforts to contain China's rise in the Indo-Pacific region.

Introduction

In November 2011 in Bali, Indonesia, 15 Indo-Pacific countries comprising ASEAN and its partners agreed to establish the Regional Comprehensive Economic Partnership (RCEP) in an effort to improve mutually beneficial regional economic integration.¹ Following eight years of negotiations spanning 31 rounds, 15 member states that include ten ASEAN countries, China, Japan, South Korea, Australia, and New Zealand formally signed the landmark RCEP on 15 November 2020.² Making the Indo-Pacific the world's largest free trade area—bigger than European Union or North America—the RCEP integrates a market of 2.2

billion people with \$26.2 trillion global output, representing 30 percent of the world's population and global GDP.³ Besides emerging as a regional recourse to the negative impacts of the Noodle Bowl Effect and declining multilateralism, the RCEP ushers a new trend of geopolitics in the Indo-Pacific region where regional power dynamics are defined spatially by the complex economic interdependence.

The RCEP helps China to integrate the region and bring regional countries closer to its economic orbit, including opponents like Japan and South Korea with whom Beijing never had a bilateral free trade agreement (FTA). This makes regional countries more intertwined with China's economic progress, thereby leaving them more dependent on China's economy.⁴ In this way, the RCEP, as an integrated structure, improves the degree of regional complex economic interdependence, which helps Beijing to trim down regional opposition to China's rise in the Indo-Pacific region. Therefore, experts have called the success of the RCEP, as a trade bloc, a "strategic milestone" for Beijing that broadens prospects for China's rise with minimal regional opposition in the Indo-Pacific region.

On the other hand, the RCEP brings implications for the strategic influence of the United States in the Indo-Pacific region. This is because, firstly, the multilateral economic arrangement includes some of America's staunchest allies such as South Korea, Japan, and Australia—the latter two of which are key US partners in the Quadrilateral Security Dialogue (Quad), a regional security grouping that is supposedly aimed to counter China. Secondly, the RCEP was signed with the backdrop of the American withdrawal from its own Trans-Pacific Partnership (TPP), making the possibility of success of a Chinese alternative even more feasible. However, the rest of the 11 members, including Australia and Japan, renegotiated the TPP to establish the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP). Thirdly, India's withdrawal from the RCEP arrangement after seven years of negotiations brings China to the fore in shaping the rules of this comprehensive regional arrangement, leaving Beijing as the dominant player in this multilateral arrangement that covers around 30 percent of global GDP and population. In this way, America's absence from regional multilateralism itself and the economic march of its allies alongside China raises questions over the future of Washington's influence in the region.

The success of the RCEP highlights one of the fundamental realities about the Indo-Pacific region. It shows that the region's policies are centered on economics and are open for economic integration—with little inclination toward becoming a strategic playground for great powers like China and the United States. Nevertheless, Indo-Pacific countries' economic turn toward China is to maximize their economic potential by securing their trade interests given the uncertain strategic environment amid the China-US strategic competition.

Secondly, China's leading role in the RCEP discourages the presumed opinion about the Dual Circulation Strategy by which Beijing is supposedly focusing on developing and protecting China's domestic market. Thirdly and most importantly, the signing of the RCEP by some of the region's leading economies, including US allies, shows that regional countries are less interested in becoming a sandwich in a Sino-US strategic hostility in the Indo-Pacific and more concerned about their own relative economic development and mutually beneficial economic integration.

Therefore, this research article is divided into five parts. Part one explains the RCEP as a response to the growing Noodle Bowl Effect of individual free trade agreements. Part two describes the importance of the RCEP as a strategic milestone in the context of China's rise. Part three examines the decisive impact of the RCEP on the credibility of American strategic influence in the region. After giving a broader look into the relative impact of the RCEP for the geopolitics of the Indo-Pacific in part four, part five identifies some policy recommendations that could improve the prospects of a peaceful and economically integrated Indo-Pacific.

The article argues that aside from economic benefits for the regional economies, the RCEP brings greater geopolitical advantages for Beijing by scaling down the degree of regional opposition to China's rise, leaving the United States at the receiving end of costs for Washington's withdrawal from the multilateralism that will threaten the credibility of US primacy in the Indo-Pacific region. The article answers the following main questions: What is the RCEP and its role in regional economic integration? How does the RCEP bring economic and geopolitical benefits to China? Why is the RCEP a precursor to the decline in US influence in the Indo-Pacific? And, what are the fundamental contours of the RCEP shaping the geopolitical trend across the Indo-Pacific region?

The RCEP as Recourse to the Spaghetti/Noodle Bowl Effect

The RCEP is more explicitly considered a recourse against the Noodle/Spaghetti Bowl Effects, which is a phenomenon in trade economics introduced by Jagdish Bhagwati in 1995,⁵ describing the how the "increasing number of FTAs between countries slows down trade relations between them."⁶ The Indo-Pacific is one of the most highly economically integrated regions of the world, wherein ASEAN acts as the regional agency regulating free trade. Besides integrating economies of the member states under its "centrality" principle, ASEAN has actively promoted free trade with regional non-ASEAN states through its ASEAN+1 initiative with five different regional economies. Here, free trade is mostly identified by a number of FTAs, of which there are around 133 in the

Indo-Pacific alone.⁷ However, in addition to leaving aside important features of trade liberalization, a network of individual FTAs in the region creates problems for the countries involved under the Noodle Bowl Effect.

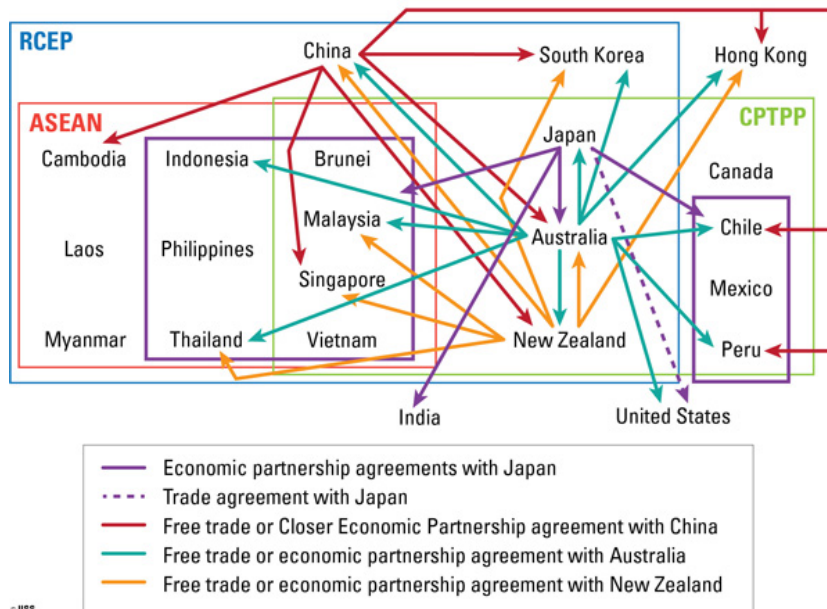
The impacts of the Noodle Bowl Effect can be explained more aptly by understanding the new trading dynamics in Indo-Pacific, wherein, because of a close trading network, the intraregional trade is more than interregional trade. More importantly, the trade is done mostly in the “intermediate goods” rather than the “finished products,” which means most of the products are manufactured by passing them through different “manufacturing steps” established in different regional countries, creating a complex regional chain.⁸ Such complex regional chains and multiple individual FTAs disrupt the cross-border production networks. For instance, it could lead to varying phase-in timeframes for concessions in tariffs as well as varying preferences across different FTAs.⁹ Given the need to converge the rules and mechanisms of the multiple FTAs in the region, the RCEP is deemed essential in improving cross-border regional trade and investment. In addition to varying internal and external tariffs, a web of FTAs brings with it varying rules of origin (ROO) to determine the country of origin of different products. It makes the compliance of countries by all the ROOs more complicated, impeding growth in trade volume among regional countries.

Herein lies the importance of the RCEP, which is expected to integrate the Indo-Pacific region with improved liberalization¹⁰ and to remedy the Spaghetti Bowl Effect of the existing network of individual FTAs by introducing a unified set of ROOs. The unified ROOs will set a common standard for the production of products in a region to qualify for tariff-free treatment. Deborah Elms, founder of the Asian Trade Centre, puts it more simply, stating that the RCEP allows the firms to “build and sell across the region with just one certificate of origin paper and no more juggling different forms and rules.”¹¹ Overall, the RCEP will reduce the transaction costs, discourage protectionism, strengthen the production networks, make it simpler for companies to set up supply chains covering different countries, and improve free trade across the Indo-Pacific region.

The RCEP is a big deal that combines Indo-Pacific economies with a market five times the size of its contemporary peer, the CPTPP. Being the world’s largest trade bloc, the RCEP intends to add around \$209 billion to the world income (when global income will reduce by \$301 billion due to China–US trade war) and a remarkable \$500 billion to global trade by the year 2030.¹² Most interesting is the diverse nature of its membership, with rich and poor, vast and tiny, advanced and nascent industrial economies, making it an all-inclusive FTA. Specifically, Article 4 of the guiding principles and objectives of the RCEP call for “special and different treatment” based on the level of development among member states,

especially important for Laos, Cambodia, Myanmar, and Vietnam.¹³ Therefore, the RCEP promises equitable trade benefits for the advanced and developing regional economies. However, geopolitically, the economic arrangement leaves states like China at greater advantage than the others.

The complex web of Asia-Pacific trade deals



Source: International Institute for Strategic Studies, 2020.¹⁴

Figure 1. The complex web of Asia-Pacific trade deals

The RCEP: A Strategic Edge to China

In scope, the RCEP is more limited than the CPTPP; however, geopolitically, the RCEP is more of a symbolic advantage for China than a trade stimulator. According to Citi Research, the “diplomatic messaging of the RCEP may be just as important as economics,” and the arrangement is a “coup for China,” given its geopolitical advantages for Beijing.¹⁵ China’s growing economic and military assertiveness in the Indo-Pacific is subject to continuous suspicion and opposition by the regional countries spearheaded by the United States.¹⁶ However, being the largest regional economy, China is expected to play a bigger part in integrating regional economies and encourage their economic interdependence with Beijing. China’s presence in the world’s largest FTA in Indo-Pacific comes at a time when

America's economic ties with the region are uncertain, given the latter's withdrawal from multilateralism: i.e., the TPP. Therefore, the RCEP is a geopolitical win for China, as it allows Beijing to shape regional economic policies and mitigate regional opposition to China's rise in the Indo-Pacific region.

The RCEP streamlines China's products in the greater market size of the Indo-Pacific by removing the sourcing restrictions and helping Beijing play as counterweight to global disruptions and "Slowbalization" caused by the COVID-19 pandemic.¹⁷ Therefore, the arrangement increases China's importance as the major destination of investment, end market, and supporter of the global supply chain. Besides offsetting the anticipated impact of China-US trade war and gradual decline of Chimerica,¹⁸ the RCEP will reduce the cost of doing business in Indo-Pacific and offer China the opportunity to invest in energy, transport, and communication sectors in Indo-Pacific countries through Beijing's \$1.4 trillion Belt and Road Initiative.

Geopolitically, China stands at greater advantage from the RCEP. This is because the multilateral arrangement, for the first time, links China to its regional opponents like Japan and South Korea in a FTA. Therefore, Takashi Terada has called the RCEP as the "de-facto China-Japan FTA," allowing both countries to benefit from the deal.¹⁹ Thus, the RCEP is more beneficial for China, with expected annual gains of \$100 billion followed by Japan with \$46 billion and South Korea with \$23 billion.²⁰ ASEAN countries will also gain nearly \$19 billion, since its member states are already engaged in FTAs.

The RCEP leaves regional countries dependent over China in the long run. Eswar Prasad, former head of the International Monetary Fund's China Division, states, "The trade pact more closely ties the economic fortunes of the signatory countries to that of China and will over time pull these countries deeper into the economic and political orbit of China."²¹

More essentially, locked in a free trade bloc, Indo-Pacific is expected to slide toward China, particularly given the uncertainty about America's leadership in the region. Supporting this, Peter A. Petri and Michael G. Plummer argue that, aside from the economic benefits, the RCEP is essentially significant in terms of the "regional turn on China's prospects for leadership in the region. The CPTPP and the RCEP15 agreements, without the United States and India, remove powerful balancing influences in determining economic policies in East Asia."²² Faced with the punishing trade war by the United States, the RCEP also helps China to diversify its market as an effort to offset the consequences of the trade war. Professor Dinding Chen of the Jinan University states, "it's hard to replace the U.S., but you have to try, you have to diversify."²³

It is interesting to note that the RCEP is not a China-led project but spearheaded by the ASEAN. Yet, China consistently supported the “rollercoaster negotiations” under ASEAN’s leadership, which allows Beijing to expand China’s economic and political cooperation with regional countries. The reason is China’s relatively high stakes in Indo-Pacific economic stability promulgated by the RCEP. Also, China wants greater economic integration with its regional opponents. In fact, had China been leading the arrangement, Japan and South Korea would not have joined the RCEP.²⁴ Therefore, without coming to the forefront, China is likely to use the RCEP to negotiate with ASEAN on different political issues like the Code of Conduct negotiations on the disputed South China Sea.²⁵ Four of the claimant states in the South China Sea—namely, Vietnam, Malaysia, Brunei, and Philippines—are also members of the RCEP, and the arrangement is likely to bring reconciliation among the parties due to the complex economic interdependence.

Implications of the RCEP for America’s Regional Strategic Influence

The RCEP accelerates regional economic integration and leaves Indo-Pacific less dependent on the United States for trade and costs Washington its claimed strategic influence in the region. Chinese state media outlet, the *Global Times*, has already called the deal the “end of US hegemony in the Western Pacific.”²⁶ Though, the RCEP is being termed as a major loss to the United States and its influence in the region, America had already lost its influence four years earlier with Pres. Donald Trump’s withdrawal from the TPP, an agreement that was essentially to serve as a counter China’s rise in the most “strategically uncertain part of the world.”²⁷ With this, Trump reversed decades of US diplomatic efforts for leading the region’s trade policies, backed off from the international agreements, and rather imposed tariffs on friends and foes in the region. With the RCEP in specific, the prospected decline in America’s influence is twofold—direct and indirect.

Directly, the RCEP is likely to accelerate the decoupling process of Indo-Pacific economies from the United States, given the significant lowering in trade costs, economically sidetracking America’s influence from the world’s most dynamic region. It will make it more difficult for US firms to compete in Asia, as the regional firms will have lower tariffs to pay, more investment opportunities, and improved open access to the huge Asian market. Asian economic dependence on the US market will decline, and American products will be discriminated against in a much cheaper Indo-Pacific market. For instance, Kawasaki reports that the

US economy will decline by 0.16 percent if the RCEP materializes.²⁸ The US Chamber of Commerce has expressed its concern with being left behind in the region, which is expected to gain 5 percent average growth rate during the pandemic-hit 2021.²⁹ Therefore, access to the lucrative market of Southeast Asia is essential for US workers, farmers, and exporters to share a relatively high growth rate.

Indirectly, the success of the RCEP elevates China as the primary competitor of the United States closer to some of America's staunchest regional allies like Japan, South Korea, and Australia, in addition to its strategic partners like Indonesia, Singapore, and Vietnam. Most important is the inclusion of two US treaty allies, Japan and Australia, which are part of the US-led Quad, a strategic and military counterweight to China's rise in the region. Quad members are already embroiled in a dilemma of strategic ambiguity vis-à-vis partnering with the United States in its efforts to contain China, given their complex economic relationship with Beijing. For instance, China is the largest and second-largest trading partner of Australia (with \$158 billion trade volume) and Japan (with \$330 billion trade volume), respectively, and the RCEP not only strengthens these countries' economic interdependence with Beijing but also increases the degree of strategic ambiguity among Quad members in partnering with US efforts to confront China. However, the mutual security concerns of regional countries vis-à-vis China keep them reliant on Washington. The recent pushback of Chinese naval vassals from Philippine waters by the US Navy is one such example that illustrates the United States remains the primary security guarantor in the region.

The agreement only accelerates the decline of America's primacy in the Indo-Pacific where its own allies are less certain about US leadership in the region. For instance, South Korea's ambassador to the United States was more convinced about this fact and argued that "just because Korea chose the U.S. 70 year ago does not mean it has to choose the U.S. for the next 70 years, too."³⁰

Finally, the RCEP is likely to weaken the credibility of American efforts to contain China's assertiveness in the Indo-Pacific, as Trump's protectionist policies—identified as "America First," an inward-looking approach—have relatively abandoned the spirit of multilateralism. Jennifer Hillman, a senior fellow at the Council on Foreign Relations, argues that the signing of the RCEP shows that the world, whether Europe or Indo-Pacific, is no longer waiting around for the United States to take the lead but rather continues to respond to US protectionist policies with integrated multilateral structures. In fact, America's withdrawal and uncertainty regarding its commitment to engage and lead the region remains an essential motivation for many of the Indo-Pacific countries to join the RCEP.

The RCEP and Changing Geopolitical Trends across the Indo-Pacific

Although the RCEP is an economic arrangement, it holds significant geopolitical importance. China is not part of the erstwhile TPP (now CPTPP), and the United States, which spearheaded the original TPP, is not part of the RCEP. The fact that the United States is not party to either of these regional multilateral FTAs, combined with China's outstanding economic performance—especially during COVID-19—and Beijing's willingness to lead the Indo-Pacific market increases China's prospects to emerge as the economic, if not a political and security, alternative to the United States.

However, Chinese leadership needs to understand the gravity of the challenges Beijing faces vis-à-vis its policies in Hong Kong and the disputed South China Sea, which are currently driven by a “wolf warrior” diplomatic approach that persuades less and alienates more.³¹ Having said that, neither can China extend its global influence, what the Singaporean prime minister termed as the “unencumbered power,” nor can the Indo-Pacific emerge as the model if regional countries view an assertive, rising China as a threat.³² Therefore, the RCEP convinces the Indo-Pacific states about China's rise as a benign development and brings them closer to the economic and political orbit of Beijing. However, having their economic fortunes tied to the authoritarian Chinese regime, will render a Chinese-dominated RCEP more challenging for democracies like Japan, South Korea, and Australia.

On the other hand, New Delhi also spent nearly eight years negotiating the RCEP, only to withdraw from it in 2019, fearing the Chinese products flooding in would damage India's domestic markets. Indian inclusion was expected to increase the RCEP's global output by nearly 25 percent. However, since most of the output was supposed to flow back to India, New Delhi's withdrawal is of less significance to the other members. In short, India will increase its national income by \$60 billion if it rejoins the RCEP but will lose \$6 billion annually if it continues to stay out.³³ Moreover, by staying out, India makes it even easier for China to dictate the rules of economic and political engagement in Asia.

The United States needs to recognize the new realities of the Indo-Pacific, including China's inevitable rise, mature independent Southeast Asian economies, and the relative credibility of both China and the United States. President Trump failed in doing so. Therefore, the nature of the American posture and credibility in the region depends on how Pres. Joe Biden responds to developments like the RCEP and security concerns of US allies in the region.

President Biden is aware of the fact, stating that “countries will trade with or without the United States. The question is who writes the rules that govern trade? . . . The United States, not China, should be leading that effort.”³⁴ For now, Biden has shown no commitment to rejoining the CPTPP but has expressed his willingness to “work with its allies to set global trading rules to counter China’s growing influence.”³⁵ He declined to comment on whether the United States will join the RCEP but argued that “we make 25% of the economy in the world. . . . We need to be aligned with the other democracies, another 25% or more so that we can set the rules of the road instead of having China and others dictate outcomes because they are the only game in the town.”³⁶ The changing pattern of China–US relationship necessitates the realization that economic growth cannot be separated from the political and strategic imperatives in the region.

More important is the willingness in Beijing to cooperate through multilateral frameworks—something in tune with the mode of economic boost in the Indo-Pacific. For instance, China’s signal to join the CPTPP brings additional geopolitical benefits to China and can add around \$485 billion economic benefits to global trade.³⁷ Gains from the extended membership of CPTPP could raise up to a trillion US dollars, which can offset the losses incurred due to the China–US trade war some three times.³⁸ Therefore, China’s desire to support regional economic integration outweighs the benefits of a growingly uncertain regarding US premiership in the region. Also, the RECP and CPTPP could be an opportunity for Beijing to manage and lead the COVID-19–affected economies and reverse the free fall of global economic order.

While, regional countries have joined the RCEP to get economic benefits, they certainly are unwilling to choose between China and the United States, given their security-based apprehensions regarding Beijing. Therefore, the degree of the US relevance in the Indo-Pacific depends largely on how China manages to convince regional countries to buy into Beijing’s “win-win” approach and that China’s rise in the Indo-Pacific is benign and has mutual benefits as its core objective.

Conclusion

The RCEP brings the Indo-Pacific countries closer to forming the world’s largest free trade region; however, it also comes with significant geopolitical consequences. With its huge free trade market and potential economic benefits, the RCEP offers China a lucrative opportunity to link regional economies, especially those of Japan and South Korea; promote regional trade; and make confrontational behavior costlier for Beijing’s regional opponents. The agreement offsets the prospected economic decline and the negative impact of the breakage of Chime-

rica, because of the China–US trade war that could otherwise cost the Indo-Pacific economies.

Having the economic fortunes of regional countries tied together, Beijing can discourage regional opposition to China's rise in the Indo-Pacific. This becomes more likely as India has abandoned the free trade bloc as an appropriate balancer to China in the group. India, though, has less to gain and more to lose in staying away from the deal; however, the agreement's role in promoting China's influence in the Indo-Pacific has rather greater geopolitical costs for India and the United States.

The United States, which has undermined its regional leadership under the Trump administration, is more likely to feel the heat of a Chinese-dominated RCEP. The motivation for US allies to join the RCEP, the economic entente between China and Washington's treaty allies, its own disregard for multilateralism, and withdrawal from the TPP leave Washington relatively weaker in terms of its influence, ability, and credibility to lead the region.

Although President Biden has declared China to be a competitor and expressed his commitment to lead US allies against China's assertiveness, Washington must understand the threshold of China's rise has already transcended the ability of regional and extraregional powers to constrain it. Considering the costs of confronting China and growing ambiguity among its allies, including Quad, the United States needs to revive its role in multilateralism and adopt a less combative and more accommodative approach toward China. ★

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Notes

1. "ASEAN Framework for Regional Comprehensive Economic Partnership," *Association of Southeast Asian Nations (ASEAN)*, n.d., <https://web.archive.org/>.
2. Charmaine Ng, "15 Countries, including Singapore, Sign RCEP, the World's Largest Trade Pact," *Strait Times*, 16 November 2020, <https://www.straitstimes.com/>.
3. Ministry of Foreign Affairs of the People's Republic of China, "Joint Leaders Statement on Regional Comprehensive Economic Partnership (RCEP)," 16 November 2020, <https://www.fmprc.gov.cn/>.

4. Saibal Dasgupta, "Trade Deal Raises Questions About China's Dominance," *VOA*, 17 November 2020, <https://www.voanews.com/>.
5. Jagdish Bhagwati, "US Trade Policy: The Infatuation with FTAs," Discussion Paper 726, *Department of Economics Columbia University*, 4 April 1995, <https://academiccommons.columbia.edu/>.
6. Osama Sajid, "Youth Voices: Effects of The Spaghetti Bowl on South Asia-East Asia Trade Relations," *World Bank Blogs*, 11 February 2015, <https://blogs.worldbank.org/>.
7. "Asian Economic Integration in an Era of Global Uncertainty," Australian National University, n.d., <https://press-files.anu.edu.au/>.
8. Andrew Cainey, "The Geopolitics of Indo-Pacific Trade," *RUSI*, 15 November 2020, <https://rusi.org/>.
9. Shen Minghui, "Lifting Global Free Trade from the 'Noodle Bowl'," *East Asia Forum*, 9 March 2017, <https://www.eastasiaforum.org/>.
10. Ganeshan Wignaraja, "RCEP: A Life Raft for Trade Liberalization in Asia," *Asian Development Bank Blogs*, 20 April 2016, <https://blogs.adb.org/>.
11. Amy Gunia, "Why the US Could Be the Big Loser in the Huge RCEP Trade Deal between China with 14 Other Countries," *Time*, 17 November 2020, <https://time.com/>.
12. Mercy A. Kou, "RCEP: The Future of Trade in Asia: Insight from Peter Petri," *The Diplomat*, 8 December 2020, <https://thediplomat.com/>.
13. Ministry of Foreign Affairs, Japan, "Guiding Principles and Objectives for Negotiating the Regional Comprehensive Economic Partnership," 20 November 2012, 1, <https://www.mofa.go.jp/>.
14. Robert War, "RCEP Trade Deal: A Geopolitical Win for China," *International Institute for Strategic Studies (IISS)*, 25 November 2020, <https://www.iiss.org/>.
15. Yen Nee Lee, "'A Coup for China': Analysts Reacts to the World's Largest Trade Deal That Excludes the U.S.," *CNBC*, 15 November 2020, <https://www.cnbc.com/>.
16. Marco Overhaus et al. "Strategic Rivalry Between the United States and China," *German Institute for International and Security Affairs*, April 2020, 17, <https://www.swp-berlin.org/>.
17. Evelyn Cheng, "New Regional Trade Deal to Help China to 'Sustain Its Advantages' in Global Supply Chain," *CNBC*, 23 November 2020, <https://www.cnbc.com/>.
18. Niall Ferguson and Xiang Xu, "Make Chimerica Great Again" (Hoover Institution Economic Working Paper 18105, Stanford University, 3 May 2018), <https://www.hoover.org/>.
19. Takashi Terada, "RCEP Negotiations and Implications for the United States," *National Bureau of Asian Research*, 20 December 2018, <https://www.nbr.org/>.
20. Peter A. Petri and Michael Plummer, "China Could Help Stop the Free Falls in Global Economic Cooperation," *Order from Chaos* (blog), 16 July 2020, <https://www.brookings.edu/>.
21. Gunia, "Why the US Could Be the Big Loser."
22. Peter A. Petri and Michael G. Plummer, "East Asia Decouples from the United States: Trade War, COVID-19, and East Asia's Trade Blocs," *Peterson Institute for International Economics (PIIE)*, June 2020, 22–23, <https://www.piie.com/>.
23. "China Needs New Places to Sell Its Mountain of Stuff," *Business Times*, 27 July 2019, <https://www.businesstimes.com.sg/>.
24. Peter A. Petri and Michael Plummer, "RCEP: A New Trade Agreement That Will Shape Global Economics and Politics," *Order from Chaos* (blog), 16 November 2020, <https://www.brookings.edu/>.

