A DRAGON IN SHEEP'S CLOTHING

China's Drift Towards an Inadvertent Nuclear Posture of Assured Destruction

Paul A. Hesser, Major, USAF

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Air Command and Staff College

Col Lee G. Gentile, Jr., Commandant
Col Christian Watt, Dean of Resident Programs
Lisa L. Beckenbaugh, PhD, Director of Research
Lt Col Shannon Cummins, Essay Advisor

Please send inquiries or comments to

Editor
The Wright Flyer Papers
Department of Research and Publications (ACSC/DER)
Air Command and Staff College
225 Chennault Circle, Bldg. 1402
Maxwell AFB AL 36112-6426

Tel: (334) 953-3558
Fax: (334) 953-2269

Email: acsc.der.researchorgmailbox@us.af.mil

AIR UNIVERSITY

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Maxwell Air Force Base, Alabama

Commandant, Air Command and Staff College
Col Lee G. Gentile, Jr.

Director, Air University Press
Dr. Paul Hoffman

Project Editor
Catherine Parker

Illustrator
Catherine Smith

Print Specialist
Cheryl Ferrell

Air University Press
600 Chennault Circle, Building 1405
Maxwell AFB, AL 36112-6010
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I wish to thank Maj Matthew Dougherty for his thoughtful comments and suggestions. All errors found herein are my own.

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Foreword

It is my great pleasure to present another issue of the Wright Flyer Papers. Through this series, Air Command and Staff College presents a sampling of exemplary research produced by our resident and distance-learning students. This series has long showcased the kind of visionary thinking that drove the aspirations and activities of the earliest aviation pioneers. This year's selection of essays admirably extends that tradition. As the series title indicates, these papers aim to present cutting-edge, actionable knowledge—research that addresses some of the most complex security and defense challenges facing us today.

Recently, the Wright Flyer Papers transitioned to an exclusively electronic publication format. It is our hope that our migration from print editions to an electronic-only format will foster even greater intellectual debate among Airmen and fellow members of the profession of arms as the series reaches a growing global audience. By publishing these papers via the Air University Press website, ACSC hopes not only to reach more readers, but also to support Air Force–wide efforts to conserve resources.

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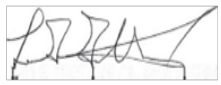

LEE G. GENTILE, JR.
Colonel, USAF
Commandant

Abstract

This research seeks to understand how the Chinese think about the role of nuclear deterrence and why their nuclear posture is drifting from their declaratory nuclear policy. First, it will examine the origins and evolution of the Chinese nuclear weapons program to understand their reasons for building the bomb. Establishing and characterizing China's past nuclear posture will serve as a base to learn how its nuclear thinking developed through the decades and provide a launching point for surmising where it may go in the future. Comparing China's grand strategy to its nuclear posture and policy will clarify why what they say seems to differ from what they do. Ultimately, the conclusions of this analysis will answer why there are disparities between Chinese nuclear policy and posture. Finally, this research will consider the implications of China's nuclear posture. Throughout the examination, consideration is given to Chinese history, culture, diplomacy, media, military, economy, and leadership to reveal the truth behind Chinese rhetoric.

Introduction

Once considered a "paper tiger" by Mao Zedong, the current role of nuclear weapons in China is anything but irrelevant. Chinese nuclear policy portrays a stance of no first use (NFU), opposition to levying nuclear threats, and ardent rejection of nuclear arms racing.[1] However, China is simultaneously building hundreds of intercontinental ballistic missile (ICBM) silos,[2] demonstrating anti-satellite (ASAT) capabilities,[3] entangling its conventional/nuclear forces, developing nuclear-capable hypersonic weapons,[4] and sanctioning nuclear threats against non-nuclear countries.[5] While states tend to embrace different levels of ambiguity, the disparity between what China declares and what it does in the nuclear realm is alarming. Moreover, calls from the international community to explain this disparity are either dismissed or described by the Chinese Communist Party (CCP) as a misinterpretation. This puzzle leads to the question: why does China's nuclear deterrence policy appear misaligned from its nuclear deterrence posture? China's declarations of a "minimum nuclear capability" seem incongruent with their actual nuclear deterrent posture.[6] Consequently, understanding the chasm between Chinese rhetoric and reality concerning their nuclear posture is vital to US strategic security interests. This research argues that, motivated by the goal of stalemating its adversaries, a combination of tech lag phobia and norming behavior have conspired to push China into developing an inadvertent assured destruction posture within the confines of its ardent minimum defense and NFU policy.

This research seeks to understand how the Chinese think about the role of nuclear deterrence and why their nuclear posture is drifting from their declaratory nuclear policy. First, it will examine the origins and evolution of the Chinese nuclear weapons program to understand their reasons for building the bomb. Establishing and characterizing China's past nuclear posture will serve as a base to learn how its nuclear thinking developed through the decades and provide a launching point for surmising where it may go in the future. Comparing China's grand strategy to its nuclear posture and policy will clarify why what they say seems to differ from what they do. Ultimately, the conclusions of this analysis will answer why there are disparities between Chinese nuclear policy and posture. Finally, this research will consider the implications of China's nuclear posture. Throughout the examination, consideration is given to Chinese history, culture, diplomacy, media, military, economy, and leadership to reveal the truth behind Chinese rhetoric.

The following questions helped guide the investigation of China's nuclear condition. How has China's nuclear deterrence posture and policy

evolved since it first developed the atomic bomb? How does China currently characterize nuclear deterrence and why does China's current nuclear deterrence policy appear misaligned with its nuclear deterrence posture? Finally, what implications does China's nuclear deterrence condition hold for the United States? Developing a framework to answer these questions will require looking at China's past and present to gain insight into its future behavior.

Following the introduction, the paper will cover the literature review then discuss the methodology of the research. The remaining chapters are devoted to answering the preceding questions, serve as the foundation to contemplate future implications of Chinese policy and posture, and anchor the research. Each question is evaluated thru the lens of the Chinese DIME, philosophy, culture, and beyond. To gain a balanced perspective, this research strives to include a thorough representation of Chinese and non-Chinese sources.

The remainder of this research will focus on China's development of nuclear weapons and its deterrence policy. Mainly, it covers why China decided to build nuclear weapons and how its nuclear doctrine and thinking did or did not evolve. For example, Taylor and Medeiros suggest that China's willingness to endure nuclear vulnerability for decades can explain Chinese thinking about nuclear deterrence.[7] This section aims to provide a timeline of how China's nuclear deterrence posture and policy evolved since it first developed the atomic bomb. Moreover, the factors that initially motivated the Chinese to build the bomb might be the same factors that encourage them to proliferate or influence their nuclear deterrence posture in the future. Mao saw China's acquisition of nuclear weapons as a means to destroy the "nuclear monopoly."[8] Perhaps this same perception and subsequent logic explains China's present behavior and will help predict its future actions.

The research discusses how China characterizes nuclear weapons and why China's current nuclear deterrence posture seems misaligned with its declaratory policy. This chapter focuses heavily on deciphering Chinese thinking and philosophy to explain the juxtaposition between their posture and policy. In 2014, Vipin Narang claimed that China's efforts over the past several decades to improve its capabilities was to guarantee nuclear retaliation in response to the first strike from an adversary.[9] This assessment considered China a fledgling regional power and did not appreciate its global hegemon potential. Chinese rhetoric also seems to support adherence to a defensive nuclear posture. However, China's recent global emergence, the building of hundreds of ICBM silos, and testing of a nuclear-capable fractional orbital bombardment system (FOBS) seem to indicate a shift from assured retaliation to a more aggressive posture. For instance, Narang says a shift to an asymmetric escalation posture

is significant because it suggests a move toward a rapid and first use capability.[10] In light of Chinese military capability and imminent economic dominance, China's thoughts and actions embody potent variables, vulnerable to misperception. Therefore, the United States must tread carefully when attempting to clearly interpret Chinese nuclear deterrence policy and posture.

