

China's Hybrid Warfare and U.S.-China Security Dilemma

Part III

by MGySgt Andy B. Anderson

Section Four: China's Escalating Hybrid Warfare and Current U.S.-China Security Dilemma

As demonstrated below, China's escalating hybrid warfare, namely maritime warfare and cyber warfare, aggravates the security dilemma by increasing the U.S. suspicion of China's long-term intentions. Section 3 describes why the United States believes that the upsurge of China endangers its interests and allies in the Indo-Pacific region. By contrast, U.S. military focus on the region increases China's suspicion of U.S. long-term intentions. Such perceptions on both sides have escalated the current security dilemma and caused China to rely on itself to achieve security. In a self-help system, China has found itself in a David versus Goliath type of a military situation. Political scientists, such as Ivan Arreguin-Toft, claim that in the last 200-year history of wars,

every war fought where the stronger opponent was at least ten times more powerful, the "underdog" won almost one-third of the time. Moreover, in those instances when underdogs chose not to play by Goliath rules, they won, "even when everything we think we know about power says they shouldn't."¹

In essence, by not playing by conventional rules, Davids may still achieve impossible results against Goliaths on the military battlefield.

>MGySgt Anderson is the Infantry Specialist-Operations Division in Plans, Policies, & Operations Department HQMC, Washington, DC. He earned a Master of Arts in International Relations with a concentration in International Security (Norwich University, June 2019). He is a member of SALUTE Veterans National Honor Society and the National Society of Collegiate Scholars. He previously served as the Operations Chief for Marine Corps Forces Europe and Africa in Stuttgart, Germany, and as the Operations Chief for the 31st MEU while deployed five times in the Indo-Pacific region. MGySgt Anderson deployed twice in support of Operation IRAQI FREEDOM in Anbar Province, Iraq, and twice in support of Operation ENDURING FREEDOM in Helmand.



Communist China's People's Liberation Army continues to modernize capabilities while increasing mass. (Defense Intelligence Agency.)

THANK YOU TO OUR ADVERTISERS

Your Marine Corps Association & Foundation would like to thank the following companies for having advertised in our *Leatherneck* and *Marine Corps Gazette* magazines and/or on our website and digital offerings. It's companies like yours who help us continue our mission of supporting Marines in every clime and place.



Diane Segal



Ian Griffiths Design



Col Foster Ulrich, USMC (Ret), Author of "An American Story: The Life and Times of John Garland Turner, Jr"



Iwo Jima Memorial Park

Jane Waterhouse, Author of "Valor In Action"

MSgt Jeff Dacus, USMC (Ret), Author of "The Fighting Corsairs: The Men of Marine Fighting Squadron 215"

John Poole, Author of "The Iwo Alamo" and "Super-Squad"



MEB-A Reunion



Dr. Susan Johnston, Author of "Black Angel"



THANK YOU

Since China's armed forces do not match those of the United States in terms of conventional force parity, China recognizes that hybrid warfare "would be more effective than direct combat" to defend its national interests.² During the 2017 testimony to the U.S. House Armed Services Committee, Andrew Shearer delineates such a strategy as the one that:

draws on many of the elements also employed by Russia and Iran: exploiting the "gray zone" created by the West's binary notion of "war and peace"; primarily using paramilitary, coast guard, or militia organizations while keeping regular military forces over the horizon; and combining all instruments of national power, including sophisticated cyber operations, economic incentives and sanctions, and legal and political warfare ("lawfare").³

China's hybrid warfare draws its main elements from the concept of "unrestricted warfare" that was propagated by its Air Force colonels Wang Xiangsui and Qiao Liang in their 1999 book *Unrestricted Warfare*, considered as "a manifesto of hybrid warfare on steroids."⁴ In 2003, inspired by this book, China's Communist Party Central Committee approved the concept of "three warfares": media warfare, psychological warfare, and legal warfare.⁵ First, media/public opinion warfare focuses on influencing both international and domestic public opinions in support of China's objectives and on dissuading enemies from attempting contrarian actions. Second, psychological warfare strives to spread specific information through various channels to disrupt or influence an enemy's decision-making capability as well as create doubt about its capacities that degrade its will to act. Lastly, legal warfare exploits domestic and international legal systems to claim the legitimacy of Chinese claims and restrict an enemy's operational freedom.⁶ The next section addresses how China's maritime hybrid warfare aggravates the existing U.S.-China security dilemma.