25. Kavi Chongkittavorn, "RCEP the Key to East Asia Recovery," *Bangkok Post*, 21 July 2020, <https://www.bangkokpost.com/>.
26. Wang Jiangyu, "RCEP Will End US Hegemony in Western Pacific," *Global Times*, 14 November 2020, <https://www.globaltimes.cn/>.
27. Gardinar Harris and Keith Bradsher, "China's Influence Grows in Ashes of the Trans-Pacific Trade Pact," *New York Times*, 19 November 2016, <https://www.nytimes.com/>.
28. Renuka Mahadevan, "Can the Regional Comprehensive Economic Partnership Minimize the Harm from the United States-China Trade War?," *World Economy* 42, no.11 (13 August 2019): 3148–67, <https://onlinelibrary.wiley.com/>.
29. "US Chamber Statement on the Regional Comprehensive Partnership Agreement (RCEP)," *US Chamber of Commerce*, 16 November 2020, <https://www.uschamber.com/>.
30. Choi Sung-jin, "Time for 'Korea First' Policy," *Korea Times*, 20 October 2020, <https://www.koreatimes.co.kr/>.
31. Laura Silver, Kat Devlin, and Christine Huang, "Attitude towards China," *Pew Research Center*, 5 December 2019, <https://www.pewresearch.org/>.
32. Lee Hsien Loong, "The Endangered Asian Century," *Foreign Affairs*, July/August 2020, <https://www.foreignaffairs.com/>.
33. Petri and Plummer, "East Asia Decouples from the United States."
34. Joseph R. Biden, "Why America Must Lead Again," *Foreign Affairs*, March/April 2020, <https://www.foreignaffairs.com/>.
35. David Lawder, "Biden Says U.S., Allies Need to Set Global Trade Rules to Counter China's Influence," *Reuters*, 17 November 2020, <https://www.reuters.com/>.
36. Lawder, "Biden Says U.S., Allies Need to Set Global Trade Rules."
37. Lu Zhenhua, "Premier Sends 'Powerful' Signal for China to Join Indo-Pacific's Largest Trade Pact," *Caixin*, 29 May 2020, <https://www.caixinglobal.com/>.
38. Hugh Stephens, "An Expanded CPTPP: Could It Help Bridge China-US Trade Differences?," *China US Focus*, 8 February 2021, <https://www.chinausfocus.com/>.

A US Response to China's Aggression in the South China Sea and Overall Aim of Information Dominance

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The *Indo-Pacific Strategy Report* released by the United States Department of Defense in 2019 clearly affirmed “the enduring U.S. commitment to stability and prosperity in the region through the pursuit of preparedness, partnerships, and the promotion of a networked region.”¹ Yet, China has continued to make improvements to many islands within the South China Sea (SCS) Beijing claims as China’s sovereign territory without regard for overlapping claims and the exclusive economic zones of the other countries in the region.² China’s expansionist actions, combined with an uptick in Chinese naval activity and its ongoing militarization of the SCS, risk further escalation of tension within in the region.

The new United States Strategy for the Indo-Pacific, released in June 2020, indicated that:

The primary U.S. interests in the region are (in rough order of importance): protection of the United States against direct threats; maintenance of the security and strength of U.S. allies; continued access to an economically dynamic region; regional peace and stability; prevention of the spread of nuclear, biological, and chemical weapons; human rights, freedom, and democracy; and a healthy natural environment.³

To pursue those six key interests, the following strategy is discussed:

Once the region has recovered from the effects of the coronavirus pandemic, the strong economic growth of recent decades will likely resume, and the region will remain largely open to outside trade and investment. Population growth will be moderate, causing limited stress on resources and governing capacity. China will remain the dominant economy and dominant military power in the region (other than the United States), with a GDP greater than the next six largest economies combined and annual military spending roughly equal to that of all the other

countries combined. China will also continue its efforts to take control over Taiwan, the South China Sea, and the Senkaku Islands. China's leader will try to achieve this without military conflict but will use force if they believe it is necessary. Meanwhile, Beijing will continue to infiltrate and subvert the political systems of countries in the Indo-Pacific and elsewhere in the world.⁴

What is not discussed in enough detail is a more focused, asymmetric strategy that 1) thwarts China's information dominance by stopping the use of military controlled assets in the SCS with actions that will "press on" amid China's threats and use of C4ISR and 2) combines cyber and precision strikes on China's key economic and informational capabilities. This recommendation is backed by J. Michael Dahm's analysis in his 2020 *Introduction to South China Sea Military Capability Studies*: "any challenger to Chinese military capabilities in the SCS must first account for and target the very core of the PLA's [People's Liberation Army] informationized warfare strategy—its information power."⁵

United States President Joseph R. Biden in his *Interim National Security Strategic Guidance (INSSG)* released in March 2021, highlights how China is rapidly becoming more assertive: "It is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system."⁶ If China controls the SCS, then China will be able to potentially hold hostage more than 30 percent of world trade.⁷

This article lays out views relating to the operational environment and the desired end state (DES) in the SCS, and offers recommendations using elements of national power (diplomatic, information, military and economic) to confront China's destabilizing actions in the region, interrupting trade, threatening sovereignty of other nations around the SCS, and limiting United States commercial and military access to the region in accordance with the Trump Administration's *U.S. National Security Strategy* issued in 2017 and the Biden Administration's newly released *INSSG*.⁸ Most notable, though, this article makes a stronger argument for why the United States should focus more on China's aim of information dominance. Led by the United States, immediate, focused actions involving key regional partners are needed in the SCS to maintain freedom of the seas for all allies in and beyond the region in accordance with international law.

Operational Environment

The construct of political, military, economic, social, information, infrastructure, physical environment, time (PMESII-PT) is a holistic way to assess the current conditions in an operational environment (OE). The following paragraphs

briefly cover some of the more important current conditions in the OE of the SCS with some macro analysis of the Indo-Pacific region.

Political: Claims in the SCS are characterized by a significant divergence in the claimant's perceived territorial and maritime rights and the basis for those claims. China's expansive claims are based on questionable historical claims while the Philippines and other nations that border the SCS are based on international law.⁹ The official stance of the United States is that claims must be based on international law,¹⁰ although the United States has not yet signed the United Nations Convention on the Law of the Seas (UNCLOS). The concerns over ratification are just as strong as the benefits:

The Convention violated U.S. sovereignty and gave too much power to Communist countries like the Soviet Union and the United States might have to surrender sovereignty to the International Seabed Authority. Ratifying the UNCLOS would bring substantial benefits such as the agreement would resolve many territorial disputes with other countries, encourage investors to take advantage of resources on the high seas and deep seabed, and allow the Navy easier access to foreign waters.¹¹

In 2016 an Arbitral Tribunal, established under the authority of the UNCLOS, determined China's claims are contrary with UNCLOS and without legal effect.¹² Beijing categorically rejected the Tribunal's decision, authority, and process, refusing to even participate in the tribunal and has since.¹³ China actions since the Tribunal has only increased tensions in the SCS as recently stated by Admiral Davidson, United States Navy Commander, United States Indo-Pacific Command during this 27 March 2019 testimony to Congress:

Through fear and economic pressure, Beijing is working to expand its form of Communist-Socialist ideology in order to bend, break, and replace the existing rules-based international order. In its place, Beijing seeks to create a new international order led by China and with "Chinese characteristics"—an outcome that displaces the stability and peace of the Indo-Pacific that has endured for over 70 years.

In April 2018, Beijing continued militarizing outposts by deploying advanced military systems that further enhance the PLA's power projection capabilities, including missiles and electronic jammers. On multiple occasions, Beijing has landed military transport aircraft on the Spratly Islands and long-range bombers on the Paracel Islands. Additionally, Chinese Coast Guard vessels now fall under the command of the Central Military Commission and regularly harass and intimidate fishing vessels from our treaty ally, the Philippines, operating near Scarborough Reef, as well as the fishing fleets of other regional nations.¹⁴

The Association of Southeast Asian Nations (ASEAN) and Asia-Pacific Economic Cooperation (APEC) are, according to RAND senior political scientist Andrew Scobell, “wary of confronting China directly, either individually or collectively, because of a significant imbalance of power” and a lack of confidence in US support and willingness to uphold the rule of law.¹⁵

Military: China leads the Indo-Pacific regional arms race in quantity of weapons – along with recently built aircraft carriers, airpower, and an estimated 20 percent increase in militarization of ports and airfields in the SCS. Despite the larger quantity, their quality remains a question-mark. Chinese confidence remains circumspect, otherwise they would operate more aggressively.¹⁶ Philippine forces depend on support from allies as they are outmatched by Chinese military capabilities, particularly regarding long range missile capabilities by sea and air. American assets are limited in the region, but they can respond quickly with global reach capabilities.¹⁷ China’s strategic goals (sea dominance and power projection) have shaped the growing emphasis on the aircraft carrier, which is a strategic target for other countries.¹⁸ Chinese aircraft carriers project power and are a national symbol for Chinese pride. China is not alone in increasing military capabilities. Vietnam, Philippines, and Indonesia had corresponding increases in arms imports.¹⁹ As explained by Heigo Sato, a professor at Takushoku University in Tokyo, “The U.S. thinks that rather than deploying their own troops, they should export arms and enhance their allies’ military capabilities.”²⁰ More concerning is the way that China operates its coast guard as nonmilitary forces in the SCS to protect claims and fishing boats, particularly in the Whitsun Reef area. In reality, China is actually employing the People’s Armed Forces Maritime Militia, an armed fishing militia, and the well-trained Chinese Coast Guard to provide them a unique capability to operate in disputed areas while not crossing the line of offensive conflict.²¹ his tactic allows China an early information dominance in the SCS.

Economic: The region comprises at least 38 countries that share 44 percent of world surface area, 65 percent of world population, and account for 62 percent of world-GDP, and 46 percent of the merchandise trade worldwide.²² The region has numerous trade agreements, most importantly the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), the Regional Comprehensive Partnership (RCEP), the trilateral free trade agreement (FTA) between China, Japan, and South Korea, the United States, and the European Union FTA. Yet, most concerning are China’s aggressive economic actions described in *the National Security Strategy* issued in 2017 and *National Military Strategy* issued in 2018 that preclude open and stable free trade in the international system. Additionally,

China's growing middle class will have immense spending power. By 2025, it is estimated that

More people will migrate to China's cities for higher paying jobs. These working consumers, once the country's poorest, will steadily climb the income ladder, creating a new a massive middle class. This segment will comprise a staggering 520 million people – more than half of the expected urban population of China – with a combined total disposable income of 13.3 trillion renminbi (100,000 renminbi = \$40,000 in the U.S.).²³

Another line of thought is that economic opportunities are stagnating, especially for new college graduates, lower-middle class and below. Either analysis provides an opportunity to influence the economic situations.

Social: To secure China's future as a strong nation, the Chinese Communist Party (CCP) had to create a new culture that enabled the creation of a "new society, that is not only "Chinese" in name but also in essence."²⁴ China is a civilization state that foreigners labeled a nation-state as defined by western society. The Chinese culture's ability to absorb foreign ideas greatly enabled the CCP in creating an image as a unified but multi-ethnic nation. This created image laid a foundation to Sinicize content-less nationalism. In addition, the CCP developed and executed a patriotic education campaign that effectively replaced socialism with patriotism. Increased patriotism and nationalism have worked hand-in-hand to legitimize the rule of the CCP.²⁵ Often not considered in social analysis is how public opinion of China's growing middle class will matter in the SCS. In 2004, it was reported that China's middle class "exhibits a greater nascent liberalism than poorer classes"²⁶ that promotes greater emphasis on individual rights, democracy, and civil liberties. Yet more recent analysis in 2020 questions "how will a growing Chinese middle class impact global politics, when democracy is no longer the only way to achieve a stable middle-class lifestyle?"²⁷ While there is merit in both sentiments, it is clear that the social force matter in the region. For the past two decades, there has been continuous sparring online by Chinese, Filipino, and Vietnamese – lower class, middle class, and celebrities – over claims in the SCS.²⁸

Information: One of Beijing's goals for its island outposts in the SCS is to build an integrated system-of-systems to facilitate information superiority through command, control, communications, computers, intelligence, surveillance, reconnaissance (ISR) capabilities and nonmilitary information networks. A review of open-source material and commercial satellite imagery by a senior researcher at the Johns Hopkins Applied Physics Laboratory, found significant communication potential for China through undersea fiber-optic-cable, multi-band satellite

communications and high-frequency broadband arrays.²⁹ These combine to develop an integrated system of Chinese information superiority, allowing Beijing *de facto* control.

However, information operations are ill-defined in military publications in relation to China's focus on information dominance.³⁰

IW presents the Chinese with a potentially potent, if circumscribed, asymmetric weapon. Defined carefully, it could give the PLA a longer-range power projection capability against U.S. forces that its conventional forces cannot currently hope to match. In particular, I would argue that these weapons give the PLA a possible way to attack the Achilles' Heel of the advanced, informatized U.S. military: its information systems, especially those related to command and control and transportation. By attacking these targets, the Chinese could possibly degrade or delay U.S. force mobilization in a time dependent scenario, such as Taiwan, and do so with a measure of plausible deniability.³¹

Consequently, one of NORAD four strategic principles is information dominance as a defensive measure for the United States.³² This is somewhat problematic because neither USNORTHCOM nor USINDOPACOM are directly confronting China's focus on information operations, especially as an element of asymmetric warfare, and the use of military owned assets in the SCS. Admiral Davidson, Commander of United States Indo-Pacific Command, is his testimony to Full House Armed Services Committee Hearing: "National Security Challenges and U.S. Military Activities in the Indo-Pacific," on Wednesday, 10 March 2021, believed that:

...absent a convincing deterrent, China will be emboldened to continue to take action to supplant the established rules-based international order, and the values represented in our vision for a free and open Indo Pacific," he said. "Our deterrence posture in the Indo Pacific must demonstrate the capability, the capacity and the will to convince Beijing unequivocally, that the costs of achieving their objectives by the use of military force are simply too high."³³

Infrastructure: China's actions potentially threaten the infrastructure of all nations that border the SCS. The improvement to the island features in the SCS were initially all military in nature; however, commercial infrastructure development is ongoing to support tourism, oil and gas exploration, and the fishing industry.³⁴ China's aggression threatens allies who depend on unfettered access to regional waterways and shipping lanes. China's action in the SCS can have ripple effects on other nations. For example, China's actions could disrupt Philippine commercial shipping that sustains the abundant commercial bus, airline, ferry, and taxi services, or disrupt power on the 95 percent of the Filipino population

who are dependent on electricity and the growing 60 percent who have access to the internet.³⁵ The key military infrastructures are an array of interisland communications, high-frequency communications, electronic warfare and signals intelligence, sub-reef counterstealth radar, and undersea fiber-optic cable and satellite communications.³⁶

Physical: The SCS is the western Pacific's largest marginal sea occupying an area of slightly more than 1.4 million square miles, including the Luzon Strait and Strait of Malacca. Although China claims the Taiwan Strait as part of the SCS, the claim is more of a propaganda move. The SCS is a tropical climate with frequent typhoons in the summer months and weather patterns are primarily controlled by monsoons.³⁷ Among the nations that border the SCS, there is a history of disputed land masses and China's encroachment and buildup on the various islands are methods of gaining strategic advantage.

Time: According to public policy scholar Marvin Ott, "the most likely single scenario for a major military engagement against a great power adversary would be one against China centered on the South China Sea."³⁸ The longer China can intimidate its neighbors and expand into the SCS, the more their operations become accepted over time as normal activities, thus emboldening China. China's increasing aggression indicates Beijing's clear goals for hegemony impact the environment, both regional and global.³⁹

Problem Statement

China's economic and military aggression and its refusal to acknowledge international law in the SCS threatens our Indo-Pacific security alliances, the economic interest of the United States and its allies, and the regional balance of power. According to the *National Security Strategy*, "China seeks to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favor."⁴⁰ There are significant problematic conditions that must be addressed to reach a satisfactory DES.

1. China's continued use of the historic and unclarified "nine-dashed line" claim as justification of their SCS expansionism.⁴¹ Interestingly, it may now be a 10-dashed line because the People's Republic of China (PRC) added a dash east of Taiwan.⁴²
2. China's attempts to intimidate United States Indo-Pacific allies using predatory economics.⁴³
3. China's aggressive posturing and militarization of artificial islands in the SCS.⁴⁴
4. Lack of a strong united global alliance and leadership and the weakening of the ASEAN and APEC, which is why President Biden intends to "deepen

our partnership with India and work alongside New Zealand, as well as Singapore, Vietnam, and other Association of Southeast Asian Nations (ASEAN) member states, to advance shared objectives.”⁴⁵

5. Rising Chinese nationalism and an emboldened President Xi Jinping.⁴⁶

The Desired End State

The DES is a United States led Indo-Pacific region that enjoys the observance of international law and a regional balance of power that supports freedom of navigation in the SCS. The *National Security Strategy* recognizes Indo-Pacific states “are calling for sustained United States leadership in a collective response that upholds a regional order respectful of sovereignty and independence.”⁴⁷ United States leadership is needed to achieve five desired conditions:

6. Stronger regional security alliances.
7. An effective ASEAN and APEC.
8. Open sea lanes in the SCS.
9. China’s participation in third party resolution of its unclarified nine-dashed (or ten-dashed) line claim.
10. Thwart China’s aim of information dominance.

Whole-of-Government Response

Beijing is using a long-term, whole-of-government approach to realize the “Chinese Dream,” which includes continued expansion, control, and influence in the SCS that is part of the wish to reclaim its lost territories (e.g., Taiwan, Indian border, etc.).⁴⁸ Strategic competition with China in a volatile, uncertain, complex, and ambiguous environment, requires our use of all instruments of national power in an integrated fashion.⁴⁹ The United States must view engagement with its allies and partners in the region through the lens of a whole-of-government perspective, including intensifying political, economic, military, and informational cooperation to strengthen nations so they can support their sovereign rights and economic independence.⁵⁰ As President Biden says in his newly released *INSSG*: “Our democratic alliances enable us to present a common front, produce a unified vision, and pool our strength to promote high standards, establish effective international rules, and hold countries like China to account.”⁵¹ The four elements of national power (Diplomatic, Information, Military and Economic, or DIME) were used as lenses to develop policies and powers of influence, but the policies should be used together for a whole-of-government approach.

Diplomatic Power: Using political communication, demarches, and information statecraft to promote the UN Tribunal’s ruling in 2016 against China’s “nine-

dash line,” the United States will influence China that participation in multilateral negotiations underpinned by international law is in their best interest.⁵² Diplomacy will be integrated with other instruments of power so that US “diplomats negotiate from a position of strength.”⁵³ This effort will seek to clarify the official Chinese position, which despite their overt, aggressive actions in the SCS, is ambiguous.⁵⁴ As specified in the *National Security Strategy*, we will publicly condemn Chinese state-owned enterprises for predatory economic strategies and leverage economic diplomacy to coerce, compel, and deter such deleterious actions against other nations of the SCS.⁵⁵ Further, the United States will highlight and condemn China’s militarization of artificial islands in the SCS and synergize our diplomatic efforts with military actions. Finally, US State Department leaders will actively engage in the Indo-Pacific, adding emphasis to the bilateral relation of important security partners, such as the Philippines, as well as to emphasize how international organizations such as ASEAN and APEC are critical to securing a “Free and Open Indo-Pacific.”⁵⁶ The United States will enhance ambassadorial status in the region or at least increase diplomatic actions, including the Ambassadors to the Philippines, Vietnam, ASEAN, and APEC, and increase the frequency and the level of key leader engagements. The United States will leverage our “like-minded allies and partners and the rest of the United States government to advance our shared vision for a Free and Open Indo-Pacific.”⁵⁷

Information Power: To deter future Chinese aggression and expansion, the United States through continued partnership with the Philippines and regional allies, must go beyond information sharing and adopt a more aggressive strategy that negates China’s aim of information dominance. Simultaneously, the United States will increase the frequency and scope of ISR gathering in the region. Increasing our involvement could signify to China a shift from the historically passive stance we have taken to one that is assertive and aligns with our current NSS. This increased involvement and showcase of strength would bring forth a new-found commitment to a collective response that upholds regional order respectful of sovereignty and independence.⁵⁸ Furthermore, these actions would influence China to freeze the militarization of its island bases—especially in the Spratly Islands—and rethink its refusal to abide by international law regarding its expansionism in the SCS.⁵⁹ Alongside sharing with China the terrorist information, the United States should be more bold on the world media stage with its condemnation of China’s infractions of international law and China’s illegal operations and buildup in the SCS as well as other potential global rights and international law issues, which aligns with the Biden Administration’s focus on China’s aggression. The United States would continue to rely on satellite imagery to provide precise information on China’s military expansion in the Spratly Islands. We would en-

gage in strong collaboration with the Philippines and our coalition partners; additional ISR assets would be reallocated to the area and surveillance patrols increased throughout the Indo-Pacific region. The increased ISR could also be leveraged by the Foreign Malign Influence Response Center that is being established within the Office of the Director for National Intelligence, as mandated by recent legislation.⁶⁰ The Center will ensure focused analysis and response on the most pressing information domain threats and develop courses of action to counter Chinese information operations. The center will enable deeper understanding of Chinese and regional leaders' perspectives, cultures, decision-making processes, risk perception and acceptance, and will allow for more effective tailored deterrence strategies.⁶¹ Ideally, the above actions would strengthen United States regional credibility as China starts to respect international law, recognize sovereign independence of regional states, discontinue its territorial expansion, and return the Indo-Pacific balance of power back to the status quo.⁶² Although a rational argument, something like this would require a sea-change in thought for the PRC.

Military Power: The aim of military power is to use cooperation and coercion to ensure that China does not continue to "maintain maritime claims in the SCS that are contrary to international law and pose a substantial long-term threat to the rules-based international order."⁶³ By the authorities granted by international law and UNCLOS rulings and in accordance with the *National Security Strategy of 2017* and *National Defense Strategy of 2018*, US Indo-Pacific Command (USINDOPACOM) will leverage existing partnerships to support the partnership governments against further Chinese aggressive militarization in the SCS.⁶⁴ Either the United States needs a more forward presence near the SCS or it should move assets into the region that can better respond to China's presence. One way to indicate a powerful presence is:

The creation of a new fleet based out of Singapore, as suggested by former Secretary of the Navy Kenneth Braithwaite, would enable the US Navy to focus its efforts in the region and help boost the confidence of our ASEAN partners that the United States is there to stay. Establishing this new fleet within the South China Sea and near the Strait of Malacca would give the United States a more rapid response capability to Chinese provocations and enable a more proximate hub for freedom of navigation operations. A ubiquitous United States in Southeast Asia will also serve as a deterrent to an increasingly belligerent China and its gray-zone operations that have allowed Beijing to expand China's sphere of influence in the region relatively unopposed. Greater US military presence in Southeast Asia will not only inspire confidence from our partners in the region

but show China that its implementation of a Monroe-esque Doctrine in Asia will not go unchallenged.⁶⁵

For the coercion aspects of this course of action, the United States will send an aircraft carrier battle group supported by air assets and missile defense that are joined by partner naval and air forces to the SCS to cooperatively monitor the Chinese naval threat and other emergent threats to freedom of navigation. USINDOPACOM will increase its commitment to building alliances that create a broader coalition/alliance in the region to improve the joint interoperability of participating nations.⁶⁶ Additionally, it will work with the State Department to assist the governments of the Philippines and Vietnam in building joint information campaigns that support military operations and in building joint military medical response teams that can aid in the COVID-19 pandemic.⁶⁷ Acting in concert with established multinational organizations will have a synergistic effect in terms of impact and outcomes and increased legitimacy on the international stage. Hence, USINDOPACOM will expand their military exercise program and increasing to multilateral exercise every two years with partner nations in the region, namely the Philippines, China, Japan, Vietnam, and Indonesia.

To work toward a regional balance of power in the SCS, air and space power need to be projected in a total force concept. The aim would be to target Chinese military forces, primarily naval. Joint ISR would be used to observe, collect intelligence, and degrade Chinese capabilities and set conditions for strategic strikes, if needed. United States assets for this task would include P-8As, P-3Cs, EP-3Es, and RC-135V/W's. These aircraft would collect a wide variety of information, "from full-motion video via electro-optical and infrared cameras on the P-8As and P-3Cs to a host of signals and electronic intelligence via the sensor suites on the EP-3Es and RC-135s."⁶⁸ Additionally, both satellite and drone tracking would be a key element to intelligence and surveillance gathering. Combining all these capabilities would allow for joint planning efforts to meet potential Chinese threats, as well as surveillance of terrorist groups. Cyber forces could attack Chinese satellites to dominate and protect the space domain. Control of the space domain is imperative, as our satellites must be operational due to our reliance on GPS and other technologies of our weapon systems. Simultaneously, cyber actions would be deployed to disrupt China's military operations, impairing computer systems responsible for "data communications and computation for command and control,...ISR, targeting, navigation, weapon guidance, battle assessment and logistics management, among other key functions."⁶⁹ Strategic targets would include Chinese information and collection assets largely controlled by Chinese air and naval forces, air and surface radar, interisland communications, high-frequency communications, electronic warfare and signals intelligence, un-

manned systems, and sub-reef counterstealth radar, undersea fiber-optic cable, and satellite communications.⁷⁰ If required, military information support operations could be enhanced in the region through information warfare, via the coalition/alliances, particularly to support pro-messaging to civilian populations and degrade the informal info networks of Chinese civilian boats and fishermen.

Economic Power: China's economic status in the region and world will continue to allow them to bully the countries in the Indo-Pacific region. We will utilize cooperation among the Indo-Pacific countries to ensure China comes back to the bargaining table and to support the overarching goal of "a free and open Indo-Pacific region."⁷¹ We will continue to deepen cooperation with India and other nations within the region on an economic and political level. We must revive the Geo-Economic trade and investment sanctions that were proposed in the Trans-Pacific Partnership (TPP) during the Obama Administration. According to President Obama, "We can't let countries like China write the rules of the global economy. We should write those rules."⁷² The TPP and CPTPP are different and will require different approaches:

Despite the withdrawal of the world's largest economy from the agreement, CPTPP is one of the largest free trade agreements in the world, representing nearly 13.5 percent of global gross domestic product (GDP). The agreement links 11 Asia-Pacific economies—Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam—providing freer trade and investment access among its members. Most of the original TPP text remains intact, and two-thirds of the CPTPP's 30 chapters are identical to TPP.⁷³

Reviving the TPP or joining the newly ratified CPTPP is foundational for the SCS region and would put additional pressure on China by increasing the trade opportunities beyond those offered by China.⁷⁴ As part of the reviving of the TPP and/or becoming a member of the CPTPP, we must work with all Indo-Pacific countries, including the PRC, to join the trade agreement. Most importantly for this situation, the Philippines. Having a strong contingent of Indo-Pacific countries in a collective trade deal will put pressure on China to readdress their geo-economic strategies in the region that have been largely successful in creating a reliance on China to fund projects throughout the globe.⁷⁵

Conclusion

Chinese expansion in the SCS is detrimental to the stability and security of the IPR. The article used a PMESII-PT approach to develop courses of action that were nested with current strategy, but more importantly, focused at 1) thwarting

China's information dominance by stopping the use of military controlled assets in the SCS with actions that will "press on" amid China's threats and use of C4ISR and 2) combined cyber and precision strikes on China's key economic and informational capabilities. Nonaction will only further embolden China and reduce freedom of movement in the SCS for trade, transport, and security. In his March 4, 2021 "Message to the Force," US Secretary of Defense Lloyd J. Austin prioritized China:

The Department will prioritize China as our number one pacing challenge and develop the right operational concepts, capabilities, and plans to bolster deterrence and maintain our competitive advantage. We will ensure that our approach toward China is coordinated and synchronized across the enterprise to advance our priorities, integrated into domestic and foreign policy in a whole-of-government strategy, strengthened by our alliances and partnerships, and supported on a bipartisan basis in Congress.⁷⁶

The recommended actions put forth above advocate for a whole-of-government approach that will protect the interests of the United States in the region by preserving freedom of the seas, protecting partners and allies, and limiting China's sphere of influence. This article places China's aggression and aim of information dominance in the SCS as the number one priority in the Indo-Pacific region and supports President Biden's agenda to "strengthen our enduring advantages and allow us to prevail in strategic competition with China or any other nation."⁷⁷ ★

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Notes

1. US Department of Defense "Indo-Pacific Strategy Report: Preparedness, Partnerships, and Promoting a Networked Region" 1 June 2019.
2. Stephen F. Burgess, "Confronting China's Maritime Expansion in the South China Sea," *Journal of Indo-Pacific Affairs* 3, no. 3 (Fall 2020), 112, <https://media.defense.gov/>.
3. Roger Cliff, "A New U.S. Strategy for the Indo-Pacific," NBR Special Report no. 86, 16 June 2020, 7. For further information, Cliff draws on several sources: the Commission on America's National Interests, "America's National Interests," July 2000, <https://www.belfercenter.org/>; U.S.-China Economic and Security Review Commission, "2016 Annual Report to Congress," November 2016, 475–77, <https://www.uscc.gov/>; Robert D. Blackwill, "Defending Vital U.S. Interests: Policy Prescriptions for Trump," *Foreign Policy*, 25 January 2017, <http://foreignpolicy.com/>; and Charles Boustany and Richard J. Ellings, "China and the Strategic Imperative for the United States," *Asia Policy* 13, no. 1 (2018): 47–67.
4. Cliff, "A New U.S. Strategy for the Indo-Pacific," 111.
5. J. Michael Dahn, "Introduction to South China Sea Military Capability Studies," part of the *South China Sea Military Capability Series – A Survey of Technologies and Capabilities on China's Military Outposts in the South China Sea*, Johns Hopkins University, July 2020.
6. Joseph Biden, *United States Interim National Security Strategic Guidance* (INSSG), March 2021, 8.
7. David Geaney, "How the Biden Administration Should Counter China in Southeast Asia," *Journal of Indo-Pacific Affairs* 4, no. 2 (Spring 2021), 257–62, <https://media.defense.gov/>; and "How Much Trade Transits the South China Sea?," *ChinaPower*, 2020, <https://chinapower.csis.org/>.
8. United States *National Security Strategy* (NSS), December 2017, 46.
9. David J. Firestein, "The US-China Perception Gap in the South China Sea," *The Diplomat*, 19 August 2016, 4, <https://thediplomat.com/>.

