
STRATEGIC STABILITY VS. STRATEGIC PRIMACY: PREDICTING CHINA'S RESPONSE TO THE 2018 U.S. NUCLEAR POSTURE REVIEW

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As the US nuclear posture continues to evolve, so does China's response to it. The US-China rivalry is redefining nuclear crisis stability in the region, and Beijing's reaction to the latest changes to US nuclear policy proposed in the 2018 US Nuclear Posture Review (NPR) has the potential to impact regional and international security for decades. While much has been written on American and Chinese nuclear strategy, little research has attempted to combine the two to explain this transformative document or the two concepts that define them. By conducting a comparative analysis of both American and Chinese interpretations of the terms "strategic stability" and "strategic primacy," this paper attempts to shed light on the question, "How does China perceive the NPR and what set of actions might Beijing take in response?" This analytical framework presents scholars with a contemporary perspective on China's perception of the report and facilitates discussion on Beijing's most likely course of action. The paper argues that China perceives the proposed changes as a threat to the viability of its nuclear deterrent and interprets them collectively as US pursuit of strategic primacy. Findings suggest China will continue to expand its nuclear and military capabilities, bridge the technological gap between the two, and return the powers to a temporary period of Beijing-defined strategic stability.

Keywords: *Nuclear Deterrence, Crisis Stability, Strategic Stability, Strategic Primacy, Nuclear Posture Review, United States, China*

List of Abbreviations

ATA – Annual Threat Assessment (report)
ALCM – Air-launched cruise missile
BMD – Ballistic missile defense

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C4ISR – Command, control, communications, computers, intelligence, surveillance & recon

CCP – Chinese Communist Party

ECS – East China Sea

EMP – Electromagnetic pulse (weapon)

GBSD – Ground-based strategic deterrents

ICBM – Inter-continental ballistic missile

INF – International Nuclear Forces (treaty)

MAD – Mutually assured destruction

MDR – Missile Defense Review (report)

MIRV – Multiple independently targetable reentry vehicle

NFU – No-first-use (policy)

NPR – Nuclear Posture Review (report)

NC3 – Nuclear command, control, and communications

PLA – People's Liberation Army

POTUS – President of the United States

SLBM – Submarine-launched ballistic missile

SLCM – Submarine-launched cruise missile

SSBN – Nuclear-powered ballistic submarines

Introduction

The 2018 US Nuclear Posture Review (NPR) is a document of significant importance to those countries it singles out as adversaries, such as China, and how Beijing perceives and responds to the Trump administration's nuclear policy will play a role in redefining what constitutes a strategically stable security environment in East Asia. These definitions are critical toward maintaining crisis stability in the region, which describes the optimal scenario in which both parties are deterred from using nuclear weapons during crisis. Perhaps most crucially, China's behavior will shape the future of regional and international security. Should Beijing attempt to either accommodate or ignore the administration's nuclear policies, objectives, or strategy, China risks jeopardizing the effectiveness of its own nuclear deterrence. Chinese strategists and scholars argue that such a miscalculation would undermine the strategic stability upon which mutually assured destruction (MAD) rests. On the other hand, should Beijing decide to oppose the NPR, its actions may indeed return the two powers to a period of temporary Beijing-defined strategic stability, only to antagonize neighbors or set off a region-wide arms race. Understanding China's perception of America's chief nuclear policy document is the first step toward developing a solution that addresses the threat to crisis stability.

The Pentagon released the NPR to a cold reception from major powers, nuclear

experts, and academics from around the world.¹ Indeed, several US senators opposed aspects of the NPR; sixteen senators wrote in an open letter to President Trump that “creating new nuclear capabilities and widening their possible use constitute an increase in America’s nuclear war-fighting capacity that will pressure other nuclear weapons states to follow suit.”² This chilly reception can be attributed to three controversial proposed changes found within the lines of the nearly 100-page report: 1) the enlargement and comprehensive modernization of the nuclear triad; 2) the reintroduction of limited nuclear warfare into US nuclear deterrence strategy via low-yield nuclear weapons; and 3) the potential expansion of the conditions under which nuclear weapons may be employed. These proposed changes in America’s nuclear posture will not only have an impact on US-China relations, but also on regional and international security.

Critics of the 2018 NPR argue that enlarging the US nuclear stockpile will undo decades of international nonproliferation efforts, modernizing nuclear forces will antagonize Beijing and accelerate China’s military modernization, and introducing low-yield nuclear weapons might lower the threshold for nuclear war – all of which could undermine crisis stability.³ Certainly, the recent death of the Reagan-era International Nuclear Forces (INF) Treaty⁴ and the doubt surrounding the future of Obama-era New START treaty⁵ only exacerbate these concerns. Proponents of the NPR, on the other hand, cite “aggressive” behavior from China and Russia⁶ as evidence that the US must expand its capabilities to meet the threat they pose. Others agree with the NPR’s contention that America’s strategic superiority over these adversaries in fact decreases the risk of miscalculation, thereby sustaining crisis stability, saving lives, and enhancing national security.⁷ Regardless, a lack

1 John Mecklin, “The Experts on the New Nuclear Posture Review,” *Bulletin of the Atomic Scientists*, February 2, 2018 (See ‘invited expert commentary’), <https://thebulletin.org/2018/02/the-experts-on-the-new-nuclear-posture-review/>.

2 Kingston Reif, “Trump Seeks Expanded Nuclear Capabilities,” *Arms Control Association*, March 01, 2018. <https://www.armscontrol.org/act/2018-03/news/trump-seeks-expanded-nuclear-capabilities>.

3 Alan Kuperman, “A Nuclear Weapon That Could Change Everything: Don’t Allow Low-yield Atomic Warheads to Be Deployed,” *NY Daily News*, March 09, 2019, <https://www.nydailynews.com/opinion/ny-oped-a-nuclear-weapon-that-could-change-everything-20190307-story.html>.

4 Ankit Panda, “After the INF Treaty: US Plans First Tests of New Short and Intermediate-Range Missiles,” *The Diplomat*, March 14, 2019, <https://thediplomat.com/2019/03/after-the-inf-treaty-us-plans-first-tests-of-new-short-and-intermediate-range-missiles>.

5 Aaron Mehta, “One Nuclear Treaty Is Dead. Is New START Next?” *Defense News*, October 24, 2018, <https://www.defensenews.com/pentagon/2018/10/23/one-nuclear-treaty-is-dead-is-new-start-next>.

6 Michaela Dodge, “Trump’s Plan to Protect America’s Nuclear Capabilities,” *National Interest*, February 16, 2018, <https://nationalinterest.org/feature/trumps-plan-protect-americas-nuclear-capabilities-24529>.

7 Aaron Miles, “Keep US Nuclear Options Open to Avoid Using Them,” *National Interest*, September 3, 2018, <https://nationalinterest.org/feature/keep-us-nuclear-options-open-avoid-using-them-30242>.

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of mutual understanding on key security concepts, such as strategic stability, may end up sending the two powers careening toward conflict. Without a mutually agreed upon definition, a growing risk of miscalculation has the potential to lead to escalatory actions neither can manage.

An exploration of the NPR's three major changes through a comparative analysis between the two country's understanding of strategic stability and strategic primacy, based on their respective nuclear strategies, will help answer the question: "How does China perceive the NPR, and what actions might Beijing take in response?" In answering these questions, the paper finds that China perceives the NPR as a threat to its nuclear deterrence strategy and identifies the problem as stemming from contradictory definitions regarding what constitutes a stable nuclear security environment (strategic stability). The findings suggest China will oppose the NPR's proposed changes by expanding its nuclear and military capabilities, most likely in an attempt to neutralize the threat they pose and return the status quo back toward Beijing's own definition of strategic stability.