The final section of this paper attempts to place the preceding analysis into perspective by exploring what implications Chinese nuclear deterrence thinking holds for the United States. During his reign, Deng Xiaoping believed the Chinese should "Hide our capacities and bide our time, but also get some things done."[11] China's ability to rapidly develop technology, production capacity, and brazen actions seem to portend a shift from Deng's subdued approach. Furthermore, in an apparent departure from his predecessors, Chinese President Xi Jinping has built his career on adhering to a philosophy of "do it now."[12] The answer to why China's nuclear deterrence policy differs from its nuclear posture is a preamble to many subplots. On November 29, 2012, Xi Jinping gave a speech entitled, "Achieving Rejuvenation Is the Dream of the Chinese People," where he uttered a seemingly innocuous line. Xi said that "all Party members must bear in mind that we still have a long way to go and much hard work to do before we can turn our blueprint into reality."[13] The take-away is that the Chinese Communist Party has a plan and understanding that plan starts with knowing how they think.

Literature Review

The sources selected strongly influence and guide this research effort. While not an exhaustive list of sources, they represent the pillars that support the findings of this paper. Additionally, the thorough research accomplished in these sources proved indispensable in discovering additional angles and thought processes from which to understand why China's nuclear policy appears to differ from its nuclear posture.

Widely considered the preeminent examination of why China decided to pursue nuclear weapons, *China Builds the Bomb* by John Lewis and Xue Litai trace China's nuclear ambition from the 1950s to the 1980s. The authors argue that the threat of US nuclear blackmail after the Korean War and the 1954 Taiwan Strait Crisis convinced Chinese leaders that possessing the bomb was necessary for their security.[14] This book captures how Mao Zedong's dismissive view of nuclear weapons evolved into one of utility and lays out the origins of China's earliest nuclear policy. Many facets of China's early nuclear policy, such as "no first use" and "minimum defense," are prevalent in their current policy. However, the book's overarching theme is about security; pur-

suing the bomb forced China to modernize, the culmination of which is ever-present today.[15]

Scott Sagan's article, published by *International Security* in 1996 lays out his reasoning for why states seek nuclear weapons. In the aptly titled "Why Do States Build Nuclear Weapons," Sagan offers three models to explain why states undergo the task of building the bomb. These models are the "security model," "domestic politics model," and the "norms model." Although Sagan proposes these models as reasons why states decide to pursue nuclear weapon capability, they can also help explain why states may expand their initial capability in the future. This paper focuses on considering the applicability of the security and norms models because the secrecy of China precludes thorough deliberation of the domestic politics model.[16]

Writing for the Carnegie Endowment for International Peace, the goal of Li Bin and Tong Zhao's, *Understanding Chinese Nuclear Thinking* is to shed light on the difference between Chinese and US nuclear philosophy.[17] Topics range from China's NFU policy, through nuclear proliferation, to nuclear relations as they pertain to the United States and China. The contributors to this publication include many current or former People's Liberation Army (PLA) members and Chinese academics. It contends that dialogue between Chinese nuclear experts and their counterparts in the United States has been strained due to the different way each country views and implements its security policy. It not only explains how the Chinese think about nuclear weapons but provides insight on how they interpret US deterrent strategies.

The Congressional Research Service report, "China's Military, The People's Liberation Army," discusses PLA reform and reorganization efforts, their role in advancing Chinese security interests, and significant features of China's strategic outlook.[18] The CCP has prioritized the buildup, reorganization, and modernization of the PLA. Coupled with China's economic expansion and world influence, the PLA is another facet of Chinese power that has the United States concerned. The extent to which China develops the PLA speaks to their strategic goals and can provide insights into their views on deterrence.

Published in 2019, the Defense Intelligence Agency's (DIA) review of Chinese military power seeks to identify what role China sees itself playing in the world. Additionally, it addresses the strategic intentions of the CCP, and how will they affect the United States, and how the roles and missions of the PLA changed. Underpinning the answers to all these questions is China's strategy of "active defense," which allows Beijing's broad interpretation to react offensively to perceived impropriety. The DIA provides a modern examination of Chinese strategy and military capabilities in its analysis.[19]

The book, *How China's Leaders Think: The Inside Story of China's Past, Current, and Future Leaders*, by Robert Kuhn, tries to answer who are China's future leaders, what are they doing today, how do they think about China's place in the world, and what are the prospects for reform or democracy? Kuhn contends that there are many misunderstandings about China's ambitions and methods and that knowing how China's leaders think can assuage the "China threat" syndrome. Besides senior leaders, the author features interviews with officials and intellectuals who influence Chinese thinking and outline the Chinese emphasis on ideological purity, political pragmatism, and economic growth.[20]

"China's National Defense in the New Era," white paper is the latest published by the Chinese Ministry of National Defense. The stated purpose of the paper is to help "the international community better understand China's national defense." China's national defense aims to safeguard China's sovereignty, security, and developmental interests. This paper makes a concerted effort to paint China's motivations in soft light. At the very least, it represents the preferred portrayal of the Chinese Communist Party and the People's Liberation Army.[21]

Nuclear Strategy in the Modern Era by Vipin Narang proposes his optimization theory of nuclear posture. Narang's theory explains how and why external security and internal political and financial constraints may cause a regional power to make a change to optimize its nuclear posture.[22] Optimization theory uses three different categories to describe a state's nuclear posture. First, a catalytic posture consists of few weapons but threatens breakout to force a third party to intervene on the state's behalf.[23] Second, an assured retaliation posture describes a state with a secure second-strike capability.[24] Finally, an asymmetric escalation posture can enable the rapid and first use of nuclear weapons in response to a conventional attack.[25] Writing in 2014, Narang characterized China as a regional power and denied it superpower status. Although China is no longer a mere regional power, Narang's theory is still valuable for examining what could cause them to shift from an assured retaliation posture to an asymmetric escalation posture.

Taylor Fravel argues in *Active Defense* that China is most likely to make a major change in military strategy when it encounters a significant external incentive for change and when the CCP is united.[26] He then claims a shift in the conduct of warfare has caused China to make major changes to its strategy in 1956, 1980, and 1993.[27] A change in operational doctrine, force structure, and training are key indicators that a state will significantly modify its strategy.[28] Examining China's current nuclear policy and posture under Fravel's analytical framework could help bridge the gap be-

tween what China says and what it does. Furthermore, if his conclusions are valid about military strategy, it could help predict when China may change its nuclear posture.

China's Strategic Arsenal is a comprehensive assessment of China's nuclear weapons program that covers the latest insight into their capabilities, doctrine, and posture. The book comprises distinguished scholars attempting to explain the modernization and expansion of China's nuclear arsenal. In chapter 3, "China's Nuclear Doctrine and Deterrence concept," Christopher Twomey discusses the ambiguity surrounding China's declaratory policy of "no first use." Twomey points out that evolving US conventional capability to strike Chinese nuclear missile silos and the questionable ability for China to discern between a nuclear and conventional attack may adulterate the long-standing Chinese policy.[29] Additionally, Twomey states that the PLA Rocket Force's new focus on the timing and efficiency of its operations suggests that China believes its nuclear forces need to be more responsive to achieve its strategic goals.[30] Choosing to focus on the more objective indicator of intent, Bates Gill dissects the "Organization of China's Strategic Forces" and concludes that the sweeping reorganization of the PLA since 2015 is to create a more robust strategic deterrent and integrate joint warfare capabilities.[31] It is hard to believe that a state willing to take such ambitious actions to bolster its strategic deterrent would totally discount the value of increasing its nuclear posture.

Methodology

The core question this paper seeks to answer revolves around the perceived misalignment between China's declaratory nuclear policy and its posture. According to Fravel, China's nuclear policy and posture have remained consistent since it built the bomb in 1964.[32] However, Brad Roberts indicates that China is reconsidering its longstanding nuclear policy to overcome conventional strategic threats.[33] These two disparate takes suggest that China's stance on how it thinks about nuclear weapons spans a relatively broad expanse. Either China will maintain the status quo or see the world as its nuclear oyster. As extensive as its nuclear options are, China is not open or clear about its nuclear intentions, which is the main driver for this research.