10. Kevin Baumert and Brian Melchior, "China: Maritime Claims in the South China Sea," Office of Ocean and Polar Affairs Bureau of Oceans and International Environmental and Scientific Affairs, US Department of State, 2014, 1.
11. Aditya Singh Verma, "A Case for the United States' Ratification of UNCLOS," *The Diplomatist*, 2 May 2020, 3. <https://diplomatist.com/>.
12. Statement of Admiral Philip S. Davidson, US Navy, Commander US Indo-Pacific Command, Before the House Armed Services Committee, 27 March 2019, 9.
13. Firestein, "The US-China Perception Gap," 2.
14. Davidson statement, 3–7.
15. Andrew Scobell, "The South China Sea and U.S.-China Rivalry," *Political Science Quarterly* 133, no. 2 (2018), 215, DOI: 10.1002/polq.12772.
16. Derek Grossman, "Military Build-Up in the South China Sea," RAND, 28 January 2020, <https://www.rand.org/>; Leszek Buszynski and Do Thanh Hai, eds., *The South China Sea: From a Regional Maritime Dispute to a Geostategic Competition*, 1st ed. (New York: Routledge Taylor & Francis Group, December 2019), <https://www.routledge.com/>.
17. Burgess, "Confronting China's Maritime Expansion."
18. Andrew Scobell, Michael McMahon, and Cortez A. Cooper III, "China's Aircraft Carrier Program: Drives, Development, Implications," *Naval War College Review* 68, no. 4 (Autumn 2015): 65–77.
19. Burgess, "Confronting China's Maritime Expansion"; and Grossman, "Military Build-Up in the South China Sea."
20. Shotaro Miyasaka and Junnosuke Kobara, "Indo-Pacific's Military Equipment Buying Spree Risks Arms Race," *Nikkei Asia – DATAWATCH*, 1 November 2020, 3, <https://asia.nikkei.com/>.
21. Derek Grossman and Logan Ma, "A Short History of China's Fishing Militia and What It May Tell Us," *The RAND Blog*, 6 April 2020, <https://www.rand.org/>.
22. Mohammad Masudur Rahman, Chanwahn Kim, and Prabir De, "Indo-Pacific Cooperation: What Do Trade Simulations Indicate?," *Economic Structures* 9, no. 45 (2020), <https://journalofeconomicstructures.springeropen.com/>.
23. Diana Farrell, Ulrich A. Gersch, and Elizabeth Stephenson, "The Value of China's Emerging Middle Class," *McKinsey Quarterly*, 1 June 2006, 2–4, <https://www.mckinsey.com/>.
24. Ane Bislev and Xing Li, "Conceptualizing the Cultural and Political Facets of 'Chinese Nationalism' in an Era of China's Global Rise," *International Communication of Chinese Culture* 1, no. 1–2 (2014), 21, <https://link.springer.com/>.
25. Bislev and Li, "Conceptualizing the Cultural and Political Facets," 30.
26. Alastair Iain Johnston, "Chinese Middle-Class Attitudes Towards International Affairs: Nascent Liberalization?," *China Quarterly*, No. 179 (September 2004), 603–28, <https://www.jstor.org/>.
27. Homi Kharas and Meagan Dooley, "China's Influence on the Global Middle Class – Global China: Assessing China's Growing Role in the World," *Global Governance and Norms*, October 2020, Brookings Institute, <https://www.brookings.edu/>.
28. Linh Tong, "The Social Media 'War' over the South China Sea—Vietnamese, Chinese, and Filipinos Spar Online after the Recent Tribunal Ruling on the South China Sea," *The Diplomat*, 16 July 2016, <https://thediplomat.com/>.

29. Michael Dahm, "Beyond Conventional Wisdom: Evaluating the PLA's South China Sea Bases in Operational Context," *War on the Rocks*, March 2020. <https://warontherocks.com/>.
30. Joint Chiefs of Staff (JCS) Pub 3-13, *Joint Doctrine for Information Operations (IO)*, 9 October 1998, I9; and Joint Chiefs of Staff (JCS) Pub 3-13.1, *Joint Command and Control Warfare (C2W) Operations*, 7 February 1996, I3.
31. James Mulvenon, "The PLA and Information Warfare," in *The People's Liberation Army in the Information Age*, ed. James Mulvenon and Richard H. Yang (Santa Monica, CA: RAND, 1999), 176–77, <https://www.rand.org/>.
32. NORAD and USNORTHCOM Strategic Strategy, Executive Summary, March 2021, 6.
33. Admiral Philip S. Davidson, US Navy, Commander US Indo-Pacific Command, testimony to Full House Armed Services Committee Hearing: "National Security Challenges and U.S. Military Activities in the Indo-Pacific," Wednesday, 10 March 2021.
34. Xue Gong, "The Role of Chinese Corporate Players in China's South China Sea Policy," *Contemporary Southeast Asia* 40, no. 2 (2018): 310–26.
35. "Transportation in the Philippines: The Complete Guide," *Via Hero*, 15 December 2020, <https://www.viahero.com/>; and The World Bank, "Country Profile: Philippines," <https://databank.worldbank.org/>.
36. See: J. Michael Dahm, *South China Sea Military Capabilities Series: A Survey of Technologies and Capabilities on China's Military Outposts in the South China Sea* (Laurel, MD: The Johns Hopkins University Applied Physics Laboratory, 2020).
37. Eugene C. LaFond, "South China Sea," *Encyclopædia Britannica*, 16 April, <https://www.britannica.com/>.
38. Marvin Ott, "The South China Sea in Strategic Terms," *Asia Dispatches* (blog), 14 May 2019, <https://www.wilsoncenter.org/>.
39. Rosemary Foot, "China's Rise and US hegemony: Renegotiating Hegemonic Order in East Asia?," *International Politics* 57 (2020): 150–65, <https://doi.org/>; and Hal Brands and Jake Sullivan, "China Has Two Paths to Global Domination," *Foreign Policy*, 22 May 2020, <https://foreignpolicy.com/>.
40. NSS, 25.
41. Baumert and Melchior, "China: Maritime Claims in the South China Sea," 1.
42. Harry Kazianis, "China's 10 Red Lines in the South China Sea with the Publication of Its Latest Map, China Has Declared 'Mapware' in the Western Pacific," *The Diplomat*, 1 July 2014, <https://thediplomat.com/>.
43. *United States National Military Strategy (NMS)*, 2018, 1.
44. NSS, 6.
45. Joshua Espena and Anne Uy, "Brunei, ASEAN and the South China Sea," *The Interpreter*, 3 August 2020, <https://www.lowyinstitute.org/>.
46. Bisley and Li, "Conceptualizing the Cultural and Political Facets," 21.
47. NSS, 46.
48. Bisley and Li, "Conceptualizing the Cultural and Political Facets," 21–33; and Jim Garamone, "White House Report Recommends Multi-Pronged Approach to Counter China," *Defense News*, 5 June 2020, <https://www.defense.gov/>.
49. JP 5-0 2021, I-24, E-2; and Statement by Secretary Michael R. Pompeo, "U.S. Position on Maritime Claims in the South China Sea," 21 July 2020, 1, <https://2017-2021.state.gov/>.
50. Davidson testimony, 4.

51. *INSSG*, 10.
52. Davidson testimony, 1; and *NSS*, 35.
53. Pompeo, "U.S. Position on Maritime Claims," 1.
54. *NDS*, 1.
55. Firestein, "The US-China Perception Gap," 5.
56. *NSS*, 34.
57. Davidson testimony, 3.
58. Zachary Torrey, "TPP 2.0: The Deal without the US, What's New about the CPTPP and What Do the Changes Mean?," *The Diplomat*, 3 February 2018, <https://thediplomat.com/>.
59. Earl Anthony Wayne, "The Death of TPP: The Best Thing That Ever Happened to China," *National Interest*, 29 January 2017, <https://nationalinterest.org/>.
60. *See*: 50 U.S. Code § 3059.
61. M. Elaine Bunn, "Can Deterrence Be Tailored," *Strategic Forum*, No. 225, January 2007, 2, <https://apps.dtic.mil/>.
62. Patricia Ranald, "RCEP Has Limited Trade Gains and Ignores Labour and Human Rights," *Australian Outlook*, 17 November 2020, <https://www.internationalaffairs.org.au/>.
63. United Nations Convention on the Law of the Sea (UNCLOS), 1982, 7, <https://www.un.org/>.
64. UNCLOS, 9.
65. Geaney, "How the Biden Administration Should Counter China." For additional sources, *see*: Megan Eckstein, "SECNAV Braithwaite Calls for New U.S. 1st Fleet Near Indian, Pacific Oceans," *USNI News*, 17 November 2020, <https://news.usni.org/>; David Geaney, "China's Island Fortifications Are a Challenge to International Norms," *Defense News*, 17 April 2020, <https://www.defensenews.com/>; Lyle J. Morris, et al., *Gaining Competitive Advantage in the Gray Zone Response Options for Coercive Aggression Below the Threshold of Major War* (Santa Monica, CA: RAND Corporation, 2019), <https://www.rand.org/>.
66. *NDS*, 9.
67. *NMS*, 2–3.
68. Joseph Trevithick, "American Surveillance Aircraft Have Been Flooding into The Airspace South of Taiwan," *The War Zone*, 10 July 2020, <https://www.thedrive.com/>.
69. David C. Gompert and Martin Libicki, "Waging Cyber War the American Way," *Survival* 57, no. 4 (22 July 2015): 7–28, <https://www.tandfonline.com/>.
70. Dahm, *South China Sea Military Capabilities*.
71. *NDS*, 9.
72. Victor A. Teixeira, "China on Stage: Assumptions and Strategies in South China Sea," *Asian Journal of Social Science Studies* 3, no. 3 (2018), 57.
73. Matthew P. Goodman, "From TPP to CPTPP," *Critical Questions*, 8 March 2018, <https://www.csis.org/>.
74. *NSS*, 46.
75. Steven Stashwick, "Leveraging US Military Power in South China Sea," *The Diplomat*, 22 August 2007, <https://thediplomat.com/>.
76. Lloyd J. Austin III, United States Defense Secretary, Message to the Force, 4 March 2021, 1, <https://media.defense.gov/>.
77. *INSSG*, 10.

Evaluating Civil Engineer Force Presentation Models for Agile Combat Employment

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Abstract

This article examines the need for redesigned force presentation packages within the Air Force Civil Engineer community due to the return to Great Power Competition and the implementation of Agile Combat Employment (ACE). The author initiates the discussion by proposing a standardized lexicon for these emerging concepts, particularly concerning contingency basing. A recent RAND study proposed a base archetype model for classifying installations within the ACE construct. This paper discusses the advantages of this model and proposes a few modifications. The model, in turn, suggests how to redesign force presentation packages for modern operations. Finally, the author conducts a brief review of current progress toward implementing these redesigned force modules within the Civil Engineer community.

Introduction

The United States Air Force Chief of Staff, General Charles Brown, wrote a letter to his force in August 2020 calling for a restructuring of the force to “better support emerging force generation and force presentation models.”¹ Previously, he had instructed the Air Force to adapt to “employ global effects on near-immediate timelines.”² These urgent requests from the Air Force’s highest levels of leadership spawn from concepts initiated in the 2018 National Defense Strategy, which called for the Department of Defense to develop a “lethal,” “agile,” “resilient,” and “adaptable” force posture and employment to compete in the global strategic environment.³ Our nation’s defense strategists recognized that despite the continued presence of our forces in counterinsurgency (COIN) and counterterrorism (CT) operations, the greatest threats we now face are peer and near-peer actors. Specifically, China and Russia are the modern competitors in returning to great-power competition (GPC).⁴ Drawing upon Graham Allison’s Thucydides Trap concept, Major Phillip Ferris emphasizes the inevitability of conflict between the US and China, comparing the scenario to that of Great Britain and Germany prior to World War I.⁵

The modern environment has led to the development of new operational strategies in the Air Force based on eliminating two critical assumptions from COIN/CT operations of the past several decades, “that airbases are sanctuaries and communications reliable”⁶ As General Brown took command of the Air Force, his immediate orders directed the development, refinement, exercise, and implementation of this new adaptive and agile strategy. His initial guidance drew upon his time as Pacific Air Force (PACAF) Commander, during which he developed the concept of Agile Combat Employment (ACE). As the Air Force continues to refine and evolve this concept, operations and support communities must work hand in hand to ensure sufficient but realistic options.⁷

In their recent RAND report, Mills et al. suggest two recommendations for the Agile Combat Support (ACS) community to focus on as the Air Force continues to refine and implement adaptive basing concepts: mission and base force package redesign and personnel skill design.⁸ Several others, including Priebe et al., identify the current Air Force force presentation model as incompatible with contested environment operations.⁹ Thus, we will focus on that challenge here. The report mentioned above further suggests a four-step approach to redesign ACS force packages: (1) decompose the mission demands into their component parts, (2) reconfigure the force package building blocks, (3) train force package designers, (4) develop a library of new force module designs.¹⁰ The Air Force Civil Engineer (CE) enterprise has started following this process loosely. This paper will attempt to evaluate their progress toward the RAND report suggestions and make recommendations for improvements.

Words Matter

Although the CE community has made some progress toward achieving the goals outlined in the four-steps mentioned above, there are still many unsolved issues. Namely, multiple commands are working on the problem from different angles and have failed to standardize their approaches effectively. To address this issue, we suggest starting with a standard language across the force. Carl von Clausewitz states: “The primary purpose of any theory is to clarify concepts and ideas that have become, as it were, confused and entangled. Not until terms and concepts have been defined can one hope to make any progress in examining the question clearly and simply...”¹¹ However, a quick review of literature on distributed operations in the Air Force returns an exhaustive list of terms: Adaptive Operations in a Contested Environment (AOiCE), flex-basing, adaptive basing, dynamic basing, cluster basing, untethered operations, distributed basing, agile basing, austere airbase, main operating base, forward operating base, forward operating location, forward arming and refueling point, contingency location, hub

and spoke. Suppose we are to adhere to Clausewitz's words. In that case, we must define a consistent set of terms and concepts of the Air Force's dynamic force employment and distributed operations strategies before making any progress in genuinely developing and implementing them.

This task is a current instruction from the Chief of Staff of the Air Force (CSAF) to Headquarters Air Force (HAF) and Major Commands (MAJCOMs.)¹² Given that the current CSAF developed comprehensive definitions and lexicon during his time in PACAF, it makes the most sense that the Air Force will adopt PACAF language. Further reasoning for using the PACAF construct is that it is seemingly the most relevant theater for these operations, as outlined by the CSAF himself¹³ and as suggested by Ferris.¹⁴ Therefore, for the remainder of this paper, we will use the PACAF term Agile Combat Employment (ACE) to refer to the "proactive and reactive scheme of maneuver executed within threat timelines to increase survivability while generating combat power," including all elements of campaigning such as force employment, command and control (C2), and combat support.^{15, 16}

The next clarification involves base terminology. Remaining in the PACAF arena, General Brown identified the following terms in his PACAF Annex to AOiCE:¹⁷

- Cluster: A network of one or more Main Operating Bases, or hubs, that orchestrate the operations of an associated group of distributed fighting locations or spokes. Clusters may have multiple hubs that are MDS or distribution specific to enhance effectiveness. An Air Expeditionary Wing's (AEW) commander or higher normally commands a cluster.
- Hub/Main Operating Base (MOB): Hub locations embody resiliency and maximum levels of combat support to enable the warfighting effort. Hubs are a conduit between forward operating bases (spokes) and rear-echelon forces and must prepare to both receive follow-on forces and disperse current assets within a cluster's hub and spoke network. Hubs coordinate and support their associated spokes.
- Spoke/Forward Operating Base (FOB): Spoke locations embrace an expeditionary mentality to generate combat power on the front lines of a high-end conflict. Spokes vary greatly in operational capability but should include a suitable runway and appropriate ramp space to support a rapid transition to expeditionary combat operations. Spokes support cluster efforts coordinated by hubs.

We will use the terms regional cluster to refer to a group of hubs and spokes, and we will use hubs interchangeably with MOB and spokes interchangeably

with FOB. The critical piece here is that clusters, hubs (MOB), and spokes (FOB) may classify bases according to operational intent and base resiliency, but they fail to define a specific construction standard. To effectively develop force modules for engineers (and other ACS entities), the Air Force must first assign more specific definitions of airpower projection capability to each installation type. This may require further breakdown than the current two categories of MOB and FOBs.

Base Archetype Model

Mills et al. developed a suggested matrix (Figure 1) for classifying base archetypes within the ACE environment, using four categories: Traditional, Temporary Use, Dispersal, and Stay and Fight.¹⁸ Although these are additional words added to the lexicon, we can attempt to fit them within our existing categories. Traditional and Stay and Fight bases would fit into the hub / MOB category, and Dispersal and Temporary would fall into spoke / FOB classification. The matrix includes two factors previously mentioned: base-level resiliency and force projection capability. Base-level resiliency refers to the capability level of infrastructure, equipment, and trained personnel to protect (or rapidly regenerate when protection fails) sorties. Resiliency includes Rapid Airfield Damage Repair (RADR), robust fuel storage, and missile defense capabilities. The proposed model's second axis is force projection capability, scaling from low capability and brief duration to high capability and long duration.

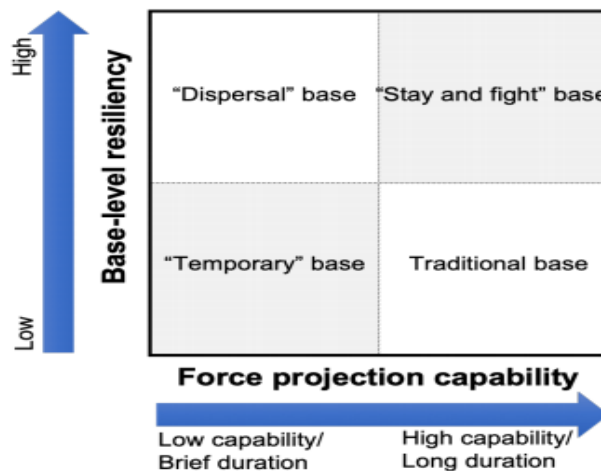


Figure 1 – Mills et al. Proposed Framework for Characterizing Adaptive Basing Archetypes.¹⁹

One significant change is required if we are to integrate this model into our existing base planning and design concepts. We recommend breaking the force projection capability axis into two separate axes: operational capability and projected duration. This separation would result in a three-dimensional model with three axes: base-level resiliency, operational capability, and projected duration. See Figure 2 for an illustrated model; imagine the original RAND model as the blue and green axes in our proposed model. There are two reasons we must add the third dimension, 1) geopolitical differences across theaters suggest varying levels of existing infrastructure, and 2) traditional base planning and design rely upon the projected duration of the base.

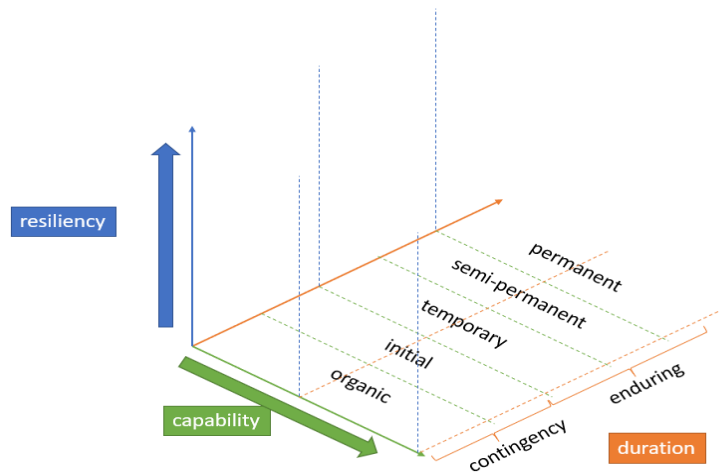


Figure 2—Proposed modified base archetype model

Before discussing the two reasons for separating duration as a third axis, it is important to understand existing DoD construction standards. DoD guidance outlines construction standards in JP 3-34, broken into 2 phases: (1) Contingency Phase (Typically 0 to 2 Years), which consists of Organic, Initial, and Temporary standards, and (2) Enduring Phase (Typically 2+ Years), which consists of semi-permanent and permanent. Unified Facilities Criteria (UFC) provide standards and specifications (e.g., building codes) for DoD installations classified as temporary, semipermanent, and permanent.

With these classifications in mind, we can discuss the reasoning for separating duration on the base classification matrix. Consider a geopolitical scenario in which we have a plethora of existing, high-quality platforms from which to launch operations, including a large number of friendly forces that would permit us to

use their facilities (i.e., NORTHCOM or USAFE). This type of scenario suggests an ACE implementation that does not require much new construction. Therefore, the shell game of maneuvering assets among the regional cluster may involve robust bases well within the Enduring phase. In these cases, all or most of the MOB and FOB locations will have facilities at permanent construction standards, regardless of proposed operational capability.

On the other hand, consider a theater in which the US maintains only a handful of robust Enduring locations and can access only a few allies (i.e., Air Force Central Command, AFCENT). ACE implementation here may permit the use of the few existing Enduring locations as MOB's but will require renovation, repair, or even construction of new installations to use as FOB's. The existing locations probably are built to temporary or semipermanent construction standards at best. Any new construction will not exist past the initial standard of construction given the timeline constraints of GPC. A third scenario exists somewhere such as PACAF: we have plenty of existing Enduring locations to use as MOB's and several local allies, but our potential enemies' strength and adjacency prohibit the first scenario's security levels. This portfolio of scenarios shows that duration (and thus construction standard) is not directly tied to operational capability as the RAND model proposes. The separation of projected duration and force projection capability is necessary because of the differences in ACE operations in different theaters.

The second concept involves a bit more discussion. Traditional Air Force base planning and development relies on AFH 10-222, last updated in 2012.²⁰ The planning process involves a gradual force module concept seen in Figure 3; open the airbase, establish the airbase, operate the airbase, robust the airbase. The first few blocks have one goal: generate airpower. This process enables the establishment of air superiority, after which we can transition to an enduring location, i.e., move to "robust the airbase." This block involves planning and building toward the temporary, semipermanent, or permanent standard of construction mentioned previously, based upon the *duration* we plan to remain at the location.

In the AFCENT theater and COIN and CT wars, in which established air superiority was assumed, these durations were appropriate. Generally, our bases in AFCENT all transitioned to the Enduring phase. However, the return to GPC suggests an operating environment in which this assumption is invalid, thus retaining a majority of our installations in the Contingency phase and never reaching the "robust the airbase" block of base development. Thus, the requirement for an agile, integrated, distributed, and resilient base infrastructure dictates a review of the existing construction standards for Air Force installations.



Figure 3—Base Development Force Modules as presented in AFH 10-222, Volume 1.²¹

The existing Enduring classifications—temporary, semipermanent, and permanent—have suitable existing specifications primarily defined in UFC 1-200-01.²² They are typically appropriate for traditional, “home-station” and rear-echelon bases. However, in some well-established theaters, they may contain MOB or even FOBs (think of the USAFE scenario), depending on the Combatant Commands (COCOMs) intent with ACE implementation. We should focus on the Contingency phase—Organic and Initial—because there are no standards or specifications for these classifications. No definitions exist here because the expected duration is so short that tents and mobile equipment are more feasible than hardened facilities and infrastructure. Service construction standards typically retain the Organic classification for Army and Marine base camps. Although training such as Silver Flag emphasizes the initial phases of bare-base development, Air Force engineers rarely think in terms of Organic or Initial standards because the typical operation we have grown used to exceeds that standard. The CE enterprise currently emphasizes a cost-effective asset management model based on long-term planning, and thus the use of permanent standards. For example, Castaneda analyzed the cost benefits of such thinking, concluding that it is cheaper, in the long run, to produce permanent facilities than temporary or semi-permanent if an endured location duration is expected.²³ Our military’s fiscal constraints and the long-lasting operations in the AFCENT theater heavily influence this thinking.

However, in the modern times of GPC, ACE dictates that the Air Force also operates in the Organic and Initial arena. Canfield suggests embracing lower construction standards to coincide with the larger number of distributed bases required for ACE within the constrained financial environment previously men-

tioned.²⁴ Instead, we propose that the Air Force embrace the Organic and Initial standards of construction as the most applicable minimum for most ACE installations. This step furthers progress toward a consistent joint standard of construction called for by Scott and Canfield and minimizes the amount of new administrative work required to update standards, regulations, and specifications.^{25, 26} Therefore, we recommend the Air Force CE enterprise work to normalize Organic and Initial standards from JP-4 within its lexicon. Although the terms currently exist in AFH 10-222, their definitions and explanations may require expansion.

Concerning Organic standards, an essential difference between the Army and Marines and the Air Force is that the latter requires a projection platform—an airfield—to project combat power.²⁷ The Air Force already has clearly defined standards for airfield pavements, facilities, and infrastructure (with specific considerations for each aircraft when appropriate) within its portfolio of UFCs (primarily UFC 3-260-01 and UFC 3-260-02).^{28, 29} At its core, engineers use the number of required “passes” for different aircraft types to complete airfield pavement design. This design method is compatible with currently evolving ACE concepts. It is scalable based on operational intent (i.e., type of aircraft and number of sorties), and existing bare-base development guidance, AFH 10-222, already references this procedure. Therefore, airfield specifications should not require additional modification once the CE enterprise normalizes Organic construction standards.

Addressing the Force Module Question

Now that we have reviewed Air Force construction standards, we can return to the initial question of Air Force CE enterprise progress toward redesigning force modules in the ACE environment. Other than the proposed third axis of the RAND model, redesigning CE force modules relies on clarifications for the other two axes: force projection capability and base resiliency.