The significance of this research lies in its timely comparative analysis, its updated presentation of two security concepts as understood from the Chinese strategic community's perspective, and its identification of an important area of future research. The paper is organized into an introductory primer on the relationship between the NPR and Chinese nuclear strategy for introduction into scholarly debate. Finally, this paper is also a direct response to an area of further research identified in "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability," one of the most contemporary and impactful pieces of research on the subject. In their pathbreaking article, China security experts Fiona Cunningham and Taylor M. Fravel identify the divergence of Chinese views on US intentions as well as the effect of US Strategic developments on China as an area of required analysis.⁸

The following paper is organized as follows: First, the analytical framework of the paper will be outlined, and the definitions of strategic stability and primacy established. Second, the 2018 NPR will be unpacked, and its three major changes will be examined. Third, the nuclear strategies of both the US and China will be explored through relevant literature, and the concepts of strategic stability and primacy, analyzed. Fourth, the NPR's three changes will be analyzed from China's perspective. Finally, Beijing's most likely course of action is identified, followed by an exploration of practical implications and future areas of research.

Analytical Framework

To determine China's perception of the 2018 NPR, the terms strategic stability and

8 Fiona Cunningham and Taylor M. Fravel, "Assuring Assured Retaliation: Chinas Nuclear Posture and U.S.-China Strategic Stability," *International Security* 40, no. 2 (2015): 7-50, doi:10.1162/isec_a_00215, 48-49.

strategic primacy as defined by both American and Chinese strategic communities – that is, the collection of scholars and practitioners primarily concerned with nuclear and military strategy (government leaders, scholars, researchers, strategists, analysts, generals, planners etc.) – should first be established. There are several reasons for employing these two concepts. First and foremost, strategic stability is a key element of nuclear deterrence strategy. Consequently, it is central to both US and Chinese deterrence. It follows that understanding how the two country’s definitions differ provides insight into their behaviors, motivations, ambitions, and intentions.

Second, the 2018 NPR lays out US logic regarding what constitutes a strategically stable security environment. Consequently, the three major changes proposed in the report stem from this definition and will play a pivotal role in the development of crisis stability between the two powers. However, in many Chinese and American security circles,⁹ America’s definition of strategic stability is increasingly characterized as strategic primacy (used interchangeably with ‘superiority’ in many texts). Understanding China’s perspective on strategic primacy assists in understanding a number of issues, from China’s perception of the NPR to the country’s evolving nuclear capabilities and underlying motivations. Exploring the difference between Chinese and American interpretations of strategic primacy offers insight into how each country seeks to maintain crisis stability. In the case of China, strategic primacy illustrates Beijing’s anxieties and concerns and will help explain their understanding of the 2018 NPR.

Furthermore, assessment of China’s perception on the 2018 NPR still lacks an established body of critical literature. To account for this limitation, a brief examination of the philosophies that underpin American and Chinese nuclear strategy acts as a bridge to connect the two concepts to their respective country’s contemporary nuclear strategy. Examination of the two power’s strategies suggests a uniquely Chinese understanding of strategic stability and primacy – wholly unlike America’s understanding of the terms. A comparative analysis of these updated concepts, therefore, provides an apt framework through which to assess the perceptions and intentions of China’s strategic community regarding the three major changes in the NPR, building a case for Beijing’s likely response.

Strategic Stability

James M. Acton, an expert on nuclear policy and senior fellow at Carnegie Endowment for International Peace, defines strategic stability as the “absence of

9 For a comprehensive look into American and Chinese assessments of the US nuclear posture, see Cunningham and Fravel “Assuring Assured Retaliation: China’s Nuclear Posture and U.S.-China Strategic Stability,” *International Security* 40, no. 2 (2015) and also: Li Bin “Understanding Chinese Nuclear Thinking: Differences Between Chinese and U.S. Nuclear Thinking and Their Origins,” Carnegie Endowment for International Peace, 2015.

incentives to use nuclear weapons first (crisis stability) and the absence of incentives to build up a nuclear force (arms race stability).¹⁰ This flexible, multidimensional definition provides a useful foundation for understanding American and Chinese understandings of the term as well as demonstrates succinctly the difficulty of achieving consensus. Ironically, both powers can comfortably fit their opposing definitions within the boundaries of Acton's definition. The United States believes strategic stability lies in a world where "a war that can never be won, is never fought."¹¹ Ergo, denying adversaries the ability to win a nuclear confrontation eliminates incentives to either use or build up one's nuclear arsenal.

Similarly, China's nuclear deterrence strategy aims to limit incentives for nuclear weapons use or arms buildups, too. However, China's methods for achieving this differ. Beijing seeks to establish mutual vulnerability with the US – that is, a situation in which both possess effective second-strike capabilities. In other words, China hopes to ensure that mutually assured destruction remains mutual. Nuclear policy and security expert Li Bin explains China's blueprint for achieving that: "if China is susceptible to attack, there is no longer strategic stability. Therefore, if China develops new tech and applies them to military affairs with a rival which whom it lacks the equivalent technology, the strategic stability between the two will improve and vice versa."¹²

Two factors, therefore, threaten to undermine Beijing's definition of strategic stability, tipping the balance in favor of one state's ability to launch an effective second-strike: technological developments and nuclear forces survivability. First, Beijing has long recognized its technological disadvantages and has sought to catch up to modern nuclear powers in terms of the quality of its nuclear arsenal. As a result, China believes its efforts to finally achieve an effective deterrent simply balances an imbalanced security situation – one in which the US enjoys all-around superiority. Second, China must protect and maintain the efficacy of its second-strike capabilities or it leaves itself vulnerable to attack.

Strategic Primacy

In their article on China's perception of the US nuclear posture, scholars Fiona Cunningham and Taylor Fravel assert that the US has committed to a nuclear posture of "strategic primacy."¹³ Strategic primacy, according to Cunningham and Fravel, describes the situation in which a country "can insulate itself from the retaliatory

10 James M. Acton, "Reclaiming Strategic Stability," Carnegie Endowment for International Peace, <https://carnegieendowment.org/2013/02/05/reclaiming-strategic-stability-pub-51032>.

11 U.S. Department of Defense (2018), 16.

12 Li Bin, "Understanding Chinese Nuclear Thinking: Differences Between Chinese and U.S. Nuclear Thinking and Their Origins," Carnegie Endowment for International Peace, https://carnegieendowment.org/files/ChineseNuclearThinking_Final.pdf, 15.

13 Cunningham and Fravel, "Assuring Assured Retaliation," 9-10.

nuclear strike of an adversary.”¹⁴ Not to be confused with the oft used expression “numerically superior,” strategic primacy refers to the comparatively greater impact US nuclear forces can survive (and unleash) in a comparatively greater number of scenarios. In practice, this means the country in question must maintain nuclear, conventional military strike, C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) and BMD (ballistic missile defense) capabilities superior enough to deter adversaries in any conceivable scenario. These capabilities encompass five attributes the NPR is designed to ensure: survivability, penetration, prompt response, visibility, and diverse nuclear options.¹⁵

In the context of the US-China rivalry, strategic primacy describes the US pursuit of nuclear and conventional military capabilities so overwhelming that it removes all benefit from China’s cost-benefit analysis regarding retaliation. The result of this primacy essentially insulates the US from China’s retaliatory capabilities. However, such superiority, according to Chinese scholars like Bin, undermines China’s ability to ensure MAD,¹⁶ which requires a degree of mutual vulnerability. Strategic primacy, from the view of Chinese analysts, is the US pursuit of absolute security, which ensures “one’s own security at the expense of others and thereby [escapes] mutual vulnerability.”¹⁷ Consequently, China is primarily concerned with the survivability of its nuclear forces and Beijing is deeply concerned by a perceived intent on America’s side to remove Beijing’s second-strike capabilities, rendering its nuclear deterrent impotent. American experts at think tanks like RAND also assess that Chinese leadership likely sees US pursuit of strategic superiority as a way of containing China.¹⁸

The 2018 US Nuclear Posture Review

NPR Goals and Objectives

The NPR is the United States’ primary national security statement on nuclear policy. The purpose of the review, commissioned by the President of the United States (POTUS), is threefold. First, the NPR articulates the role and status of the nation’s nuclear weapons. Second, it announces the current presidential administration’s assessment of the international security environment. Finally, the document acts as a report to congress outlining the administration’s overall nuclear strategy, how it seeks to address nuclear-related security concerns, and proposals to carry that strategy out. The NPR, much like the Director of National Intelligence’s Annual

14 Ibid, 10. See: Kier A. Lieber and Daryl G. Press, “The New Era of Nuclear Weapons, Deterrence, and Conflict,” *Strategic Studies Quarterly*, Vol. 7, No. 1 (Spring 2013), pp. 3–12, at p. 5.