Hybrid Warfare: Maritime

China's maritime hybrid warfare in-

creases the U.S. anxiety about China's long-term intentions. The People Liberation Army "still could not defeat America in a fight, but power is about resolve as well as strength."⁷ Such resolve is demonstrated in China's maritime hybrid warfare with the attributes of the gray zone strategy.⁸ According to Singh, this strategy has three elements, namely "salami slicing" or "cabbage strategy," coercive diplomacy that requires an opponent to accommodate Chinese views or risk confrontation, and the shrewd use of the three warfares strategy.⁹ In addressing China's hybrid warfare, Mazarr offers the narrower definition of the gray zone warfare as connected only with "campaigns that serve revisionist intent, seek gradual or incremental gains, and seek to avoid escalation toward outright conventional conflict."¹⁰ Hence, he elaborates on Shelling's concept of "salami slicing" that allows an aggressor to achieve its incremental goals by not triggering a substantial military response and complicating an opponent's other response options.¹¹ China's maritime hybrid warfare coincides with the geospatial thinking of a Chinese *weiqi/go* master player who strives for a region's control through an incremental expansion rather than decisive battles. This approach differs from that of a Western chess master who attempts to conquer the opponent through domination of the center of the board. Whereas a chess master typically anticipates 5 to 6 moves ahead, the *weiqi/go* master foresees 20 to 30 moves. Therefore, Lai warns about the peril of "[playing] *go* with the chess mindset."¹²

China has been successful in applying hybrid warfare in the naval disagreements of the East and South China Seas. Shearer claims that the country uses "capabilities like maritime law enforcement where it has a comparative advantage, for objectives like offshore islands in which it believes Washington has a little direct stake."¹³ Chinese Maritime Militia represents the Third Sea Force of "blue hulls," in addition to Coast Guard of "white hulls" and Navy of "gray hulls." Increasingly, Chinese "Little Blue Men" are being equated to "Little Green Men"

who were involved in Russian hybrid war against Ukraine. "Little Blue Men" represent an advanced naval force that is organized, developed, and controlled by the state. China's maritime forces work together with "blue hulls operating forward and white and gray hulls backstopping them."¹⁴ For example, in 2017, China used its Navy, Coast Guard, and Maritime Militia to sail around Thitu Island after the Philippines announced its plan to upgrade the island's runway. As a consequence, those naval forces implemented the first part of China's hybrid warfare: "cabbage strategy" that involves surrounding the contested area with various types of ships to claim "its jurisdiction and [to accumulate] a record of effective control."¹⁵

As a result, the manner in which China has conducted its maritime warfare aggravates the contemporary security dilemma. From the United States' perspective,

backed by its expanding suite of advanced access denial capabilities, the intent of China's creeping militarization ... is to complicate U.S. military planning, undermine regional countries' confidence in American security commitments, and ratchet up pressure on the U.S. alliance system.¹⁶

The United States' negative perception of China's maritime hybrid warfare has predictably prompted its quest for military build-up. First, in 2018, not only did the Pentagon officially define the threat of China's Maritime Militia but also Japan addressed such a threat in its annual Defense Ministry's white paper.¹⁷ Second, the United States has shown willingness to enlarge the U.S. Navy fleet and, especially, to increase the number of more advanced and larger unmanned systems. The Center for Strategic and Budgetary Assessments and Senator John McCain advocated the expansion of such type of unmanned systems.¹⁸ Burgers and Romaniuk believe that the unmarked unmanned systems or, as they label "Little Grey (Un) Men," can be efficient opponents to the "Little Blue Men" in hybrid maritime warfare. For example, such systems can perform either high-risk or semi-covert missions to demonstrate the active op-



SALUTE TO OUR SPONSORS

Thank you to our Premier Sponsors who stuck with us through thick and thin in 2020! We truly appreciate your support and thank you for being there for our Marines.



DINNER SPONSORS



A special thank you to these and all of our sponsors.

position to China's policy in maritime disputes. These experts further claim that unmanned systems, "like so-called cyber warfare, will expand the scope of war and warfare, opening new directors for actors to pursue in war."¹⁹ In short, China's maritime warfare and cyber warfare can be used to address its fear of U.S. encirclement and containment. The next section describes how China's cyber warfare aggravates the current security dilemma.

Hybrid Warfare: Cyber

As discussed below, China's cyber warfare, as an essential element of its hybrid warfare, also exacerbates U.S. apprehension about China's strategic intentions. According to Dannreuther, cyber warfare represents "the transformation of the 'metaphorical place in which machine-mediated communications occur' into a space of combat."²⁰ Since China realizes that cyberspace represents "an electronic counterpart of a physical battlefield," in 2015, it formed the "Cyber Warfare" branch of its army.²¹ China's President Xi also established the Cyberspace Administration of China, which is responsible for strengthening cybersecurity, controlling the online content, and developing the digital economy. Additionally, China is rushing to use the advancements of artificial intelligence (AI) and quantum computing in its military operations. The country, in particular, seeks to utilize autonomous drone swarms—an AI software that can protect itself against cyberattacks as well as quantum computing that can help Chinese intelligence services to break most conventional encryptions.²² Allison claims that "in both war and peace, Chinese strategy is ... unencumbered by any serious need to justify Chinese behavior in terms of international law or ethical norms."²³ In short, China's leaders can be brutally flexible in the pursuit of security in response to the current security dilemma. Such an attitude suits well in cyber warfare since there is no "sense of fair play" or commonality with the rules of conventional warfare.²⁴