Strategic Command (STRATCOM) lists a variation of this topic within its "Academic Alliance" program. The framing of the original question asks to contemplate how all US adversaries define and practice deterrence.[34] This research will focus solely on China for four reasons: (1) China's historically closed society has hampered efforts to gather information concerning their

behavior and goals, (2) the United States and China do not have an extensive history of wielding strategic deterrence against each other, and (3) China's meteoric rise across diplomatic, information, military, and economic instruments (DIME) of power requires understanding its strategic intentions in a rapidly evolving security environment, and finally (4) focusing on China offers a unique opportunity to understand why a nuclear state would decide to adapt its nuclear deterrence posture after decades of maintaining a minimum deterrent.

This research relies primarily on a qualitative methodology because of China's opaqueness and historically stagnant nuclear development. Additionally, China has avoided official nuclear talks, which can provide valuable insights into a state's viewpoints even if they do not result in agreements. Primary and secondary sources comprise the majority of the source material for this research. Primary sources include speeches, defense policy, and military doctrine documents. Secondary sources include scholarly journals, articles, and books. Examination of these sources sought to discover trends and commonalities that may provide an understanding of the questions posed in the introduction. In particular, stalemating motivation, tech lag phobia, and strategic norming behavior emerged as commonalities among sources.

China's Nuclear Evolution

Atoms for Security

Understanding why the Chinese decided to build the bomb can help explain their current nuclear policy and posture. In his article "Why Do States Build Nuclear Weapons?" Scott Sagan outlines three models that explain why a state pursues nuclear weapons. Sagan labels these models the "security model," "domestic politics model," and the "norms model."[35] Sagan argues that in addition to the inherent security value of nuclear weapons, they are also useful political objects and can serve as symbols of a state's modernity.[36] Of these models, the security model best explains China's initial motivation to build the bomb but an examination of China's potential and actual power reveals that the norms model might explain China's recent rapid nuclear modernization.

China's decision to build the bomb stemmed from US nuclear threats during the Korean War.[37] According to Taylor Fravel, by the spring of 1952, China's top leaders had agreed that it was necessary to acquire nuclear weapons.[38] Additionally, Lewis and Xue claim that China found the further motivation to build the bomb during the 1954–55 Taiwan Strait Crisis,

when the Chinese Politburo voiced concerns that the United States would use nuclear weapons to rectify the conflict.[39] Mao, on January 15, 1955, in front of the Central Secretariat meeting, announced that after not seeing the need to pay attention to the matter of nuclear weapons, the present circumstances necessitated that China focus on developing atomic energy research for military purposes.[40] China initially enjoyed robust cooperation and expertise from Soviet nuclear experts, but by August 1960, the Sino-Soviet relations had soured, forcing China to proceed alone. Led by Mao, China unilaterally continued its journey to find usefulness in a capability that he previously characterized as a "paper tiger."

Mao's Enduring Influence

On October 16, 1964, China conducted its first test of an atomic bomb. Immediately following the bomb, it declared the test was executed for defensive purposes only and that China would not be the first to use nuclear weapons in any situation.[41] Consequently, although China acquiesced to building the bomb, they still claimed the utility of such weapons was limited to preventing nuclear coercion and deterring a nuclear attack.[42] In Mao's mind, this limited deterrent provided the counter to "nuclear blackmail" that had held China subservient to the United States and Soviet Union.

Even after his death in 1976, Mao Zedong's aura continued to shape Chinese nuclear thinking. Mao's influence on China's declaratory nuclear policy represents his enduring influence and the looming power of autocratic decrees. Starting with Bernard Brodie, the United States has leaned mainly on domestic academia to feed its conceptualization of nuclear weapons. Since 1945, US freedom of ideas has led to nuclear strategies such as "mutually assured destruction," "flexible response," "massive retaliation," "countervailing strategy," and "damage limitation."[43] Along with Brodie, the founders of nuclear deterrence, like Schelling and Kahn, still influence US deterrence thinking. However, unlike Mao, United States theorists remain influential because of the salience of their ideas, not through sheer reverence. As such, for better or worse and as initially dictated by Mao, China has dogmatically claimed a policy of minimum deterrence and no first use since 1964. For Mao, the issue of nuclear weapons came down to utility, and because of the vastness of his territory and the mass of China's populace, he did not view them as an existential threat.[44] Additionally, China's economic situation could not support extensive proliferation.

Although China's nuclear policy and strategy have been relatively consistent over the past few decades, there have been notable stages in its evolution. In the book, *Strategy in the Second Nuclear Age,* Yeaw, Erickson, and Chase identify

three distinct stages that illustrate the progression of Chinese nuclear strategy.[45] The first stage took place under Deng's leadership in the 1980s. This period featured minimal capability and used uncertainty to compensate for its inability to strike distant targets.[46] A wider scope of strategic deterrence characterizes the next stage by beginning to incorporate other nonnuclear means.[47] The most significant of these means is the addition of a conventional missile force to the Second Artillery Force in 1993. This development had a significant influence on China's coercive diplomacy toward Taiwan.[48] Finally, Hu Jintao led the third stage in which he sought strong, reliable, and development-oriented nuclear deterrence that met the needs of Chinese national security.[49] This phase saw the deployment of China's road-mobile ICBMs. The trend between all three of these stages is a broadening aperture regarding the utility of nuclear weapons in relation to China's expanding interests.

China's current nuclear deterrent policy seems like a vestige of the past wrestling with the reality of the present. Because of its burgeoning economy, nearly every facet of China has undergone rampant change in the past few decades, including the modernization of its nuclear arsenal and reorganization of its Rocket Force. However, its nuclear policy still ardently adheres to Maoist espousals of minimum defense despite the incongruence with its hegemonic potential. Soon after detonating the first atomic bomb, Mao reflected, "We don't wish to have too many atom bombs ourselves. What would we do with so many? To have a few is just fine."[50] China did not aspire to achieve parity with the United States and the Soviets in 1964. It only sought the ability to retaliate if attacked. However, because of China's limited economic power, it could not afford to build a significant arsenal even if it wanted to. It cost 37 percent of the entire 1957 Chinese state budget to build their first bomb.[51] Nonetheless, Mao had broken the nuclear monopoly, and China's nuclear policy and posture continued to reflect a minimum deterrent for the next fifty years until its wealth completed its potential.

The Power of Population and Prosperity

Potential and actual power is a simple way to frame the evolution of China's relationship with the bomb. From an offensive realist point of view, the size of a state's population and wealth indicates a state's potential power.[52] China has always fulfilled the population piece of the equation, but its potential wealth had always been lacking until Deng Xiaoping cracked the Chinese economic door to the world in 1978. Deng's "opening" of the Chinese economy marked the start of an unprecedented development phase. Between 1979 and 2018, China's annual gross domestic product has averaged a staggering 9.7 percent

annual growth rate.[53] Presently, China's economy is the second largest globally, but it is forecasted to eclipse the United States by 2030.[54] Thus, China has accrued massive potential power and in a few years, it will hold the greatest potential power the world has ever seen. The question is how China will wield that power. Coupling its economic might with its ambitious global behavior, China has greater strategic interests today than it did in the 1960s. As a new superpower, China now finds itself with much to protect and a lot to spend. Its aim of rejuvenation, especially concerning Taiwan, is a revisionist goal that it probably believes is not attainable with a simple minimum deterrent.

"Great powers behave aggressively not because they want to or because they possess some inner drive to dominate, but because they have to seek more power if they want to maximize their odds of survival."[55] According to Katherine Morton, Xi Jinping's ambition to play a leadership role in global governance is motivated by the need to defend Chinese interests on a global scale.[56] In Xi's 2017 address to the 19th National Congress of the CCP, he spoke of the dream of building a powerful military and China's power to shape the global governance system.[57] A minimum deterrent designed to dissuade mostly regional aggressors does not mesh with Xi's ambition of remaking the international order to fit China's needs.[58] Finally, China's much vaunted "century of humiliation" imbued China with a "never again" attitude and sparked a demand for global recognition and respect.