15 Aaron Miles, “Keep US Nuclear Options Open to Avoid Using Them.”

16 Bin, “Understanding Chinese Nuclear Thinking,” 15.

17 Cunningham and Fravel, “Assuring Assured Retaliation,” 15.

18 Michael S. Chase and Arthur Chan, “China’s Evolving Approach to “Integrated Strategic Deterrence,” RAND (2016), 48.

Threat Assessment (ATA) and the Department of Defense's Missile Defense Review (MDR), is meant for foreign adversaries as much as it is the American public. Far away from being a collection of tenuous proposals, these documents are guides to US plans and intentions that adversaries take very seriously. Many of the actions proposed in these reports are already well underway or near completion. For example, the Trump administration is starting production on a low-yield submarine-launched ballistic missile (SLBM)¹⁹ and will begin testing intermediate-range ballistic missiles (IRBM) Summer 2019.²⁰

In particular, the 2018 NPR has proven to be significant in several ways. The document announced intentions to reinvigorate the comprehensive modernization of the nuclear triad, expand definitions for the use of nuclear weapons, and hints at the potential reintroduction of nuclear war-fighting tactics into the nation's nuclear posture. These changes are introduced against the backdrop of what the Trump administration perceives to be a resurgence of "great power competition" in international affairs—a hostile trend it sees as a leading cause behind the increasingly uncertain security environment the country finds itself in.²¹ In response to these challenges, the NPR seeks to provide the POTUS with a wide range of flexible nuclear capabilities to address threats.²² However, in the process of doing so, the 2018 NPR is transforming US nuclear deterrence strategy in far-reaching ways.

US Nuclear Deterrence Strategy & Philosophy

Former US Secretary of Defense James N. Mattis revealed the fundamental logic behind the current administration's US nuclear thought when he observed that "a safe, secure, and effective nuclear deterrent is there to ensure a war that can never be won, is never fought."²³ This type of deterrence logic is based upon the works of scholars like Glenn H. Snyder and Andre Beaufre in the 1950's and 1960's, which aims to "deny potential aggressors even a wishful-thinking belief that it has a strategy... than can achieve its goals at low risk and cost."²⁴ In other words, a superior nuclear arsenal—that is, qualitative nuclear superiority across the triad—prevents war and a nuclear deterrence strategy based on this concept will save lives.²⁵ The objectives of the strategy are five-fold. Consistent with previous NPRs, the 2018 iteration declares the highest priority of US nuclear policy and strategy to

19 Kuperman, "A Nuclear Weapon That Could Change Everything."

20 Panda, "After the INF Treaty."

21 "2018 Nuclear Posture Review - U.S. Department of Defense,"

<https://www.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx>, 2.

22 U.S. Department of Defense (2018), II.

23 Ibid, 16.

24 André Beaufre, *Deterrence and Strategy*, New York: Praeger, 1965, 53. See also Glenn H. Snyder's *Deterrence by Denial and Punishment*, Center of International Studies, 1959.

25 U.S. Department of Defense (2018), 16-17.

deter nuclear attacks.²⁶ According to the report, US nuclear forces are also designed to deter non-nuclear attacks, assure allies and partners, achieve US objectives if deterrence fails, and most recently, hedge against an uncertain future.²⁷

The US government aims to achieve these deterrence objectives by influencing a potential adversary's "calculations of the prospective benefits of aggression" or limited nuclear escalation. The underlying belief is that adversaries will be less likely to see an advantage to nuclear weapons use if American nuclear forces are strategically superior.²⁸ The US seeks to achieve strategic primacy by maintaining conventional military strike, C4ISR, BMD, and nuclear forces superiority. Regarding the conditions for nuclear use, the NPR states that America will only resort to nuclear weapons use in extreme circumstances to deter aggression, maintain peace and "protect vital U.S. and allied interests."²⁹

NPR's Three Major Changes

The 2018 NPR proposes three major changes that great powers, especially China, will find of major consequence. These changes include: 1) calls for a more vigorous modernization of US nuclear forces than the program initiated by the Obama administration in 2010, one which increases the country's nuclear stockpile; 2) plans to reintroduce increased levels of diversified 'non-strategic' tactical nuclear weapons, which potentially reintroduce nuclear war-fighting tactics into US nuclear deterrence strategy; and 3) a possible expansion of the number of scenarios under which America may conceivably consider using nuclear weapons.

Comprehensive Modernization of Nuclear Forces

First, President Donald Trump remarked on February 12, 2018 that the US would need to modernize and expand its nuclear arsenal because other countries were doing the same.³⁰ The president followed this comment by stating the US would create a new nuclear force superior to and in excess of all others, proclaiming: "We will always be number one in that category, certainly as long as I'm president."³¹ The president's comments provide a context and rationale for the NPR's call for a renewed nuclear force modernization effort; in order to protect itself and assert its power, the country must maintain absolute nuclear primacy and remain "number

26 Ibid, 20.

27 Ibid, VII.

28 Ibid, VII.

29 Ibid, 2.

30 Emily Shugerman, "Trump Says He Will Expand US Nuclear Arsenal 'far in Excess of Anybody Else'," *The Independent*, February 12, 2018, <https://www.independent.co.uk/news/world/americas/us-politics/donald-trump-nuclear-arsenal-force-us-military-weapon-a8207586.html>.

31 Ibid.

one.”

The NPR outlines its modernization goals as follows: to “sustain and replace its nuclear capabilities, modernize NC3 (nuclear command, control, and communications), and strengthen the integration of nuclear and non-nuclear military planning.”³² Efforts include upgrading the nuclear triad to include new and diversified SLBMs (submarine-launched ballistic missiles), ICBMs (inter-continental ballistic missiles), and ALCMs (air-launched cruise missiles); COLUMBIA-class SSBNs (nuclear-powered ballistic submarines); GBSDs (ground-based strategic deterrents); B-21 Raiders, B61-12 gravity bombs; and affixing nuclear capabilities to F-35 and other aircraft.³³ It is important to note that the Trump administration does not break with the previous administration in terms of its desire to modernize the country’s aging nuclear forces. Experts agree this is necessary.³⁴ Instead, they differ in terms of the scope and end goal of modernization. Where the 2010 NPR sought to decrease stockpiles and limit the types of weapons the US employed, for example, the 2018 NPR abandons these goals completely.³⁵

Expanding Low-yield Nuclear Options

Second, the NPR announced intentions to expand US nuclear options to include increased levels of low-yield (smaller explosive power) tactical nuclear weapons with more diverse delivery systems (such as the SLMBs currently in production). The NPR states that expanding these nuclear options are critical to credible deterrence because they raise the nuclear threshold—the point at which conducting nuclear warfare becomes more difficult and less advantageous—by denying adversaries any advantage in the event of limited nuclear escalation.³⁶ The report explains that this proposed action is in direct response to US adversary’s expanding capabilities, which favor limited nuclear escalation and non-nuclear strategic warfare.³⁷ “Non-nuclear” strategic attacks here likely refers to new theaters of conflict, such as cyber warfare, in addition to biological and chemical warfare. The NPR argues that the existence of new tactical nuclear weapons will “counter any mistaken perception of an exploitable ‘gap’ in U.S. regional deterrence.”³⁸ These changes will have a significant impact regionally and, as the NPR states, specifically in Asia, where they are designed to assure allies like South Korea and Japan.³⁹ The US aims to strengthen extended deterrence by modifying SLBM and SLCM warheads with low-

32 U.S. Department of Defense (2018), VIII.

33 Ibid, 10.

34 Cheryl Rofer, “Evaluating the Nuclear Posture Review,” *Physics Today*, January 29, 2018, <https://physicstoday.scitation.org/doi/10.1063/PT.6.3.20180209a/full/>.