China's cyber warfare toward the U.S. has been evolving and has significantly escalated in recent years. According to

Denning, the Chinese patriotic hackers attacked the United States in retaliation to the 1999 accidental bombing of the Chinese embassy by the United States during the Kosovo conflict and after the 2001's collision of the U.S. military plane with a Chinese fighter plane in 2001.²⁵ In 2003, in a series of so-called "Titan Rain" cyber intrusions, Chinese hackers stole information from the computers that belonged to the U.S. DOD and other U.S. government agencies.²⁶ Nowadays, because of maritime disputes, the Indo-Pacific region is considered to be "the most targeted area in the world by hackers."²⁷ Moreover, CrowdStrike, a U.S. cybersecurity company, claimed that in the first half of 2018, China initiated the greatest number of cyberattacks on the U.S. computer networks. However, because of the strategic distrust, China instead accuses the United States of being "a cyber-predator that has a notorious record of violating other countries' interests and rights."²⁸

Consequently, China's cyber warfare, as an essential part of its hybrid warfare, contributes to the current security dilemma. According to the offense-defense balance theory, "the security dilemma is at its most vicious when commitments, strategy, or technology dictate that the only route to security lies through expansion."²⁹ In essence, with the advent of cyber weapons, the United States does not view Chinese military actions and preparations as a defensive pursuit of security. Because of the concerns about China's cyber warfare capabilities, the United States formed its cyber-division within U.S. Cyber Strategic Command in 2009.³⁰ After the announcement of 2011 Pacific Pivot, in 2014, the United States indicted five Chinese army officers for industrial espionage that pushed China to sign the pact with the United States regarding commercial espionage in 2015.³¹ The U.S. military is also particularly concerned about the advanced cyberattacks on the country's infrastructure. The U.S. DOD has already warned hackers that "if you shut down our power grid, maybe we'll put a missile down one of your smokestacks."³² Therefore, the further escalation of China's cyber warfare may

lead to a conventional conflict between these great powers. The following section discusses how China increases its hybrid warfare's capabilities to attain security in an uncertain world.

Section Five: China's Escalating Hybrid Warfare: Crouching Tiger, Hidden Dragon

China discreetly grows its hybrid warfare's capabilities to defend its national interests. Sections 3 and 4 demonstrate how the perceptual biases and the "asymmetric distribution of military power" have intensified the current security dilemma and caused China to rely on hybrid warfare to achieve security. While increasing its hybrid warfare's capabilities, China behaves as "crouching tiger, hidden dragon." This idiom stems from Yu Xin's Chinese poem, which reads "behind the rock in the dark probably hides a tiger, and the coiling giant root resembles a crouching dragon."³³ The expression describes a situation or a place where masters hide their strengths from others.³⁴ The state also follows Sun-Tsu's advice that "one who excels at warfare first establishes himself in a position where he cannot be defeated while not losing any opportunity to defeat the enemy."³⁵ In essence, as a rising power, China uses these strategies to enhance security by downplaying or withholding information about the legitimate objectives and details related to the transformation of its maritime and cybersecurity infrastructure, the growth of defense budget, and the civil-military integration connected to its escalating hybrid warfare.

First, China is not transparent about its intentions about the build-up of its maritime and cybersecurity capabilities. For example, Section 4 describes how the paramilitary forces, along with the People's Liberation Army Navy, participate in hybrid warfare to impose China's maritime claims. For example, since 2010, China has doubled the number of their Coast Guard's large patrol vessels, transforming it into the largest global coast guard force that can "conduct simultaneous, extended offshore operations in multiple disputed areas."³⁶ In July 2018, China's Coast Guard administrative control was moved from



Chinese and Russian Special Forces conduct routine joint training exercises. (China Military Online.)

the State Oceanic Administration to People's Armed Police.³⁷ China has also transformed the Chinese Maritime Militia into another major hybrid warfare's force by recruiting military veterans and building a state-owned fishing fleet with ammunition storage and reinforced hulls.³⁸ Overall, "since 2014, China has launched more submarines, warships, principal amphibious vessels and auxiliaries than the total number of ships currently serving in the navies of Germany, India, Spain, Taiwan, and the United Kingdom."³⁹ In sum, this drastic transformation of maritime infrastructure related to hybrid warfare dramatically contributes to the aggravation of the current security dilemma.

China pursues a similar strategy in its cyber domain. Section 4 demonstrates the escalation of the state's cyber hybrid warfare toward the United States in recent years. For instance, although the exact responsibilities remain unclear, the formation of the Strategic Support Force (SSF) in 2015 shows China's intent to grow its cyber, space, and information-dominance competencies.⁴⁰ China believes that the development of cyber hybrid warfare capabilities is necessary to counter a stronger adversary.⁴¹ Since 2008, the state has incorporated cyber and information warfare's (defensive and offensive) aspects into the major

military exercises.⁴² The U.S. military experts warn that

the establishment of the SSF may represent the first step in developing a cyber force that creates efficiencies by combining cyber reconnaissance, attack, and defense capabilities into one organization.⁴³

To advance its cyber hybrid warfare that requires technological sophistication, the PLA also strives to improve the quality of its recruits.⁴⁴ Thus, such steps demonstrate that China follows Sun Tsu's guidance in striving to excel in this warfare by advancing its capabilities.