Mills et al. have suggested a framework here as well, using the four classifications described earlier: Traditional, Stay and Fight, Dispersal, and Temporary Use.³⁰ The report uses Airfield Damage Repair (ADR) and Explosive Ordnance Disposal (EOD) capability in the base resiliency axis and combat operations intensity (i.e., number sorties) and maintenance capability on the force projection axis. Our operational entities should identify what combat operations intensity looks like for our entire aircraft inventory. Nordhagen takes a reliable approach regarding the A-10, ultimately confirming that the Warthog community can conduct ACE operations with a few minor adjustments to training, regulations, and exercises.³¹ Other aircraft communities should follow this evaluation model, ulti-

mately attempting to define various levels of operational intensities for their aircraft.

Operational intent suggests support provided. Thus, once operational communities define the above operational intensities and accompanying force modules for our aircraft inventory, the ACS community can effectively develop support force modules. Most important is the aircraft maintenance component. Mills et al. suggest three categories: rearm-refuel-repair, rearm-refuel, and refuel only, although an “under fire” category may be necessary.³² Next, based on the operational intensity and base resiliency requirements, Engineer support modules could be designed.

The CE enterprise is currently developing standard modules to present forces—really just modified Unit Type Codes (UTC)—that provide appropriate levels of support for the directed operational intent. These modules provide traditional Base Operating Services (BOS) engineering services, airfield damage repair capability, and emergency services (Fire, EOD, and chemical, biological, radiological, and nuclear (CBRN) support. PACAF, USAFE, and AFCENT have all proposed various iterations of new “ACE UTCs” designed for MOBs and FOBs. These proposals need to be discussed and standardized as much as possible. Flexibility and scalability are essential to remaining consistent with ACE tenets and account for the various geopolitical scenarios (i.e., different means of implementation) described previously. These different scenarios may ultimately prevent a one-size-fits-all solution. However, if the Air Force can implement the naming convention and base archetypes discussed above, discussions across theaters will be less confusing. Perhaps it is possible to break down Mills’ archetypes even further within our 3-D model above in a way that can encompass all theaters, although this is unlikely.

Additionally, the CE enterprise is evaluating alternative equipment kits to support operations on a more flexible scale. One such example is the Air Rapid Response Kit, an alternative to the less agile Force Provider and Basic Expeditionary Airfield Resources (BEAR) kits.³³ These alternatives focus on providing support within the timeframes focused on earlier (i.e., less than 30 days) and much smaller footprints, consistent with ACE operations. Finally, the CE enterprise is attempting to optimize global asset management via pre-positioned equipment. PACAF has developed pre-positioned equipment kits (RBCP), and USAFE has developed “dabs,” both of which strive to support an integrated basing model, rapid scalability, and increased resiliency through distribution.³⁴ These new developments are essential progressions along the four-step process outlined by Mills et al. to redesign ACS force packages within the ACE construct.

Conclusion

The return to GPC has led to the development of new force presentation methods and a discussion of integrated basing networks. This article sought to discuss current force presentation and ACE basing challenges that the Air Force CE Enterprise is facing. The current lexicon around these concepts is jumbled at best, so we recommend standardizing the PACAF naming convention of ACE, including clusters, hubs (MOB), and spokes (FOB). We also suggest employing the base archetype matrix discussed in Mills et al. – Traditional, Temporary Use, Dispersal, and Stay and Fight. The matrix uses base resiliency and force projection capability, to which we add a third dimension of projected duration. This three-dimensional matrix provides a framework for Combatant Commanders to classify their MOBs and FOBs, enabling combat support entities to shape their provider packages and capabilities appropriately.

Within the CE enterprise, the transition to ACE within the above framework suggests a review of current planning and construction guidance. Although there is no need to create new standards, existing guidance such as AFH 10-222 requires review to ensure the normalization of Organic and Initial standards of construction compulsory for the ACE environment. Additionally, the planning process and force modules presented for bare-base development may require updating to reflect the time constraints and increased scalability (back-and-forth) of ACE.

Current CE staffs are discussing, developing, and exercising new force presentation models to help support ACE. They have proposed a variety of different modules in the form of modified UTCs. They are also evaluating new equipment packages and toying with pre-positioned assets. All these efforts differ across theaters according to the unique characteristics of the respective Area of Responsibility.

There are many challenges the Air Force faces as it stages for the modern GPC. As the force evolves this new means of operating, consistency across the force is vital. Consistent communication using a common language between operations communities and ACS entities is essential to realizing the modern Air and Space Forces outlined in our service priorities. This paper outlined several recommendations to help standardize that common language to permit shaping the modern and agile force our nation requires.

Further Considerations and Additional Research

The discussions above bring forth a plethora of other challenges and questions outside this paper's immediate scope. These items require further consideration

and additional research to help solve. We have outlined a few of them, as well as potential starting points for research, below.

Within most theaters, the United States and its allies own pre-existing locations that could meet the requirements of one of the base archetypes discussed above. Combatant Commanders should already maintain at least some information on such locations. Is this information accurate and up-to-date? Is it easily and rapidly accessible to use within the time constraints of ACE operations? Moreover, is it robust enough to outline the types of operations and airframes each location could support? Patrick Kelly develops an analytical model for evaluating the feasibility of fielding various systems at different airfields based on their respective infrastructure.³⁵ It is also essential that we know what construction standards our allies rely on at these locations, for example, do our European partners use the same pavement design methodology as we do?

How do we effectively pre-position assets, equipment, and personnel to support a resilient and integrated base network? Lynch et al. evaluate a methodology for the global management of Air Force War Reserve Materiel. They argue that the Air Force should move away from inventory management and toward capability management for mission support assets, should develop a method to determine priority for War Reserve Materiel (WRM) pre-positioning, and should optimize its WRM pre-positioning posture.³⁶

How do we rapidly determine requirements for ACE bases, personnel, equipment, and assets, project corresponding mobility needs and effectively deploy? Another RAND team developed a Lean-START tool that takes user inputs and uses various planning factors to output UTC requirements.³⁷ If this tool considers an updated force module library, ACE planners and employers could effectively use it.

JP 5-0 states: “Joint planning is resource informed and time-constrained.”³⁸ In the GPC environment, the joint planning environment will be more time--constrained than ever before. Therefore, the ACS community must perform their portion of “resources informed” better than ever before. From the ACS perspective, this involves providing accurate, up-to-date data on available airfields and their capabilities, as outlined in some of the questions proposed above. Further, In an ACE operational environment, planning and execution may happen much more simultaneously than in previous operations; therefore, aligning modern operational command and control (JADC2) methodologies identified by Fitle and Terino with ACS planning and execution is essential.^{39, 40} Joint Planners must understand how to rapidly and effectively employ these capabilities; thus, these JADC2 methodologies must incorporate the ACS tools and capabilities outlined in the first few questions.

Finally, achieving appropriate readiness levels will require the CE enterprise to reassess the relevance and effectiveness of current training efforts, specifically in the areas of bare-base planning, design, development, and rapid airfield damage and repair. The successful implementation of ACE may require an increase in the frequency and intensity of training in Organic and Initial standards, as well as rapid and scalable bare-base development, to support new force presentation modules and the requirements of a dynamic GPC strategic environment. ★

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Notes

1. General Charles Q. Brown, Jr., *CSAF Action Orders: To Accelerate Change Across the Air Force* (Arlington, VA: Department of the Air Force, December 2020), 7.
2. General Charles Q. Brown, Jr., *Accelerate Change or Lose* (Arlington, VA: Department of the Air Force, August 2020), 4.
3. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge* (Washington, DC: Department of Defense, 2018), 7.
4. Brown, *CSAF Action Orders*, 9.
5. Phillip Ferris, *The Rising Dragon: How Should the United States and the International Community Respond* (Maxwell Air Force Base, AL: Air University Press, October 2019), 3–4.
6. Miranda Priebe, Alan J. Vick, Jacob L. Heim, and Meagan L. Smith, *Distributed Operations in a Contested Environment: Implications for USAF Force Presentation* (Santa Monica, CA: RAND, 2019), 94.
7. Priebe, Vick, Heim, and Smith, *Distributed Operations in a Contested Environment*, 95.
8. Patrick Mills, et al., *Building Agile Combat Support Competencies to Enable Evolving Adaptive Basing Concepts* (Santa Monica, CA: RAND 2020), xv.
9. Priebe, Vick, Heim, and Smith, *Distributed Operations in a Contested Environment*, 94.
10. Mills, et al., *Building Agile Combat Support Competencies*, xv–xvi.
11. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 132.
12. Maj Nathan Demers, chief, Theater Construction, Headquarters PACAF/A4CI, Joint Base Pearl Harbor-Hickam, HI, to the author, e-mail, 27 January 2021.

13. Brown, *CSAF Action Orders*, 9.
14. Ferris, *The Rising Dragon*, 3–4.
15. United States Air Force Expeditionary Center, *Annex A to Adaptive Operations in Contested Environments: Agile Combat Employment for Force Providers* (Joint Base McGuire-Dix-Lakehurst, NJ: Directorate of Operations, Logistics, and Plans, June 2020), 27.
16. Department of the Air Force, *Air Force Doctrine Publication 3-99: Department of the Air Force Roles in Joint All-Domain Role in Joint All-Domain Operations (JADO)* (Maxwell Air Force Base, AL: Curtis E. LeMay Center for Doctrine Development and Education, October 2020), 3.
17. Pacific Air Forces Command, *PACAF Annex to Department of the Air Force Adaptive Operations in Contested Environments* (Joint Base Pearl Harbor-Hickam, HI: Headquarters Pacific Air Forces, June 2020), 9.
18. Mills, et al., *Building Agile Combat Support Competencies*, 30.
19. Mills, et al., *Building Agile Combat Support Competencies* 30.
20. Air Force Handbook (AFH) 10-222, Volume 1, *Civil Engineer Base Development*, 23 January 2012.
21. AFH 10-222, 23.
22. Unified Facilities Criteria (UFC) 1-200-01, *DoD Building Code, With Change 1*, 8 October 2019, revised 1 October 2019.
23. Jorden Castaneda, “Analyses of Temporary, Semi-Permanent, and Permanent Construction Standards on Expeditionary US Air Bases” (master’s thesis, University of Texas at Austin, December 2017), 67.
24. Michael Canfield, “Contingency Basing for Great Powers Competition” (working paper, Air University Advanced Research Initiative, 7 December 2020), 9.
25. James T. Scott, “Joint Standards for Contingency Construction,” Report no. NDU-ICAF-A82 (Fort McNair, Washington, DC: National Defense University, April 1993), 21.
26. Canfield, “Contingency Basing,” 6.
27. The establishment of the US Space Force as a new service component under the Department of the Air Force does impact this statement. Until the Space Force implements its own facility construction and maintenance entity, the Air Force Civil Engineer community is responsible for the construction and maintenance of US Space Force installations. Projection of power within the Space domain does not necessarily require an airfield as a platform, as installations may support radio, communication, satellite, and other equipment vice aircraft.
28. Unified Facilities Criteria (UFC) 3-260-01, *Airfield and Heliport Planning and Design, With Change 1*, 4 February 2019, revised 5 April 2020.
29. Unified Facilities Criteria (UFC) 3-260-02, *Pavement Design for Airfields*, 30 June 2001.
30. Mills, et al., *Building Agile Combat Support Competencies*, 30.
31. Leif C. Nordhagen, “A-10 Adaptive Basing Operations and Applications in Support of SOF” (master’s thesis, Naval Post Graduate School, December 2018), 74.
32. Mills, et al., *Building Agile Combat Support Competencies*, 32, 49.
33. Maj Nathan Demers, chief, Theater Construction, Headquarters PACAF/A4CI, Joint Base Pearl Harbor-Hickam, HI, to the author, e-mail, 27 January 2021.
34. Demers e-mail, 27 January 2021.
35. First Lieutenant Patrick J. Kelly, IV, “Methodology for Including Base Infrastructure in Conceptual System Analysis” (master’s thesis, Air Force Institute of Technology), 36.

36. Kristin F. Lynch, et al., *Analysis of Global Management of Air Force War Reserve Materiel to Support Operations in Contested and Degraded Environments* (Santa Monica, CA: RAND, 2021), xv.
37. Patrick Mills, James A. Leftwich, Kristin Van Abel, Jason Mastbaum, *Estimating Air Force Deployment Requirements for Lean Force Packages: A Methodology and Decision Support Tool Prototype* (Santa Monica, CA: RAND, 2017).
38. Joint Publication (JP) 5-0, *Joint Planning*, 1 December 2020.
39. Kyle Fitle, "JADC2 in Distributed Operations" (working paper, Air University Advanced Research Initiative, 6 August 2020).
40. Hannah Terino, "Joint All Domain Operations for 2030" (working paper, Air University Advanced Research Initiative, 7 August 2020).

Pivot to Power

US Grand Strategy and the Rise of China

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The new spectrum of superpower engagement in, and the shift in US grand strategy toward, the Indo-Pacific carry immense implications for the Indian Ocean region. On 12 March 2021, the first joint meeting hosted by Pres. Joe Biden with India, Australia, and Japan (commonly known as the “Quad Summit,” referring to the four members) proved that America needs its allies to “pivot” in Asia to secure mutual interests and to counter a rising China. The leadership meeting, which was initiated by the United States, signals the immediate significance of “priority theater” and the urgency to counterbalance China’s aggressive behavior and the threat to American hegemony globally.

The joint statement by the Quad leaders reaffirmed their commitment to make sure the Indo-Pacific is “free, open, inclusive, healthy, anchored by democratic values, and unconstrained by coercion.”¹ The region represents a population of 4 billion, or 60 percent of people worldwide.²

This article analyzes the emerging engagement and paradigm shift in the US grand strategy in the Indo-Pacific. Its primary thesis is that the current geopolitical and strategic importance of the region has led the United States to redesign and refocus its grand strategy toward the Indo-Pacific, primarily as a method to establish a rules-based order with other like-minded nations, especially democracies, to counterbalance the rise of an increasingly aggressive China.

US Involvement in the Indo-Pacific

The United States has committed to the Indo-Pacific through “trade, exchange, shared sacrifice, and mutual benefit.”³ The United States first step into the Indo-Pacific was in 1794, when an American trading vessel reached Kolkata.⁴ However, in strategic terms, US involvement was limited and ill-defined until the end of the Cold War. Today, the American presence in Asia centers around US Pacific Command, with established bases throughout the region including Japan, Guam, and South Korea.⁵

In the early post-Cold War period, Bill Clinton and George W. Bush administrations attempted to formulate a new grand strategy, with Europe now taking a

lesser role as it tilted toward addressing issues in Eurasia. The Department of Defense in 1995 issued its “U.S. Security Strategy for the East Asia–Pacific Region,” the official publication depicting the US government’s approach to the Indo-Pacific.⁶ American grand strategy began to shift toward Indo-Pacific in the early 2000s in response to the rise of China, the growing threat from North Korean, and the gradual economic integration of the region. The 9/11 terrorist attacks, China’s growing economic, military, and technological power, and a quantum leap in US–India relations pushed Washington to adjust its strategy to focus even more on this region. The Obama administration rolled out and articulated its strategy as a “pivot” or a “rebalance” toward Asia.⁷ The Obama-era pivot was then readjusted again under Pres. Donald Trump’s Free And Open Indo-Pacific strategy. The US *National Security Strategy*, released in December 2017, recognized authoritarian revisionist power as the consequential challenge for the United States and its partners’ interests.

The growing influence of China in South and Southeast Asia created concerns over US ongoing interests in this region. The aftermath of the coronavirus pandemic and dependence on Beijing raised global concerns regarding the shifting of power balance in the two regions. China has also made huge investments in anti-access/area-denial (known as “A2/AD”) aimed at strategic competition with the United States.⁸

Since 2010, China has been expanding its presence as a dominant regional power vis-à-vis economic growth, advancement of technologies, expertise in cyberwar, and artificial intelligence.⁹ In addition, China’s Belt and Road Initiative (BRI), launched in 2013 by President Xi Jinping, is a vast collection of development and investment initiatives that stretch from East Asia to Europe, pointedly expanding China’s economic and political influence.¹⁰ The latest data on China shows the soaring industrial production and retail sales—35.1 percent and 33.8 percent higher than predictions and betting consensus forecasts.¹¹ China’s growing economic, military, and technological power has raised serious alarm bells in Washington. And China’s aggressive behavior in Asia, particularly toward Taiwan, is further straining its diplomatic relationship with the United States.

A Rising China: Opportunity for Worldwide Progress? Or Threat to Global Stability?

An understanding of the US grand strategy requires an appreciation of core American values, which are represented by a model that maximizes security, prosperity, and liberty. This necessitates optimizing the grand strategy to prioritize those core *American* interests, as opposed to the interests of the rest of the world.¹²

It can be argued that the inherent dynamism of globalization has created an economic and political ecosystem in which US grand strategy must include geopolitical considerations in the Indo-Pacific while stabilizing the bilateral relationship with China both as a near-peer and as an adversary.

But the competitive economic pressures exerted by China have created an imbalance of power in the Indo-Pacific, thereby weakening the US strategic advantage in the region. While the United States maintains its position as the global “security partner of choice,” China’s economic influence has shifted the regional balance of power.¹³ The essential grand strategy domains—security, prosperity, and liberty—are rooted, fundamentally, in the operational realities in the region specific to economics, diplomacy, and military might. For the United States and its allies in the Indo-Pacific, it is critical to maintain and promote an open region that embraces fair trade, adheres to global norms around human rights, and favors diplomacy over armed conflict.

China’s domestic grand strategy, by contrast, mirrors its current foreign policy, which has shifted from relative neutrality into an assertive position to further China’s core soft and hard powers. Much of the soft-power influence is grounded in economic policies that present opportunities for China and threats to the Indo-Pacific. One of the primary characteristics of how China will continue to evolve as a world superpower will be a unique socio-philosophical cultural foundation that works in parallel with robust economic strength within the Chinese ecosystem.¹⁴ Heuristically, the soft-power influence and strength of China, in economic terms, have created an appearance of implicit endorsement of the current regime in the country as trading partners such as the United States and countries within the Indo-Pacific do not respond aggressively to actions taken outside global norms.

In furthering its position as a world superpower, China formulated a well-articulated vision for the future—one of established economic interdependence. In general, this relies on a focus that is rooted in economic concepts of dependency and control: reducing dependency on imports while simultaneously increasing economic control across the world. These concepts set the foundation for Made in China 2025 and the BRI by linking a simple adage—“what is good for China is good for other regions”—particularly, but not exclusively, to developing nations.

Compounding this Chinese expansion of economic power throughout the Indo-Pacific, the US reliance on China-based supply chains was illustrated during the COVID-19 pandemic. As China-centric developments continue to rebound through the region, there is a potential to further strain the resiliency and

security of the value chain for products and services that maintain research and development or manufacturing roots in China.

As part of the shifting balance of power across the world—including in key strategic infrastructure areas that are the focus of the BRI—the use of so-called adversarial capital in China is on the rise. Within the national security and defense communities, adversarial capital is the use of financial and economic tools to acquire sensitive strategic advantages in technologies, data, and other critical assets. These complex interactions among developments in economics, diplomacy, and military action permit the projection of power across the Indo-Pacific as well as toward the United States—advancing the mission of the People's Republic of China and adding further weight on the scales of power.

Even while the world must acknowledge the growing economic prowess of China, unhumanitarian behavior toward the Uyghur ethnic minority and the crackdown on prodemocracy protesters in Hong Kong (resulting in the imposition of a new security law that could diminish citizens' freedoms and rights) cause angst and uncertainty. Communist China's ongoing treatment of the Uyghurs has meant that more than a million Uyghurs have been detained in reeducation camps in the guise of "vocational and educational training." The Chinese government in early 2017 began building state-run, highly securitized "child welfare guidance centers" to confine Uyghur children full-time, including infants. Institutionalized sexual assaults and rapes have become commonplace within this program. Moreover, during the height of China's COVID-19 outbreak, detainees were reportedly forced to strip naked on a weekly basis as guards hosed them down with "scalding" and corrosive disinfectant.¹⁵ The Chinese government is intending to destroy the identity of the Uyghurs as a group through elaborate government policies and programs, systemic oppression, and inhumane and degrading treatment (including rape, sexual abuse, and public humiliation) both inside and outside the camps. It is beyond comprehension in the modern world order.

Furthermore, China's aggressive postures toward Taiwan, eastern India, the South China Sea, and Bhutan are a direct indication of its intent to alter the status quo and cause instability throughout the region.

Challenges

The nature of the challenges faced by the United States in the Indo-Pacific will require deconstructing its holistic grand strategy into actionable goals with defined metrics of success. Whether industrial policy, economic and trade policy, or national security considerations, any undertaking will require targeted and tactical implementation. The standards that govern com-

petition in free and open economies often conflate these issues, which makes finding resolutions increasingly difficult, as with trade policy surrounding intellectual property, data rights, and underselling or underbidding markets—tactical issues that are increasingly identified as national security issues.

Power and Influence

One of the challenges, which will require significant multilateral partnering with allies, will be to ensure that the United States has enough influence in the Indo-Pacific to offset China's influence. While the United States is considered to possess dominant military ability worldwide, the probability of armed conflict that draws in American forces is low. However, the power and influence wielded by China economically on the region remains significant and is growing. The current economic impact of a conflict with China is likely to outweigh the US influence in the region, particularly considering the immense presence of Chinese economic interests in the Indo-Pacific. This will impact US–China trade, foreign direct investment, and free foreign exchange reserves in bilateral and regional relations.

A Center for Strategic and International Studies research report titled “Survey of Southeast Asian Strategic Elites” found that “China is seen as holding slightly more political power and influence than the United States in Southeast Asia today and considerably more power relative to the United States in 10 years.” Along with this, in economic terms, “the region views China as much more influential than the United States today, and this gap is expected to grow in the next 10 years.”¹⁶

Rule of Law

The other challenges the region faces are climate change and extremist policies. With seven of the world's ten largest standing armies, the Indo-Pacific is the world's most militarized region, with five of the world's declared nuclear states; the region will play an important role in determining future strategy formulation in the region.¹⁷ However, regional instability deriving from nontraditional sources, such as weak state capacity, also poses a challenge. A clear understanding is needed for maritime challenges and situations that are likely to develop in the Indian Ocean and in the South China Sea, in addition to nuclear proliferation and its impacts and consequences. Upgraded nuclear arsenals, shifts in power, and collusion among nation-states with a focus on South Asia are of utmost importance.

Extremism and protectionism are on the rise, causing the liberal international order to become nervous and off-balance. In many developed democracies, identity politics is attracting support for authoritarian approaches more than ever. Addressing the scourge of religious fundamentalism and its impact on regional security dynamics is another facet of this burgeoning rubric of challenges. Climate change is now a game-changer in the region as countries take steps to prevent environmental degradation. Indo-Pacific countries will contribute approximately 30 percent to the global rise in temperature by the year 2100, based on the estimates of an international group of researchers.¹⁸

The Russia–China Relationship

Its growing strategic partnership with China has resulted in Russia targeting the Indo-Pacific through foreign policy. However, Russia doesn't have much to offer when it comes to the Korean Peninsula or Southeast Asia other than to raise concerns within the US strategic community, which sees it as a grave threat.¹⁹ Russia's aspirations in the Indo-Pacific have been seen through a lens of geopolitical considerations; however, Russia has to accommodate its position by strengthening the geo-economic component of its foreign policy.²⁰ Russia has reason to prioritize the Indo-Pacific, and it is more concerned about the expansion of Western initiatives through the North Atlantic Treaty Organization than it is about allied relations between the United State and Japan and South Korea. But it cannot ignore the military component in the Indo-Pacific, which may eventually develop its own "Asian NATO."²¹

Policy Implications

The challenges facing the United States in the Indo-Pacific cannot be examined or addressed adequately if the issues are evaluated from a singular or unilateral perspective. The strategy must be evergreen and nontraditional in nature, requiring a mosaic of harmonized solutions—from industrial policy to foreign policy to consistent global economic policy. To succeed in the Indo-Pacific, the United States must focus on shifting the incentives from defense to economics in its own bid to win the soft-power competition for power and influence.

Economics is a key part in understanding and analyzing the US grand strategy in the Indo-Pacific, targeting trade, investment, and infrastructure/connectivity. Importantly, US resources can be conducive to social development, as regional states rely on external assistance; the region is strategically motivated to respond to China's rise. China continues its massive political and economic investment

throughout the Pacific theater, beginning in 2006, and has reaffirmed its position as a major external actor.

China's power and influence are pursued through economic influence over the Indo-Pacific. As such, the United States and its regional allies need to evaluate economics-focused solutions and tools that will mitigate risks associated with the rise of China. This will mean redefining the competitive landscape, including the United States and its allies establishing economic incentives for trading partners that will adhere to global norms while also considering punitive measures against bad acts that may originate in China—such as forced labor, unfair trade practices, and intellectual property theft.

The United States declassified one of its national security documents—the 2018 “Indo-Pacific Strategic Framework”—which reinforces and focuses on “working alongside and encouraging like-minded countries to play a greater role in addressing the challenges and in increasing burden-sharing” and “[s]haring the benefits of US research and development with allies and like-minded partners to retain a collective military edge.”²² Signaling continuity of the policy is a good start for the Biden administration to build on the government's Indo-Pacific strategy.²³ Moreover, the framework reiterated the US commitment to maintaining “diplomatic, economic, military pre-eminence” in addition to supporting like-minded democracies throughout the region. The document pledges the United States to “promote and support Burma's transition to democracy” but, unfortunately, says nothing about democracy or human rights violations anywhere else in Southeast Asia.

Policy makers should prioritize deepening cooperation in investment and infrastructure through domestic and international incentives—thereby competing in the long term with China's BRI. A commitment toward funding projects will help strengthen transparency in cross-border investment, encourage involvement by the private sector, and ensure that investment in innovation and entrepreneurship is pushed forward along with the US–ASEAN Trade and Investment Framework Agreement. Furthermore, the United States could assist other ASEAN countries in digitizing their customs clearance, which would lead to the full operation of ASEAN Single Window (ASW).

Conclusion

Detailed analyses and reexaminations are urgently needed so that governments and think tanks can determine key areas that are likely to have the greatest impact on shaping the contours and future dynamics in the region. The United States should not attempt to single handedly solve these challenges; instead, it should coordinate a consortium of supporters to address them together. The natural allies

in this quest to regain balance in the Indo-Pacific are those that share core American values and are willing to focus on freedom, democracy, and mutually beneficial strategic interests. ★

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Notes

1. The White House, Statements and Releases, Quad Leaders' Joint Statement: "The Spirit of the Quad," 12 March 2021, <https://www.whitehouse.gov>.
2. Worldometer, South-Eastern Asia Population, <https://www.worldometers.info>.
3. US Department of State, "A Free and Open Indo-Pacific: Advancing a Shared Vision," 4 November 2019, <https://www.state.gov/>.
4. US Department of State, "A Free and Open Indo-Pacific."
5. US Department of Defense, "U.S. Security Strategy for the East Asia-Pacific Region," February 1995, <https://nautilus.org/>.
6. US Department of Defense, "U.S. Security Strategy for the East Asia-Pacific Region."
7. Hillary Clinton, "America's Pacific Century," *Foreign Policy*, 11 October 2011, <http://foreignpolicy.com>.
8. Michele A. Flournoy, "How to Prevent a War in Asia," *Foreign Affairs*, 18 June 2020.
9. Hui Lu, "Full Text: China's National Defence in the New Area," *Xinhua*, 24 July 2019.
10. Andrew Chatzky and James Macbride, "China's Massive Belt and Road Initiative," Council on Foreign Relations, 28 January 2020.
11. "Industrial Production and Investment Surge in China," *The Economist*, 16 March 2021, <https://www.economist.com/>.