35 Ibid.

36 U.S. Department of Defense (2018), 54.

37 Ibid, 17.

38 Ibid, XII.

39 Ibid, XII.

yield nuclear options.⁴⁰

Because low-yield nuclear weapons are designed for deployment in limited nuclear conflicts, their existence provides the US with limited nuclear warfare capabilities and the ability to participate in limited or theater nuclear war. The administration would likely refute the notion that capability alone reflects an active war-fighting strategy. At the very least, the administration is relying on the implication of limited nuclear war to reinforce its nuclear deterrence strategy. Consequently, the US has moved toward, instead of away from, a nuclear war-fighting strategy – a move that concerns many experts and US senators. As mentioned previously, the NPR justifies this proposal by pointing out that its adversaries possess or are developing these capabilities.

Expanded Definition for Nuclear Weapons Use

Finally, the NPR potentially expands upon the definitions of previous NPRs regarding the conditions required to justify the use of nuclear weapons. The 2010 NPR produced under the Obama administration reaffirmed previous administration’s declarations that nuclear weapons could only be used in extreme circumstances to defend US and allied vital interests as well as to deter nuclear and extreme non-nuclear attacks, with the overall goal of US nuclear policy to eventually achieve “sole-purpose” nuclear deterrence⁴¹ (sole-purpose refers to the idea that a country will only use nuclear weapons to deter nuclear—a principle tantamount to China’s “no-first-use” policy). The US has consistently perceived, however, that a sole-purpose declaration would weaken its ability to deter by removing ambiguity that might otherwise dissuade miscalculation.⁴² In other words, by promising to never use nuclear weapons unless attacked with them first, potential foes could launch conventional or asymmetrical attacks (conventional bomb, cyber, biological, chemical attacks or even a military invasion) of equal or greater destruction without fear of nuclear retaliation. Adversaries, the US argues, might take advantage of such a policy, thereby inviting threats, encouraging escalation, and increasing the change of conflict. Conversely, lack of a sole-purpose policy implies that nuclear weapons might always be on the table. This form of strategic ambiguity aims to dissuade attack and is a core element of American and Russian nuclear postures. In this regard, the 2018 NPR differs in two significant ways. First, the document includes a caveat for the use of nuclear weapons in the event of “significant non-nuclear strategic attacks” which include “attacks on the U.S., allied, or partner civilian population or infrastructure, and attacks on U.S. or allied nuclear forces,

40 Ibid, XIII.

41 “2010 Nuclear Posture Review - U.S. Department of Defense.” https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf, 16

42 U.S. Department of Defense (2010), 16.

their command and control, or warning and attack assessment capabilities.”⁴³ This new definition regarding the circumstances under which America will use nuclear weapons encompasses a greater number of scenarios than identified in the past. While the NPR under the Obama administration contained a caveat for nuclear weapons use in the event of biological attack, the new NPR’s language could conceivably be manipulated in a number of ways to justify nuclear strikes in response to “significant non-nuclear strategic attacks.”

A second possible expansion of US nuclear weapons use can be found on page twenty-one of the NPR, where the report describes a “negative security assurance,”⁴⁴ in which the US reserves “the right to make any adjustment... warranted by the evolution and proliferation of non-nuclear strategic attack technologies and U.S. capabilities to counter that threat.”⁴⁵ Experts are concerned that these two new definitions lower the bar for first use in that the US could respond to “less than fully catastrophic” scenarios with nuclear weapons.⁴⁶

China’s Nuclear Strategy

Security & Nuclear Philosophy

To understand China’s perception of the NPRs major changes, it is important to first understand how Beijing views the role of nuclear weapons. Mao Zedong famously opined that nuclear weapons were “paper tigers.” On its face, one might think the Chinese leader did not appreciate the immense power of the weapons. It is clear from the historical record, however, that Mao grasped quickly the importance of the atomic bomb, both in international security and politics. China’s first and second-generation leaders established early on a nuclear philosophy and strategy that still dominates Chinese nuclear thought today.⁴⁷

According to one of China’s top nuclear policy experts, Tsinghua University professor Li Bin, China’s philosophy is unique from the traditional Western understanding of the weapon’s role. This divergence resulted in fundamental differences in the way the two countries approach nuclear deterrence. China’s security strategy, Bin posits, focuses on the study of security challenges, while the US focuses on security threats.⁴⁸ Bin argues that this point reflects more than semantics. Instead, it reflects deeply contrasting perceptions of and therefore diverging approaches to security issues like nuclear deterrence. International

43 Ibid, 21.

44 Reif, “Trump Seeks Expanded Nuclear Capabilities.”

45 U.S. Department of Defense (2018), 21.

46 Reif, “Trump Seeks Expanded Nuclear Capabilities.”

47 Taylor M. Fravel and Evan S. Medeiros, “China’s Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure,” *International Security* 35, no. 2 (2010): 48-87, doi:10.1162/isec_a_00016, 86.

48 Bin, “Understanding Chinese Nuclear Thinking,” 4.

security scholars like Robert Jervis and Paul Huth have also argued that other fundamental variables, such as how governments interpret threats – which is further shaped by domestic politics, geopolitics, culture, and the personality of individual leaders, to name a few – have a profound impact on how states approach nuclear deterrence.⁴⁹

Bin’s characterization of the concept of China’s security challenges as comprising a “theory of comprehensive national power” is a useful lens for analyzing China’s views on nuclear weapons.⁵⁰ China tends to view the role of nuclear weapons not simply in terms of military strategy as the US appears to, according to Bin, but comprehensively and in concert with domestic and international economic and political considerations. Jeffery Lewis, professor at the Middlebury Institute of International Studies and an expert on China’s nuclear posture, summarizes this point succinctly when he writes: “Chinese leaders have consistently seen nuclear weapons as, fundamentally, tools of political coercion rather than useful battlefield instruments.”⁵¹ Highlighting Mao’s belief that nuclear weapons were useless as battlefield weapons, the Communist leader remarked, “there is a possibility of great powers waging a world war; it’s just that everyone is afraid to do so because of a few more atomic bombs.”⁵² For China’s leadership, the logic of MAD had rendered these immensely powerful weapons useless “paper tigers” — hunks of metal consigned to collect dust. Mao realized that only a repurposing of the weapon’s role—one along political lines—could extract value from their expensive existence.

From Mao Zedong and Deng Xiaoping to Hu Jintao and Xi Jinping, the Chinese Communist Party’s (CCP) leadership has long understood that nuclear weapons are a potent political tool useful for a variety of purposes, such as political coercion, enhancing soft power, buttressing conventional military power, improving China’s national image, and raising the country’s international profile. Emphasizing the coercive aspect of Beijing’s view on nuclear weapons, Mao observed that, “without [nuclear weapons], your words will be taken lightly.”⁵³ Mao’s observation suggests that when a state possesses nuclear weapons, its words are strengthened. Without them, a state is vulnerable to coercion. That strength invariably comes from the threat of force behind those words, thereby increasing the coercive power of the state as well as protecting it from the same.

To illustrate this point, looking to the Sino-Japanese rivalry in the East China

49 Robert Jervis, “Rational Deterrence: Theory and Evidence,” *World Politics*, Vol. 41, No. 2. January 1989, p. 292–294. See also “Huth, Paul, *Extended Deterrence and the Prevention of War*, New Haven, Conn.: Yale University Press, 1988. pp. 201–202.”