Second, China downplays the growth of its total defense spending and withholds financial information related to its escalating hybrid warfare. For example, Erickson describes the "extraordinary efforts that Beijing's state media mouthpieces and spokespeople are making to minimize the purposes and extent of China's military spending."⁴⁵ Appendix B shows the consistent increase in China's total military expenditures (2008–2018) based on the official Chinese data, estimates from the Stockholm International Peace Research Institute (SIPRI), and those from the DOD.⁴⁶ On 6 March, China announced the 7.5 percent increase of its 2019 defense budget.⁴⁷ On the surface, China is open about its long-term

plans, such as the 2035's objective of finishing its military modernization as well as the 2050's objective of transforming the PLA into global military force.⁴⁸ Kang defends the continued rise in spending since "history proves China's defense budget growth benefits the world."⁴⁹ Rear Admiral Yang Yi vehemently asserts that:

China has been most transparent in its strategic intentions. For instance, it promises never to use nuclear weapons first and is committed to avoiding conflicts and building friendly relations with neighboring countries, and has its warming relationship with Japan to show for that.⁵⁰

However, despite this seemingly transparent official rhetoric, China does not disclose specific information about its defense spending, especially related to its escalating hybrid warfare.⁵¹ In doing so, it seems to adhere to the aforementioned discreet strategy and another Sun Tsu's advice that "warfare is the Tao of Deception."⁵² Although credible information about China's hybrid warfare spending is not readily available, there is tangible evidence of the growth and usage of its capabilities. It is reasonable to conclude that, holding all other variables constant, the rise in China's total military expenditures, prompted by its perception of insecurity, contributes to both the increase of its hybrid warfare expenditures and capabilities. Therefore, China's opacity about the specifics of its defense spending and the discrepancy between official statements and actions lead to the deterioration of the security environment in the Indo-Pacific region.

Lastly, China is similarly non-transparent about the civil-military integration related to the development of its hybrid warfare capabilities. Civil-military integration "refers to the military and defense industry transferring technologies to civilian sectors."⁵³ The phrase also describes the "leveraging of dual-use technologies, policies, and organizations for military benefit."⁵⁴ The initiative accelerated in 2015; furthermore, in January 2017, the formation of the Commission for Integrated Civilian-Military Development indicated the state's renewed nationwide

focus on the civil-military.⁵⁵ On the surface, China publicly disclosed its goals during the 19th Party Congress “to deepen reform of defense-related science, technology, and industry, achieve great military-civilian integration, and build integrated national strategies and strategic capabilities.”⁵⁶ However, China does not disclose the details about SSF’s efforts, which has been “signing cooperation agreements with research universities and even stationing officers within an unnamed software development company.”⁵⁷ The state also withholds the information about the allocation of the defense-related research and development funds to PLA research institutes and civilian defense contractors.⁵⁸ Bitzinger suggests that China does not reveal information about its research and development expenditures and other objectives because of the continued claims about its “peaceful development.”⁵⁹ Thus, the state’s limited transparency concerning the civil-military integration connected to the rise of its hybrid warfare capabilities also leads to the strategic distrust, thereby intensifying the contemporary security dilemma.

Section Six: Conclusion

This article uses the theoretical concept of the security dilemma to analyze the impact of China’s hybrid warfare on the contemporary U.S.-China relations. It asserts that China’s escalating hybrid warfare intensifies the U.S. suspicion of China’s long-term intentions, thereby aggravating these states’ current security dilemma. This article affirms the continued importance of this concept to illustrate this bilateral security relationship since “[of] all dilemmas in world politics, the security dilemma is quintessential. It goes to the heart of the theory and practice of international politics.”⁶⁰ This article has also extended the current IR literature concerning the U.S.-China’s military asymmetry in the Indo-Pacific region, and, especially, the relatively novel discourse that claims that “asymmetric distribution of military power” can also materially regulate the security dilemma.⁶¹ It argues that in the post-Cold War international system, China’s escalating hybrid warfare

exacerbates the effect of this regulator, thereby intensifying the contemporary security dilemma.

However, the analysis of the influence of China’s hybrid warfare on these states’ current security dilemma has its deficiencies as well. Such weaknesses are the limited scope of the literature reviews and the potentially flawed educated assumptions about the escalation of hybrid warfare because of the lack of credible information from Chinese primary sources. First, the limited scope of the literature reviews about the security dilemma concept and China’s hybrid warfare is one of the main weaknesses of this article. Because of space limitations, this article does not discuss, in detail, the views on the security dilemma by the IR scholars of other traditions, besides realism or neo-realism. For example, it would have been beneficial to include a poststructuralist’ discourse

hybrid warfare, are strictly in response to China’s external security issues, or they are also instigated by its domestic threats, such as separatist/sovereignty movements in Taiwan, Tibet, and the East Turkistan.⁶⁴ Such an analysis, then, can complement this article’s realist perspective to illustrate China’s intentions and motivations behind its escalating hybrid warfare.