12. Paul C. Avey, Jonathan N. Markowitz, and Robert J. Reardon, "Disentangling Grand Strategy: International Relations Theory and U.S. Grand Strategy," *Texas National Security Review* 2, no. 1 (2018): 28–51, <https://repositories.lib.utexas.edu/>.
13. Stephen Tankel, Lisa Curtis, Joshua Fitt, and Coby Goldberg, *Positive Visions, Powerful Partnerships: The Keys to Competing with China in a Post-pandemic Indo-Pacific* (Washington, DC: CNAS, 2021), <https://s3.us-east-1.amazonaws.com/>.
14. Attila Kasznár, "China: The New Key Protagonist of International Security," *Academic and Applied Research in Military and Public Management Science* 17, no. 2 (2018): 53–60, <https://folyoirat.ludovika.hu/>.
15. Azeem Ibrahim, et al., "The Uyghur Genocide: An Examination of China's Breaches of the 1948 Genocide Convention," Newlines Institute for Strategy and Policy, Policy Report, March 2021, <https://newlinesinstitute.org>.
16. Michael Green, et al., "Powers, Norms, and Institutions: The Future of the Indo-Pacific from Southeast Asia Perspective," Center for Strategic and International Studies, CSIS Report, June 2020, <https://csis-website-prod.s3.amazonaws.com/>.
17. Shreya Upadhyay, "The Indo-Pacific & the Indo-US Relations: Geopolitics of Cooperation," Report, Institute of Peace and Conflict Studies, 1 November 2014, <http://www.jstor.org>.
18. Intergovernmental Panel on Climate Change, "Impacts of 1.5°C Global Warming on Natural and Human Systems," 2018, <https://www.ipcc.ch>.
19. Chung Min Lee, "South Korea Is Caught between China and the United States," Carnegie Endowment for International Peace, 21 October 2020, <https://carnegieendowment.org>.
20. Michael S. Chase, et al., "Russia–China Relations: Assessing Common Ground and Strategic Fault Lines," NBAR Special Report no. 66, July 2017, <https://carnegieendowment.org>.
21. Chase et al., "Russia–China Relations."
22. *A Free and Open Indo-Pacific: U.S. Strategic Framework for the Indo-Pacific* (Washington, DC: White House, 15 February 2018), <https://assets.documentcloud.org/>.
23. Pratinashree Basu and Premesha Saha, "Signalling Policy Continuity: US Declassifies Files on Indo-Pacific," 18 January 2021, <https://www.orfonline.org>.

F-35 O-Ring Production Functions versus Mosaic Warfare

Some Simple Mathematics

DR. JÖRG SCHIMMELPFENNIG

Introduction

On 28 January 1986, the space shuttle *Challenger* broke apart 73 seconds into its flight, claiming the lives of all seven astronauts aboard. The Presidential Commission on the Space Shuttle Challenger Accident, known as the *Rogers Report*, identified the failure of rubber O-rings sealing the joints in one of the boosters as the cause of the accident: “The specific failure was the destruction of the seals that are intended to prevent hot gases from leaking through the joint during the propellant burn of the rocket motor.”¹ The external tank was destroyed, leading to the breakup of the orbiter.

Tragically, the possibility of an O-ring failure had been known for some time but was not properly communicated. Although the original cause of the disaster was a faulty design, the immediate cause—defective O-rings costing just a couple of dollars—lent its name to Michael Kremer’s idea of an O-ring production function.² In contrast to the classical view of output as a deterministic function of some inputs, production is viewed as consisting of a wide range of independent subsystems all prone to failure and succeeding only if none of the subsystems fail.

The earliest example of a possible application in defense was the suggestion to interpret an aircraft carrier’s flight deck operations as an O-ring production function.³ That is, unless everything falls into place, catastrophic failure may result, as the USS *Forrestal* accident on 29 July 1967 sadly demonstrated. An example of an O-ring-like sequence, though not in name, is provided in the book *Naval Operations Analysis*. It states that for a submarine to succeed in destroying an enemy submarine, it would first have to detect it, then identify it as the correct target, work out a firing solution, launch the torpedo(es), at least one torpedo would have to make contact with the target, not become fooled by any decoys, and its exploder should eventually fire the warhead.⁴ This sequence illustrates how every other kind of kill chain can also be interpreted as an O-ring production function as well, from the general idea of an OODA loop to the use of a drone strike to take out an individual terrorist.⁵ It also holds for every individual weapon system, whether a WWII pursuit plane such as the P-40 Warhawk; an M1 Abrams battle tank; or last but not least, the F-35 Lightning II.

The F-35: A State-of-the-Art O-Ring Production Function

Generally considered the most advanced fighter plane in existence, the F-35 not only displays extreme maneuverability and lethality but is a platform incorporating all the subsystems needed to conduct a strike against surface and aerial enemy targets alike. Still, it is an O-ring production function. Sticking with the OODA paradigm, a pilot unable to observe or orient would be unable to decide, let alone act. Thus, if any of an F-35's subsystems are incapacitated—either kinetically, by means of a cyberattack, or just by jamming—the whole platform is basically rendered useless. The mathematics behind the O-ring production function elucidates the dilemma.

The scenario assumes there are four tasks or subsystems needed to successfully complete a mission—such as “observe,” “orient,” “decide,” and “act.” The probabilities for these tasks to be successfully met are denoted by p_1 , p_2 , p_3 , and p_4 , respectively. The probability of mission success, assuming stochastic independence, is given by $p_1 \cdot p_2 \cdot p_3 \cdot p_4$, and the probability of mission failure by $1 - p_1 \cdot p_2 \cdot p_3 \cdot p_4$. To give a numerical example, even if every subsystem has a 90 percent chance of doing exactly what it is supposed to do, the mission success probability is $(0.9)^4 = 0.6561$; that is, the mission will fail in more than one out of three cases. If the subsystem success rate is increased to 95 percent, the probability of failure would go down to $1 - (0.95)^4 = 0.1855$, but the mission would still fail in almost one in every five cases. One would be mistaken, though, in assuming that increasing a subsystem's reliability is an easy way to alleviate the problem. Prima facie increasing (all) subsystems' reliabilities by 5 percentage points to increase the overall success probability by roughly 24 percent—from 0.6561 to 0.8145—looks a great idea. The cost of increasing any subsystem's reliability is exponential. It would cost less to increase its success probability from say 70 to 80 percent than increasing it from 80 to 90 percent, and the additional cost becomes ever more prohibitive the closer one gets to 100 percent. In terms of the O-ring production function theory and denoting the cost functions by $C_i(p_i)$, this reads as $C_i' > 0$ and $C_i'' > 0$. To illustrate the effect by using the simplest functional form for an O-ring-compatible cost function, $C_i(p_i) = 1/(1 - p_i)$, if a subsystem's reliability were to be raised from 70 to 80 percent, the cost would rise by 50 percent; raising reliability from 70 to 90 percent would triple the cost. Finally, it should be superfluous to point out that a success probability equal to one is impossible to achieve—just as man is not perfect, there are no technologies available that never fail.

From US (Not Only Air) Superiority to Anti-Access/Area Denial

Throughout history and up to and including WWII, warfare has largely been a numbers game. At the beginning of the Pacific War, the *Zero* was the most advanced fighter plane; Japan didn't have enough of them, though. In contrast to their American counterparts, Japanese pilots had combat experience, but again, there were too few. The German *Tiger* was considered the best tank of its time, vastly superior to say the American *Sherman*. Luckily for the Allies, though, there were many more *Shermans* around than *Tigers*.

All of this is in line with (tactical) warfare models. Bradley Fiske in 1905 and Frederick Lanchester in 1916 suggested that, in naval combat and aerial combat respectively, doubling a force's quantity should be more important than doubling its quality.⁶

From the end of WWII and through the Cold War decades, however, the picture changed as the US attained an ever-expanding gap in weapon technology advances over its peer rivals, Russia and China. The simple reason was economics. Just as a command economy could not compete with a free-market economy, neither could its defense industrial base. Russian numerical superiority did not help. The higher kill ratio of US weapon systems would have sufficed to halt Russian forces. Russian submarines could be tracked wherever they went, but not vice versa, and Russian commanders knew this. Precision bombing during the Vietnam War saw the advent of the "one bomb, one target" capability. US air superiority achieved its heyday during Operation Desert Storm. US stealth fighter-bombers could enter Iraqi airspace at will, and as Gen David Deptula noted in 2001, "The Gulf War began with more targets in one day's attack plan than the total number of targets hit by the entire Eighth Air Force in all of 1942 and 1943—more separate target air attacks in 24 hours than ever before in the history of warfare."⁷

The picture changed with 9/11 and the ensuing wars in Afghanistan and Iraq for three reasons. First, top-of-the-line air combat platforms were no longer considered necessary for counterinsurgency operations. Second, the cost of fighting two wars at the same time pushed back other expenditures, leading to a reduction in the numbers of F-22s and F-35s. Third, airspace was implicitly assumed to continue being uncontested. However, having had ample opportunities to study the American way of war over the decades US forces had reigned supreme, Russia and China—aware that they would remain unable to match US technological developments and military expenditure—chose to take an altogether different path. Rather than trying to play catch-up, they changed the game by embarking on doctrinal responses and strategies that would render US forces' superiority

useless. The two countries would simply bar access to disputed areas, such as the Baltic Sea or the South China Sea respectively, and/or deny the ability to operate in those areas (i.e., A2/AD). In particular, by area denial US operations in the respective area would be impeded or slowed down at best, effectively preventing US forces to pursue the fundamental principle of tactical warfare which is, as the US Navy puts it, “Fire effectively first!”⁸ Any attempt to enter the contested battlespace would be met by a both fierce and relatively cheap resistance. The cost of a Chinese DF-26 “carrier-killer” anti-ship missile comes at a fraction of any of its intended targets—it would make US losses unsustainable.

The outlook is bleak. War games keep proving that Chinese forces, by embarking on what Jeffrey Engstrom calls a “system confrontation” strategy and by conducting “system destruction warfare,” would win against even the most advanced weapon systems, such as the F-35.⁹ The basic elements of “system destruction” are attacking the joints, or nodes, by disrupting an adversary’s flow; targeting networks and data links (thereby isolating his forces); targeting an adversary’s high-value assets by disabling their essential elements (such as C2, ISR, and/or other essential subsystems); disabling an adversary’s operational infrastructure; and slowing down an adversary’s kill chains. To quote from the final report of the National Defense Strategy Commission:

If the United States had to fight Russia in a Baltic contingency or China in a war over Taiwan . . . , Americans could face a decisive military defeat. These two nations possess precision-strike capabilities, integrated air defenses, cruise and ballistic missiles, advanced cyberwarfare and anti-satellite capabilities, significant air and naval forces, and nuclear weapons—a suite of advanced capabilities heretofore possessed only by the United States. The U.S. military would face daunting challenges in establishing air superiority or sea control and retaking territory lost early in a conflict. Against an enemy equipped with advanced anti-access/area denial capabilities, attrition of U.S. capital assets—ships, planes, tanks—could be enormous. The prolonged, deliberate buildup of overwhelming force in theater that has traditionally been the hallmark of American expeditionary warfare would be vastly more difficult and costly, if it were possible at all. Put bluntly, the U.S. military could lose the next state-versus-state war it fights.¹⁰

Cutting the number of US platforms—whether they are B2s, F-22s, or F-35s—certainly didn’t help—nor does the fact that they are O-ring production functions.

Mosaic Warfare

“Mosaic warfare” is a brainchild of the Defense Advanced Research Projects Agency (DARPA).¹¹ With the publications of the Mitchell Institute’s research

study authored by Gen David Deptula and Heather Penney¹² and a shortened version in *Air Force Magazine*,¹³ the idea has entered military mainstream discussions.

The basic idea of mosaic warfare is amazingly straightforward and intuitively striking. If your adversary goes after your systems—"system destruction warfare"—just disaggregate your systems! Rather than putting all proverbial eggs (read subsystems or nodes) in one basket (read on board a single [O-ring production function] platform such as the F-35), use small platforms hosting disaggregated nodes instead. If your original force consisted of say four F-35s, opt for four small platforms hosting only one node each of the kill chain, say observation; opt for four small platforms hosting just another node of the kill chain, say orientation; and so on. And make sure every small platform can independently communicate with every other platform. If just one small platform were disabled, there would be no harm whatsoever because the remaining three platforms hosting the same subsystem or node would take over. In contrast, disabling one F-35's subsystem or node would render that F-35 ineffective. If every F-35 took just one hit, there would be no kill chain left. On the other hand, rendering a disaggregated kill chain network inoperable would require disabling not just any four small platforms but four identical platforms (i.e., all those hosting the same node). While the effect of this strategy is obvious—the probability of mission success should increase with mosaic warfare—its magnitude is not.

Some Mosaic Warfare Mathematics

To illustrate the extent of the benefits to be expected when switching to mosaic warfare, consider an F-35's kill chain consisting of k nodes—using the OODA loop picture, k would equal four—and having an n -ship formation. Assume that for the mission to be successful, it would suffice if just one ship gets through and delivers the kill. Then, using the same notation as in the F-35 section, the probability for an individual F-35 to get through would be $p_1 \cdot p_2 \cdot \dots \cdot p_k$ and the probability of failing or having to abort by, correspondingly, $1 - p_1 \cdot p_2 \cdot \dots \cdot p_k$. With stochastic independence, the most likely scenario, the probability for all n ships to fail would be $(1 - p_1 \cdot p_2 \cdot \dots \cdot p_k)^n$. Therefore, the probability of successfully completing a mission when using n F-35s (i.e., having at least one ship survive to deliver the kill) is

$$(1) \text{ prob (success} | \text{F-35s)} = 1 - (1 - p_1 \cdot p_2 \cdot \dots \cdot p_k)^n.$$

Alternatively, assume that instead of having all k nodes hosted by one (F-35) platform, k small sub-platforms are used for every F-35, each of which is responsible for just one of the k nodes. Then any of the k nodes would be compromised only if all its respective n sub-platforms are destroyed or rendered ineffective by other means. To isolate the mosaic warfare effect, all p_1 through p_k are assumed to

remain unchanged (most likely at least some of these probabilities would go up, as sub-platforms should be harder to detect due to being smaller; some sub-platforms could also be unmanned, increasing their maneuverability). Then, as the probability of node i to fail equals $(1 - p_i)^n$ the probability of node i surviving is $1 - (1 - p_i)^n$, and the probability of all nodes surviving and of mission success therefore is

(2) $\text{prob}(\text{success}|\text{mosaic warfare}) = (1 - (1 - p_1)^n) \cdot (1 - (1 - p_2)^n) \cdot \dots \cdot (1 - (1 - p_k)^n)$.

The difference between (2) and (1) gives the increase in the chances of mission success due to switching to mosaic warfare.

To visualize the magnitude of the influence of mosaic warfare, assume that all p_i are identical, henceforth denoted by $p := p_1 = p_2 = \dots = p_k$.¹⁴ Then (1) and (2), respectively, can be simplified to

(1a) $\text{prob}(\text{success}|F-35s) = 1 - (1 - p^k)^n$ and (2) becomes

(2a) $\text{prob}(\text{success}|\text{mosaic warfare}) = (1 - (1 - p)^n)^k$.

This formula allows for evaluating the outcome of different scenarios by means of a simple pocket calculator.

It is obvious that for any one-ship mission there cannot be a mosaic warfare effect. Therefore, assume $n = 2$ (i.e., a two-ship mission) and $k = 4$ (OODA). With $p = 0.9$, (1a) yields 0.88173279, while (2a) yields 0.96059601 (i.e., switching to mosaic warfare would improve the chances of mission success by about 7.9 percentage points). However, as an F-35 mission success probability of around 88 percent still sounds pretty good and is not exactly in line with “the U.S. military could lose the next state-versus-state war it fights”,¹⁵ try $p = 0.7$ instead. (1a) would yield 0.42255199 – now the mission would fail more often than not – while (2a) would yield 0.68574961, i.e., Mosaic Warfare would increase the chance of winning by about 26.3 percentage points and raise it above the two-out-of-three level.¹⁶

Formulae (1a) and (2a) can be used to easily evaluate the outcomes of other scenarios by toying with k , n , and p (i.e., whether it is a change in the number of subsystems or nodes, the number of platforms, or the reliability of the subsystems). The results stay true: mosaic warfare will always improve the chances of mission success, and the more even the chances of a successful F-35 mission, the higher the benefits to be gained.

Summary

This article was never intended to prove the validity of the mosaic warfare concept. Particularly, it did not even try to address technological or doctrinal questions such as the danger of communications between sub-platforms being compromised (mission failure would be obvious; on the other hand, should an F-35 become isolated, it could still try to proceed). Neither did it address how

long it would take to develop sub-platforms and bring them into service (the South China Sea conflict could turn hot any time soon); the time it takes to devise a new doctrine (as long as the commander in the field remains unconvinced, all is in vain); or the compatibility of “traditional” air war (i.e., putting one’s trust in highly sophisticated but more vulnerable O-ring production function weapon systems) and applying mosaic warfare (can they be run in parallel?).

That said, for any new idea to live on, the word must get out, the story, including every single facet, has to be circulated. This article concentrates on the likely magnitude of the mosaic warfare effect on mission success. Using a not-exactly-rocket-science mathematical argument, the article suggests that this approach can, more often than not, substantially improve the chances of mission success in scenarios where traditional approaches are bound to fail. Considering that mosaic warfare systems can come a lot cheaper than the single-platform weapon systems in use today, mosaic warfare could begin to look ever more attractive. ★

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Notes

1. “Report of the Presidential Commission on the Space Shuttle Challenger Accident (In compliance with Executive Order 12546 of February 3, 1986):” 40 <https://history.nasa.gov/rogersrep/v1ch4.htm>.
2. Michael Kremer, “The O-Ring Theory of Economic Development,” *Quarterly Journal of Economics* 108, no. 3 (August 1993): 551–75.
3. Gene Rochlin, Todd La Porte, and Karlene Roberts, “The Self-Designing High-Reliability Organization: Aircraft Carrier Flight Operations at Sea,” *Naval War College Review* 40, no. 4 (1987): 76–90.
4. Daniel H. Wagner, W. Charles Mylander, and Thomas J. Sanders, eds., *Naval Operations Analysis* (Annapolis, MD: Naval Institute Press, 1999).
5. The concept’s very essence carries over to other nonstochastic models, such as Driver and DeFeyer’s, where “intelligence,” “resources,” and “political opportunity structures” are “multiplied, as opposed to summed, to reflect that all components are necessary” to have a chance of winning in unconventional warfare. William “Dave” Driver and Bruce E. DeFeyer, *The Theory of Unconventional Warfare: Win, Lose, and Draw* (Monterey, CA: Naval Postgraduate School, 2008).

6. Bradley A. Fiske, American Naval Policy, Proceedings of the United States Institute 31 (January 1905): 1-80; Frederick W. Lanchester, Aircraft in Warfare: The Dawn of the Fourth Arm (London: Constable, 1916). While Lanchester's model was about aerial combat, unbeknown to him a paper written by Jehu Chase in 1902 as a lieutenant at the Naval War College was a forerunner in describing naval warfare. The mathematics were the same, but Chase, in contrast to both Lanchester and Fiske, had even taken staying power, i.e., defensive characteristics, into account. Using his model, Chase in particular pointed out the advantages of the tactics of isolating enemy forces. It was this recommendation that immediately led to the paper being classified. It was not declassified until 1972. See Jehu V. Chase, "*A Mathematical Investigation of the Effect and Superiority of Force in Combats upon the Sea*" (unpublished paper, Naval War College Archives, Newport, RI, RG 8, Box 109, XTAV [1902]).
7. David A. Deptula, Effects-Based Operations: Change in the Nature of Warfare (Arlington, VA: Aerospace Education Foundation, 2001).
8. See Wayne P. Hughes, *Fleet Tactics and Coastal Combat*, 2nd ed. (Annapolis, MD: Naval Institute Press, 2000).
9. Jeffrey Engstrom, *Systems Confrontation and System Destruction Warfare: How the Chinese People's Liberation Army Seeks to Wage Modern Warfare* (Santa Monica, CA: The RAND Corporation, 2018).
10. Eric Edelman and Gary Roughead, Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission (Washington, DC: United States Institute of Peace, 2018): 14.
11. DARPA, Strategic Technology Office Outlines Vision for Mosaic Warfare, (DARPA, August 4, 2017, <https://www.darpa.mil/news-events/2017-08-04>).
12. David Deptula and Heather Penney, Restoring America's Military Competitiveness: Mosaic Warfare (Arlington VA: The Mitchell Institute for Aerospace Studies, 2019).
13. David Deptula and Heather Penney, "Mosaic Warfare", *Air Force Magazine* 102, no. 11 (2019): 51-55.
14. If the sub-systems' cost functions are identical, $p_1 = p_2 = \dots = p_k$ would be the cost minimizing/success maximizing solution anyway.
15. Edelman and Roughead, *Providing for the Common Defense*. See previously cited quote in the section on anti-access/area denial.
16. It should be noted, though, that if p was reduced further, the gain, while always being positive, will eventually become smaller again.

Our Enduring Advantage

How Working with Our Allies and Partners Is the Best Way to Compete

COL JOSHUA “MULE” KOSLOV

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MAJ RAYMOND ZHANG

We are all comfortable with the idea of framing success in a debate, a game, or a conflict around the goal of winning. However, what if you were asked to shift your paradigm that the idea is not to win but to continue playing with the goal of always making ourselves better to have advantage over our competitors? In great-power competition, there is no defined finish line, time limit for play, or mercy rule to end the game for participants lagging unrecoverably behind. This continuity and open-endedness stand in stark contrast to how we view our role as those charged with wielding our nation's military powers to achieve our goals. Rather than viewing employment of military force as an aberration leading back to a condition of “peace,” instead we must think of ourselves in a long-term effort employing all instruments of national power in pursuit of our national objectives.¹

As the air component in the Indo-Pacific region, Pacific Air Forces (PACAF) executes operations supporting national strategic guidance directing strategic competition with the Russian Federation and the People's Republic of China (PRC). We can best compete in this region by making engagement, interoperability, and common goals with our allies and partners the center of gravity around which all our efforts revolve.

The 2018 *National Defense Strategy* (NDS) outlines two primary objectives: (1) to restore America's competitive edge by blocking global rivals Russia and the PRC from challenging the United States and our allies, and (2) to keep those rivals from throwing the current international order out of balance². These two revanchist and revisionist powers compete with US influence in the Indo-Pacific; while Russia has enduring historical interests in the Far East, our region lies at the heart of the PRC's strategy to match and eventually surpass the United States as the leading power in the world. This fact is increasingly accepted across the United States government, with our response coalescing around a policy of deliberate, enduring competition against a Chinese government seeking to displace the United States as world leader. For our nation, and specifically Airmen

serving in the Indo-Pacific theater, the PRC is the pacing threat to those in the region who actively contribute to regional and global security. As stated in the Biden administration's *Interim National Security Strategic Guidance*, "[China] is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system."³

The PACAF Strategy operationalizes guidance on great-power competition from the President, Secretary of Defense, and theater commander through three lines of effort: (1) strengthening alliances and partnerships, (2) improving interoperability and lethality, and (3) developing operational concepts for great-power competition. The key asymmetric competitive advantage the US military enjoys over the armed forces of our adversaries, particularly the PRC, are the war-fighting capabilities, positional advantages, and moral authority our constellation of like-minded allies and partners provide. This article will examine each of the lines of effort Indo-Pacific Airmen are directed to execute, focusing on the impact of allies and partners and contrasting PACAF's approach with the malign and corrosive influence of the Chinese government.

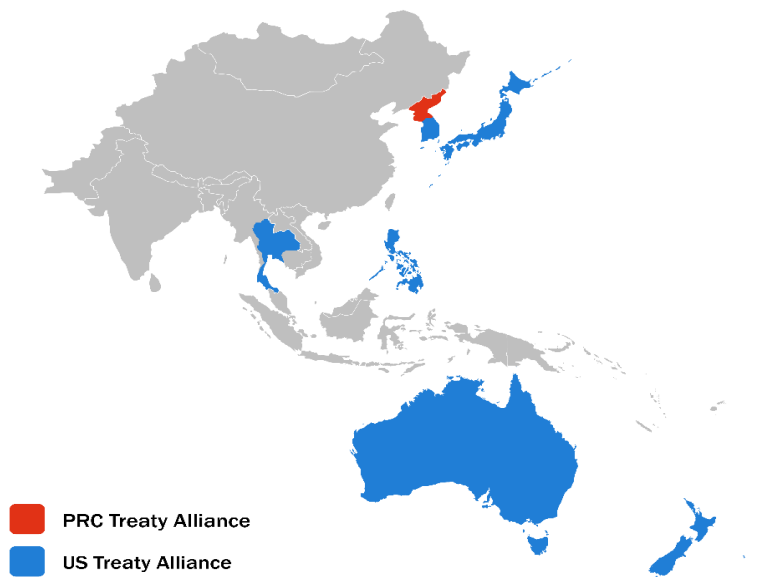


Figure 1. Alliances. The PRC's relationship with their sole treaty ally, the Democratic People's Republic of Korea, has atrophied, and military interoperability is not actively maintained the way it is within US alliances. The United States has defense alliances with Australia, Japan, New Zealand, the Philippines, South Korea, and Thailand, as well as partnerships with many nations throughout the region.

Readiness through Strong Alliances and Partnerships

Our readiness to respond in any crisis is the foundation of our force; the geographic and political realities of the Indo-Pacific theater mean that for PACAF, readiness must be built on a foundation of strong relationships with allies and partners. Our first line of effort is to strengthen our network of alliances and partnerships. Personal engagement, practical cooperation, and demonstration of our shared values and goals set the stage for the complex combined air operations required to respond whenever and wherever a crisis strikes.

As the COVID-19 pandemic took hold, the potential impact to readiness was obvious. Through various exercises and engagements, PACAF supported efforts to provide COVID-19 relief to the region. In April 2020, PACAF Airmen, in coordination with other government agencies, airlifted more than 31,000 pounds of effective personal protective equipment and medical supplies to Guam and Saipan; even more impressively, they achieved this feat with only 72 hours' notice. In December 2020, the Department of Defense's longest-running humanitarian airlift, Operation Christmas Drop, provided an opportunity for the United States and Japan to demonstrate decades of bilateral training and readiness. In its 69th year, despite the pandemic, the operation resulted in the delivery of nearly 30 tons of toys, food, clothing, and supplies to the citizens of the Republic of Palau.

Where face-to-face meetings were not possible, PACAF worked at the staff level to expand and fortify our relations with allies and partners through a seamless transition to virtual platforms. In 2020, PACAF conducted Airman-to-Airman talks with Thailand, Malaysia, Bangladesh, Sri Lanka, and, for the first time, Brunei. These talks provided an avenue to develop interoperability, foster military-to-military relations, and improve bilateral cooperation.