50 Bin, “Understanding Chinese Nuclear Thinking,” 4, 9.

51 Lewis, Jeffrey, “Chinese Views of Nuclear Weapons,” *Adelphi Series* 54, no. 446 (2014): 13–42, doi:10.1080/19445571.2014.995419, 37.

52 Weidi Xu, “Understanding Chinese Nuclear Thinking: Differences Between Chinese and U.S. Nuclear Thinking and Their Origins,” Carnegie Endowment for International Peace, https://carnegieendowment.org/files/ChineseNuclearThinking_Final.pdf, 24.

53 *Ibid.*, 8.

Sea (ECS) from 2012-2014 is helpful. China demonstrated the political utility of nuclear weapons in its handling of the ECS crisis, where it relied on nuclear signaling to achieve its goals in the territorial dispute.⁵⁴ Professor of Political Science at Lingnan University and an expert on China's security, Baohui Zhang argues that China employed "implicit nuclear deterrence" to punish Japan's nationalization of the Senkaku Islands in 2012 and to deter further militarization of the ECS.⁵⁵ Beijing accomplished this, in part, by mobilizing its propaganda machine to strategically make high profile announcements on the China's latest nuclear developments, testing new strategic weapon systems, and allowing its military generals to make implicit threats of nuclear war during critical moments of the crisis.⁵⁶ Zhang argues that Beijing's nuclear signaling—in this case, political coercion via nuclear weapons—may have contributed to Japan's relative restraint within the ECS.⁵⁷

Nuclear Deterrence Strategy

China's nuclear and security philosophies play a central role in shaping the nation's nuclear deterrence strategy, which is best characterized by the country's self-defense oriented "no-first-use" (NFU) policy. Often used interchangeably with the terms "minimal deterrence" and "assured retaliation," the NFU policy states that China will not attack with nuclear weapons unless attacked first with nuclear weapons. China announced its the policy immediately after its first nuclear test in 1964⁵⁸ and it remains the focal point around which China's nuclear posture is centered. One defining feature of NFU is the unambiguous threat of assured retaliation. An assured second strike is designed to deter potential aggressors from misinterpreting that China's lack of desire to fight a nuclear war is in any way passive.⁵⁹ In terms of crisis stability, NFU depends entirely on the survivability of nuclear forces. If China is unable perform a second strike because its missile sites are destroyed before it can respond sufficiently, it loses the ability to deter. Any serious threat to the survivability of China's nuclear forces, therefore, undermines the country's deterrence strategy and is an area of perpetual concern for Chinese leadership.

The decision to adhere to NFU can be understood as the result of two factors:

54 Baohui Zhang, "China's Assertive Nuclear Posture: State Security in an Anarchic International Order," (London, United Kingdom: Routledge, 2015), doi:10.4324/9781315756158, 26.

55 Zhang, "China's Assertive Nuclear Posture," 133.

56 Ibid, 133.

PLA General Luo Yuan commented that China could potentially use nuclear weapons against Japan to prevent the destruction of its East China Sea and North Sea naval fleets. (Additionally, see Huanqiu, Shibao, "Yin Zhuo riben ruo zao he daji keneng zhege minzu jiu bu cunzaile" ["Yin Zhuo: If Japan Is Attacked by Nuclear Weapons, This Nation Will No Longer Exist"], February 19, 2014, mil.huanqiu.com/observation/2014-02/4842993.html." General Yin Zhuo stated emphatically that if attacked with nuclear weapons, Japan would "no longer exist.")

57 Zhang, "China's Assertive Nuclear Posture," 139.

58 Weidi, "Understanding Chinese Nuclear Thinking," 26.

59 Ibid, 56.

China's security challenges paradigm (described earlier) and the PRC's socialist philosophy. For its part, the country's focus on security challenges played a pivotal role in informing Beijing's understanding of its strategic limitations during the Cold War. In assessing the country's nuclear arsenal through the lens of a comprehensive security challenge, leadership recognized the need to develop a deterrence strategy that leveraged its own strengths to counter the US and Soviet Union's (USSR) quantitatively and qualitatively greater arsenals. With this in mind, and in the face of a tremendous economic and technological gap between itself and other major powers, China found its answer in a defense-oriented posture. Strategists and planners realized China had no need to amass thousands of warheads, like the US or USSR. To overcome its limitations, China instead needed to instill the fear of assured retaliation and unacceptable damage in a potential aggressor's cost-benefit calculus. By utilizing a nuclear deterrence strategy that emphasized second-strike capability, leadership effectively leveraged China's comparatively smaller arsenal.⁶⁰ In many ways, China's NFU policy was born out of a need to overcome technological constraints and economic limitations.

Second, the PRC's socialist philosophy is integral to the country's nuclear deterrence strategy. China security expert Weidi Xu argues that, "as a socialist country, China will never seek hegemony or bully others."⁶¹ The emphasis that Chinese socialist thought places on peace and equality among states acts as a powerful ideological driver that has permeated Chinese strategic military discussions for nearly 70 years. Bin agrees with Xu's assessment when he asserts that, unlike American nuclear weapons that play a central role in the maintenance of US hegemony, "China's nuclear weapons serve no other purpose" than deterring nuclear attacks, as evidenced by the country's refusal to participate in nuclear arms races.⁶² A self-defense-oriented policy, however, can be double-edged. No-first-use constrains China's freedom of action and Chinese socialist ideology potentially inhibits the country's ability to react effectively in times of crisis. In other words, by rhetorically and ideologically delegitimizing first use, China places a self-imposed limit on its options and restricts itself from responding in advantageous ways—one reason the US has not declared NFU. However, as scholars Taylor Fravel and Evan Medeiros point out, so long as the three pillars of China's second-strike capability are assured—survivability, reliability, and penetrability—flexibility is not necessarily required.⁶³

One final key distinction between Chinese and American nuclear and security philosophies can help shed light on both China's NFU policy, as well as its concerns about US behavior. Scholars and practitioners within Chinese and American strategic communities exhibit a fundamentally different understanding regarding the coercive

60 Fravel and Medeiros, "China's Search for Assured Retaliation," 87.

61 Weidi, "Understanding Chinese Nuclear Thinking," 56.

62 Bin, "Understanding Chinese Nuclear Thinking," 13.

63 Fravel and Medeiros, "China's Search for Assured Retaliation," 87.

nature of nuclear deterrence. The distinction lies in the subtle difference between “deterrence” and “compellence.” Although both concepts are considered forms of coercion, they enjoy differing levels of legitimacy. That level of legitimacy also varies by country. Generally, the former is considered more legitimate than the latter. Deterrence describes the act of one party dissuading another party from taking a particular action, which has not happened yet, by threatening punitive action the party to be deterred finds unacceptable. Deterrence, however, is defensive in nature and seeks to maintain the status quo. Compellence on the other hand describes a situation whereby one party attempts to persuade another party to reverse or halt some ongoing behavior. Crucially, compellence seeks a change in the status quo, either by creating a new status quo or reverting to back the status quo ante. While deterring an action yet to be taken is commonly practiced by states, forcing action is frowned upon because it violates principles of national sovereignty (and is extremely difficult to achieve to boot).