Second, because of the absence of reliable quantitative information about China’s hybrid warfare spending within its primary sources, there are some educated assumptions about the subject matter in Section 5. Based on extensive research, this article builds the case to present tangible evidence of both the growth and application of China’s hybrid warfare capabilities. It also holds all other variables constant in extrapolating the assumption that the increase in China’s total military



China’ transparency regarding its military capabilities only serves external deception and internal propaganda purposes. (Defense Intelligence Agency)

analysis of Chinese state propaganda, such as its presidents’ speeches at the CCP’s National Congresses, to further understand the nature and prioritization of all China’s perceived security threats. Foucault defines discourse as “a linguistic system that orders statements and concepts.”⁶² Poststructuralism asserts the language’s importance since “politicians and other actors relevant to world politics must legitimate their foreign policies to audiences at home and abroad.”⁶³ Thus, this analysis may reveal whether China’s security developments, such as the escalation of its

spending, prompted by its perception of insecurity, contributes to both the rise of its hybrid warfare expenditures and capabilities. However, the paper would have benefited from the supplemental analysis of the internal security drivers that also contribute to the rise of China’s total defense budget that, in turn, triggers the U.S. perception of insecurity and intensifies the security dilemma. According to *White Paper 2012*, China’s concept of national defense incorporates the state’s protection from both external and internal security threats.⁶⁵ Appendix A also shows the integration

of China's paramilitary and military forces under one centralized command. Therefore, China's total military spending, especially the spending to improve its paramilitary maritime capabilities, may have also increased throughout the years to better address not only foreign but also domestic security issues.

Regardless of the presented shortcomings in this article, the analysis of the impact of China's escalating hybrid warfare does confirm the intensification of the U.S. suspicions about China's long-term intentions, thereby aggravating these states' current security dilemma. The escalation of Chinese maritime warfare and cyber warfare, in particular, aggravates the security dilemma that upsets the relationship between a rising and established power. The United States perceives the current acceleration of China's hybrid warfare as a threat to its interests and regional allies. However, the United States fails to recognize that the root of China's relentless pursuit of security stems from the U.S. interference in maritime disputes, the 2011 Pacific Pivot, and the contemporary focus of the U.S. military on the Indo-Pacific region. This analysis does not excuse Chinese hybrid warfare since they have other avenues to address the issues underlying the strategic distrust. However, the United States' inability to see how its quest for security threatens China represents a grave mistake of strategic empathy. Thus, "the United States and its partners need not necessarily defer to that fear—but they must understand it."⁶⁶ China's leaders must also realize that the continued increase of its hybrid warfare will cause a U.S. military buildup, which will further militarize the region and lead to a potential armed conflict. In other words, to reduce the Thucydidean risks, both the U.S. and China's policymakers must improve their understanding of how their opponents view the causes and consequences of the current security dilemma.

Finally, this closing section proposes several future research directions, namely the continuation of research about China's hybrid warfare and the exploration of Chinese historical memory's influence on the current security

dilemma. First, researchers can build upon this article's ideas and evaluate the effect on the security dilemma if China achieves military symmetry or exceeds the United States in the hybrid warfare capabilities or the Indo-Pacific region. This scenario might be likely since analysts have pondered about the permanence of United States' regional military superiority within the spheres of long-range precision strike missiles and hybrid warfare.⁶⁷ Nouwens agrees that "there should be no doubt that the PLA today is no longer far behind the west when it comes to certain areas of

The United States perceives the acceleration of China's hybrid warfare as a threat ...

defense technology."⁶⁸ In essence, the continuing examination of Chinese hybrid warfare's impact on the security dilemma is relevant. Second, the analysis of China's historical memory's influence on this dilemma is equally significant since it uncovers the additional driver of its ongoing insecurity in the bilateral relations. Historical memory represents "the prime raw material for constructing China's national identity."⁶⁹ According to Hoffman, the Marine Corps currently examines "the role of geography and history as it applies to maritime power, cyber threats, and non-direct but coercive forms of influence."⁷⁰ The failure to comprehend the depth of China's nationalism contributes to strategic distrust and, thus, to the further exacerbation of the U.S-China security dilemma.

Notes

1. P.H. Liotta, "American Spartans: Networks, Neurons, and the Chaos Challenge," *Dynamics of Asymmetric Conflict*, (Milton Park, UK: Taylor & Francis, 2010).

2. Vikrant Deshpande, *Hybrid Warfare: The Changing Character of Conflict*, (Dehli: Balaji World of Books, 2018).

3. U.S. Congress, House Armed Services Committee, *The Evolution Of Hybrid Warfare and Key Challenges*, written testimony by Andrew Shearer, (22 March 2017).