In contrast, while PACAF has provided aid and relief since early spring of 2020, the PRC behaved disingenuously from the very beginning of the pandemic. As COVID-19 spread from Wuhan to the rest of the world, PRC leaders squandered the opportunity to alert the world to the danger, instead choosing secrecy and disinformation. This dangerous level of self-centered behavior has continued as the PRC exported defective personal protective equipment, refused to be transparent with international health organizations, and limited the participation of experts. Additionally, the PRC's pandemic assistance in the region is based on transactional considerations rather than sincere goodwill, as countries like Cambodia received swift assistance while independent actors like Singapore and Vietnam waited months. In May 2020, PACAF hosted a virtual senior leader conference to discuss COVID-19 and its implications on engagement and exercises; this event included a leader from Taiwan, which has performed incredibly im-

pressively in responding to the virus. The PRC responded to the event by démarching the United States and other countries for the inclusion of Taiwan. We believe that when a crisis hits, you cannot deflect and you must be ready to act with all the best tools available.

Unfortunately, the PRC and its People's Liberation Army (PLA) do not prioritize bilateral cooperation with their neighbors, or with us. After months of planning, representatives from PACAF and Pacific Fleet were scheduled to meet with their PRC counterparts at a three-day virtual engagement in December—except the PLA cancelled due to a minor dispute over the agenda. While the United States will continue to seek constructive forums for engagement with the PRC, this failure to participate in the Military Maritime Consultative Agreement (MMCA) demonstrates an abandonment of bilateral cooperation and the rules-based international order.

Interoperability and Lethality

PACAF's second line of effort, improving interoperability and lethality, is how we translate the alliances and partnerships into airpower to deter military adventurism in competition and, if necessary, prevail in conflict. The most visible and imposing icon of US Air Force (USAF) power projection in the theater is the flights by our Bomber Task Force. In the past year, PACAF successfully transitioned from a continuous bomber presence construct focused on rotational bomber deployments on Guam to employ a more agile and responsive concept, focused on interoperability with our allies and partners. This showcased our ability to generate deliberate airpower from multiple sites throughout the theater and from the North American mainland. This revolution in bomber employment would have been infinitely more difficult without the unmatched levels of interoperability we established with our allies. This enabled new locations, such as Japan, to facilitate basing, maintenance, refueling, and fighter integration to make our missions a success.

The key to building interoperability with our allies and partners is their participation in our service-level and joint exercises. In 2020, despite the ongoing COVID-19 pandemic, PACAF still executed 24 exercises, building capacity by executing unilateral, joint, and combined operations even under pandemic conditions. Indeed, the ability to continue to conduct exercises even under restrictive conditions illustrates a great strength of airpower, fostering military ties with established and developing partners via distributive means. We never know where the next crisis will develop, and interoperable procedures cannot be developed overnight; the PACAF exercise program represents a critical enabler for our abil-

ity to credibly respond to conflict, gray-zone confrontations, and natural or man-made disasters—no matter where they strike.

In December, F-15Cs and a KC-135 from the 18th Wing at Kadena Air Base, Japan, as well as aircraft from the Republic of Korea Air Force and Japanese Air Self-Defense Force, responded to a diverse formation of PRC and Russian combat aircraft flying near their respective airspaces. Korea and Japan effectively handled the response, with PACAF providing backup support. This mission was only possible because the United States and allies train regularly, share information, and trust each other.

In contrast to PACAF's dedication to cultivating relationships with dozens of partners in the interest of maintaining peace and stability throughout the region, in the past year, the PRC elected to provoke crises with multiple neighbors. The most brutally egregious of these transgressions occurred in June 2020 when Chinese troops wielding spiked clubs attacked and killed 20 Indian troops in the Galwan Valley along a disputed border referred to as the Line of Actual Control (LAC). This was the first fatal confrontation between the two nuclear powers since 1975 and rapidly led to further deterioration of all aspects of their relationship. The PRC's aggressive acts of territorial encroachment needlessly threatened countries' response to humanitarian disaster. Less violent PRC activities also took place in the East China Sea, South China Sea, and Nepal.

While the PRC puts its peaceful neighbors on the defensive, the United States stands ready to partner with all nations that seek to maintain the rules-based international order. The PACAF–Indian Air Force relationship was on an upward trajectory prior to last year's LAC crisis, and the relationship accelerated due to our timely and relevant support. This rapid increase in support of a fellow democracy quickly yielded concrete progress in our direct communication capabilities, intensified collaboration on common airlift platforms, energized operationalization of our logistics agreements, and increased the scope and pace of intelligence sharing. Years of engagement and exercises with India made it possible for us to support India's response to Chinese aggression in a constructive and de-escalatory manner at an operationally relevant speed and reaffirmed our shared commitment to a free and open Indo-Pacific.

Operational Concepts

The fights of today and tomorrow will be unprecedented in speed, scope, and complexity. Even with allies and partners with whom we enjoy outstanding interoperability, if deterrence fails and we are called upon to defend our national interests, legacy tactics and operational concepts will be insufficient. Through our third line of effort, by developing novel operational concepts, we will reaffirm our

status as an innovative, agile, dynamic, and lethal force, but without the partnerships developed in competition and crisis, these concepts will not be viable in conflict.

To meet the challenges of today's dynamic environment, PACAF continues to develop, refine, and exercise its cornerstone operational concept: agile combat employment (ACE). ACE enables PACAF to prosecute a modern, high-end campaign as the theater air component utilizing agility, posture, protection, and joint all-domain command and control. It is a proactive and reactive operational scheme of maneuver executed within expected threat timelines to increase survivability while still generating effective combat power. PACAF Airmen successfully implemented the concept in 2017, and we continue to expand the ACE enterprise across multiple platforms, joint operations, and with our allies and partners. Indeed, the entire concept requires a transition from centralized bases, often on US soil, to regional base clusters dispersed throughout the theater. The agility demonstrated by the ACE concept stands in stark contrast to our competitors from the People's Liberation Army Air Force (PLAAF), who despite aspirations to coordinate complex and agile operations, have only demonstrated an archaic ability to operate in rigid and scripted environments.

Rigidity is not an option. We must be strategically predictable but operationally unpredictable. PACAF continues to follow the *NDS* direction to "flexibly use ready forces to proactively shape the strategic environment while maintaining readiness to respond to contingencies and ensure long-term warfighting readiness."⁴ Our dynamic force employment concept and expeditionary expertise enable us to project power across the globe at the time and place of our choosing. This capability allows us to provide our allies and partners with the consistent support that they expect and deserve as fellow advocates for a free and open Indo-Pacific and is an ability not shared by regional competitors with revisionist goals. Without the capacity to build meaningful trust-based relationships that treat other nations as true partners, the PLAAF will never have the ability to conduct agile, distributed global power projection in the same manner as the USAF.

By comparison, much of our strength comes from our Airmen's development and the trust we put in them to make decisions. This past year and with minimal guidance, PACAF commanders at bases throughout the theater planned and executed joint, bilateral "Elephant Walks,"⁵ demonstrating the ability to rapidly generate airpower. This decentralized execution showcased a level of agility unattainable by our authoritarian competitors. Empowering Airmen at the lowest level is essential to developing a competitive force. In the USAF and in the air forces of our closest allies, we value our enlisted force's leadership, innovation, and experience; conversely, the PRC's airmen are viewed by their service primarily as

necessary for menial tasks but not as leaders or experts, regardless of their time in service. Our and our allies' investments in human capital are yet another asymmetric advantage; the PRC's lack of investment in the personnel comprising its force has stymied its ability to use modernizing military hardware to its fullest advantage and has sustained a qualitative deficiency in performance between the PLAAF and our partners.



Figure 2. Elephant Walk. In June 2020, the 35th Fighter Wing and the Japanese 3rd Air Wing executed a joint, bilateral “Elephant Walk” at Misawa Air Base, Japan. With minimal guidance, commanders were able to execute this under their own authority, validating our doctrine of centralized control and decentralized execution. Accomplished on short notice and under COVID-19 operating conditions, it demonstrated agility and our ability to quickly generate airpower with our ally.

Our Enduring Advantage

We will continue trying to cooperate with the PRC within the bounds of national policy, despite Beijing's antagonistic behavior. PACAF is committed to cooperating with the PRC in appropriate ways in the coming years, including the MMCA, pandemic response, and natural disaster relief. These activities demonstrate our commitment to being good neighbors and playing by the rules of conduct set by the international community.

Short of armed conflict, PACAF is maximizing our long-term advantages to reinforce the rules-based international order, ensure a free and open Indo-Pacific,

prevent regional hegemony, and deter PRC aggression in the region. We will continue to exercise readiness, improve our interoperability, and develop more effective operating concepts alongside our many allies and partners. While we believe in the criticality of a coalition, the PRC has but one ally; this is our enduring advantage in competition.

While national and regional leadership shifts, strategic competition between the United States and the PRC will remain the defining feature of the global geopolitical environment for decades to come. It will define the careers of all those in uniform now and for the next generation. Indo-Pacific Airmen should expect increasing levels of uncertainty and a multifaceted threat that seeks to erode confidence in the rules-based international order to become the norm. We will rise up against this challenge, shoulder-to-shoulder with our allies and partners, with a competitive long-term mind-set focused on building a safe, healthy, and prosperous future for all nations in the Indo-Pacific. ★

Col Joshua “Mule” Koslov

Colonel Koslov is the Chief of the Strategy, Plans and Competition Division at Headquarters Pacific Air Forces. Prior to serving at PACAF, Colonel Koslov earned a master’s degree in national security studies from the Naval War College Mahan Advanced Research program, focused on deterrence and competitive strategies. A USAF Weapons School Distinguished Graduate, he has commanded the 755th Operations Support Squadron and twice commanded the 43rd Expeditionary Electronic Combat Squadron supporting Central Command combat operations. In his next assignment, he will be the Commander of the 609th Air Operations Center, Al Udeid Air Base, Qatar.

Kate McIlvaine

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Maj Adam “Bumper” Peterson

Major Peterson is a Combat Air Force Fellow conducting his research into competitive strategies and interagency coordination with Pacific Air Force’s Strategic Competition Team. He is an A-10C Evaluator Pilot with more than 2,200 flight hours in AETC, ACC, and PACAF, as well as 300 combat hours in support of Operation Freedom’s Sentinel and the Resolute Support mission.

Maj Raymond Zhang

Major Zhang is a member of Pacific Air Force’s Strategic Competition Team. Maj Zhang received his commission from the United States Air Force Academy in 2009. He is a C-5M Instructor Pilot and a USINDOPACOM Foreign Affairs Officer with more than 1,800 flight hours in the C-5M, C-5B/C, C-130H, T-44, and T-6. He has operated and deployed in support of Operation Freedom’s Sentinel, Inherent Resolve, and Resolute Support.

Notes

1. Simon Sinek, *The Infinite Game* (London: Penguin Business, 2019).
2. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, DC: Department of Defense, 2018), <https://dod.defense.gov/>.
3. Joseph R. Biden, Jr., *Interim National Security Strategic Guidance* (Washington, DC: The White House, March 2021), <https://www.whitehouse.gov/>.
4. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*.
5. An *elephant walk* is a US Air Force term for the taxiing of aircraft in close formation before takeoff.

The Truth about Messaging

Competition Requires Placing Information Objectives at the Center of All We Do

COL JOSHUA “MULE” KOSLOV

KATE MCILVAINE

The best time to plant a tree was 20 years ago. The second-best time is now.

—Chinese Proverb

During the Korean War, the People’s Republic of China (PRC) launched an influence campaign claiming that the United States was responsible for outbreaks of bubonic plague, anthrax, cholera, and encephalitis in China and North Korea. Even before the age of the Internet, adversarial propagandists were able to spread this message globally using a multitude of vectors, including Western scientists, writers, and journalists.¹ These tactics resurfaced in 2020 as the PRC attempted to deflect blame for the COVID-19 pandemic.

The sad truth is that the PRC currently enjoys an advantage in the information domain due to superior organization, unity of effort, and persistent narratives that set roots in cracks in the US narrative. While the US military has continued to treat operations in the information environment as something that can be tacked on to a “real” operation after the fact, the PRC has been employing information as a natural extension of state policy, directed against all audiences, even against its own people. In the US Air Force (USAF), public affairs and information operations have remained peripheral players orbiting the main mass of contingency operations, major exercises, and training opportunities. Even as “Pivot to the Pacific” and “Great-Power Competition” entered the common vernacular over the past decade, planners continued to execute the same routine events they had for years without actually altering the way they conceived and executed operations. Despite a growing national focus on the problem of competing with China, military planners remained satisfied with a model that ignores the steady-state messaging aspects of operations that can have immeasurable benefits during crises.

The Biden administration recently identified the PRC as “the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system.”² While the department and the nation have begun to

change the US approach by countering PRC rhetoric, we lag our adversary by decades; after squandering opportunities to build a cohesive model for integrating information effects into our operations, we simply cannot afford to delay any further. *It is time to place information objectives and cognitive effects at the center of all we do.* In this piece, we will discuss how to build a strategic messaging capability that yields real effects and then outline how recognizing the message as the center of gravity requires a refocus by the entire USAF. As emphasized in Chief of Staff of the Air Force General Charles Q. Brown's "Accelerate Change or Lose" directive, we are already far behind, and time is short—until every Airman believes that messaging *is* operations, we will not be a contender in competition or a champion in conflict.³

What Needs to Be Done Now

The best time for the Air Force to develop a cross-functional strategic messaging capability to counter malign influence was 20 years ago. However, we did not. Instead, the Air Force focused on a stovepiped approach, limiting the service's ability to synchronize its operations and messaging. Opposing the PRC's information superiority requires reworking the method by which we plan, execute, and assess our operations throughout the theater. Starting under General Brown, and now under Gen Kenneth S. Wilsbach, PACAF Commander, the guidance is clear: *rather than bringing messaging in as an afterthought, information objectives must shape the operations we conduct from the point of conception and persist long after the jets have landed.*⁴

The Three Messaging Truths of Competition

At PACAF, we believe strategic messaging in competition should be organized around three truths:

1. **The commander owns the narrative.** The narrative is driven by strategy, and no single office owns the message or the process through which the message is disseminated. Messaging is a cross-functional effort guided by the commander's intent and objectives.
2. **The narrative drives operations.** Information objectives must shape operations. Messaging is more than articles and pictures; every operation and activity sends a message and must be synchronized against command objectives and desired perceptions.

3. **The narrative is consistent, but messaging is dynamic.** Long-range planning builds effective message synchronization, but emergent events also require thoughtful, cross-functional responses that can only be achieved through established crisis communication procedures.

Set the Conditions for Success

Cognitive effects constitute the primary objective of competitive campaign activities, and *there is nothing we do that can be viewed outside the lens of competition*. The primary effects we strive for are cognitive effects or changing the perceptions of our adversaries, allies, partners, and bystanders. Viewed this way, it is clear that military operations should be driven by the message we wish to send to our competitors and teammates, as well as those watching from the sidelines.⁵

At PACAF, we have addressed some of the structural challenges posed by these requirements by creating an integrated Strategic Competition Team with O-6 leadership, located within the Directorate of Strategy and Plans (A5/8) to reflect the importance of strategic planning and long-range synchronization of competition operations, activities, and investments (OAI). Additionally, locating this effort within the A5/8 creates a valuable synergy with contingency planning to enhance synchronization of competition efforts with wartime scheme of maneuver and concepts of operations. As expressed in Messaging Truths #1 and #2, we recognize messaging does not just come from A5 and have developed proactive and reactive processes for cross-coordination and synchronization with A3 and PACAF Public Affairs to ensure that messaging drives operations.

Of course, making this change happen is more challenging than simply articulating what is required—the organization must adapt to facilitate an approach centered on cognitive effects and shifts in the information environment (IE). While there are vendors with technological solutions to this problem, we are convinced that people are more important than widgets. After all, we are discussing the goal of changing the minds of our adversaries—how are we to believe we can accomplish that if we cannot change the way our own staff thinks about the mission?

This implies that cultural change within our organizations is a crucial enabler of a shift to an information-centered mission concept; however, how do we accomplish this? British military historian B.H. Liddell Hart once said, “The only thing harder than getting a new idea into a military mind is to get an old idea out.”⁶ Getting Airmen to think about strategic messaging as operations requires a major cultural shift. A few guiding change management principles should shape

the approach. First, it is vital to gain senior leadership buy-in. While the work is done at the action officer level, leadership needs to be empowered to set clear expectations and hold people accountable. Second, efforts must be focused on quick wins while building long-term proactive and reactive processes that support Messaging Truth #3. Securing early successes makes a big difference to the momentum of any organizational change. Lastly, change leaders should expect and plan to overcome resistance. Creating change that survives leadership and personnel transition takes an organized approach backed by guidance; communicate well and often how and why this shift is critical to the mission. In the following paragraphs, we will illustrate how messaging is integrated into operations at all points in the planning cycle with specific examples of PACAF successes.

Blunt the Adversary's Narrative: Rapid Response to Volatile Events

Execution requires careful consideration of the current situation and how it affects the message our operations send. Military activities are just one part of the message the nation as a whole sends—and in many ways is less consequential than diplomatic or economic effects. As the execution window for our operations approach, we must consider the strategic and operational environment and assess how it will magnify or contradict the intended information effects we designed the operation to create.

Our approach has yielded notable results already, across the planning horizon from current operations to long-term efforts. In the execution window, we established a cross-functional rapid response messaging team able to quickly react to developments in the IE with a tailored messaging plan advancing American interests. Previously, we discovered China was able to get an information response out in a crisis event in six to eight hours, while it often took the United States days or weeks. PACAF leaders directed their staff to close this gap by setting up a dedicated team of planners and information professionals able to rapidly craft a message supporting our objectives inside the adversary's decision cycle. A notable early success of this initiative came when Chinese and Russian bombers flew inside airspace monitored by the United States, Republic of Korea, and Japan in December 2020. Messaging products illuminating the speed of the friendly response and integration of efforts between allies countered any possible information gains by our adversaries.

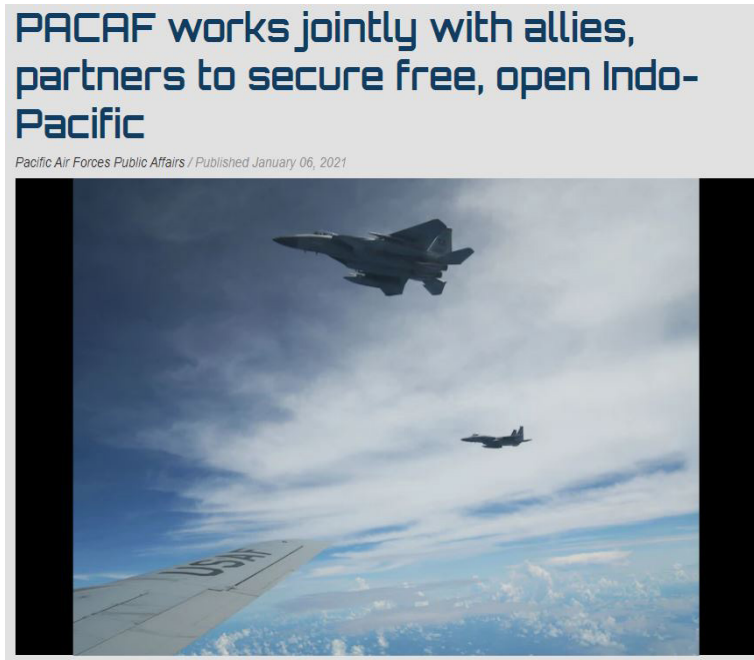


Figure 1. Rapid response. PACAF messaging response to the December PRC–Russia bomber patrol emphasized the strength of our decades-long bilateral relationships.

Just Submitting a Concept of Operations Is Not Enough: Messaging in Emergent Planning

Task saturation permeates the lives of planners across the force (or at least the good ones). When guidance from higher headquarters demands a response in the form of a concept of operations (CONOP) or an order to subordinate units, these planners will give it their best but must apply economy of effort across competing tasks. This often leads to satisfying the letter of the task and moving it on to the next stage; this runs the risk of ignoring the messaging implications of the mission and method selected to achieve it. Unfortunately, higher headquarters often lack the understanding of the operating environment or the specific operational expertise required to incorporate effects on perceptions of adversaries and partners into their guidance; so, it falls to operational-level planners to work through the effects of their operations in the information environment. In most contexts, the best that can be expected is for public affairs, and possibly information operations, to tack on a messaging concept at the end of the CONOPs, but rarely are they significantly involved in the actual development of the operation. This absolutely

must change—in strategic competition, the message is the entire point of the operation, so it cannot exist simply as a backup slide.

Since its stand-up in 2019, PACAF's Strategic Competition Team has been shaping the information environment by leading the messaging surrounding the Air Force's shift from a Continuous Bomber Presence structure in the Indo-Pacific to a more agile, responsive, and operationally unpredictable Bomber Task Force model. This transition posed significant messaging risk because it had the potential to make it appear as though the USAF was pulling back from an operational commitment in the Indo-Pacific. Instead, PACAF proactively and adroitly crafted an information campaign that illuminated the reality: the shift to rotational deployment complemented by long-range flights from the mainland United States poses a greater operational dilemma for China and Russia and highlights the truly global reach of American strategic bombers. In response, China's *Global Times* decried PACAF's efforts as "despised strategically, [but] respected tactically."⁷

When You Have Got the Time, Use It: Messaging for Future Plans

In longer-term planning, staffs all too often squander the breathing room they have to conceive of new activities, falling back on normal force rotations in support of annual exercises and neglecting to design new operations. Rather than leaving the business of designing force employment to those who will have to execute it in two to three years, our planners should have an opportunistic campaign mindset, conceiving of new activities that can be synchronized across time and space to link our strategic objectives to the tasks we assign our forces. This can seem challenging given that force allocation processes typically take place multiple years before operation execution, but dynamic force employment provides a valuable tool to allow planners the forces needed to take advantage of emerging opportunities; anticipated force availability should be a consideration in planning, not an excuse to avoid planning.

Looking forward, PACAF is developing longer-range influence-led campaigns, designed to synchronize OAI to intentionally shape adversary perceptions. Over the next several years, PACAF's operations and exercises will deliberately focus attention on particular capabilities; these concepts of operations will be built from the ground up with information objectives in mind and will be fully integrated with joint and interagency messaging campaigns to demonstrate the US ability to continue operating as it chooses in the theater, even in the face of advanced threats.

If You Do Not Assess It, Did It Happen?: The Importance—and Elusive Nature—of Assessments

Finally, following execution we must ensure we conduct quantitative and qualitative assessment of the effectiveness of the operation against our desired effects. While this is absolutely imperative, it is also incredibly difficult. Consequently, most military commands neglect this function or expend their efforts on measures of performance pertaining to how much effort they put into an operation rather than the changes it has made in the operational environment. The difficulty of this effort is amplified by challenges inherent in assessing changes in adversaries' and partners' views; often the indicators of such changes lag by months if not years. Aggregated through multiple operations and other whole-of-government efforts rather than singular in nature, assessments require a concerted effort to track over time.

The time to build our assessments capabilities is now—and we need help. Never before has the USAF had the access and ability to leverage an unimaginable volume of social media data, intelligence, and advanced analytics to provide so much insight in the IE. While our team has made progress in its ability to understand trends in public discussion and perception relating to efforts like the Bomber Task Force initiative and ally and partner engagements, this is the area in which we need the most help. We are simply not sustainably resourced to assess steady-state messaging, and currently the broader force and national security establishment is not either. We believe this is an appropriate growth area for the intelligence community and combatant commands to ensure assessment of the IE is consistent across operating forces.

Spreading the Message: Implications for the Air Force

While we have had a great number of initial successes in PACAF, we do not think we have all the answers, and we welcome a big-tent approach in building this out across the force. As we have been establishing this process, we have observed the following roadblocks in institutionalizing this approach and believe they apply to all organizations across the force that are grappling with efforts to relearn strategic competition. While we welcome all other organizations' input and support, we also believe that the demands levied on us as a USINDOPACOM service component command impose a unique responsibility in the messaging battle against China.

There are a variety of organizations around the Air Force and the joint force discussing strategic competition and its messaging component, but at PACAF we are actively integrating it into the competition we execute every day. Headquarters

Air Force (HAF) A3 has provided an excellent framework for conceiving of Operations in the Information Environment, as well as matching objectives with the various tools available to affect the environment, but HAF A3 does not exercise day-to-day control over operating forces or actively plan and direct operations. In the end, while HAF will be responsible for resourcing and programming decisions that will either limit or expand our capability to conduct the battle in the information environment, the responsibility to execute the fight will lie with the major commands (MAJCOM) and numbered air forces that answer to combatant commanders.

On the numbered air force front, the establishment of 16th Air Force as the operational organization responsible for integrating information warfare effects is a major move forward. However, chain of command still matters, and 16th Air Force does not report to PACAF or INDOPACOM. While they provide invaluable supporting capability to efforts within the Indo-Pacific, ultimately it is PACAF that is responsible for planning and integrating Air Force operations in the theater. We have an obligation to our commanders to ensure that we are considering information effects in all that we do, rather than outsourcing it to another headquarters.

We addressed a variety of issues here, ranging from early successes to where we still need to see progress, but we fully recognize this will be a years-long effort across the Air Force and the Joint Force to institutionalize a new way of thinking. A single MAJCOM, or even the Air Force or entire Department of Defense, cannot counter the PRC's narrative on its own. We need to deliberately and thoughtfully integrate our efforts into a whole-of-government approach (supported by the National Security Council) to ensure legacy habits and stovepiping do not dull the impact of our government's information response. In addition to harnessing this whole-of-government effort, USAF needs to design a responsive process for synchronizing messaging across the force so our messaging activities amplify, not contradict, one another. Overall, the creation of Strategic Competition Teams across all MAJCOMs lays the foundation for an organization that prioritizes messaging as the central organizing principle of operations; this is a great start, because with the breadth of this task, we simply cannot afford to delay any longer.

Call to Action

The challenge is clear: in China, we face a determined competitor with the capability to back its messaging with real power, globally. Our neglect of messaging capabilities and processes in the past decades has left us dangerously vulnerable. The Air Force has taken the first steps to address this shortfall, but truly contesting

the narrative will require a wholesale change in culture, and unfortunately, we do not have the time to await generational change on this issue. USAF senior leaders—not just in the Indo-Pacific but around the globe—need to build their strategic messaging capabilities around the three truths: the commander owns the narrative, the narrative drives operations, and, while the narrative is consistent, messaging is dynamic. Simply “demonstrating resolve” or “advancing proficiency” is no longer enough. Serious competition requires serious planning and identification of how one intends to change minds and then the follow up to honestly assess how we are doing. We should have done this work years ago, but the second-best time is now. 🌟

Col Joshua “Mule” Koslov

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Notes

1. Glenn Tiffert, et al., “Telling China’s Story: The Chinese Communist Party’s Campaign to Shape Global Narratives,” *Hoover Institution*, 21 July 2020, <https://www.hoover.org/>.
2. Joseph R. Biden, Jr., *Interim National Security Strategic Guidance* (Washington, DC: The White House, March 2021), <https://www.whitehouse.gov/>.
3. Charles Q. Brown, “*Accelerate Change or Lose*,” US Air Force, August 2020, <https://www.af.mil/>.
4. PACAF Commander’s Messaging Strategy, April 2020.
5. PACAF Strategic Competition Framework, May 2020
6. B.H. Liddell Hart, *Thoughts on War* (London: Faber and Faber, 1944), v.
7. “The US Military B-1B Strategic Bomber ‘Passed By’ Taiwan to the East China Sea and Was Exposed for the First Time in Waters Outside Taiwan!,” *Global Times (Huanqiu Shibao)*, 4 May 2020, <https://3w.huanqiu.com/>.