Chinese scholars argue that US deterrence is in fact a form of compellence. In their assessment, US deterrence strategy relies on threats that force adversaries to take actions they do not wish to take.⁶⁴ America’s deterrence strategy, Li Bin argues, is predicated on an implicit assumption that by threatening the use of nuclear weapons, the US can force China to accept changes to the status quo.⁶⁵ For example, in the event of a conflict where one state threatens to use nuclear weapons against another due to some alleged transgression, the threatening state is not simply forcing another state to abandon its actions if the status quo surrounding the actions are difficult to ascertain in the first place. If it is not readily possible to determine which party first altered the status quo leading to the actions that precipitated the nuclear threat, that threat is potentially forcing the threatened state to take actions it does not want to.⁶⁶ Consequently, many in China’s strategic community criticize US nuclear deterrence strategy for exhibiting elements of compellence. From China’s perspective, the NFU policy better satisfies the ‘proper’ definition of deterrence. China insists no-first-use is designed instead to persuade an adversary to abandon an action, rather than forcing it to take a particular one.⁶⁷

Nuclear Modernization

Despite its NFU policy, China has been slowly modernizing and diversifying its nuclear forces over the last two decades. In recent times, Beijing has also begun making technological advances that, coupled with its ever-growing defense spending and increasingly aggressive military posture in the East and South China Seas, have raised concerns among its neighbors and the US regarding its intentions. Developing

64 Bin, “Understanding Chinese Nuclear Thinking,” 9

65 Ibid, 9.

66 Ibid, 10.

67 Ibid, 10

a snapshot of China's nuclear capabilities is important toward understanding the current state and direction of the country's nuclear deterrence strategy. For example, Michael Tkacik, an expert on China's nuclear capabilities, outlines a modernization program that demonstrates China's research into new nuclear warheads and delivery vehicles, past development of a "neutron bomb-like weapon," and electromagnetic pulse (EMP) capabilities.⁶⁸ A study by RAND researchers Michael S. Chase and Arthur Chan found that the People's Liberation Army (PLA) is likely working toward future developments which include ICBM's with multiple independently targetable reentry vehicle (MIRV) capability, advanced SSBN's and SLBM's, hypersonic-glide vehicles, and space-based early warning systems, to name a few.⁶⁹ Cunningham and Fravel note that China's upgrades also consist of both improvements to the survivability of its ICBM force as well as the size of its missile stockpile.⁷⁰ These specific military technological developments are designed to directly undermine key aspects of America's strategic primacy. Take MIRV capabilities for instance – offensively, the development of MIRV-capable missiles are designed to penetrate US missile defenses to ensure second-strike capability, which the US seeks to avoid with BMD systems. Defensively, increasing the survivability of China's ICBM forces decreases the lethality of America's overwhelming nuclear and conventional first-strike capabilities.

Beijing is also researching and exploring low-yield tactical nuclear warhead options.⁷¹ These trends conflict with China's NFU policy by lending toward a policy of possible first-use in a limited nuclear conflict, and as Tkacik argues, reflects "expanding capabilities far beyond that would be required of an NFU policy or assured retaliation."⁷² James S. Johnson, a military and security expert on China, observes that recent evidence in fact reveals a limited nuclear posture shift toward nuclear war-fighting, citing China's development of solid-fuel road-mobile missiles, MIRV warheads, and nuclear-powered SSBNs.⁷³ The existence and research of these technologies is indicative of nuclear war-fighting intentions, if not already existent capabilities.⁷⁴ At the very least, it reflects the PLA's desire to provide China's leaders with a wide range of flexible nuclear options, even a 'break out' capability if the circumstances require it, much in the same way the NPR seeks to do.

68 Michael Tkacik, "Chinese Nuclear Weapons Enhancements – Implications for Chinese Employment Policy," *Defence Studies* 14, no. 2 (2014): 161-91. doi:10.1080/14702436.2014.889471, 176.

69 Michael S. Chase and Arthur Chan, "Chinas Evolving Strategic Deterrence Concepts and Capabilities," *The Washington Quarterly* 39, no. 1 (2016): 117-36. doi:10.1080/0163660x.2016.1170484, 49.

70 Cunningham and Fravel, "Assuring Assured Retaliation," 2.

71 Tkacik, "Chinese Nuclear Weapons Enhancements," 176.

72 Ibid, 178.

73 James Samuel Johnson, "Chinese Evolving Approaches to Nuclear "War-Fighting," An Emerging Intense US–China Security Dilemma and Threats to Crisis Stability in the Asia Pacific," *Asian Security* (2018), 1-18. Doi:10.1080/14799855.2018.1443915, 85.

74 Tkacik, "Chinese Nuclear Weapons Enhancements," 176.

As Jeffery Lewis points out, China's NFU policy still poses constraints on the country's nuclear options.⁷⁵ However, it is not inconceivable that China desires deeper asymmetric capabilities to reinforce its deterrent should it feel handicapped—a debate currently underway among Chinese experts and scholars.⁷⁶ Combined, these developments reflect not only China's comprehensive rejection of American strategic primacy, but its desire to achieve a security environment in line with its own definition of strategic stability. In terms of finding a mutually agreeable definition of the term, efforts are complicated by the fact that the capabilities China is developing appear in excess of the ones required to maintain the level of strategic stability itself describes.

How do Chinese strategists account for the developments making up China's impressive nuclear and military modernization? China's strategic community reasons that the country's modernization efforts are designed to ensure the survivability of its nuclear retaliatory capabilities (second-strike), without which its nuclear forces would have little deterrence effect. MAD has so far proven effective because nuclear powers possess second-strike capability. Without it, a state is believed to be vulnerable to attack and coercion. Concerned by US advances in nuclear and conventional strike, C4ISR, and BMD, China argues that it is simply "upgrading its insurance policy against a massive nuclear first strike by the United States without gaining any new political leverage in the process"⁷⁷ while trying to maintain its second-strike capability (the conditions that constitute Beijing's definition of strategic stability). If the US develops new BMD technologies that threaten the credibility of China's second-strike capability, for example, China must seek new upgrades to its nuclear and conventional arsenal which penetrate those defenses.

China's Perception of the 2018 NPR's Three Major Changes

1. US Nuclear Modernization

Chinese analysts would likely argue that upgrades to US nuclear forces directly undermine China's nuclear deterrent by either widening the technological gap China must then catch up with or compromising the survivability of China's nuclear forces during conflict. In either case, China's strategic community feels the credibility of the country's nuclear deterrent is threatened and potentially neutralized by American strategic primacy, which both leaves China susceptible to attack and inhibits crisis stability.⁷⁸ Logically, Beijing should then seek to improve the effectiveness of its deterrent to level the playing field and achieve strategic stability. The result, however,

75 Lewis, "Chinese Views of Nuclear Weapons," 38.

76 Weidi, "Understanding Chinese Nuclear Thinking," 38.

77 Thomas J. Christensen, "The Meaning of the Nuclear Evolution: China's Strategic Modernization and US-China Security Relations," *Journal of Strategic Studies* 35, no. 4 (2012): 447-87. Doi:10.1080/01402390.2012.714710, 448.

78 Fravel and Medeiros, "China's Search for Assured Retaliation," 86.

is an endless cycle of reciprocal developments and advancements between the two powers – a classic security dilemma that can lead to arms races and proliferation. While China would prefer to maintain a ‘lean and effective’ nuclear force, the viability of Beijing’s NFU policy is being perpetually challenged by US superiority. US strategic primacy capitalizes on China’s NFU commitment by neutralizing the lethality of its smaller arsenal with asymmetrical advancements provided by superior nuclear, C4ISR, BMD, conventional strike, and ICBM capabilities. China opposes US modernization efforts to upgrade its nuclear triad with new capabilities the PLA has yet to develop or at least deploy. US advances threaten China’s definition of strategic stability.⁷⁹

The 2018 NPR’s modernization efforts will likely prompt China to actively seek solutions that either undermine these advancements or bring China to parity with them. This analysis is consistent with previous studies that found Beijing has been pursuing, with great determination, a rigorous modernization of its own military and nuclear capabilities. It should come as no surprise that China’s own modernization efforts traverse a technological gap widened by many of the same areas the US is enhancing. Consequently, China is likely to continue actively opposing the NPR’s proposed modernization efforts.