4. *Hybrid Warfare*.

5. Tony Corn, "Peaceful Rise through Unrestricted Warfare: Grand Strategy with Chinese Characteristics," *Small Wars Journal*, (2010), available at <https://smallwarsjournal.com>.

6. Michael Clarke, "China's 'Three Warfares' in Xinjiang," *East Asia Forum*, (November 2017), available at <https://www.eastasiaforum.org>.

7. Staff, "What the West Got Wrong," *The Economist*, (London, UK: The Economist Group, March 2018).

8. James Stavridis, "Maritime Hybrid Warfare Is Coming," *Proceedings*, (Annapolis, MD: U.S. Naval Institute, December 2016); and Sugio Takahashi, "Development of Gray-Zone Deterrence: Concept Building and Lessons from Japan's Experience," *The Pacific Review*, (Milton Park, UK: Taylor & Francis, 2018).

9. Abhay Singh, "Expanding the Turbulent Maritime Periphery: Gray Zone Conflicts with Chinese Characteristics," in *Hybrid Warfare: The Changing Character of Conflict*, (Dehli: Balaji World of Books, 2018).

10. Christopher Paul, "Confessions of a Hybrid Warfare Skeptic," *Small Wars Journal*, (March 2016), available at <https://smallwarsjournal.com>.

11. *Ibid.*

12. Graham Allison, "China vs. America: Managing the Next Clash of Civilizations," *Foreign Affairs*, (September/October 2017), available at <https://www.foreignaffairs.com>.

13. U.S. Congress, House Armed Services Committee, *The Evolution Of Hybrid Warfare and Key Challenges*, written testimony by Andrew Shearer, (22 March 2017).

14. Andrew S. Erickson, "Passing a Chinese Maritime 'Trump Test,'" *The National Interests*, (December 2016), available at <https://nationalinterest.org>.

15. "Expanding the Turbulent Maritime Periphery."

16. *Evolution of Hybrid Warfare and Key Challenges*.