China is no longer content with a subservient role to the superpowers of the Cold War. Despite its massive nuclear force, the Soviet Union failed to unseat the United States because of its poor economy. During the Cold War, the United States enjoyed a formidable nuclear force and the world's largest economy. China, resolute to never be the victim of bullying again, turned its economy into a global juggernaut, and the only thing it is missing is a commensurate nuclear force. However, through nuclear modernization and expansion, it is converting its massive potential power into daunting actual power because a state's actual power mostly emanates from its military forces.[59] The empirical record is small, but it is clear. The Soviet Union's nuclear arsenal demanded the respect of the United States, not its economy. In light of this reality, Scott Sagan's norms model perhaps best explains China's recent push to modernize and drastically expand its nuclear arsenal. Sagan's idea is that over time institutions unintentionally resemble each other.[60] The next chapter will examine this possibility but will generally look at China's current nuclear policy declarations and posture to understand why they appear misaligned.

Misalignment between Policy and Posture

What China cares about

First and foremost, the ruling party of China, the CCP, is concerned about its security. The PLA exists to serve the CCP, not the Chinese state and, as autocracies are prone to do, China spends more on domestic security than foreign security.[61] However, this is not to say that the CCP is concerned about short-term political stability. On the contrary, the CCP maintains a focused eye on long-term security endeavors, a condition Andrew Scobell describes as "regime perpetuation."[62] In their book, *China's Search for Security*, Andrew Nathan and Andrew Scobell describe four concentric rings that depict the threats from Beijing's perspective. The authors effectively summarize the span of these rings by stating, "The world as seen from Beijing is a terrain of hazards, stretching from the streets outside the policymakers' window to land borders and sea lanes thousands of miles to the north, east, south, and west and beyond to the mines and oilfields of distant continents."[63] China's interests and concerns have evolved since 1949 and thus still require it to carefully plan out its future to stay ahead of its immutable economic momentum. As China has expanded its reach, it must broaden the specter of its strategic presence.

History is littered with examples of China's predilection for focusing on long-term goals and undertaking monumental projects. From the building of the Great Wall to the Great Leap Forward to the Belt and Road Initiative (BRI), China's ambition to plan, mobilize, and execute is undeniable. The bottom line is that they think big and far out. Thus, when considering China's security policy and posture, it is best to attempt to think about where it is going versus dwelling on where it has been. The following will briefly cover an assessment of China's current declaratory nuclear policy and posture, including recent events that have caused a rift between the two. After establishing the present nuclear environment, the discussion will focus on China's nuclear condition to offer an explanation for the apparent difference between its policy and posture.

Chinese declaratory nuclear policy

China does not disseminate the equivalent to the *US National Defense Strategy* or *Nuclear Posture Review*. It periodically publishes publicly available military strategy documents and white papers, but the gaps between issuances of such documents can span long enough periods that question their validity over time. Besides these documents, official statements from the CCP, PLA leadership, and Xi Jinping can provide a sounding board from which to

detect any sway in the declaratory policy. Further complicating the search for the truth is China's hierarchy of sources. Michael Swaine, aided by former CIA China analyst Alice Miller categorizes Chinese media reporting as "authoritative," "quasi-authoritative," and "nonauthoritative."[64] Thus, Chinese media reporting is ripe for misinformation and misinterpretation. Often, in a state as secret as China, trends and patterns across various sources provide the only available clues. The hope is that the truth lies where they all converge.

China's official declaratory policy does not suffer from a lack of promulgation or consistency. On the contrary, policy tenets are uniformly echoed across the CCP, the PLA, and the state-controlled media. For example, the latest white paper published in 2019 by China's Ministry of National Defense is titled "China's National Defense in the New Era." Like many other Chinese documents and utterances since 1964, it succinctly states China's nuclear policy.

China is always committed to a nuclear policy of no first use (NFU) of nuclear weapons at any time and under any circumstances, and not using or threatening to use nuclear weapons against nonnuclear-weapon states or nuclear weapon-free zones unconditionally. China advocates the ultimate complete prohibition and thorough destruction of nuclear weapons. China does not engage in any nuclear arms race with any other country and keeps its nuclear capabilities at the minimum level required for national security. China pursues a nuclear strategy of self-defense, the goal of which is to maintain national strategic security by deterring other countries from using or threatening to use nuclear weapons against China.[65]

It is essential not to conflate the consistency with which China espouses its declaratory policy with the clarity of the policy. Therein lies the impetus between what China says and what it means. In particular, China's definition of NFU can quickly morph into meaninglessness depending on how it conceptualizes a threat.

No means maybe

At first glance, China's declaratory NFU policy seems straightforward. However, when placed in the context of varying stakes and perceptions, the credibility of a NFU policy begins to muddy. Moreover, the trustworthiness of any idealistic rhetoric uttered in peacetime fundamentally loses its assurance power during an intense conflict.[66] Thus, a NFU policy may dissuade fears of a "bolt out of the blue" attack, but in the much more likely situation of incremental rising tensions between conflicting nuclear powers, the purported chivalry of the adversary does little to overcome the existential stakes of the situation.

Like many things in China, the reasoning for their policy often leads back to Mao. As noted previously, Mao never saw much utility in nuclear weapons

other than to break the nuclear monopoly and prevent nuclear blackmail. His adoption of a NFU policy in 1964 is widely regarded as a moral messaging technique to quell international reaction to China acquiring the bomb.[67] China has stuck with the policy while consistently touting its overarching defensive posture in all affairs. However, certain situations highlight the potential malleability of a NFU policy in the current security environment. For example, consider a scenario where the United States employs a conventional weapon that intentionally or unintentionally compromises a critical part of China's nuclear infrastructure. In this scenario, the United States is not using a nuclear weapon to attack, but by degrading a state's nuclear capability (no matter the means employed) it can certainly be construed as an existential threat worthy of a nuclear response. Will China still feel obligated to its NFU policy should such an event occur? Perhaps its assertive control of nuclear weapons is the determining reason behind why it proclaims a NFU policy.[68]

The obstacle to First Use is civil-military relations

China's most significant impediment to adjusting its nuclear posture might not be its longstanding policy but its civil-military relations (CMR). The CCP's confidence in the PLA has a lackluster history. As recently as 2014, President Xi led an anti-corruption campaign to rid the PLA of crooked personnel, and he started with its two highest-ranking officers.[69] By 2016 nearly 1,600 PLA personnel were under investigation, arrested, or removed from the ranks,[70] and by 2019 over 100 generals were purged due to charges of corruption or disloyalty.[71] Additionally, Chinese media has voiced criticism of PLA capabilities by questioning PLA officers' ability to judge situations, understand the commander's intent, instill a fighting mentality, deploy forces, and adapt to challenging situations.[72] Chinese leadership appears to suffer fundamental trust issues with the PLA that will only heal with proven performance but probably will never reach any semblance of delegating nuclear authority. Xi has attempted to address these issues through reforms and reorganization, but he appears far from trusting PLA leadership with the existential responsibility of managing a heightened nuclear posture or even mating weapons with warheads during peacetime. Ever since China developed its first bomb, CCP leaders have controlled the nuclear strategy decision-making process, and it does not seem like that will change any time soon.[73]

China's current nuclear posture

China does not openly report the extent of its nuclear arsenal. Instead, open-source reporting primarily relies upon DOD reports, analysis of Chinese me-

dia, interpretation of official statements, and assumptions. The lack of authoritative sources has historically led to varied estimates among US government agencies and research organizations, as depicted in figure 1. For example, the Federation of American Scientists (FAS) estimates that the Chinese possess 350 warheads. In contrast, the Defense Intelligence Agency (DIA) and DOD estimate that China possesses a little over 200 nuclear warheads as of 2021.