2. Reintroduction of Nuclear War-fighting into U.S. Deterrence Strategy

Beijing’s reported pursuit of tactical nuclear weapons and potential development of a nuclear war-fighting doctrine, however, bears no apparent weight on its decision to oppose US efforts in the area. China strongly opposes the idea of limited nuclear warfare, which it calls “Cold War-era.”⁸⁰ When US President George W. Bush announced intentions to develop nuclear bunker busters (a type of tactical nuclear weapon), for instance, the administration faced immediate and harsh criticism from China.⁸¹ The fundamental reason for their position can be observed in China’s opposition to any action that lowers the threshold for nuclear weapons use. Tactical nuclear weapons lower this threshold by enabling limited (as opposed to all-out) nuclear warfare, where the incentives for nuclear use are greater. As China’s strategic community is likely to argue, behaviors that lower the nuclear threshold weaken China’s deterrence, undermine strategic stability, and threaten crisis stability in the region. Conversely, actions that raise the nuclear threshold, such as restricting nuclear arsenals to the possession of high-yield weapons – a move which restricts nuclear weapons use to largely infeasible and unattractive large-scale conflicts – deter attack and strengthen China’s hand.

When the use of nuclear weapons is confined to all-out nuclear war, China’s

79 Cunningham and Fravel, “Assuring Assured Retaliation,” 15.

80 BBC News, “China derides ‘Cold War’ US nuclear plan,” February 4, 2018, <http://www.bbc.com/news/world-asia-42935758>

81 Bin, “Understanding Chinese Nuclear Thinking,” 6.

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smaller arsenal and NFU policy achieve parity with America's larger and more sophisticated arsenal. Under these circumstances, China believes it can maintain strategic stability. However, in the event of a limited nuclear war precipitated by US first-use, China is currently disadvantaged by America's growing insulation from a second-strike and potential incentives for limited nuclear escalation. China fears that its smaller arsenal could lead the US to calculate that its nuclear, C4ISR, and conventional strategic strike capabilities give it an advantage in limited nuclear war. While China is potentially looking into nuclear war-fighting capabilities, the country's lack of transparency makes it difficult to determine if they do indeed possess any proportional retaliatory capabilities in the event of limited nuclear war. As a result, China is likely to oppose this proposed change to US nuclear policy.

3. America's Expanded Conditions for Nuclear Weapons Use

China's NFU policy is as constraining as it is clear: China will only employ nuclear weapons if nuclear weapons are first used against itself. Conditions for nuclear weapons use are subsequently limited and defensive in nature. Deng Xiaoping once observed that "[China's] strategy has always been defense, and it will still be strategic defense after 20 years... Even if [China is] modernized in the future, it would still be strategic defense."⁸² But while China has yet to fundamentally diverge from its defensive approach to nuclear deterrence, the US position on nuclear weapons use is potentially changing with the 2018 NPR's latest proposal.

Much in the same way an increase in tactical nuclear weapons threatens China's strategic stability, expanding the conditions for nuclear weapons use additionally threatens stability. Both actions lower the nuclear threshold and make using the weapons more advantageous. This suggests Beijing likely views the proposal, particularly its negative security assurance (an asserted right to adjust conditions for nuclear weapons use suddenly, potentially even arbitrarily),⁸³ as lowering the bar for first-use dangerously low. The concern surrounding this negative security assurance is that the US asserts the right to use nuclear weapons in less than extreme circumstances, increasing the number of scenarios under which nuclear war could conceivably occur. Ostensibly, China will mostly likely attempt to protect its NFU policy, which it sees as a cornerstone of strategic stability. This suggests China will oppose the report's expanded definition and seek solutions that mitigate the threat it poses to the country's NFU policy.

82 Weidi, "Understanding Chinese Nuclear Thinking," 56.

83 Reif, "Trump Seeks Expanded Nuclear Capabilities."

Predicting China's Nuclear and Military Response to the 2018 NPR

The CCP's Public Reaction

Following the document's release, China's CCP and media organs reacted with swift and strong condemnation.⁸⁴ Comments by a Chinese Defense Ministry spokesman offer an illustrative picture of China's opposition to the 2018 NPR: "We hope that the United States will abandon its Cold War mentality, earnestly assume its special disarmament responsibilities, correctly understand China's strategic intentions and objectively view China's national defense and military build-up."⁸⁵

Predicting China's Nuclear and Military Response

Based on China's perception of the three major changes proposed in the 2018 NPR, there is a compelling case to be made that China's response to the report will be one of active opposition. Due to China's preference for a return to its own interpretation of strategic stability, Beijing will seek to undermine America's strategic primacy by expanding its nuclear and military capabilities. First, China can be expected to continue rejecting US interpretations of strategic stability in, among various other venues, media, scholarly literature, and official bilateral negotiations. As identified in this paper's analytical framework and throughout the piece, China's interpretation of strategic stability can be characterized as mutual vulnerability via assured second-strike capability, with a caveat that China can silently work outside the limits of NFU. The US definition of strategic stability looks markedly different. In the preface of the NPR, General James N. Mattis states emphatically that "... a war that can never be won, is never fought."⁸⁶ The US interpretation of strategic stability, gleaned from the 2018 NPR, is a situation in which stability (peace and the US-led post-Cold War international system) is maintained by a nuclear posture so superior that it removes all benefit from an adversary's cost-benefit analysis. The result is a US interpretation of strategic stability closer to definitions of strategic primacy, which China opposes.

The two powers' interpretations of strategic stability are therefore contradictory: what constitutes a stable nuclear security environment is different in Washington than in Beijing. Certainly, the seismic balance of power transition towards bipolarity occurring in the region right now is exacerbating these misunderstandings. Neither country wishes to concede to the other. In order to fully meet China's strategic stability definition—that is, ensure mutual second-strike capability—the US would need to rescind each of the three major changes proposed in the 2018 report, eventually transition to an NFU policy, and allow Beijing to traverse the current technological

84 BBC News, "China derides 'Cold War' US nuclear plan."

85 Ibid.

86 U.S. Department of Defense (2018), 16.

gap between the two. On one hand, such expectations are somewhat unreasonable and highly unrealistic. Based on both the arguments laid out in the NPR as well as comments made by the POTUS, the country's sense of threat is higher than at any point since 9/11. Concerned by the nation's receding power, the weakening US-led post-Cold War international system, China's growing assertiveness, Russia's expanding asymmetrical capabilities, and the rise in great power competition,⁸⁷ the US desires greater security than ever. Many in the US strategic community, including the POTUS, believe the changes proposed in the 2018 NPR enhance the nation's security and improve crisis stability. Moreover, the US's aging nuclear forces do indeed require an update to ensure the deterrent's credibility. It would be unreasonable to expect the US to allow its nuclear forces to fall into disrepair, an action that would also undermine strategic stability. Finally, the US is unlikely to make the transition to no-first-use anytime soon, as Washington has historically sought a level of strategic ambiguity in its nuclear weapons declaratory policy that NFU eliminates.

On the other hand, however, the US interpretation of strategic stability is unreasonable and, in many ways, counterproductive. It is unreasonable to expect China to accept being placed at a permanent nuclear and conventional disadvantage under the premise that stability and peace will be maintained by the United States. Perhaps most importantly, the Chinese strategic community's claim that MAD rests upon the credibility of China's second-strike capability is persuasive. MAD indeed relies on the fear of mutual nuclear destruction – this must apply across the board. The perceived inferiority of one's nuclear deterrent can manifest itself in nuclear arms races, dangerous escalatory rhetoric, and eventually military confrontation. While these effects themselves may not necessarily lead to war, as Acton points out, it has in the past led to a dangerous change in military postures that include “dispersing mobile forces, redeploying existing systems, or developing entirely new ones.”⁸⁸ Perhaps we are seeing the results of that now – China's military modernization continues to push new boundaries. Without a mutually agreeable definition of what strategic stability means, solutions are difficult to prescribe.⁸⁹

Second, evidence suggests Beijing will actively work towards counteracting the proposed changes by expanding its own nuclear and asymmetric military capabilities. To combat the adverse effects of US nuclear force modernization efforts, tactical nuclear weapons, and expanded conditions for nuclear weapons use on China's nuclear deterrent, Beijing will likely seek to upgrade its comparatively inferior nuclear forces with qualitatively greater capabilities and, potentially, a more flexible nuclear doctrine. One of the most consequential scholarly debates happening in international security right now revolves around whether US activities

87 See: “2019 Annual Threat Assessment – U.S. Office of the Director of National Intelligence,” <https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf>.