17. Todd Crowell and Andrew Salmon, "Chinese Fishermen Wage Hybrid 'People's War' on Asian Seas," *Asia Times*, (September 2018), available at <https://asiatimes.com>.
18. Tobias Burgers and Scott N. Romaniuk, "Will Hybrid Warfare Protect America's Interests in the South China Seas," *The Diplomat*, (March 2017), available at <https://thediplomat.com>.
19. Tobias Burgers and Scott N. Romaniuk, "Hybrid Warfare in the South China Sea: The United States' 'Little Grey (Un)Men,'" *The Diplomat*, (December 2016), available at <https://thediplomat.com>.
20. Roland Dannreuther, *International Security: The Contemporary Agenda*, 2nd ed., (Maiden: Polity Press, 2017).
21. Liu Jianna, "Worries over Defense Budget Unwarranted," *China Daily*, (March 2019), available at <http://global.chinadaily.com.cn>.
22. Adam Segal, "When China Rules the Web," *Foreign Affairs*, (September/October 2018), available at <https://www.foreignaffairs.com>.
23. "China vs. America."
24. Nicholas J. Wheeler, "To Put Oneself Into the Other Fellow's Place: John Herz, The Security Dilemma and The Nuclear Age," *International Relations*, (Newbury Park, CA: SAGE Publishing, 2008).
25. Dorothy Denning, "Cyberwar: How Chinese Hackers Became a Major Threat to the U.S.," *Newsweek*, (October 2017), available at <https://www.newsweek.com>.
26. Ibid.
27. Nilanthan Niruthan, "How Hybrid Warfare Could Change Asia," *The Diplomat*, (June 2016), available at <https://thediplomat.com>.
28. Staff, "The Rivals," *The Economist*, (London, UK: The Economist Group, 2018).
29. Robert Jervis, "Cooperation under the Security Dilemma," *World Politics*, (Cambridge, UK: Cambridge University Press, 1978).
30. "Peaceful Rise through Unrestricted Warfare."
31. "The Rivals."
32. Roland Dannreuther, *International Security: The Contemporary Agenda*, 2nd ed., (Maiden: Polity Press, 2017).
33. *Chinese Dictionary*, s.v., "Crouching Tiger-Hidden Dragon," available at <https://www.zdic.net>.
34. Di F, "Chinese Lesson: Crouching Tiger Hidden Dragon, A Movie and a Chinese Idiom," *Italki*, (June 2013), available at <https://www.italki.com>.
35. Sun Tzu and Sun Pin, *The Complete Art of War*, (Boulder, CO: Westview Press, 1996).
36. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2018*, (Washington, DC: 2018).
37. Staff, *The Military Balance 2019*, (London, UK: International Institute for Strategic Studies, 2019).
38. *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2018*.
39. Nick Childs and Tom Waldwyn, "China's Naval Shipbuilding: Delivering on its Ambition in a Big Way," *IISS*, (May 2018), available at <https://www.iiss.org>.
40. *The Military Balance 2019*.
41. *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2018*.
42. *The Military Balance 2019*.
43. *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2018*.
44. Adam Ni, "What Are China's Military Recruitment Priorities?" *The Diplomat*, (August 2018), available at <https://thediplomat.com>.
45. Andrew S. Erickson, "China's Defense Spending to Rise 7.5% to 1.19 Trillion Yen (-177.61 billion U.S. dollars)," (March 2019), available from <http://www.andrewerickson.com>.
46. China's Total Military Expenditures (2008–2018) are based on the following estimates: China's official data, estimates from the SIPRI, and estimates from U.S. DOD. Official Chinese (real) spending (billions of 2018 USD, adjusted for inflation) is provided by the Defense Intelligence Agency (2019); the SIPRI data (2007–2017) is provided by the SIPRI Military Expenditure Database (2019); U.S. DOD estimates (2008–2017) are provided by the DOD's annual reports about military and security developments in China (2009–2018). 2018's U.S. DOD estimate is provided by the Defense Intelligence Agency (2019).
47. Xinhua, "China to Lower Defense Budget Growth to 7.5%," *China Daily*, (March 2019), available at <http://global.chinadaily.com.cn>.
48. Lie Zhao, "PLA To Be the World-Class Force By 2050," *China Daily*, (October 27, 2017), available at <http://www.chinadaily.com.cn>.
49. Jie Kang, "History Proves China's Defense Budget Growth Benefits the World," *CGTN*, (March 2019), available at <https://news.cgtn.com>.
50. "Worries Over Defense Budget Unwarranted."
51. Richard Bitzinger, "Modernising China's Military, 1997–2012," *China Perspectives*, (Hong Kong: French Centre for Research on Contemporary China, December 2011).
52. *The Complete Art of War*.
53. Lie Zhao, "Xi: Integrate Military and Civil Sectors," *China Daily*, (June 2017), available at <http://www.chinadaily.com.cn>.
54. Defense Intelligence Agency, *China Military Power: Modernizing a Force to Fight and Win*, (Washington, DC: 2019).
55. Staff, *The Military Balance 2018*, (London, UK: Interanion Institute for Strategic Studies, 2018).
56. Meia Nouwens and Lucie Beraud-Sudreau, "Xi Looks to China's Private Sector as He Pursues a Slimmer, Smarter PLA," *War on the Rocks*, (February 2018), available at <https://warontherocks.com>.
57. Lorand Laskai, "Civil-Military Fusion: The Missing Link Between China's Technological and Military Rise," Council on Foreign Relations, (January 2018), available at <https://www.cfr.org>.
58. Adam Liff and Andrew Erickson, "Demystifying China's Defence Spending: Less Mysterious in the Aggregate," *The China Quarterly*, (Cambridge, UK: Cambridge University Press, December 2013).
59. Richard Bitzinger, "China's Double-Digit Defense Growth," *Foreign Affairs*, (March 2015), available at <https://www.foreignaffairs.com>.

60. N.J. Wheeler and K. Booth, "The Security Dilemma," in J. Bsylys and N.J. Rengger, eds., *Dilemmas of World Politics: International Issues in a Changing World*, (Oxford, UK: Oxford University Press, 1992).

61. Shipping Tang, "The Security Dilemma: A Conceptual Analysis," *Security Studies*, (Milton Park, UK: Taylor & Francis, 2009).

62. James Johnson, "The U.S.-China Military and Defense Relationship during the First Obama Administration 2009–2013: Deteriorating Military Relations in the Asia-Pacific, Washington's Strategic and Military Responses and Security Dilemma Explanations," (thesis, University of Leicester, 2016).

63. L. Hansen, "Poststructuralism," in J. Baylis, S. Smith, and P. Owens, eds., *The Globalization of World Politics: An Introduction to International Relations*, (Oxford, UK: Oxford University Press, 2017).

64. Michael Clarke, "China's 'Three Warfares' in Xinjiang," *East Asia Forum*, (November 2017), available at <https://www.eastasiaforum.org>; and Ministry of National Defense, *White Paper 2012*, (Beijing, ROC: 2012).

65. Ministry of National Defense, *White Paper 2012*, (Beijing, ROC: 2012).

66. Jennifer Lind, "Asia's Other Revisionist Power," *Foreign Affairs*, (March/April 2017), available at <https://www.foreignaffairs.com>.