The Threat

Chinese Conventional Land Attack Missile Forces—An Update

LT COL THOMAS R. MCCABE, USAFR, RETIRED

China defines its national defense policy as strategically defensive, proclaiming “we will not attack unless we are attacked, but we will surely counterattack if attacked.”¹ To prepare for a potential “counterattack,” China is building an increasingly formidable set of offensive capabilities for use at the operational and tactical levels of war to counter United States and allied forces in the western Pacific (hereafter WestPac).² Central to these deployments is a large force of conventional tactical ballistic and cruise missiles, mostly under the People’s Liberation Army Rocket Force (PLARF). When deployed in sufficient numbers, this force could give China the capability to stage a comprehensive integrated conventional surprise attack against fixed American and allied sites (especially air and naval bases) in WestPac. Our bases there are few, located close to China, and have limited potential for concealment or dispersion. They are also mostly unhardened (and even hardened facilities may be vulnerable to modern precision guided munitions)³ and usually possess limited, if any, defenses.

Conventional Ballistic Missiles

The bases in WestPac are especially vulnerable to attacks by ballistic missiles. China has deployed several types of such missiles:

Short range ballistic missiles (SRBM—with a range up to 1,000 kilometers). The Chinese force is more than 650 conventional SRBMs,⁴ although some recent estimates put the force as large as 1,500 missiles.⁵ However, their force of launchers is significantly smaller (200–250 launchers,⁶ each carrying one missile at a time).⁷ Historically, these missiles were short-ranged (most could reach Taiwan but not Okinawa) and unguided, but China is now deploying upgraded missiles with longer range and precision guidance.⁸ DF-11/11As, with a range of up to 530 km,⁹ are being replaced by the DF-16, with a range of up to 1,000 km,¹⁰ and some variants may have even longer ranges.¹¹ This would potentially put Okinawa, Kyushu, parts of Shikoku and Honshu, and much of Luzon within range from coastal launch sites and much of Hokkaido and Honshu within range from border areas with North Korea. Earlier versions of the DF-15 are being replaced with the DF-15B, which has a range of up to 800 km, which would put Okinawa within range.¹²

Artillery rockets. In addition, the People's Liberation Army (PLA, the Chinese land force, not the rocket force) has deployed the B-611, an artillery rocket with a half-ton warhead intended for tactical use. With a reported range of up to 250 km, it could target much of Taiwan, especially northwestern Taiwan, if launched from coastal sites. If equipped with a satellite navigation system, it may have an accuracy of 30 meters.¹³ No information is available as to the number deployed (and whatever deployments have been made were not counted in the SRBM figures). If deployed in any numbers, it could potentially supplement any PLARF SRBM attack against Taiwan.¹⁴

- **Medium-range ballistic missiles** (MRBM—with a range of between 1,000–3,000 km, which might put Guam marginally within range). In 2020, the Chinese were reported to have deployed more than 150 conventional MRBMs on 150 launchers.¹⁵ Past DOD estimates put the size of the MRBM force as large as 450 missiles.¹⁶ No detailed information is available as to the type of missiles in the force: presumably they are DF-21s, although DF-17s, possibly equipped with hypersonic warheads, may be starting deployment.¹⁷ We should note that the DF-21D antiship ballistic missile (ASBM) is a variant of the DF-21 MRBM, and no information is available as to whether ASBM launchers and missiles are counted in these overall totals. We should also note that some sources report that the SC-19 antisatellite (ASAT) system is also a modified version of the DF-21 launched from a mobile launcher,¹⁸ and no information is available as to whether these systems are included in the DOD figures.
- **Intermediate-range ballistic missile** (IRBM—with a range of between 3,000–5,500 km, which can reach beyond Guam). In 2020, the PLARF was reported to have 200 launchers and more than 200 missiles.¹⁹ We should note that the DF-26B ASBM is a variant of the DF-26 IRBM,²⁰ and no information is available as to whether ASBM launchers and missiles are included in these totals.
- **Older missiles.** While no information is available on what the Chinese have done with phased out older missiles, especially SRBMs, it is worth noting the potential use for such missiles (albeit shorter-ranged and less accurate) in wartime.

Land-Attack Cruise Missiles

In addition to ballistic missiles, China is deploying a large force of ground-launched land-attack cruise missiles (LACM). In 2020, DOD estimated this force at more than 300 long range (up to 2,000 km) LACMs,²¹ on 100 launchers,²² although the launchers carry multiple missiles.²³ These are presumably CJ-10/DH-10 and DH-10A missiles.

In addition, such missiles can be carried by other platforms, although as of early 2021, the numbers of such missiles deployed on alternative platforms are not publicly available. These alternative launchers may include:

- The H-6K medium bomber, the upgraded Chinese version of the Russian-designed Tu-16 BADGER. These can carry up to six CJ-20s,²⁴ the air-launched version of the DH-10.²⁵ They are reportedly currently 36 H-6Ks in the People's Liberation Army Air Force (PLAAF) inventory.²⁶
- PLA Navy (PLAN) surface ships and submarines.²⁷
- Containers on civilian ships.²⁸

China is likely developing a next-generation ground-launched cruise missile,²⁹ the HN-2000. It is reported to be stealthy, using a satellite navigation guidance system based on the Chinese Beidou satellite system, and is equipped with advanced sensors (millimeter wave radar, imaging infrared, laser radar, and synthetic-aperture radar). It is also reported to have a range of up to 4,000 km and has a supersonic terminal flight phase.³⁰

In addition to the previously discussed long-range LACMs, China has deployed shorter-range tactical LACMs, in particular the KD-88 air-to-surface LACM, with a reported range of 180–200 km.³¹ While the PLAAF was reported in 2019 to have only a small supply of tactical air-to-surface missiles,³² we should expect the Chinese to deploy these in much larger numbers in the future.

Finally, the PLARF has continued to deploy additional missile units (11 brigades between May 2017 and early 2020).³³ While no information has emerged as to their equipment, which presumably includes ICBMs as well as shorter-range missiles, we can anticipate their forces will increase.

While the requirements for a comprehensive conventional first salvo are formidable (one estimate was that it would take a barrage of 45 missiles with submunitions to destroy more than 80 percent of the aircraft at even an unhardened base),³⁴ there is no reason to believe that the Chinese are incapable of deploying the forces necessary to undertake such an attack. We need to act accordingly. Since the armistice that ended the Korean War, US bases in the Republic of Korea have

functioned under the assumption they could be subject to attack on short notice, and during the Cold War American and Allied bases in West Germany faced similar threats. Past American efforts to counteract these threats relied on a combination of passive measures and active defenses, rapid repair, and reconstitution. The United States and its allies need to duplicate those measures at their WestPac bases, including Guam, and, more selectively, at other Pacific region facilities (or at those that support the Pacific region). Our personnel at those bases (and on US ships in the region) need to think of themselves as being in a forward area. The front line is no longer just Korea, and our bases in the region are no longer peacetime bases. ★

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Notes

1. The State Council Information Office of the People's Republic of China, "China's National Defense in the New Era" (hereafter Chinese 2019 White Paper), 25 July 2019, <http://www.xinhuanet.com/>.
2. The People's Liberation Army (PLA) organizational concept for its military strategy is "campaigns," defined as a series of battles fought under a unified command to achieve a local or overall objective. Chinese military writings have identified numerous possible campaigns, including, for instance, a blockade campaign, a landing campaign, an antilanding campaign, and an anti-airstrike campaign. *The Science of Campaign*, (2006) English Translation Volume 1 (Beijing, 4th Watch Publishing Company, 2018)
3. Eric Heginbotham et al, *The U.S.-China Military Scorecard* (Santa Monica, CA: RAND, 2016) 63, fn 59. <https://www.rand.org/>.
4. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2020 Annual Report to Congress* [hereafter *Annual Report to Congress 2020*], 1 September 2020, 59, <https://media.defense.gov/>.
5. In 2019, the DOD estimated the size of the SRBM force as being between 750 and 1,500 missiles. Office of the Secretary of Defense, *Annual Report to Congress, Military and Security Developments Involving the People's Republic of China 2019* [hereafter *Annual Report to Congress, 2019*], May 2019, 47, <https://news.usni.org/>. In 2015, the U.S.-China Economic and Security Review Commission estimated at least 1,200. U.S.-China Economic and Security Review Com-

mission, *2015 Report to Congress of the U.S.-China Economic and Security Review Commission* [hereafter *2015 Report to Congress*], November 2015, 351, <http://news.usni.org/>.

6. The figure of 200 launchers is from *Annual Report to Congress 2020*, 59. The 250 figure is from "Sphere of Impact," *Defense News* 34, no. 10 (3 June 2019), 11.

7. Missile Threat, "DF-15 (Dong Feng-15 / M-9 / CSS-6)," *CSIS Missile Defense Project*, n.d., <https://missilethreat.csis.org/>.

8. The DF-15C was reported to have a terminally guided warhead as early as 2011. Presumably, other missile types have been similarly equipped. See: Ron Christman, "Conventional Missions for China's Second Artillery Corp," in *Chinese Aerospace Power*, ed. Andrew Erickson and Lyle Goldstein (Annapolis, MD: Naval Institute Press, 2011), 309.

9. Jacob L. Heim, "The Iranian Threat to Air Bases," *Air & Space Power Journal* 29, no. 4 (July–August 2015), 52, <https://www.airuniversity.af.edu/>.

10. David Xia, "A Comprehensive Analysis of Chinese Ballistic Missile Systems Displayed on Victory Day Parade," *IndraStra Global*, 20 September 2015, <https://www.indrastra.com/>.

11. See: *2015 Report to Congress*, 352.

12. Xia, "A Comprehensive Analysis of Chinese Ballistic Missile Systems."

13. John Pike, "B-611/BP-12A/Toros/Yildirim," *Global Security*, 28 October 2013, <https://www.globalsecurity.org/>.

14. In addition, the PLA has recently started deploying another artillery rocket system, sometimes called the PHL-16 or PCH-191, with a reported maximum range of 220 km, which would put limited areas of northwestern Taiwan within range. "PHL-16 Multiple launch rocket system," *Military Today*, <http://www.military-today.com/>.

15. *Annual Report to Congress 2020*, 59.

16. *Annual Report to Congress, 2019*, 47. The low end of the estimate range was 150 missiles.

17. Missile Defense Project, "DF-17," *Missile Threat*, Center for Strategic and International Studies, 23 June 2020, <https://missilethreat.csis.org/>.

18. Santosh Kosambe, "Mission Shakti aka Project XSV-1: India's First Anti-Satellite Test (ASAT)," *Researchgate*, January 2019, <https://www.researchgate.net/>.

19. *Annual Report to Congress 2020*, 59.

20. Andrew S. Erickson, "China's DF-21D And DF-26B ASBMs: Is The U.S. Military Ready?," *19FortyFive*, 15 Nov 2020, <https://www.19fortyfive.com/>.

21. *Annual Report to Congress 2020*, 59; and *Annual Report to Congress, 2019*, 47. The latter source estimated the forces to be as numerous as 540 missiles.

22. *Annual Report to Congress 2020*, 59.

23. CJ-10 transporter/erector/launchers (TELs) carry three missiles. Jeffrey Lin and P.W. Singer, "China's New Mystery Missile and Launcher," *Popular Science*, 11 August 2015, <http://www.popsci.com/>.

24. *Annual Report to Congress, 2015*, 12. Some sources say they can carry up to seven missiles each. See: Jeffrey Lin and P.W. Singer, "China Shows Off Its Deadly New Cruise Missiles," *Popular Science*, 10 March 2015, <http://www.popsci.com/>.

25. Dennis M. Gormley, Andrew S. Erickson, and Jingdong Yuan, "A Potent Vector: Assessing Chinese Cruise Missile Developments," *Joint Force Quarterly* 75,, no. 4 (30 September 2014), 104, <http://ndupress.ndu.edu/>.

26. Franz-Stefan Gady, "China's Air Force Can Now Launch Long-Range, Precision Strikes," *The Diplomat*, 15 October 2015, <http://thediplomat.com/>. No signs of additional procurement since then.

27. For surface ships, *see*: "Navalized DH-10 LACM," *China Defense Blog*, 25 July 2012, <http://china-defense.blogspot.com/>. For submarines, *see*: John Pike, "Type-093B/Type-093G VLS LACM Shang-class," *Global Security*, 30 April 2019, <https://www.globalsecurity.org/>.

28. Bill Gertz, "China Building Long-Range Cruise Missile Launched from Ship Container," *Jackson Press*, 30 March 2019, <http://thejacksonpress.org>.

29. Ian Easton, "The Assassin Under the Radar: China's DH-10 Cruise Missile Program," *Project 2049 Institute*, 1 October 2009, <https://project2049.net/>. Evidently, there is some uncertainty as to the current status of the program. Gormley, Erickson, and Yuan did not mention an HN-2000, although they did describe a "possible DH-2000," a submarine-launched 500-km-range LACM. *See* Gormley, Erickson, and Yuan, "A Potent Vector," 102.

30. "Key Element in the Taiwan Straits Military Situation" (Taihai junshi taishi de guanjian), 36. Quoted in Easton, "The Assassin Under the Radar." China evidently started deploying a large new cruise missile several years ago, but it remains undetermined if this is the HN-2000, how many, if any, have been deployed, and whether these are counted in the DOD figures for LACMs. Lin and Singer, "China's New Mystery Missile."

31. Gormley, Erickson, and Yuan, "A Potent Vector," 102.

32. *Annual Report to Congress, 2019*, P. 47.

33. P.W. Singer and Ma Xiu, "China's Missile Force Is Growing at an Unprecedented Rate," *Popular Science*, 25 February 2020, <https://www.popsci.com/>.

34. As discussed in Chapter 9 of Roger Cliff, *China's Military Power* (New York: Cambridge, 2015), 197.

Economic Implications and Near-Term Strategic Impacts of Military-Civil Fusion for the Next China

MIDN ANDREW SONG, NROTC

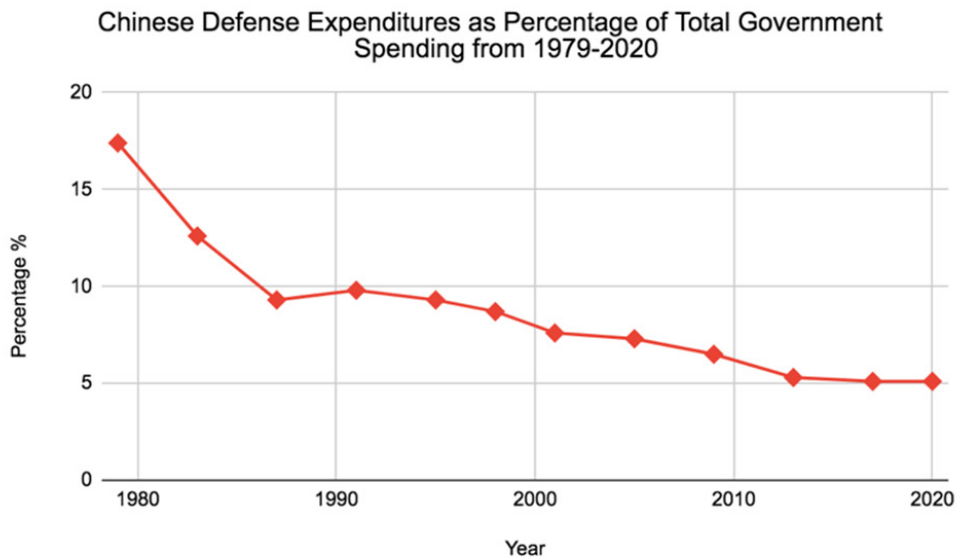
Introduction

In January 2020, former US secretary of state Mike Pompeo described China's Military-Civil Fusion (MCF) modernization initiative as a "technical term, but a very simple idea."¹ However, Pompeo's characterization of MCF belies the initiative's sophistication and its multifaceted intentions. MCF, as currently perceived by military experts, is the common term for the Chinese Communist Party's (CCP) strategy to modernize the People's Liberation Army (PLA). While this is partly true, academic circles neglect to observe how MCF marries competing objectives: economic development and national security. MCF aims to transform the PLA into a more agile institution by integrating the it into China's commercial apparatus. This unorthodox view demands greater evaluation of alarming measures that were previously ignored by the United States. This article examines, first, MCF's origins and organizational framework, along with its execution today under President Xi Jinping. The analysis documents key economic and political interactions among MCF's various stakeholders. Additionally, the article uses as an example the participation one State-Owned Enterprise (SOE) in MCF to highlight the technological force multipliers that China gains. In doing so, I describe the challenges to MCF's implementation and contend that MCF is a complex military and economic enterprise requiring greater attention by the Department of Defense.

Chinese Rejuvenation: Origins and the Need for MCF

The People's Republic of China's internal debate over whether to prioritize spending on defense or economic development dates to its founding. After the end of the Korean War, then-Chairman Mao Tse-tung reduced China's defense spending from 30 percent to 20 percent of Beijing's budget to focus on national economic construction.² Even then, Mao asked that production lines produce civilian goods and defense equipment simultaneously. The reversal of Mao's policies began immediately with his successor, Deng Xiaoping. Although Deng la-

beled defense as a pillar to the “Four Modernizations,”³ as chairman of the Central Military Commission he relegated the defense industry and the military below the other tents of modernization. The Soviet Union’s breakup as a result of excessive investments in defense convinced Deng that such a move was appropriate.⁴ Deng also feared that higher levels of defense spending would jeopardize China’s international image as a peaceful state in an era of “hide and bide.”



Source: Stockholm International Peace Research Institute, “SIPRI Military Expenditure Database” (2020), <https://www.sipri.org>.

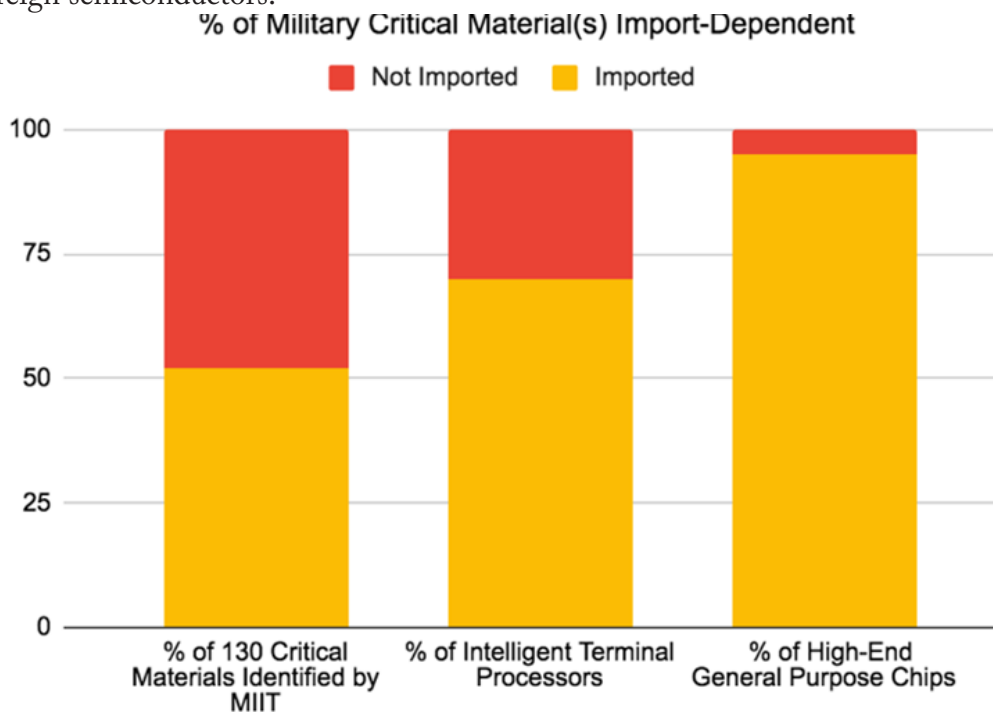
Figure 1. Chinese defense expenditures as percentage of total government spending from 1979–2020

China’s view on defense mobilization changed in the aftermath of the Persian Gulf War. China witnessed the United States implement rapid technology and modern warfare strategies that led to the West’s quick victory against Iraq. This event deeply alarmed the Chinese Communist Party’s national security establishment. In a Sputnik-like moment, the Persian Gulf War galvanized Deng’s successors, Jiang Zemin and Hu Jintao, into coordinating a national strategy that would prepare for twenty-first-century warfare.⁵ Consequently, the concept of MCF first appeared in Hu Jintao’s 17th Party Congress report published in 2007.⁶ Under Hu, the CCP envisioned that “fusing” China’s national development strategies with its military planning goals was feasible, if not critical, to sustaining high growth.

Under Xi's patronage, MCF has evolved into a national project. In January 2017, Xi founded the Commission for Military-Civil Fusion Development.⁷ He followed this action by then delivering a speech that summer, urging the 19th Party Congress to prioritize MCF.⁸ Xi, unlike his predecessors, institutionalized and created a governance system that would guide MCF to reach its long-term strategic goals. The explicit missions of MCF are (1) to morph the PLA into a world-class military by 2049 and (2) to accelerate China's science and technology (S&T) capabilities past its competitors.⁹ Less noticeable in the speech is how Xi imagines MCF as another method to centralize economic power within the state. While defense spending as a percentage of total government spending¹⁰ has been decreasing, as shown in figure 1, this trend is deceiving.¹¹ China's funding of MCF comes in the form of increased spending in "nonmilitary sectors" through SOE subsidies and preferential loans to commercial partners, to name but two. Thus, China challenges the assumption that the military is a separate account. Experts should realize that MCF is *not* a traditional stimulus package for the defense industrial base. Instead, MCF is designed to promote more efficiency in the defense sector. In accomplishing this, Beijing can continue frugal defense-spending measures, especially in a post-COVID-19 era.

Why is MCF taking place now? MCF targets undeveloped areas of interest for the military, but it also attempts to fill glaring holes in the public sector that China views as hindering future economic growth. First, private industry participation in the defense ecosystem has been problematic and minimal. The lack of private sector competition has induced public defense conglomerates to be complacent and stagnant in innovation. Current data paints a picture of a dysfunctional Chinese defense base. In 2019, less than 3,000 firms out of some 150,000 registered Chinese high-tech companies were involved in the defense supply chain.¹² This problematic 2 percent participation rate is compounded by the fact that, of these 3,000 companies, 68 percent were information and communications technology (ICT)-related companies.¹³ This signifies that China lacks commercial engagement in crucial non-ICT fields. China wishes to expand its core competencies in traditional domains like aviation and nuclear engineering, and thus MCF is designed to address this disengagement. Existing civilian participation in defense R&D also predominantly resides in low value added activities.¹⁴ National University of Defense Technology academics point to late civilian input in defense R&D as a troublesome status quo: simply using the private sector as a parts producer rather than as a research partner fails to leverage the full value of commercial services and human capital.¹⁵ In addition, the CCP hopes MCF will cultivate corporate patriotism as more firms work with PLA contracts and bind business relations with the CCP.

Second, China itself struggles with supply chain offshoring. Of 130 components necessary for defense manufacturing, 52 percent are imported into China.¹⁶ Even more concerning for CCP officials is China's reliance on foreign production of high-end chips and processors. Now, 95 percent of all-purpose chips are imported from nations such as South Korea and the United States.¹⁷ The lopsided import-export ratio in the semiconductor space threatens China from expanding its innovation capacity in technologies dependent on such materials. The technologies at risk are quantum computing, microelectronics, artificial intelligence, and the like. MCF fixes this trade imbalance by pushing swaths of capital into joint cooperative research centers that can wean China from industrial reliance on foreign semiconductors.



Source: MIIT: *China Is Import-Dependent on 130 Critical and Basic Materials*, translated to English, Sina, 17 July 2018, <http://finance.sina.com.cn>

Figure 2. Percentage of military critical material(s) import-dependent

Third, China also faces a plethora of deficient SOEs in the defense sector that desperately need reform. However, China does not wish to dismantle these SOEs or, for that matter, diminish their market power in favor of private industry. Xi Jinping sees SOEs, including these defense firms, as the primary business forces that should create national wealth.¹⁸ MCF hopes to introduce mixed ownership

to the executive management of defense SOEs to preserve their financial well-being. MCF agencies, such as the State Administration for Science, Technology and Industry for National Defense (SASTIND), are tasked with relationship-building and arranging favorable agreements between defense SOEs and state banks.¹⁹ Besides introducing more efficiency to SOEs, SASTIND and similar organizations strive to increase job growth at these firms.

Tangentially related is China's aspiration to disrupt and penetrate the global defense market.²⁰ This requires significant private sector support. In FY 2000, US companies cornered the market in foreign arms sales and defense technology. US entities completed more than 60 percent of the share of global arms sales that year; developing nations like China contributed only 4 percent of total arms sales.²¹ China's lack of private counterparts to the primary US defense contractors (e.g., Boeing, Northrup Grumman, Huntington Ingalls, and Lockheed Martin) also motivate China to cultivate an in-house contender. Of the 100 largest defense companies by revenue, 43 were listed as US-based, including eight of the top 10.²² It is reasonable to infer that post-9/11 defense postures have strengthened the US grip on the market, undercutting China's ability to enter the arms transfer market. Most nations generally sign arms agreements with exclusivity contingencies. Due to the inferior nature of existing Chinese platforms compared to those of the United States, Chinese opportunities in ally-building are limited.

Finally, and perhaps most important, China is wary of falling behind the United States in next-generation dual-use technology research. China sees US military inventions such as the internet and GPS as products resulting from successful integration of universities into the defense R&D base. In order not to miss the next revolution in military affairs, China identifies targeted technologies (including 5G, AI, aerospace, biotechnology, nuclear engineering, and advanced materials) as areas under the responsibility of universities.²³ In other words, MCF accompanies Made in China 2025 national strategic plan by providing additional funding routes for scientific research and acting as an alternative sponsor for academic grants.

These problems are noticeably more economic in nature. Thus, contrary to popular consensus, MCF activities center more around economic policies and less on military reform. Taken together, however, MCF's objectives to address systemic economic issues are: (1) the welcoming of more permanent public-private partnerships; (2) implementation of structural reforms to large SOEs in the defense industry; (3) the leveraging of human capital in S&T and universities for the military's benefit; and (4) an international mergers and acquisitions (M&A) strategy in targeted technologies.