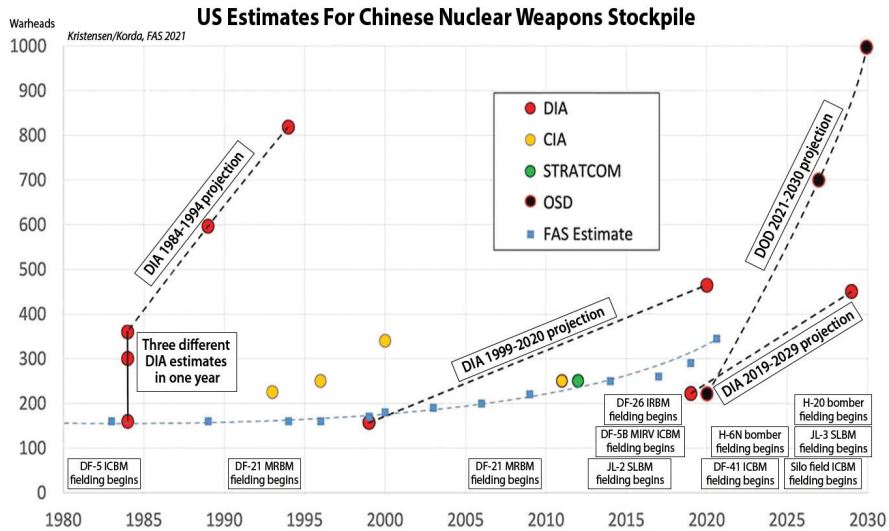

Figure 1. US Estimates for Chinese Nuclear Weapons Stockpile
(Reprinted from Hans M. Kristensen and Matt Korda, "Chinese Nuclear Weapons, 2021," 77, no. 6 (November 2, 2021): 318–36, https://doi.org/10.1080/00963402.2021.1989208.)

To employ this stockpile, China has a nuclear triad comprised of air, sea, and land forces. Table 1 is a breakdown of China's estimated nuclear stockpile. The PLA Air Force (PLAAF) operates the H-6N bomber in a contingency role, and the air leg of their triad represents its weakest capability. However, China has been developing a long-range stealth bomber since 2014, a new air-launched ballistic missile,[74] and will likely rework tactics, techniques, and procedures to execute nuclear bomber missions.[75] China's sea-based leg currently consists of six JIN SSBNs that can carry up to 12 JL-2 submarine-launched ballistic missiles (SLBM).[76] However, the range of the JL-2 is limited, forcing China's SSBNs to operate farther from littoral water than desired. The JL-3 SLBM projects to have a greater range, allowing Chinese SSBNs to operate out of protected water while still targeting the continental United States.[77] Finally, China's land-based nuclear force is its most capable and di-

verse leg. It consists of about 100 ICBMs distributed among silo-based and road-mobile platforms. In addition, because China foresees many regional threats, it maintains several road-mobile MRBMs and IRBMs.[78]

Table 1. Estimated Chinese nuclear forces, 2021

Type	NATO designation	Number of launchers[a]	Year deployed	Range (kilometers)	Warheads x yield[b] (kilotons)	Warheads
Land-based ballistic missiles						
DF-4	CSS-3	6[c]	1980	5,500	1 x 3,300	6
DF-5A	CSS-4 Mod 2	10	1981	12,000	1 x 4,000-5,000	10
DF-5B	CSS-4 Mod 3	10	2015	13,000	5 x 200-300	50
DF-5C	(CSS-4 Mod 4)	. .	(2021)	13,000	(MIRV)	. .
DF-15	CSS-6	. .	1990	600	1 x ?[d]	. .
DF-17	CSS-22	18[e]	(2021)	1,800+	1 x HGV[f]	. .
DF-21A/E	CSS-5 Mods 2, 6	40	2000, 2016	2,100+[g]	1 x 200-300	40[h]
DF-26	?	200[i]	2016	4,000	1 x 200-300	20[j]
DF-31	CSS-10 Mod 1	6	2006	7,200	1 x 200-300	6
DF-31A	CSS-10 Mod 2	36	2007	11,200	1 x 200-300	36
DF-31AG	CSS-10 Mod 2[k]	36	2018	11,200	1 x 200-300	36
DF-41	CSS-X-20	18[l]	2020	12,000	3 x 200-300	54
DF-41	(silo version)	. .	(2025)[m]	12,000	(3 x 200-300)	. .
Subtotal:		280				258
Submarine-launched ballistic missiles						
JL-2	CSS-N-14	6/72[n]	2016	7,000+	1 x 200-300	72
JL-3	CSS-N-?	. .	(2025)[o]	9,0000+	(MRV)	. .
Aircraft[p]						
H-6K[q]	B-6	20	1965/2009	3,100+	1 x bomb	20
H-6N	B-6	. .	(2024)	?	(1 x ALBM)	. .
H-20	?	. .	(2025)	?	(bomb/ALCM?)	. .
Total		372				350[r]

Reprinted from Hans M. Kristensen and Matt Korda, "Chinese Nuclear Weapons, 2021," 77, no. 6 (November 2, 2021): 318–36, https://doi.org/10.1080/00963402.2021.1989208.

NOTE: two dots (. .) imply that the number is unknown or premature.

[a]Numbers in parenthesis indicate weapons in the process of entering service but not yet operational.

[b]The Chinese nuclear testing program demonstrated a wide range of warhead yields. While older and less accurate missiles were warheads, new and more accurate missiles carry warheads with much lower yields, possibly in the low hundreds of kilotons. It is possible that some warheads have even lower yield options.

[c]The 2020 US Defense Department reports still lists the old liquid fuel DF-4. But with fielding of greater numbers of solid DF-31AG and DF-26 missiles, it is possible that the DF-4 is in the process of being retired, if it hasn't already happened.

[d]The CIA concluded in 1993 that China "almost certainly" had developed a warhead for the DF-15, but it is unclear whether the capability was fielded.

[e]Assumes one brigade is operational and perhaps two more under preparation. The total number of launchers is probably significantly higher.

[f]The DF-17 was presented as a conventional missile at the 2019 Beijing parade, but the US Defense Department says the weapon might be dual-capable. FAS is awaiting more information before attributing warheads to the DF-17.

[g]US Defense Department lists the range of the DF-21A/E as 1,750 km, but the US Air Force reported it as 2,150 km.

[h]This table only counts nuclear versions of the DF-21A (CSS-5 Mod 2) and DF-21E (CSS-5 Mod 6), of which fewer than 50 launchers are deployed. The DF-21E is thought to be replacing the DF-21A. It is assumed that nuclear launchers do have not a reload, unlike conventional versions (DF-21C and DF-21D) that are assumed to have one reload.

[i]The US Defense Department lists 200 DF-26 while INDO-PACOM counts about 100. The difference may be launchers under production.

[j]This assumes most dual-capable DF-26s have conventional missions and only a limited number have a nuclear mission. It assumes reload for conventional missile only.

[k]The DF-31AG is thought to carry the same missiles as the DF-31A.

[l]Assumes two brigades are operational. It is possible the number of launchers is closer to 24.

[m]Three large missile silo fields are in the early stages of construction. Based on construction time for training silos, it is estimated that the fields will not become operational until the mid- to late 2020s. Although the DF-41 is mostly assumed to be scheduled for deployment in the silos, they could potentially also be used for other types of solid-fuel missiles.

[n]Two additional Jin-class (Type 094) SSBNs joined the fleet in 2021.

[o]US officials have hinted the JL-3 might have become operational, but it is thought to be intended to arm the future Type 096 SSBN.

[p]Bombers were used to conduct at least 12 of China's nuclear test explosions between 1965 and 1979 and gravity and gravity bomb models are displayed in museums, The People's Liberation Army Air Force nuclear capability was dormant for years, but the mission has recently been re-established.

[q]Altough the US Defense Department lists only the H-6N as nuclear with an air-launched ballistic missile, we estimate a small number of gravity bombs were retained in the stockpile.

[r]The US Defense Department stated in 2020 that the "operational" stockpile was in the low-200s and increasing. Since then, the DF-41 and two additional submarines have become operational. Consequently, we estimate the total stockpile is larger and possibly includes approximately 350 warheads.