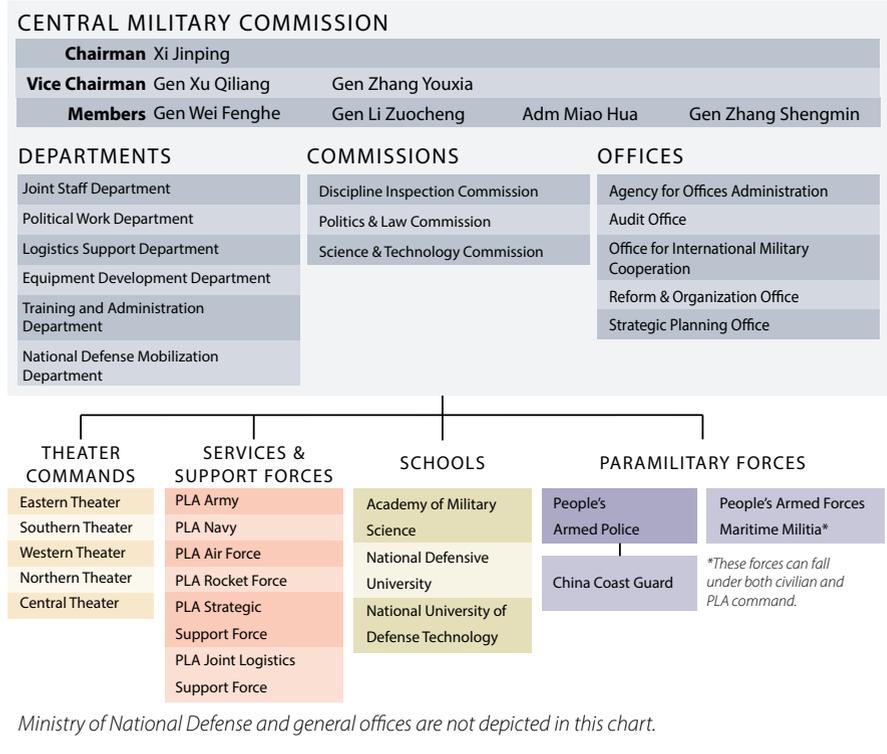
67. Rosalind Mathieson, "China is Closing Tech Gap with the U.S., Pacific Air Chief Says," *Bloomberg Business*, (February 2016), available at <https://www.bloomberg.com>.

68. Meia Nouwens, "China's Military Power Is Growing Faster Than You Think," *Prospect*, (February 2018), available at <https://www.prospectmagazine.co.uk>.

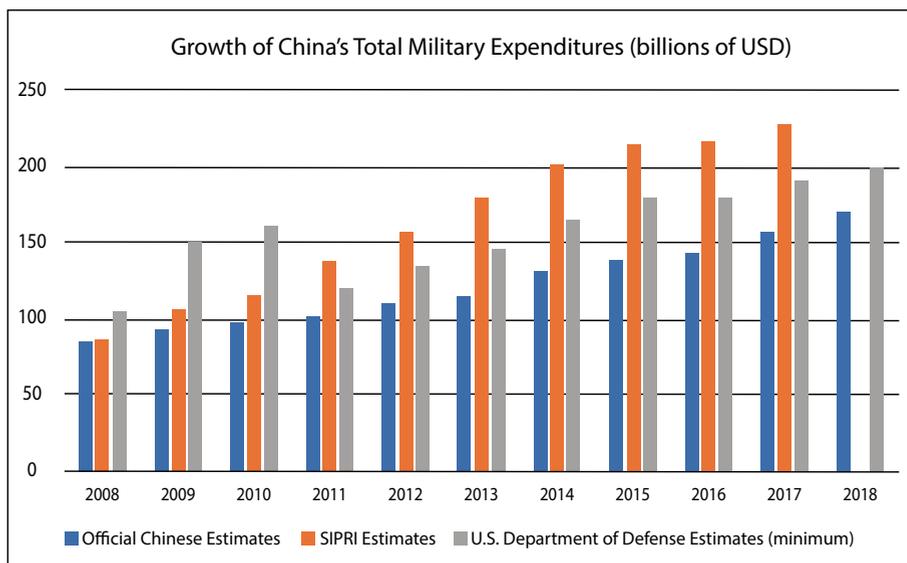
69. Zheng Wang, *Never Forget National Humiliation: Historical Memory in Chinese Politics and Foreign Relations*, (New York, NY: Columbia University Press, 2014).

70. Frank Hoffman, "Review of *A New Conception of War: John Boyd, the U.S. Marines, and Maneuver Warfare*," *Marine Corps Gazette*, (Quantico, VA: February 2019).

China's Military Leadership



Appendix A. China's Military Leadership. Source: U.S. DOD (2018). Annual report to Congress: Military and security developments involving the People's Republic of China 2018.



Appendix B. Growth of China's Total Military Expenditures (2008–2018). Sources: China's Total Military Expenditures (2008–2018) are based on the following estimates: China's official data, estimates from the SIPRI, and estimates from U.S. DOD. Official Chinese (real) spending (billions of 2018 USD, adjusted for inflation) is provided by the Defense Intelligence Agency (2019); the SIPRI data (2007–2017) is provided by the SIPRI Military Expenditure Database (2019); U.S. DOD estimates (2008–2017) are provided by the U.S. DOD's annual reports about military and security developments in China (2009–2018). 2018's U.S. DOD estimate is provided by the Defense Intelligence Agency (2019).