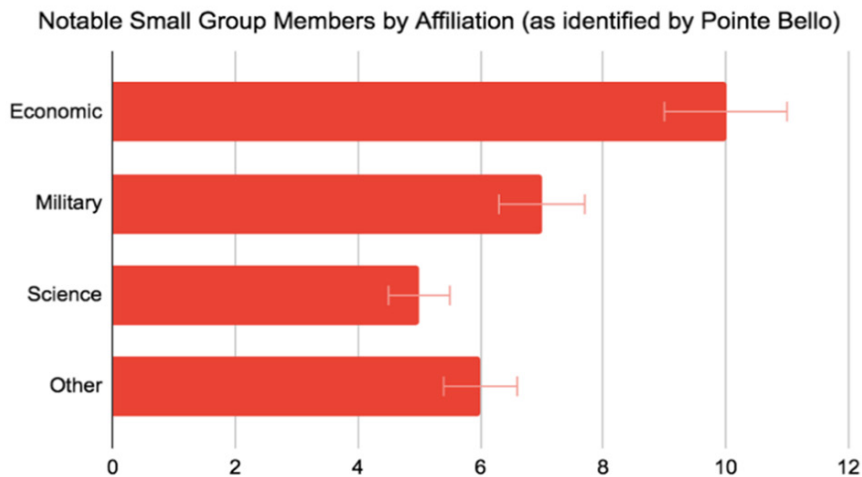
Key Stakeholders

Achieving the goals summarized just above is a task that involves hundreds of organizations. In MCF, stakeholders can be categorized into four categories: political organs, commercial enterprises, economic institutions, and the military.³¹ These four interest groups collaborate at the national environment all the way down to the prefectural level. Key military stakeholders are the Central Military Commission, PLA elites, and military institutions of higher education (IHEs). Civilian participants are drawn from top-ranked academic institutions such as Tsinghua University, private and public firms, and joint research centers. Economic agents encompass financial blocs such as the People's Bank of China, the Ministry of Human Resources and Social Security, and the State-Owned Assets Supervision and Administration Commission. Finally, the political establishment overseeing MCF is a coalition of State Council bodies, forming a powerful trinity. State Council units are the Ministry of Industry and Information Technology (MIIT) and its subordinate agencies—the Civil-Military Integration Promotion Department and SASTIND.²⁴

Although MCF appears from the outside to be a project spearheaded by military bureaucrats, its membership and the inclusion of economic actors suggest that state developers and economists are delegated more responsibility in policy decision-making than is the PLA. This is substantiated by how economic representation is greater than the number of military-related officials in the administrative bodies under MCF. One such essential body is the Inter-Ministerial Coordination Small Group for Military-Civil Fusion Integrating Weapons Research and Production Systems, the policy arm of MCF known as the “Small Group.”²⁵ This policy body consists of high-profile leaders from all four stakeholders. Pointe Bello, a strategic intelligence firm specializing in Chinese affairs, created a table with the names of members who were equivalent to deputy directors or above in their respective organizations.²⁶ Aggregating this membership list and sorting individuals by affiliation produced the chart below, which provides evidence that economic advisors are a clear plurality. The remaining three interest groups display marginal differences in representation to each other. The “Other” category includes political figures as well as officials in nontraditional domains such as the Ministry of Education. The Small Group's membership composition offers credence to speculation that an economic advisory role is at the heart of MCF's operation. More indicative is how the chair and vice chairs are currently occupied by economic and tech-related ministers such as Miao Wei (MIIT minister) and a deputy director of the National Development and Reformation Commission, respectively.²⁷ Thus, military officers, although deemed essential, may in reality be

acting in a support role to MCF's leadership decisions, thereby reflecting MCF's overarching priority of economic development.

Other reasons propelling overrepresentation by economic figures at the expense of military bureaucrats may be due to the PLA's history with corruption when charged with leading domestic business ventures.²⁸ Likewise, the impact of Xi Jinping's purges during his tenure is likely to have diminished the influence of military leaders. During his time in office, Xi has purged more than 60 percent of the top 90 military officers appointed after the 18th Party Congress and also arrested more than 52 senior military officials throughout his anticorruption campaign.²⁹ The current first-ranked vice chairman of the Central Military Commission, Xu Qiliang, has used almost all of his public addresses to the Party Congress to discuss the importance of MCF and the PLA's efforts in it.³⁰ This history demonstrates that, possibly, the PLA lacks the will or the congregation to challenge Xi in securing a more dominant role in his MCF planning.



Source: Levesque and Stokes, "Blurred Lines."

Figure 3. Notable small group members by affiliation

MCF Strategies and Interactions Among Interest Groups

Observations on leadership, however, should not detract from MCF's authentic intentions to enhance the PLA's capabilities and to improve its professionalism. An agenda of MCF set forth by Xi Jinping at the 12th National People's Congress in 2017 is to increase the PLA's brainpower and to create a leaner force.³¹ As the PLA procures more sophisticated informatized weaponry and al-

locates more resources in cyber and space operations, its workforce will require more intensive STEM education. Thus, the role of universities and academia in MCF carries a dual mandate: to host innovative research, and to educate the PLA. The latter is more interesting to study given the lack of literature on the second. MCF's strategy on military education is trinitarian. Labeled the "Triad System," this innovation education initiative is based on three mutually reinforcing elements.³² Physical implementation of the Triad System has overhauled Chinese higher education completely in recent years. First, MCF in the education sphere has focused on cutting poorly performing programs. MCF's educational policy eliminated China's National Defense Student Program, a commissioning source similar in style to the ROTC in the United States.³³ The program was discontinued because MCF wants to save money by selecting future military officers through direct recruitment of college graduates. MCF also halved the amount of existing military IHEs (from 63 to 34)³⁴ to reorient the PLA and rely more on civilian universities to cultivate military talent. MCF's cutbacks accompany significant expansion in other areas. An ongoing segment of MCF's engagement strategy with universities is increasing the number of billets dedicated to joint master's/PhD degree-granting programs for PLA personnel. This effort seems to have scaled up quickly and is well received by the PLA and its university administrators. The commandant of the PLA Rocket Force cites the fact that almost nine out of 10 of his recently promoted missile brigade commanders graduated from PLA-supported doctoral programs hosted by top-ranked research universities such as Tsinghua, the Harbin Institute of Technology, and Zhejiang University.³⁵

MCF's goal to leverage civilian S&T talent and to foster STEM education for military professionals has ramifications. First, MCF brings the Ministry of Education closer to the PLA, nearly folding the ministry under the influence of the PLA. The number of civilian IHEs who had subscribed to a talent cultivation agreement with the military at last count was 118.³⁶ MCF's progress in fusing higher education with the military indicates that this number will likely grow. The collaboration between the PLA and higher education also stimulated the proliferation of defense-related vocational training (civil aerospace engineering, air defense, nuclear and radiological studies, radar, and cybersecurity) taught in civilian universities.³⁷ Second, research in these universities currently is more accessible to the military because of the cross-pollination of PLA personnel mentored by academic professors.

Defense SOEs have witnessed how MCF's reforms can restructure and reconfigure businesses. At the heart of the action plan is mixed ownership reform. Starting with SASTIND's recommendations in the 2017 MCF Action Plan,³⁸

Chinese defense SOEs opened pathways for more private capital or market-based diversified financing. The plan additionally called for 41 defense SOEs and their subsidiaries to privatize and to complete asset sales.³⁹ SASTIND encourages parent firms to sell state-owned equity and to dissolve inefficient departments with low commercial potential. In addition to pushing defense SOEs toward abdicating complete state control, SASTIND and MCF's political committees are directing Chinese state-owned banks to double down on financing defense SOEs. For example, in late 2016, the Industrial and Commercial Bank of China extended a generous five-year credit line worth \$7.5 billion for the China Shipbuilding Industry Corporation (CSIC).⁴⁰ Defense SOEs such as CSIC need more capital for M&A efforts encouraged by SASTIND.

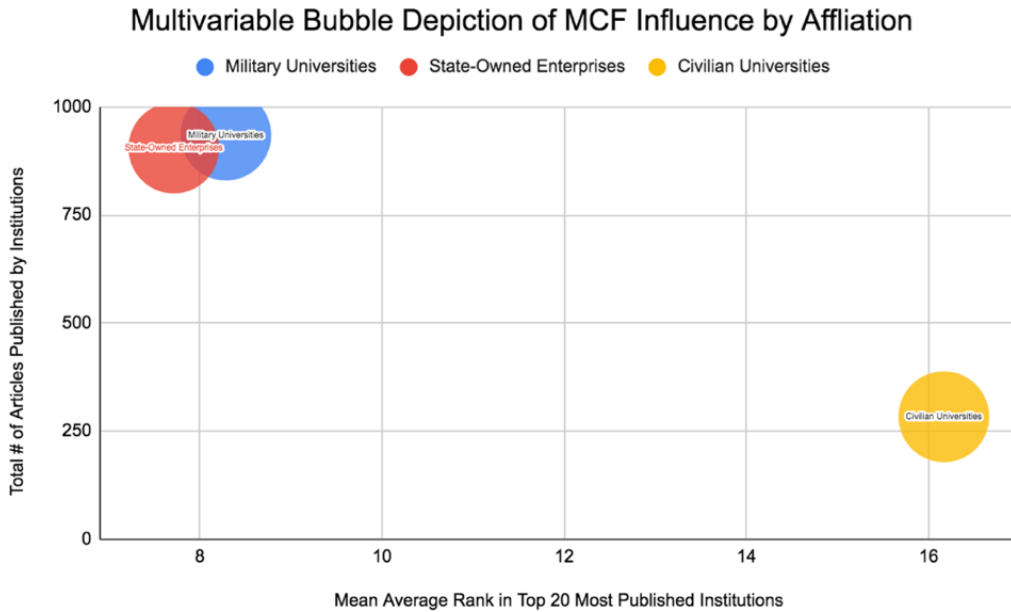
A recurring theme in MCF is how defense SOEs pursue aggressive M&A with foreign entities. Take, for example, the Aviation Industry Corporation of China (AVIC) and its recent corporate strategy in the international market. Armed with a private equity fund worth US\$3 billion backed by the China Construction Bank, AVIC acquired aviation suppliers and dual-use technology providers in the United States and Europe.⁴¹ AVIC has spent almost \$1.25 billion worth of shares in European companies. One company purchased, Future Advanced Composite Components (FACC), is a major supplier to Western military and civil aviation contractors including General Atomics, Boeing, and the French-based Airbus.⁴² It is unclear, however, whether AVIC sought these acquisitions to make connections or for to consolidate control over global arms sales. If so, a strong case for the former is AVIC's acquisition of the aircraft diesel engine manufacturer Thielert Aircraft. This German-founded firm produces engines used in the General Atomics MQ-9 UAV—the same drones operated by the US Air Force.⁴³ Although China could be attempting to bottleneck or spy on US supply chains through such acquisitions, such a conclusion might be oversimplified.

Alternatively, China's primary motivation for these acquisitions is its desire to receive intellectual property that is passed along as part of a deal. AVIC has not shown a tendency to discontinue or drastically change the prebuyout services of acquired companies. FACC's services under its new parent, AVIC, moved to Zhenjiang, where the joint-venture center has continued to produce critical aircraft materials such as wing spoilers at normal rates.⁴⁴ In other words, the purpose of this MCF-induced M&A strategy appears to exploit latecomer advantage and find nascent technology not yet available in China. For example, AVIC bought a majority stake in the Barcelona-based Aritex in 2016. This small company designs and constructs wings for the Eurofighter Typhoon, a twin-engine combat fighter jet. The Eurofighter's primary users (the Royal German, Italian, and Spanish Air Forces) state that its flexible wings and architecture enable the aircraft to reach an

extraordinary top speed of Mach 2.0.⁴⁵ It is plausible, given the Chinese J-20's head-to-head inferiority to the American F-35 fighter jet, that China is purchasing, through legal means, technology that can be copied and reproduced for its own legacy systems. Given how AVIC's board members also serve in the Small Group committee,⁴⁶ this concurrent M&A strategy may not be innocuous.

The visibility of M&A transactions by defense SOEs implicates the discussion over stakeholder influence. One metric in measuring stakeholder influence besides committee representation (e.g., the Small Group) is authorship of reports and documents referring to MCF doctrines. The China Aerospace Studies Institute (CASI) published a table detailing the top 20 institutions with the most journal articles published on MCF.⁴⁷ CASI researchers collected bibliometrics data gathered by the Central Commission on Military-Civil Fusion Development to conduct a current state analysis on MCF literature. In using this table, a multivariable bubble chart was assembled to capture "influence." The graph visualizes the extent to which stakeholders are lobbying and impacting policy decision-making discussion by assessing three variables. These variables are the number of journals published by a stakeholder; the number of institutions represented on the top 20 list by a stakeholder; and the mean average ranks by stakeholders.

The data provides a cogent argument that defense SOEs show a considerable amount of influence over military IHEs, especially civilian universities. The evidence sheds light on how SOEs are likely expending a greater proportion of resources dedicated to MCF through reports and research papers. It also suggests that civilian SOEs, compared to the PLA, show a greater amount of interest on MCF's impact on industry versus defense. Unsurprisingly, the military IHE with the most publications on the subject is the PLA Military Economics College.⁴⁸ This fact, paired with the diverse representation of SOEs, illustrates the economic focus of MCF. SOEs are influential players deeply engaged in MCF's policies, but the table below notably omits political stakeholders. Although not represented, state economists and political officials at the provincial level are making significant headway in MCF as well. MCF has created "MCF cities" or hubs focused mostly on MCF-targeted initiatives. More than eight provincial counties including Hubei signed strategic cooperative framework agreements (SCFAs) with SASTIND.⁴⁹ These SCFAs involve local government support for favorable business zoning and construction of facilities that house MCF-funded companies. County governments enjoy increased economic activities as employees relocate, and SOEs benefit from industries migrating to a specific region. Hubei Province acts as ground zero for corporate operations on space situational awareness and encryption communications.⁵⁰



Source: Stone and Wood, China's Military-Civil Fusion Strategy, 20.

Figure 4. Multivariable bubble depiction of MCF influence by affiliation

MCF's Reality and Future Challenges

Is MCF successful? It is too soon to make an assessment. While conceived by Hu in 2007, MCF as a national policy for the CCP started around the early transition period of the Trump administration in 2017.⁵¹ Failures are less advertised than successes. China realizes that the reality of meeting all its goals set in MCF is ambitious. Several challenges in MCF's implementation are becoming clear. First, defense SOEs have embraced reform but in an extremely lethargic manner. SASTIND hoped that, by the end of 2018, more than 41 defense conglomerates would introduce some semblance of mixed ownership reform. Only China South Industries' Automation Research group has completed this goal.⁵² Second, there is an unwavering US commitment to dismantle MCF. US export controls imposed by the US Department of Commerce's Bureau of Industry and Security (BIS) are inhibiting Chinese firms reliant on American manufactures such as microwave integrated circuits, marine technology, syntactic foam, and so forth. Concerns about dual-use technology handed over from civilian companies to military end-users prompted the BIS to enact the "744" trade ruling.⁵³

Private companies working in MCF also experience similar US impediments that damage revenue streams. After being indicted by the US Department of Justice in 2019 for theft of trade secrets and violation of the International Emergency Economic Powers Act of 1977, Huawei was named to the Trump administration's Entity List.⁵⁴ Even if these companies were to discontinue their joint ventures, US officials cite the Chinese National Intelligence Law's Article 7 as the primary reason for ensuring that Huawei and other Chinese firms remain excluded from the US economy.⁵⁵ Resistance to Chinese private companies also stems from shared membership with the PLA. Huawei's simultaneous employment of PLA affiliates fosters US skepticism of the company's allegiances, although the extent to which MCF influenced the hiring practices of Huawei is debatable. It is also questionable if placement of PLA personnel on the boards of China's major companies are due to MCF's will. In 2004, more than 200 presidents and vice presidents of China's top 500 companies served or worked for the PLA.⁵⁶ This suggests that, long before MCF, China's executive class had high numbers of transitioning PLA officers.

The United States' vehement opposition to MCF has impacted Chinese nationals as well. The enrollment of PLA-associated students in US universities elicits accusations of intellectual property theft and academic espionage. A Department of Justice official stated that more than 1,000 researchers affiliated with the PLA fled the United States in summer 2020 to avoid the DOJ's crackdown on researchers with undisclosed PLA relationships. Six PLA researchers were arrested, convicted, and subsequently sentenced for violating federal law.⁵⁷ Suspicions of Chinese researchers seeking to study abroad, however, are likely to continue. This negative consequence portends possible discrimination toward innocent Chinese students and professors uninvolved in MCF or in the Thousand Talents Plan.⁵⁸ Former secretary of state Mike Pompeo's numerous trips to Silicon Valley indicated that, even during the COVID-19 pandemic, the Trump administration wanted to focus on limiting US relationships with the PLA, whether it be through subcontractors or technology transfer agreements.

Still, MCF's progress appears somewhat optimistic. The United States' denial of visas and increased counterintelligence presence will accelerate MCF's inward focus on training the military at home. This can act as a positive incentive for MCF's steady march toward greater domestic integration of academia and the PLA. MCF has also altered a slow and laborious defense acquisitions process into a more efficient and open procurement network. One achievement is MCF's creation of China's first online military contracting portal in 2015.⁵⁹ Defense SOEs have promised greater outsourcing to private Chinese subcontractors, and more private entities are participating in after-market services such as military repair

and maintenance—tasks originally conducted in-house. Since 2010, the PLA has seen a 127 percent increase in Chinese defense partners developing and producing military equipment and more than 1,000 private companies actively involved in the defense industrial base compared to five years prior.⁶⁰ In pre-MCF times, the rate of commercialized defense science technologies in China was only 15 percent.⁶¹ MCF has now showed progress in modernizing its national intellectual property system by negotiating strategic cooperative frameworks with the State Intellectual Property Office. A new Defense Industry Intellectual Property Center has emerged from this initiative and has already licensed more than 600 defense-related patents proprietary to Chinese companies.⁶² MCF cities and demonstration bases are proliferating beyond Hubei's border toward rural zones of the nation, stimulating economic growth in noncoastal parts of the country. Baotou Industrial Park in China's Inner Mongolia region hosts more than 240 MCF projects.⁶³ Despite US pressure on MCF, China's joint ventures with other Western nations such as Germany are inarguably thriving. For example, Baotou houses multiple Sino-German joint ventures with companies including Siemens, Fritz Werner, and HESS.⁶⁴

Conclusion

MCF is China's largest package of reforms ever targeted at its defense industrial base, but the plan intends to accomplish more than just military modernization. MCF's other priorities are economic: a revamping of SOEs in the defense industrial base; international engagement in the defense manufacturing sector; and a foundation for domestic R&D in dual-use technology. Achieving these goals requires strong political stewardship, as well as consistent communication between the policy planners and stakeholders. The consequences of MCF's objectives include the PLA's closer collaboration with Chinese universities and an emerging private sector accommodating China's defense innovation and defense supply chain. MCF's outcome will either deliver an embarrassing blow to the CCP or create a reputation of competency that will further legitimize party leadership. Proper execution will teach valuable lessons that can be transferred to other national initiatives such as Made in China 2025 and the Belt and Road Initiative.

An essential issue that China must answer now is how MCF directly benefits the "Fifth Stakeholder," that is, China's average citizen. China confronts many issues outside the military sphere that MCF must solve indirectly. As China's population ages, Beijing will need all the money it can save to invest in a comprehensive social safety net in a post-COVID-19 world. Social programs and the government budget for the future depend on the efficiency in the public sector

promised by MCF. The effects of MCF have trickled down to the typical Chinese student in higher education. Chinese students, who represent 25 percent of the graduate student population in the United States,⁶⁵ may find more it more attractive to work at home due to MCF's generous research opportunities and the deterioration of Sino-American relations. In light of the fact that China's MCF poses a military threat to the United States, MCF provides further credence to the notion that China desires to modernize its military for the next conflict. In this case, the United States must pay closer attention to the progress of MCF and, if necessary, identify strategies that will safely guide US commerce and businesses from unwittingly supporting the PLA and its defense industrial base.

Midshipman Andrew Song

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Notes

1. "Silicon Valley and National Security—United States Department of State," US Department of State, 1 December 2020, <https://www.state.gov>.
2. "Xi Jinping: Build on Previous Successes and Strive to Achieve the Goal the Lunar Exploration Project and Contribute to the World's Space Exploration Endeavor," translated to English, Xinhua, 20 February 2019, <http://www.xinhuanet.com>.
3. Alex Stone and Peter Wood, *China's Military-Civil Fusion Strategy: A View from Chinese Strategists*, China Aerospace Studies Institute (Montgomery, AL: Air University, 2020), <https://static1.squarespace.com>.
4. Stone and Wood, *China's Military-Civil Fusion Strategy*.
5. Stockholm International Peace Research Institute, "SIPRI Military Expenditure Database" (2020), <https://www.sipri.org>.
5. Jiang Luming, Wang Weihai, and Liu Zuchen, "Initial Discussion on the Military-Civil Fusion Strategy," Beijing, People's Press, 2017.
6. Luming et al., "Initial Discussion on the Military-Civil Fusion Strategy."
7. Greg Levesque, "Military-Civil Fusion: Beijing's 'Guns AND Butter' Strategy to Become a Technological Superpower," Jamestown Foundation, 25 October 2019, <https://jamestown.org>.
8. Levesque, "Military-Civil Fusion."
9. "The Chinese Communist Party's Military-Civil Fusion Policy," US Department of State, December 1, 2020, <https://www.state.gov>.
10. China's Defense Spending in 2019 as a percentage of national spending was 5 percent. This spending allocation seems extraordinarily low, but to contextualize such a figure, it becomes appropriate to add how the US total defense budget is 15 percent. Michael Hanlon, "Is US Defense

Spending Too High, Too Low, or Just Right?," Brookings Institution, 15 October 2019, <https://www.brookings.edu>.

11. Stockholm International Peace Research Institute, "SIPRI Military Expenditure Database" (2020), www.sipri.org.

12. Stone and Wood, *China's Military-Civil Fusion Strategy*.

13. "Roughly 3,000 Private Chinese Enterprises Have Entered the Front Line of Military Industrial Procurement," Xinhua, 14 March 2018, <http://m.xinhuanet.com>.

14. Xinhua, "Roughly 3,000 Private Chinese Enterprises."

15. Zeng Li, *Research on the Military-Civil Fusion National Defense Resource Allocation and Management with Chinese Characteristics* (Beijing: Economic and Management Publishing House, 2016).

16. "MIIT: China Is Import-Dependent on 130 Critical and Basic Materials," translated to English, Sina, 17 July 2018, <http://finance.sina.com.cn>.

17. "MIIT: China Is Import-Dependent on 130 Critical and Basic Materials."

18. Lingling Wei, "China's Xi Ramps Up Control of Private Sector: 'We Have No Choice but to Follow the Party,'" *Wall Street Journal*, Dow Jones & Company, 10 December 2020, <https://www.wsj.com>.

19. Greg Levesque and Mark Stokes, "Blurred Lines: Military-Civil Fusion and the Going Out of China's Defense Industry," Pointe Bello, December 2016, <https://static1.squarespace.com>.

20. Predicted global defense market cap is \$1.6 U.S. trillion by 2025. See "\$1.6 Trillion Aerospace & Defence Market Assessment, 2019-2025—ResearchAndMarkets.com," Business Wire, June 11, 2020, <https://www.businesswire.com>.

21. "U.S. Defense Industry and Arms Sale," Stanford University, 2002, <https://web.stanford.edu>.

22. "U.S. Defense Industry and Arms Sale."

23. Stone and Wood, *China's Military-Civil Fusion Strategy*.

24. State Administration of Science, Industry, and Industry for National Defense, "2016 SAS-TIND Military-Civilian Fusion Special Action Plan," March 2017, <http://www.sastind.gov.cn>.

25. State Administration of Science, Technology and Industry for National Defense, "Convening of the Third Meeting of the Inter-Ministerial Coordination Small Group for Military-Civil Fusion Integrating Weapons Research and Production Systems," 27 June 2014, <http://www.sastind.gov.cn>.

26. Levesque and Stokes, "Blurred Lines."

27. "SASTIND Deepening Military-Civil Fusion Development Opinions," translated to English, Finance Sina, 7 March 2016, <http://finance.sina.com.cn>.

28. US Defense Intelligence Agency, "China Military Power 2019," November 2018, <https://www.dia.mil>.

29. US Defense Intelligence Agency, "China Military Power 2019."

30. Xu Qiliang, "Expounding National Defense Reform Goals," Xinhua News Agency, 21 November 2013, <http://news.xinhuanet.com>.

31. He Haiyan, "Improve the Civilian-Resource Enabled Military Talent Cultivation System," translated to English, *People's Daily Online*, 26 March 2017, <http://opinion.people.com.cn>.

32. Sun Guizhen, "Problems and Countermeasures in the Training of National Defense Students," in *Military-Civil Fusion Deep Development Theory* (Beijing: Military Sciences Press, 2016).

33. Ibid.

34. Dong Qiang, "China Recruits College Graduates on a Large Scale for the First Time," translated to English, *PLA Daily*, 29 June 2009, <http://www.mod.gov.cn>.
35. "Documenting the Two Sessions. Liu Guangbin: Cultivating PLARF's Backbone Officers and Future Leaders," 19 March 2018, <http://military.cnr.cn>.
36. "Ministry of Education: Encourage College Graduates to Join the Military," translated to English, *Xinhua*, 28 February 2020, <http://www.xinhuanet.com>.
37. Stone and Wood, *China's Military-Civil Fusion Strategy*.
38. "SASTIND Deepening Military-Civil Fusion Development Opinions."
39. Stone and Wood, *China's Military-Civil Fusion Strategy*.
40. Jon Grevatt, "Chinese Naval Shipbuilder Receives USD 7.5 Billion in Credit," IHS Jane's Defence Industry, 22 September 2016, <http://www.janes.com>.
41. Liu Xing, "China's First Aviation Industry Support Fund Established," translated to English, AVIC website, 7 July 2010, <http://www.avic.com>.
42. Future Advanced Composite Components, "FACC Expands Its Business in the Growth Region Of China," FACC Press Release, 23 October 2014, <http://www.facc.com>.
43. Jens Flottau, "AVIC Buys Thiele Aircraft Engines," *Aviation Week*, 23 July 2013, <http://aviationweek.com>.
44. "Xi'an's FACC Grows Composites in China," *Aviation Week*, 11 November 2014, <http://aviationweek.com>.
45. "Defence & Space, Eurofighter Typhoon," Airbus, 2016, <https://airbusdefenceandspace.com>.
46. Levesque and Stokes, "Blurred Lines."
47. Stone and Wood, *China's Military-Civil Fusion Strategy*, 20.
48. Stone and Wood, *China's Military-Civil Fusion Strategy*, 20.
49. Levesque and Stokes, "Blurred Lines."
50. Levesque and Stokes, "Blurred Lines."
51. Levesque, "Military-Civil Fusion."
52. Luming et al., "Initial Discussion on the Military-Civil Fusion Strategy."
53. William Alan Reinsch, "Unpacking Expanding Export Controls and Military-Civil Fusion," Center for Strategic and International Studies, 17 December 2020, <https://www.csis.org>.
54. US Department of Commerce, "Commerce Addresses Huawei's Efforts to Undermine Entity List, Restricts Products Designed and Produced with U.S. Technologies," 15 May 2020, <https://www.commerce.gov>.
55. Reinsch, "Unpacking Expanding Export Controls."
56. Stone and Wood, *China's Military-Civil Fusion Strategy*.
57. Jerry Dunleavy, "More than 1,000 Researchers Linked to Chinese Military Left US after Summer Crackdown Began, DOJ Official Says," *Washington Examiner*, 3 December 2020, <https://www.washingtonexaminer.com>.
58. Yojana Sharma, "China's Effort to Recruit Top Academic Talent Faces Hurdles," *Chronicle of Higher Education*, 10 April 2018, <https://www.chronicle.com>.
59. Yao Jianing, "Private Sector Speeds Up Participation in Military Industries," China Military Online, 21 May 2016, <http://english.chinamil.com.cn>.
60. Yao Jianing, "1,000 Private Sector Enterprises Obtain Weapon Production Permits," China Military Online, 15 March 2016, <http://english.chinamil.com.cn>.
61. Yao, "1,000 Private Sector Enterprises."

62. Luming et al., "Initial Discussion on the Military-Civil Fusion Strategy."
63. MIIT, "Military Civil Fusion, Inner Mongolia Baotou Qingshan District," translated to English, MIIT National New Industrial Demonstration Base Special Report website, <http://sfjd.miit.gov.cn>.
64. MIIT, "Military Civil Fusion, Inner Mongolia Baotou Qingshan District."
65. Elizabeth Redden, "U.S. Plans to Cancel Visas for Students with Ties to Universities Connected to Chinese Military," Inside Higher Ed, May 2020, <https://www.insidehighered.com/news/2020/05/29/us-plans-cancel-visas-students-ties-universities-connected-chinese-military>.

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