Warheads do not a posture make

Although nuclear warheads and delivery methods are inherently necessary, they do not in themselves constitute a nuclear posture. Vipin Narang defines a state's nuclear posture as "the incorporation of some number and type of nuclear warheads and delivery vehicles into a state's overall military structure, the rules and procedures governing how those weapons are deployed, when and under what conditions they might be used, against what targets, and who has the authority to make those decisions."[79] Thus, a state's nuclear posture is not an objective assessment of hardware, but it is an amalgamation of the preceding conditions and is therefore susceptible to interpre-

tation. Scholars generally assess China's nuclear posture as "assured retaliation," characterized by maintaining a secure second-strike capability that allows a state to threaten inevitable nuclear retaliation.[80]

Max performing a minimum defense policy

Despite demonstrated anti-satellite capabilities, development of hypersonic glide vehicles (HGV), reorganization of its strategic rocket force, midcourse interceptor testing, road-mobile expansion, and an imminent massive increase of its silo-based ICBMs, the prevailing analysis comes back to, "well, they still have a lot less nuclear weapons than the United States and Russia." Such comments are accurate, but they gloss over the difference between possessing 300 nuclear weapons versus 1,000 nuclear weapons and the overall trend of China's trajectory. It discounts the significance of HGV capability to strike targets at tremendous speeds while maneuvering and attacking from any direction. Finally, this assured retaliation cookie-cutter characterization lacks nuance and ignores what Francois Jullien calls "the propensity of things," or the broad tendency of Chinese behavior.[81] This research proposes that China is attempting to maximize the deterrent power of its nuclear forces while still claiming a minimum defense and a NFU policy. A combination of stalemating, tech lag phobia, and normative great power behavior is pushing China's long-standing nuclear policy to its limits.

Chasing nuclear stalemate

For three decades, China did not see the utility in adapting its nuclear doctrine or policy. Fravel offers two explanations for this stagnation: Mao and Deng's views on the limited utility of nuclear weapons continued to persist and the inability of the PLA to develop strategy and doctrine due to organizational and political constraints.[82] However, while China's nuclear weapons are still tightly and centrally controlled, and have been since the mid-1990s, the PLA has played a larger role in shaping nuclear strategy due to increased nuclear expertise, renovation of doctrine, its greater professionalization, and an evolving political environment.[83] It may still think of itself as maintaining a minimum deterrent posture, but its rise has caused the stakes to increase. China needs to intensify its deterrent posture to ensure the United States does not calculate the risk of intervention as smaller than the risk of doing nothing. Essentially, China has always sought a nuclear stalemate and with its rise, it found additional opportunities and resources to bolster the stalemate. While China might feel secure with a minimum deterrent in a status quo world, its ambition and desire to be recognized as a great power has outgrown the insurance pro-

vided by a minimum deterrent or even assured retaliation. For decades China has hedged its bets on an entry-level insurance policy that may prove woefully inadequate in an escalating conflict. "Nuclear arsenals are designed to deter not a median enemy but rather the most ruthless plausible adversary—and they must do so all the time, including in the darkest days of a crisis or war."[84]

Lieber and Press break down the task of achieving nuclear stalemate in their book *The Myth of the Nuclear Revolution.* Achieving a nuclear stalemate is a dynamic endeavor wrought with challenges. However, once achieved, it results in a condition where military victory is impossible, thus securing a state's strategic security.[85] The authors contend that "stalemate does not lie at the end of a one-way street."[86] Maintaining a stalemate is an enduring task because it is a serial victim of the security dilemma. Stalemate can never be assured but solely relying on hope opens a clear avenue from which an enemy can escape. China's recent motivation to achieve stalemate with the United States is traceable to the 1991 Gulf War, where it fully understood its vulnerability. Additionally, the Gulf War's awesome exhibition of US military proficiency spurred China's insatiable pursuit of technology.

Technology is the way

The United States military's performance during the 1991 Gulf War demonstrated a shift in the conduct of war to the Chinese. Fravel states that "such a shift should create a powerful incentive for a state to adopt a new military strategy if a gap exists between the states' current capabilities and the expected requirements of future wars."[87] The Gulf War featured high technology, precision-guided munitions, and the integration of space-based platforms.[88] Chinese PLA officers who wrote the book, *Unrestricted Warfare* describe the Gulf War as a war that changed the world and ultimately changed war itself.[89] The speed and precision in which the United States executed Gulf War operations was indeed a warning to militaries around the globe. In addition to serving as a wake-up call, the Gulf War resurrected a technological "never again" spirit in China. Never again would China allow itself to fall so far behind the vanguard of science and technology. However, leadership in provocative technologies comes with signaling baggage that can send unintended messages if not carefully managed. Obtaining capability is one thing, wielding it is another, and China has little experience with the latter.

Tech lag phobia

After the Gulf War, China found itself vulnerable and technologically backward. Fravel points out that China's 1993 strategy of "winning local wars

under modern, especially high-technology conditions" signified China's recognition that a major shift in the conduct of warfare had occurred.[90] China's 1993 strategy emphasized that it would have to harness the ability to use new technologies to seize the initiative on the battlefield.[91] With this new strategy and motivated by the lessons learned from the Gulf War, China launched its campaign to narrow the technology gap between itself and the United States. China identified that high technology would likely prove decisive in a future conflict.[92] Inspired by the Gulf War, China spent the next 30 years playing catch up, motivated by a tech lag phobia. Tech lag phobia is simply a state's fear of falling behind the leading edge of technological development. Thus, to avoid complacency, a state is forced to continually seek and master the latest technology even if it does not plan to utilize the respective technology immediately. According to Li Bin, China's fear of coming under attack while technologically lagging is considered a security challenge for China.[93] However, pursuit of technology does not necessarily signal intent, as China's development of a "neutron bomb" illustrates.

China's enhanced radiation weapon, an example of "technology reserve"

China's determination to catch up to US strategic weapons technology dates back to developing its first atomic bomb.[94] After testing its first bomb, China went on to field various nuclear weapons. All the strategic weapons China has developed have not been fielded. An example of this conundrum is China's enhanced radiation weapon (ERW) or "neutron bomb" tested in 1988. An ERW features reduced blast effects and enhanced radiation characteristics designed to minimize damage to physical features such as infrastructure while still proving lethal to personnel.[95] Jonathon Ray explains that China may seek to pursue technology such as the neutron bomb to master the involved technology and subsequently add that knowledge to its "technology reserve" to enable quick breakout ability should the need arise.[96] Sun Xiangli, writing in *Understanding Chinese Nuclear Thinking*, states that Chinese leaders and scientists agree that China should study nuclear weapon technologies such as anti-ballistic missile technologies to understand their features, strengths, and weaknesses and then decide whether to develop them further. Xiangli further claims that this process is all to avoid China getting surprised by the technological breakthroughs of other countries.[97]Chinese technological curiosity could explain their fixation with US Ballistic Missile Defense (BMD) and forays in ASAT and HGV systems amid their ardent declaratory nuclear policy. The United States cannot simply view offensive Chinese technology as a harmless hobby, regardless of China's claims.

Offering a counter to the technological reserve model proposed by Ray, Fravel and Medeiros claim that China's future nuclear strategy is linked to anxiety due to US advancements in missile defense, long-range conventional strikes, and sophisticated command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems.[98] China believes that United States development in these fields will undermine its second-strike capability. Of particular concern to China is improving its missiles' reliability, survivability, and penetrability to ensure second-strike capability.[99] These goals could explain China's recent expansion of its ICBM silos, even if only some of those silos will eventually house missiles. At the very least, it creates a massive shell game that requires targeting consideration at the expense of other priorities. Although unprecedented and provocative, China's demonstration of an ASAT capability does have a battlefield prep rationale. By blinding an adversary's ability to sense from space, it reduces its ability to defend against incoming missiles. Finally, the fielding of an HGV is a solution to Chinese concerns because it can outperform US BMD capability. Whether China's motivation falls into the "techno reserves" category or anxiety over US defense, it believes technological development is the answer, but the problem is it may never know when to stop and, in turn, create an offensive posture in a defensive posture's clothing. It is hard to argue with results; in any competition there is an innate and sometimes subconscious tendency to imitate the actions of the dominant player.