88 Acton, “Reclaiming Strategic Stability.”

89 Ibid.

will eventually force China to abandon its NFU policy.⁹⁰ In response to the US's overall modernization efforts, which include advanced submarines, improved missile defense systems, nuclear capable 5th generation fighter jets, and "bunker busters" (all of which jeopardize the survivability of China's nuclear retaliatory capabilities), Beijing may continue covert research, development, or even production of EMP technologies to disable US infrastructure, low-yield tactical nuclear weapons to remove US or Russian advantage in nuclear escalation, space-based early warning systems to prevent an overwhelming US first-strike success, hypersonic or MIRV-capable missiles to penetrate US BMD, and mobile or hidden ICBM forces to increase nuclear forces survivability. These upgrades would effectively balance against and manage America's pursuit of strategic primacy, allowing China to achieve its desired interpretation of strategic stability.

On Beijing's part, a successful campaign to counteract the NPR's major changes may indeed bring about a brief period of strategic stability. However, such stability will likely be short lived as long as the US continues to pursue strategic primacy. Yet, if China's leadership feels confident in the country's second-strike capabilities, China can avoid pressure to change its NFU policy and exorbitant defense spending.⁹¹ One of the effects of achieving strategic stability, however, is that China's neighbors may feel threatened by its aggressive military posture. Japan, South Korea, Taiwan, India, Vietnam, Thailand, the Philippines, and other states throughout the Indo-Pacific region may feel threatened by China's improving nuclear weapons and delivery systems. Given the intensity of disputes in the South China Sea and East China Sea, the blowback from China's attempt at strategic stability might actually heighten tensions in the region. The implication here is that, ironically, China's perceived security position vis-a-vis the US could improve, while its actions push neighbors toward the US alliance system. China's pursuit of strategic stability could potentially delay American departure from the region for several more decades (if possible at all), delaying China's hegemonic control of the region.

Additionally, while China's leadership possesses a number of options for managing the NPR's changes, it faces several obstacles. For example, China could officially announce the research or production of low-yield nuclear weapons to challenge US advantage in the area. However, doing so would raise the nuclear threshold and undermine the country's NFU policy. Next, Beijing could attempt to traverse the technological gap in a bid to ensure the US does not possess an advantage in limited nuclear escalation, by researching and developing greater asymmetrical and non-nuclear capabilities that deter limited nuclear escalation. Such developments could potentially include but are not limited to conventional strike, ICBM, MIRV, NC3, C4ISR, early warning, space, cyber, or even chemical and biological weapon advancements—although the repercussions of some (chemical/biological, in particular) would be so immense they are virtually impossible to

90 Cunningham and Fravel, "Assuring Assured Retaliation," 1.

91 Ibid, 30.

conceive. Third, and most dramatically, Beijing could abandon no-first-use and adopt an ambiguous first-use policy closer to that of the US. The result of this would both ruin the peaceful socialist image the PRC has attempted to construct and could make the chances of limited nuclear escalation unmanageably dangerous. As mentioned earlier, a debate regarding the merits of NFU is just beginning to take root within China's strategic community, so although an end to NFU is not likely, it is also not inconceivable. This analysis suggests that, first, China will not attempt to counteract the NPR's major changes publicly, and second, will not commit to any measure too extreme. Instead, China will undermine US strategic primacy covertly, selectively, and gradually.

Finally, these actions could come at a steep cost for both powers. Strategic primacy is an expensive endeavor and that strategy might not be viable in 30 years. As China looks to overtake America economically by 2050 (in terms of GDP, not PPP),⁹² it will be difficult for the US to continue increasing an already bloated defense budget in response to China's advancements. At some point, China will be able to outspend the US. In other words, there will come a time when maintaining superiority across the entire spectrum of nuclear and conventional military capabilities is no longer financially possible, and the US will have to pick and choose where it allocates funds. Additionally, increases to the US nuclear stockpile raises concerns about America's dedication to its nonproliferation commitments. If the leader of the liberal, rules-based world order increases its nuclear stockpile, America risks discrediting international nonproliferation regimes entirely. The fallout from such an action could be catastrophic – the proliferation of nuclear weapons around the world is a national security threat to the US as well as the international community. The NPR, therefore, could also damage the country's international image, a great source of American power.

Conclusion

This paper identified China's perception of the 2018 NPR's major changes and analyzed them through the concepts of strategic stability and strategic primacy, facilitating a prediction of Beijing's most likely response. Its analysis revealed that China's definition of strategic stability emphasizes mutual vulnerability and second-strike capability as its chief method of limiting the incentives for nuclear weapons use and arm races. At the same time, Beijing allows itself a loophole to circumvent the self-imposed constraints of its no-first-use policy. This interpretation of strategic stability is markedly different from the US interpretation, closer to the definition of strategic primacy, which seeks to achieve stability by maintaining a comprehensive and overwhelming advantage over adversaries. The US aims to decrease the

92 David Fickling, "China Could Outrun the U.S. Next Year. Or Never," *Bloomberg*, March 9, 2019, <https://www.bloomberg.com/opinion/articles/2019-03-08/will-china-overtake-u-s-gdp-depends-how-you-count>.

incentives for nuclear weapons use by ensuring that a war that cannot be won, is never fought. Based on these definitions, the paper finds that China will likely refuse to conform to US perceptions and interpretations of nuclear deterrence strategy and predicts that Beijing will attempt to counteract the various changes proposed in the transformative document.

The findings suggest that China's most likely course of action is the one it is currently on: gradually and silently expanding its own nuclear and military capabilities in an attempt to return the security environment to its desired state of strategic stability. Unless Beijing and Washington can find common ground on a mutual definition of strategic stability, however, their attempts to undermine each other's nuclear strategies could prove catastrophic. Compared to other security areas, disagreement in the nuclear arena risks perpetuating an endless cycle of escalatory responses that could precipitate a military or nuclear crisis if not properly addressed. The result is an unstable security situation that encourages hair-trigger responses neither can control. Between China's fear of insecurity and America's desire for absolute security (or control over security), lies a spectrum that leaves room for these two powers to negotiate a definition more closely aligned with their own security preferences. The good news is that both share a common goal: disincentivizing nuclear weapons use. Neither wishes to stumble into a nuclear war. It is the task of scholars and practitioners to identify that sliver of common interest. Agreement on a more strategically stable environment is not impossible. Any policy prescription to this predicament depends on it.

The US and Soviet Union survived a number of terrifying false alarms and barely avoided nuclear war more than once. They accomplished this through a shared commitment to maintaining open channels of communication. Similarly, the US might be more convinced of China's desire to solely possess second-strike capabilities if Beijing was not consistently pursuing actions inconsistent (or in excess) of its NFU policy. The flip side of this is that the US should, at least temporarily, hold off on the three changes proposed in the NPR, if only to observe China's behavior. If China's modernization efforts slow down simultaneously with the temporary freeze, this might give the two countries enough room to put together a series of short, intensive working-level talks designed to establish new nuclear escalation management and crisis stability practices and principles. Establishing these practices will bring the countries one step closer toward a common definition of strategic stability.

Further analysis on this transformative nuclear policy document, however, is critically needed. The academic community has been provided with an impetus to provide American and Chinese policy makers with an answer to the question: "How can the US and China develop a common definition of strategic stability or shorten the gap between their current interpretations?" Further research should attempt to identify points of potential cooperation on the strategic stability spectrum mentioned above, as well as offer practical solutions for bridging the definition gap. Other research avenues include expanding upon China's most likely course of action in response to the NPR based upon new developments, such as ongoing changes to the US or Chinese nuclear posture.

Most importantly, a sincere attempt at understanding these issues from China's perspective is required to bridge the gap and develop a common, yet sustainable, strategic stability definition. When it comes to the possibility of nuclear war, the stakes are too high not to.