It is what great powers do

China's decision to build the bomb undoubtedly revolved around security concerns, but assuming that remains the pervasive reasoning for the recent modernizing and expansion of its nuclear arsenal is perhaps shortsighted. China desires recognition as a great power, but that status is assessed primarily on relative military capability.[100] Moreover, the balance of conventional forces is largely irrelevant if a nuclear hegemon exits.[101] Therefore, by that logic, China cannot allow for the United States to exact nuclear superiority over it if it wishes to attain great power status. Sagan, in his article, "Why Do States Build Nuclear Weapons?" suggested that besides security and domestic political reasons, deciding to build nuclear weapons may be a normative behavior. Of course, China already has nuclear weapons, but Sagan's theory can still help explain why they are building a more extensive arsenal. His norms model states that modern institutions come to imitate one another not through competition or rational thought but simply because institutions tend to mimic each other.[102]

Lieber and Press, in *The Myth of the Nuclear Revolution,* discuss two principal findings regarding the Soviet Union's nuclear arsenal during the Cold War: (1) during peacetime, the Soviet's initial small and vulnerable arsenal effectively deterred US aggression during the first decade of the Cold War, and (2) the Soviet Union's nuclear force benefitted them in peacetime by not provoking US anxiety, but it left them susceptible to massive damage should war break out.[103] In the aftermath of World War II, the Soviets and the United States competed feverously for power while, at the same time, China had neither the inclination nor the resources at that time to compete. However, now China has the potential to dominate. According to the PLA's Rocket Force News, China is capable of "shaping strategic deterrence to a noticeable extent and posing strong strategic pressure on the main opponents and potential adversaries, deterring them from infringing upon our nation's core interests, from staging aggression or even launching a nuclear war against our nation, and thus achieving the purpose of subduing the enemy without fighting."[104] Like Russia, China may see itself at a similar nuclear disadvantage should conflict break out between itself and the United States. Thus, it makes sense for China to strive for nuclear balance with the other great powers.

Determining the balance of power has always been a nebulous concept, and the same applies to achieving a nuclear stalemate. Pondering these puzzles always leads to the question of how much is enough. This research posits that the answer to this question is only tricky when there are constraints that present limits. In the case of China, the only limits it has in expanding its nuclear arsenal and capability are those that are self-imposed. For Bernard Brodie, the limit to how many weapons a state should produce depends upon how much it can afford, and China certainly has deep pockets.[105] To be clear, if China laid out plans to build tens of thousands of weapons, it would catch the international community's ire. Building to parity with the other great powers will certainly rankle its adversaries but will not hinder China's international standing in any appreciable way.

Whether it possesses one or 3,000 warheads, China could still legitimately claim a NFU policy and minimum defense, and it has already proven that any global disapproval will do little to impede its progress. China built militarized islands in the South China Sea, and all it received was condemnation and sanctions. Meanwhile, the islands are still there, complete with runways and anti-access and area denial (A2AD) capability. Nuclear weapons are a unique entity, but by rationalizing them as defensive and avoiding an aggressive nuclear policy, China can avoid world condemnation. Finally, China is not beholden to any nuclear arms limitation treaties, so why would it not build up its arsenal to match the other superpowers?

China's nuclear buildup effectively expands the confines of their conventional battlespace and serves as a security blanket that comforts and nominally protects the other rings of its defense and its broader strategic interests. A modest stockpile does not necessarily achieve this strategic deterrent effect. In February of 2022, Russia launched a baseless invasion against the sovereign country of Ukraine while the world looked on. The United States not only refused to get its forces involved, but it prevented other countries from providing major arms and capabilities it deemed as escalatory. In 1990 the United States did not hesitate to take on Iraq's army to liberate Kuwait even though Iraq, at the time, had the fifth-largest army in the world. Russia's army is currently the fifth largest in the world and proved conventionally inept in taking on a numerically inferior Ukrainian force.[106] The big difference between the two is that Iraq had zero nuclear weapons and Russia has thousands.

President Biden has repeatedly said he does not want to start World War III, and his calls for Russian regime change were immediately downplayed by his staffers and criticized by western leaders. Moreover, during the buildup to Russia's invasion of Ukraine, the great countries of the world all resigned themselves to a presumptive foregone conclusion that if Russia chose to invade, it would quickly conquer Ukraine. Sure, there was universal condemnation, but the general fatalism was striking. None of these countries were willing to get involved during Russia's buildup to invasion, and it was not until Ukraine launched an effective resistance that the world attempted to help in a meaningful way. Would there be as much tiptoeing and scrutiny if Russia did not possess a massive nuclear arsenal? Probably not, because nuclear weapons matter and, despite the debate of how many are enough, in a conflict involving a significant risk of escalation, more will speak louder than less. Even if more does not ultimately prove better, what country with the resources to amass an arsenal and aspirations of greatness is willing to risk those odds?

Inadvertent assured destruction

Any mention of the word "destruction" in relation to a nuclear posture is sure to conjure up comparisons to the much-maligned mutually assured destruction (MAD) posture, infamously associated with the Cold War. Inadvertent assured destruction is different in that it asserts that the Chinese do not seek a traditional assured destruction posture, but because of the external perception of its behavior, their posture will appear capable of assured destruction. Though the Chinese intended to send an ever-stronger retaliatory signal of capability and resolve, their intention could easily disappear among the existential threat it presents. Instead of simply assuring a modicum of re-

taliation in response to an attack, it promises the potential to inflict massive damage on the attacker, with the capability to "terrify and frustrate the goals of even highly risk-acceptant leaders during a high-stakes crisis."[107] Additionally, according to Brad Roberts, China's deterrence experts have given little thought to the perils of inadvertent escalation, which may explain its aggressive behavior.[108]

"Inadvertent" in the context of inadvertent assured destruction delineates that it is not China's intent to achieve such a posture. However, due to fear of tech lag and the momentum of norming behavior, it's unwittingly getting pushed in that direction. Because states care more about what damage an adversary can credibly inflict with its arsenal, the fact that China claims a minimum defense and NFU policy is of little consequence.[109] If China does increase its nuclear arsenal to over 1,000 warheads by 2029, as the DOD is forecasting, the United States cannot continue to interpret its posture as assured retaliation. The United States must err on the side of caution, and there is a common tendency to see states as more hostile than they are.[110] China may claim it is the victim of a security dilemma, but the United States must recognize the fundamental difference between facing 300 nuclear warheads versus 1,000. USSTRATCOM commander, Admiral Richard, in his April 2021 testimony to the House Armed Services Committee, described China's recent nuclear developments as a "breathtaking" expansion."[111] The seeds of an assured destruction posture are germinating, and it does not matter where China's intentions lie because the United States has formed its perception.

Implications and Conclusion

Meet the new cold war, not the same as the old cold war

If the estimates come to fruition, the United States will face the formidable task of deterring two nuclear peers by 2030.Individually, China and Russia will have arsenals capable of inflicting massive destruction on the United States. Many scholars, such as Li Bin, claim that China does not seek nuclear parity with the United States.[112] Why would China not build to parity when it holds the moral high ground, compared to the US retort of "do as I say and not as I did?" Christopher Twomey states that China's nuclear policy will continue to evolve for three reasons. First, China's arsenal has grown more over the past decade than any of the other five established nuclear powers. Second, it has diversified its delivery systems. Finally, China is surrounded by four other nuclear powers while still deterring the United States.[113] The evidence

and incentives illustrate that China benefits more from maintaining a robust nuclear arsenal than not. If this logic holds true, coupled with its staggering rise across the DIME, some foresee a new cold war developing, albeit with Chinese characteristics.

A cold war requires a stalemating mechanism, and nuclear weapons have quite the pedigree in fulfilling that role. Nuclear parity does not guarantee the premise of the stability-instability paradox, but it is a critical component. The basis of the stability-instability paradox describes how the strategic balance between nuclear nations creates the tolerance and thus instability of violence at lower levels of conflict.[114] Tolerance of violence at lower levels is born out of the fear of escalation to the nuclear level, and strategic stalemate is the fruit of the paradox. The aggregate of a stalemate is not necessarily created equal across occurrences. In other words, the respective elements that kept the Cold War cool may react differently in the new cold war. The strength of Sino-US strategic stability is only as strong as the cohesion of elements that form its foundation. John Mearsheimer highlights China's greater capabilities, prevalent nationalistic ideology, regional ambition, and entangled geography as reasons why a Sino-US Cold War is more likely to turn hot compared to its US-Soviet predecessor.[115] The increased potential for volatility in the new cold war will require a comprehensive effort to mitigate the repercussions of misperception from both sides. While the Cold War can inform this effort, it must not dictate it. The one obvious truth from the Cold War is that it did not resolve itself until both sides came together to perceive the others' perceptions. Until that happens, both sides are mere pawns of the security dilemma.

The art of rejuvenation

According to Zong Ai, "Mao Zedong's nuclear thinking continues to serve as the basis of the nuclear policy of successive Chinese administrations."[116] Nevertheless, assuming or hoping Xi Jinping will continue the minimum nuclear posture of his predecessors is imprudent. Accordingly, Jervis foreshadows the perils of China's infamous patience in his "3rd Hypothesis on Misperception." He explains that an actor's established image of another actor can absorb antithetical data concerning that image (without altering the established perception of the image) as long as it is transmitted bit by bit over time rather than all at once.[117] The potential consequence of this occurrence in the context of great power competition is a Chinese *fait accompli* in the spirit of Sun Tzu's edict that the pinnacle of skill is to subdue the enemy without fighting.[118] Although unprecedented in scope and scale, China's rise happened methodically over decades, not overnight.

To win without fighting means raising the stakes to the point that the resultant risk becomes untenable to the adversary. Once risk reaches these levels, the possibility of even limited conventional conflict symbolizes a catalyst capable of releasing unrestricted escalation. Thomas Schelling described such limited war as rocking the boat or "to set in motion a process that is not altogether in one's control."[119] China is maximizing risk manipulation and making it an iterative process as seen through the building of its economy, technological revolution, Belt and Road Initiative (BRI), the building of militarized islands, and now the modernization and rapid expansion of its nuclear arsenal. As secretive as China has been about its methods, its goals are quite clear, and the efforts mentioned above demonstrate the lengths it is willing to take to realize those objectives. The concluding sentence of China's Ministry of Defense 2019 whitepaper states that China's armed forces "stand ready to provide strong strategic support for the realization of the Chinese Dream of national rejuvenation, and to make new and great contributions to the building of a community with a shared future for mankind."[120] Endeavors that require "strong strategic support" imply plans to disrupt the status quo. Therefore, China's dream presages another's nightmare. China is prepping the battlefield on a grand scale of space and time while the United States hopes that China will conform to the liberal world order, but modern China is not the Soviet Union. China is effectively making itself immune to US coercion.

Utility is in the eye of the beholder

In its oft-cited 2013 Science of Military Strategy, the PLA lists *expansion of the train of thought* as a key nuclear deterrence tactic it must develop. The description of this *train of thought* explains that the object is to make the opponent *truly believe and truly fear* China's nuclear forces.[121] Indeed the United States fears that any harsh response, any loose pebble, or gust of wind may drag it over the brink.[122] Meanwhile, China has set the conditions and embraced the stalemate it continues to fortify, seemingly unconcerned or unaware of its associated antagonistic signaling.

To put this all into perspective, consider the most plausible Sino-US conflict scenario. China is clear that it seeks reunification with Taiwan, and a forceful attempt towards that end is the most likely reason armed conflict could erupt between the United States and China. If China has 1,000 nuclear warheads at its disposal, will that make the United States more or less confident that the theory of nuclear taboo will hold firm in the face of an issue China undoubtedly views as existential? Is the United States more or less likely to engage in a limited conventional war with China under this scenario?

What is the best course of action for the United States or the world in this scenario? Russia's invasion of Ukraine may provide an analogous place to look for answers or, at the very least, sow doubt in steadfast declarations of resolve in the face of possible assured destruction.

Conclusion

China has always seen the atomic bomb as a stalemating tool, but its ambition has outgrown the utility of a minimum deterrent or even an assured retaliation posture. Considering China's recent nuclear modernization and expansion of its arsenal, the practicality of an assured retaliation posture clashes with its goals and the future security environment that those aims foreshadow. China continues to espouse a NFU policy and minimum defense, but both are susceptible to context and misperception. Indeed, China may believe its posture aligns with its rhetoric but driven by its insatiable appetite for technology and an inherent desire for great power status, China's actual nuclear capability is rapidly assuming an assured destruction posture. Since Mao first decreed the role of China's nuclear program, the cost of preventing nuclear blackmail has risen exponentially, and the risk of not doing so endangers all it has overcome and all it still hopes to achieve.

In October 1998, consider for a moment that Deng Xiaoping said "If China hadn't had the atomic bomb, the hydrogen bomb, if we hadn't launched satellites, it couldn't be said that China is an influential great power. We wouldn't occupy our present international position . . . . China cannot afford to fall behind. China cannot afford not to be engaged in spite of the fact that we are poor. Because if you aren't engaged, if you don't develop in these areas, the gap will only become greater and extremely difficult to catch up."[123] Deng succinctly summarizes the argument put forth in this research. China needs to expand its nuclear arsenal because it cannot allow itself to lag technologically, and a robust nuclear arsenal further legitimizes its international standing.

There is a tendency to interpret an adversary's intent as more hostile than it is, but assumptions will fill the void in the absence of meaningful dialogue.[124] China certainly views US BMD as antagonistic, and the United States interprets China's nuclear modernization and expansion as escalatory. The United States has had no luck in getting China to discuss its nuclear weapons programs or clarify the reasoning behind its latest provocations. China has expressed no interest in entering arms control talks, instead choosing to point out the paucity of its arsenal in comparison to the United States and Russia and thus downplaying its threat. China's dismissive response to participating in nuclear talks belies China's aggrandized declaratory nuclear policy. If China

will "not engage in any nuclear arms race with any other country," why will it not explain or defend itself against accusations of that nature?[125] This research has proposed that China does not explain itself because it wants to wear the veil of innocence while flashing its teeth. It wants the ability to portray both persons as depending on the situation and the observer. China wants its adversaries to see it as menacing while others see its benevolence. These portrayals are not up to China to interpret. China's understanding of a minimum defense spells an existential threat to another. Consequently, in pursuing a nuclear stalemate, China's fear of tech lag and its embrace of normative great power behavior is forcing it to inadvertently adopt an assured destruction posture. The United States and the world will have to confront this posture for what it threatens versus what China declares.

Notes

(Notes appear primarily in shortened form. For full details, see the appropriate entry in the bibliography.)

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5. Feng, "China Officials Share Viral Video."
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7. Fravel and Medeiros, "China's Search for Assured Retaliation," 49.
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49. Yoshihara and Holmes, *Strategy in the Second Nuclear Age*, 57.
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56. Shambaugh, *China and the World,* 164.
57. Xi, "Secure a Decisive Victory," 9.
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Abbreviations

A2AD	anti-access and area denial
ASAT	anti-satellite
BMD	Ballistic Missile Defense
BRI	Belt and Road Initiative
C^4ISR	command, control, communications, computers, intelligence, surveillance, reconnaissance
CCP	Chinese Communist Party
CMR	civil-military relations
DIA	Defense Intelligence Agency
DIME	diplomatic, information, military, and economic instrument
DOD	Department of Defense
ERW	enhanced radiation weapon
FAS	Federation of American Scientists
FOBS	fractional orbital bombardment system
HGV	hypersonic glide vehicles
ICBM	intercontinental ballistic missile
IISS	International Institute for Strategic Studies
MAD	mutually assured destruction
NFU	no first use
PLA	People's Liberation Army
PLAAF	PLA Air Force
SLBM	submarine-launched ballistic missile
STRATCOM	Strategic Command

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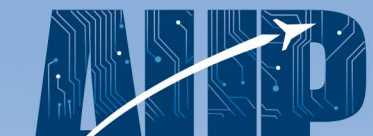

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